

CHAPTER – I

INTRODUCTION

1.1 General Background

Bank is the major financial need for the 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 which is quite low with a relatively higher marginal propensity of consumption. As, result such countries are badly trapped into the vicious circle of property. Therefore, the basis of problem for the developing countries will be to raise for 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 the sense, a bank may be defined as a financial institution, which accepts the deposits for the purpose of lending or investment from the public, repayable on demand through cheques, drafts or otherwise and 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 the deposits from the public but gave loans to employees and public against the billion so its limited resources were able to serve only limited people.

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 toward banking sector from the pre-dominant moneylenders net and 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 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 upon 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 had has contributed to the growth of financial sector.

Integrated and speedy development of the country is possible only when comparative banking services 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 2021.

As the name suggests, commercial banks are to carry out commercial transactions only. But they also had to carry out the function of all types of financial institutions. Hence, Industrial development in 2016, IDC was converted to Nepal Industrial Development Corporation (NIDC). Similarly, Agriculture Development Bank (ADB) was established in B.S. 2024 to provide finance for agriculture 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. NRB also gave incentive to NBL to expand their branches to 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 2014 as the 1st JVS in Nepal. The establishment of JVBs gave a new horizon to the financial sectors of the country. They are expected to enter the foreign capital, technology, experiences, healthy competitive concept, expertise and skill 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 are considered more significant.

1.1.1 Major Functions of a Commercial Bank

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

1.3 Statement of the Problem

Investment is the most important factor from the shareholder's and banks management point of view. Though several Commercial Bank have been established in Nepal with in short period of time sufficient return cannot have been earned and strong, stable and appropriate investment policy has not been followed. In one hand these banks collects lots of deposits where as in the other hand investment opportunities are comparatively very low. Due to less investment opportunity banks use to discourage depositors by reducing the interest on deposit hold balance. Such condition may cause the highly liquid market and can impact the condition may cause the highly Liquid market and can impact the condition of the whole country negatively. Due to throat-cut competition of financial environment, banks seem to be ready to grant much more loan, advances and other facilities against their client's insufficient deposit. If the funds are wrongly invested without thinking any financial risk, business risk and other related facts, the banks cannot obtain profitable return as well as it should sometimes lose its principle.

"Without a clear sense of why investments are being made how long-run goals are to be achieved as investor is likely to pursue inefficient approaches that lead to unsatisfactory results"

"The major problem in almost underdeveloped countries and Nepal is no exception is that of capital formation and proper utilization. In such countries, the commercial banks have to shoulder more responsibilities and act as development banks due to the lack of other specialized institutions".

There are more than a dozen of commercial banks operating their activities in Nepal but a few of them are getting regular profits. The fast growth of such

organization has made pro-rate increment in collecting deposit and their investment. Many banks or companies succumbed to liquidation although they had sustainable investment capital. The increasing rate of liquidity has caused a downward trend in investment sectors. It has ensured bad impact on interest rate to the depositor's lower market value of share etc. for the assessment such adverse impact, this study has shown the contrast and analysis the investment policy of commercial bank.

1.4 Objective 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:

1. To evaluate comparatively the profitability and risk position, liquidity, asset management efficiently of joint venture bank.
2. To compare investment policy of concern bank and discuss the fund mobilization of the sample banks.
3. To analyze the deposit utilization it's projection for next five years of Joint Venture Banks.
4. To find out empirical relationship between total investment deposit loan and advances net profit and outside assets and compare them.
5. To examine the loan loss provision.

1.5 Research Questions

- a. Are the joint venture banks proper utilizing their available fund?
- b. What is their financial position in comparison with each other?
- c. Are the fund mobilization and investment policy of joint venture banks effective?

- d. What is the relationship of investment and loan and advances with total deposits and total net profit of joint venture bank?

1.6 Significance of the Study

This study "Comparative Study on Investment Policy" of joint venture banks deserve some importance in this field will provide a useful feed back for academic institution, bank employees, trainees and investor and also for financial person, policy-making bodies banks. This study will serve to be a guide to the management of banks, financial institution, related parties, shareholders, general public (customers, depositors and creditors) etc.

1.7 Limitation of the Study

Every study of research is always accompanied by some limitation. Some following facts are the basic limitation.

- i. This study is based on secondary data.
- ii. Time factor is major limitation of this study, because this study is completed with in short span of time.
- iii. This study has taken only four joint venture banks as sample i.e. Himalayan Bank Ltd., Everest Bank Ltd. Nepal SBI Bank Ltd., Bank of Kathmandu Ltd.

1.8 Organization of the Study

The whole study is divided into five chapter.

First Chapter

The first chapter is the introductory chapter. It consist of general background statement of problem, objective of the study, significance of the study and limitation of the study.

Second Chapter

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

Third Chapter

The chapter is concerned with the research methodology used in this study. It includes research design, source of data, population sample and method of analysis.

Fourth Chapter

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

Fifth Chapter

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

CHAPTER - II

REVIEW OF LITERATURE

"Review of literature means reviewing research of other relevant preposition in the related area of the study so that all past studies, their conclusion and deficiencies may be known and further research can be concluded" (Pant & Wolf; 1999). This chapter highlights upon the existing literature and research related to the present study with a view to finding out what had already been explained and how the present research adds to this diminution.

The field of investment is enormously great. Proper utilization of collected fund plays a prominent role in the development of the country. This unit of study tries to describe the conceptual framework, concept of commercial bank, join venture banks and investment. Beside 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 article and relevant study on this topic and review of thesis work performed previously.

2.1 Conceptual Framework

2.1.1 Commercial Bank

"A commercial bank is one which exchanges money deposit money, accepts deposits, grant loans and performs commercial banking function which is not a bank meant for cooperative, agriculture industries or for such specific purpose" (Commercial Bank Act, 1974).

"Commercial bank is a corporation which accepts demand deposits subject to check and makes short term loans to business enterprises regardless of the scope of its other services. (American Institute of Banking USA, 1972, p. 345).

"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."(Ronald, Grywinski, 1991, p. 87).

The main function of commercial bank is the accumulation to the temporarily idle money of the general public for the purpose of provide short term loan necessary for the trade and commerce. It accepts deposits and grant loan exchange, purchase and discount bill for promissory notes, exchange foreign currency. Commercial bank earns profit by proper mobilization of their resources.

2.1.2 Joint Venture Bank

"When two or more independent firms mutually decide to participate in a business venture, contribute to the total equity or more or less capital and establish a new organization, its know as a joint venture" (Gupta, D.P., 1984, p. 15) .

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

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

The concept of joint venture bank is a new innovation in finance and it is on growing stage mostly in developing countries. Joint venture means "a business contract of management effort between two person, companies or organizations involving risk and benefit sharing" (B.N. Ahuja, 1995, p. 174).

2.1.3 Investment

From the point of view of development it becomes necessary to see that all allocation of financial resources becomes a very important aspect of the study in view of the fact that on efficient allocation or resources will be one of the determining factors in the growth of the economy. Therefore JV banks have to ensure, before and after the grant of financial assistance, that certain precautions are taken, requirements, satisfied and stipulation made so that the assistance provided by them not only remains safe but also maximum return to the economy as observed by George and Douglas. "Investment should be productive otherwise it will lose its purpose and by vain broadly, defined, investment may be taken as employment of capital with the aim of producing a gain in the shape of income and appreciation in value of both" (George and Douglas, 1995).

The income and profit of the bank depends upon its investment policy, lending policy and investment of its funds in different securities. The greater the credit created by the bank, the higher will be the change of earning profit. A sound landing and investment policy is not only the prerequisite for bank's profitability ,but also crucially significant for the promotion of commercial saving of a financially backward country like Nepal.

Investment is concerned with the management of an investors wealth which are the sum of current income and the present are the value of future income funds to be invested that come from assets already owned, borrowed money and saving or

forgone consumption by foregoing today and investing the saving. Investor expects to enhance their future consumption possibilities i.e. they invest to increase wealth. Investor also seek to manage their wealth effectively by obtaining the most from it, while protecting it from inflation, taxes and factor.

Some definition of investment are as follows:

J.K. Francis "An investment is a commitment of money that is accepted to generate additional money. Every investment entails some degree of risk, it requires a present certain sacrifices for the future uncertain benefit" (Jack Clark Frances, 1991, p.1).

"Investment by individuals, business and government involves a present sacrifice a income to get on expected future benefit. As result investment raises a nation's standard of living" (The World Book Encyclopedia, 1976, p. 360).

Cheney and Moses, "They investment objective it to increase systematically the individuals wealth, defined as asset minus liabilities. The higher the level of desired wealth the higher the must be received. As investor seeking higher return must be willing to take higher level of risk" (John M. Chiney and Edwards A Moses, 1992, p.13).

From the above definition, we can say that investment means use of rupee of amount today by expecting more income in future. If some one invest his fund today, he will get financial benefit in future from the mobilization of his fund. The value of rupees in future is increased than 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 may be negative also, if wrongly invested without sound knowledge of investment and their related factor.

"Investment is any vehicle in to which funds can be placed with expectation that will preserve or increase in value and generate positive return."

"The term investing can cover a wide range of activities. It often refers to invest money in certificates of deposits, bonds, 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 conservation positions and aggressive speculation."

Above mentioned definitions about investment clarify that investment means to trade money for expected future stream of payments or benefits that will exceed, the current cash out flow which is the benefit to the investor for sacrificing the time and commitment or due to uncertainty and risk factors. Financial institution 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 receive funds in the following ways:

- Capital fund
- Borrowing
- Deposits
- Other liabilities

These funds are invested following assets:

- Cash and bank balance
- Investment
- Loan, advance and bills purchased/discounted
- Fixed assets
- Other assets

2.1.5 Features of a sound lending and investing policy

The income and profit of the banks depend upon its lending and investment policy of its fund in different sector. The great greater credit created by bank, the higher will be the profitability. A sound lending and investment policy is not only a prerequisite for the joint venture bank's profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal.

a. Safety and Security

The joint venture banks should invest their fund in those security, which are too safe and have security because a little difference may cause a great loss. Joint venture bank should accept that type of securities, which are commercial durable, marketable and high market price. In this case "STAM" should be applied for the investment.

S= Stability

T= Transferability

A= Ascertainability

M= Marketability

b. Liquidity

Bank collects deposit through different types of accounts, which are repayable, when depositor demand. To fulfill this option, bank must keep this point in mind while investing in different securities or at the time of lending. So that it can meet the current or short term obligation when ever they are due to payment.

c. Profitability

Profitability is the cardinal characteristics for making investment by bank. Commercial bank maximize its volume of wealth through maximization of return on their investment and lending. So they must invest in such securities which assure gain and stable return on the fund invested. The earning capacity of securities and shares depends upon the interest rate and the dividend rate and tax benefits they carry. JVBs should invest more in such securities rather than in the shares of new companies which also carry tax exemption.

d. Legality

Illegal securities will bring many problem for the investor. Every financial institution must follow a rule and regulation as well as different direction issued by NRB, ministry of finance and others while mobilizing its fund.

e. Diversification

A firm can invest its deposit collection in various securities to minimize the risk. The bank should be careful that while granting loan, it should not be always one sector. Diversification aims at minimizing risks of the investment portfolio of bank. A bank should follow the maximum "Do not keep all eggs in one basket".

f. Purpose of loan

The loan should be utilized in purposed plan everything related with the customer should be explained before lending. If borrower misuse the loan granted by the bank, they can never repay and bank will possess heavy debts. Detailed information about the scheme of the project activities should be examined before lending.

2.1.6 Meaning of some important terms

- Deposits

Financial institution collect deposit from the customer in various account like: current account, saving account and fixed deposit account. Therefore the sum of money collected by the financial institutions from the depositors in various accounts is called "deposit".

- Assets

Assets are the variable and important properties of the firm and represent economic resources. All the assets should be measured in monetary term, which help to earn future benefits to an organization such as: building, debtors, marketable, securities, good will, patents etc. There will be tangible, intangible assets as well as fixed assets and current assets.

- Advance

Amount of money, which are paid or lent before data expiration is called advances. It is the sum of amount which was prepaid and treated as assets, will be returned in future and expired the date in future.

- Balance sheet

Balance sheet is a financial statement, which is prepared at the end of each of accounting year, which contain assets, liabilities, owner share capital.

- Bond

A bond is the source long-term financing or long term promissory note issued by an organization under which borrower agrees to pay interest as well as principle on specific data to the lender.

- Liquidity Position

It is the state of owing things of value that can easily be changed in to cash. Liquid assets determined the liquidity position of the organization and higher the liquid assets better the liquidity position.

- Share

The part of capital owned by a shareholder is called share. This share are transferable in nature. Thus, any person can be member of the company by purchasing the certificates of investment on company and could withdraw by transferring his/her share.

- Interest

Interest is that additional source of money changed on borrowing paid to some one who borrows money form lends or other financial institution or money holder. It is opportunity cost on sacrificing the saving from own state for certain period.

- Securities

Securities are the main source of long term financing, which involve share and debenture issued by the company or government and redeemed in future with interest.

- Loan and advances

Loan and advances, overdraft are the main sources of income for a firm. Bank deposit can be crossed beyond a desired level but the level of loan and advances overdraft will never cross it. Commercial bank and other financial institution may take more preferential collateral while granting loan and advances.

- Other use of fund

Commercial bank must maintain the bank balance with Nepal Rastraya Bank as prescribed by the bank. Similarly, they have to maintain the cash bill in the 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 activities

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.

2.3 Review of Related Studies

2.3.1 Review of Books/Journals/Articles

Charles P. Jones, emphasizing on the proper management of an 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 an investors wealth, which is the some of current income and present value of all future income" (Charles P. Jones, 1988, p. 1-3).

Murari R. Sharma in his article, "A study of joint venture banks in Nepal, co-existing 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. 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 type of banks will co-exist complementing each other and contributing the nations accelerated development" (Murari R Sharma, 1988, p. 120).

According to Shakespeare, Baidhaya has an elaborated definition on 'investment', which beseeches of sound investment policy and cover wider aspects. He writes, "A sound investment policy of bank is such that its funds are distributed on different type of assets with good profitability on the one hand and provides maximum safety and security on the depositor and banks on the other hand. Moreover, risk in banking sector tends to be concentrated in the loan portfolio. When a bank gets in to serious financial problem, its problem usually springs from significant amount of loans that have become uncollectible due to mismanagement, illegal economic downturn. Therefore, banks investment policy must be such that it ensures sound and prudent in order to protect public funds. Further in details he deals with what type of loan do banks make? And, how much of loans is loans to a wide variety of customers for many different purpose from purchasing automobile to construction of home and making trade with foreign countries. There, no uniform rules can be laid down to determine the portfolio of 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 bank operating 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 where as it is higher in urban areas" (Baidaya, Shakespeare, 1997, p. 46-47)

William J. Sharpe and Alexander J. Gorden has defined the term 'investment' as the sacrifice of money today for the prospective money tomorrow. They writes "Investment in its broadest sense, means the sacrifice of current dollars for the future dollars. Two different attributes are generally involved, time and risk. The sacrifice take place in the present and the magnitude is uncertain. In some cases, risk is the dominant attribute (e.g. call option in common stock). In yet both time and risk are important" (William F. Sharpe, Gorden J. Alexander and Jeffer U Bailly, 1998, p. 1-2).

I.M. Pandey says, "Investment decision expenditure and benefits should be measured in cash in investment analysis, cash follows is more important than accounting profit. It may also be pointed out of that investment decision and added to the shareholders wealth. Thus, investment should be evaluated on the basis of a criterion, which is compatible with the objective of the shareholders fund maximization. An investment will all to the shareholders wealth of it yield benefit in excess of the minimum benefits as per the opportunity cost of capital" (I.M. Pandey, 1999, p. 407).

Various articles are written in difficult such aspect of commercial bank of joint venture bank. Such as lending policy, liquidity position, interest rate structure, capital structure, investment policy etc. We will be reviewing few of them.

According to Yadav Pant (2003), a bank is a service-oriented institution, which provides many kinds of services for its customer, all of which are equally important. Moreover, the quality of services should be up to the mark to meet the customer's requirement. Customers are the key players for a service organization, without whom such organization can ever exist. (*Pant Yadav (2003), Info Himalayan*).

There is risk associated with Investment, as alas, there is risk associated with most elements of our lives. In the eyes of investors and creditors, a company's business risk complexion may change as a result of the investment it chooses. Because Investment proposals entail differing degrees of business risk, we must analyze not only their expected profitable but also the possible deviation from that expectation. Risk is expressed in terms of the dispersion of the probability distribution of possible net present values or possible internal rates of return and is measured by the standard deviation. Risk can be measured under the assumption of serial independence of cash flows over time or when cash flows from one period to the next are dependants over time. For dealing with situation of moderate correlation of cash flows over time, probability trees are useful. Simulation techniques often can be applied to analyze risk Investment. (*Vanhorn, James .C (2003), Financial Management and Policy*)

Investments are made in assets. Assets generally are two types: real assets (Land, Building, Factories etc) and financial assets (Stock, Bonds, T-Bills etc). These two types of investment are not competitive but complementary, highly developed

institution for financial investment greatly facilitating real investment. (*Bhattarai Rabindra, (2005), Investments Theory and practice 2nd Edition*).

2.3.3 Review of Research Work

In this topic we preview the important and relevant object of banking which have been conducted by some thesis researchers and some of students in this particular topic.

Upendra Tuladhar (2002) in his thesis work entitled "A Study on the investment policy of Nepal Grindlays Bank limited in comparison to the Joint Venture Bank of Nepal". He has highlighted the following objective to complete thesis work during the thesis period.

- 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. BABIL and HBL. Liquidity position of NGBL is less than that of other tow JVBs.
- Mean of cash and bank balance to current ratio of NGBL is less than that of NBIL and BHL.
- Mean of investment of government securities to working fund ratio of NGBL is better than that of other JVBs.
- NGBL has the largest profit margin in comparison with other JVBs.

- Growth ratio of NGBL and NABIL is negative but it is found that HBL has increasing growth ratio, finally, he has presented the following.
- 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 policy.

He has recommended investing their funds in the purchase of share 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 succeeding year.

Mr. Joshi (2003) in his thesis, "A comparative study on investment policy of Standard Chartered Bank Nepal Ltd. and Everest Bank Ltd." shows that the both banks have non-satisfactory current ratio in the study period is some F/Y both banks have lower current ratio than 1. He found that liquidity position of EBL is better than SCBNL. The cash and bank balance of EBL with respect to deposit is better against the readiness to serve its customer deposit than SCBNL.

The mean ratio of cash and bank balances to account assets of SCBNL is lower in comparison EBL. He concluded that, it can be said that SCBNL is not in a better position to maintain its cash and bank balances in comparison to EBL but it doesn't

mean it can't meet its daily requirement to make the payment of customer's deposit. Contrast EBL, may have to invest their fund in more productive area.

SCBNL has investment its more portion of current assets in government securities than EBL. SCBNL has made higher amount of investment on government securities this is due to unavailability of other secured and profitable investment sector. Whereas the lower amount of EBL is investment in government security. It may be the reason of more investment on other productive sector.

He concluded that EBL is successful to mobilize its total deposit as loan and advance and acquiring high profit in comparison to SCBNL. Whereas high ratio is not better advances is not as liquid and cash a bank balance, it can be stated that SCBNL has invested higher amount in share and debenture in comparison to EBL.

From analysis of co-efficient of correlation analysis he can conclude that both SCBNL and EBL have significant position relationship between deposit and loan advances, deposit and investment and total outside and net profit.

From his study, trend value of deposits loan and advances, investment net profit shows that continuously increasing trend. In conclusion, it is quite obvious that SCNL's deposit collection position in relation to EBL is proportionally better in ten years. He can say that both SCBL and EBL have followed the policy of maximizing the investment.

This research work is concentrated only in the analysis of two banks and also cannot explain the result after FY 2000/001. Investment policy of commercial banks cannot be defined by this study for succeeding years.

Rajesh Dhital (2004) in his research study entitled, "A Comparative Study of Investment Policy of Chartered Bank Nepal Ltd. and Bank of Kathmandu Ltd", has highlighted the following objective.

- To find out relationship between total investment, deposit, loan advances, net profit and outside assets and compare them.
- To compare the investment policy of the concerned banks.
- To evaluate the liquidity, assets management, profitability and risk portion of SCBNLK and BOKL.

His major findings were,

- The liquidity position of both banks are 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 beared lower degree of liquidity and credit risk compare to BOKL.
- All relationship between different variables taken for study are insignificant except deposit and interest earned in cash of SCBNL where as more relationship were significant incase of BOKL.
- Trend value are in increasing trend.
- The test of hypothesis showed no significant difference.

In this study, he recommended to increase more deposit, adopt liberal lending policy, expand the branches and adopt project oriented approach. His study based only in the two banks.

Thus various researchers have been conducted on investment policy of JVBs and most of them are generally emphasized on liquidity, profitability, activity and capital structure.

In this study, it has been tried to give full information of investment policy of Joint Venture Banks of Nepal. Although other researcher have researched and analyzed the data on the topic related to financial performance and investment policy up to FY 2006/07. That is why, it has been tried here in this study to analyze the data related to investment policy of the found JVBs up to FY 2007/08. Study period of this research is different than previous study although there are similar topics.

B.B Aryal (2005) has conducted a study on “Investment Policy of JVBs in Nepal” a comparative study of EBL with NABIL Bank and NB Bank Ltd. He found that;

- The liquidity position of EBL is comparatively better than NABIL and NBBL. It has higher cash and bank balance to total deposit can cash bank balance to current assets ratio. It has made enough investment on government securities but has maintained moderated investment policy on loan and advances.
- EBL is comparatively average successful in it's on balance sheet operation as well as off balance sheet activities in compared to NABIL and NBBL.
- Profitability ratio of EBL is comparatively worse than the NABIL and NBBL.
- Risk ratio shows that EBL has maintained higher risk which indicates heterogeneous variability in its operation. Whereas there is moderate risk taken by NABIL and NBBL
- EBL has maintained high growth rates in total deposit, loan and advances but has moderate position in investment. EBL has less growth rate than NABIL and NBBL.
- EBL has the highest value of coefficient of correlation between deposit loan and advances that other compared banks. Likewise correlation co-efficient

between deposit and total investment is also higher than other compared banks. EBL is moderately successful in mobilization of fund and earn return i.e. net profit from such mobilized funds.

- The deposit of EBL, NABIL and NBBL are in increasing trend which leads its profit also to the increasing trend.
- There is no significance difference in between loan and advance to total deposit, no differences to current assets ratio likewise no significance difference in between loan and advances to current assets ratio of EBL, NABIL and NBBL.
- There is significant different between OBS operation to loan and advances of EBL, NABIL and NBBL. Likewise there is significant difference in between total interest earned to total outside assets of EBL, NABIL and NBBL.

(B.B Aryal (2005), “Investment Policy of JVBs in Nepal”)

Subedi, Krishna, (2006) in his thesis “A study on the investment policy of Nepal Arab Bank Ltd. In comparison to other joint venture Bank of Nepal “has presented that the liquidity position of the bank may be affected by external as well as internal factors. In his study, he found that to get success in competitive banking business depositor’s money must be utilized as loan and advances. The largest item of the bank in assets side is loan & advances. Negligence in administering these assets could be the main cause of liquidity crisis in the bank and major reason of bank failures. Nabil’s loan and advances to total depositor’s ratio is lower than that of other joint venture bank. He recommended following liberal policy and investing more and more percentage of the total deposits in loan and advances and increase cash and bank balance to meet loan demand. He also suggested to play role of financial intermediary and merchant banking like underwriting of securities brokers development of capital market and supportive in the security exchange.

He centralized his study on invest or lending more amount of total deposit. Without collecting it cannot invest and unable to collect more is also reason of bank failure. His study, however doesn't show how the banks will succeed it own business.

CHAPTER - III

RESEARCH METHODOLOGY

The research methodology is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of fact and figure. Research is a systematic method of finding out solution to a problem where as research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with the certain objective in view.

In other words research methodology refers to the various method of practices applied by the researcher in the entire aspect of the study. In order to accomplish the objective of the study, research methodology is designed on the basis of secondary data by using financial and statistical tools.

3.1 Research Design

Research design is necessary for each research work. It is the plan, strategy, investigation conceived so as to obtain answer to research question and to control variances. This study depends on the secondary data. It include all process of collecting verifying and evaluating of past evidence systematically and objectively to reach conclusion. Some statistical and accounting tools have been adopted to examine facts in this study the descriptive and analytical research design has been used.

3.2 Source of Data

This study were based on secondary data such as annual report, computer data banks, published data, literature review and other publication, primary data also conducted if adequate information are not available from secondary data.

3.3 Population and Sample

There are altogether listed 22 commercial banks as listed in Nepal stock exchange. Among them only four Joint Venture Banks viz. Nepal SBI, EBL, BHL, BOK have been taken in to account for research purpose as sample in this project study to compare this investment.

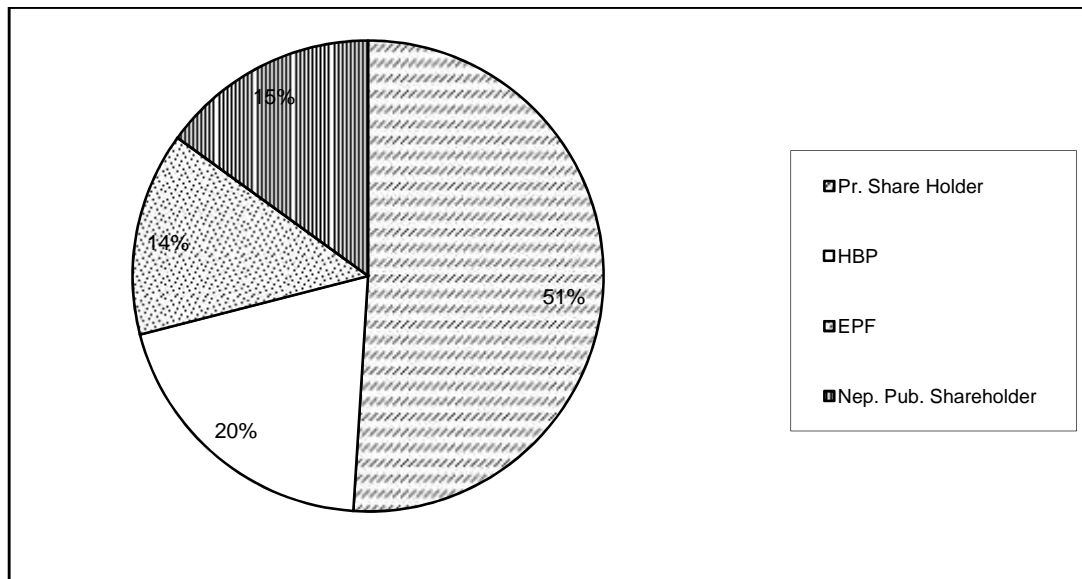
Brief Profile of the Concerned Banks

A brief profile of four selected sample banks are presented below.

Himalayan Bank Ltd. (HBL)

HBL is the fourth Joint Venture Banks of Nepal, which was incorporated in 1992 in partnership with Employee Provident Fund (EPF) and Habib Bank Limited, one of the largest commercial bank of Pakistan. Banks operation was commenced from January 1993. Its ownership is composed of promoter shareholders (Pr. Shareholder) 51%, Employee Provident Fund (EPF) 14% and Nepalese Public Shareholder (Nep. Pub. Shareholder) 15% and the Board of Directors contain 8 members. The bank at present had 16 branches including Kathmandu valley. The head office of this bank located at Tridevimarg, Thamel, Kathmandu.

Figure 1: Share Holding Pattern of HBL



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	2,000,000,000
Issued Capital	1,013,512,500
Paid up Capital	1,013,512,500

(Source: www.himalayanbank.com)

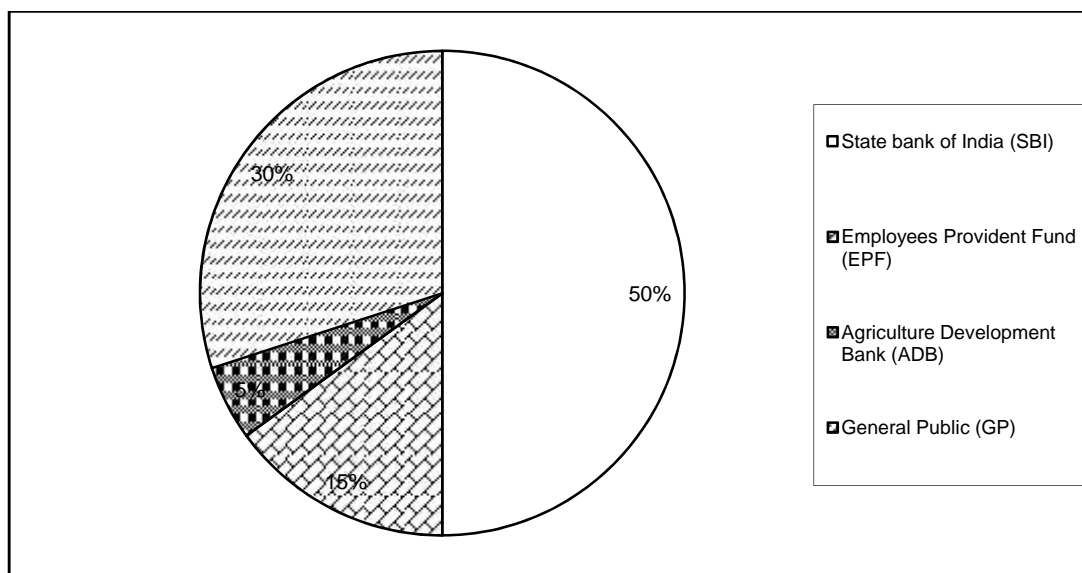
Nepal SBI Bank Ltd. (SBIL)

Nepal SBIL bank is the first Indo Nepal Joint Venture in the financial sector. Sponsored by three institutional promoters, namely, state bank of India, Karmachari Sanchaya Kosh (Employee Provident Fund) and Agricultural Development Bank through a memorandum of understanding signed on 17th July 1992, the bank came into operation on 8th July 1993 within a period of less than

one year. The bank received registration from register companies Ministry of industry, HMG on the 25th April 1993 and commenced its first board meeting on may 25th, 1995 to pave the way for operationalizing the bank within the in the quickest possible time. The bank received certificate of commencement of business on the 30th June 1993. Moreover, it received its license from NRB for all commercial banking transaction on the 6th July 1993.

The bank had set up its corporate and banking office at Durbarmarg with computerized operations. However, the space available at Durbarmarg was not adequate to facilitate its business later the corporate office was shifted to Kamal Pokhari leaving Durbarmarg office as banking office. Now, this bank has its corporate office at Hattisar. The bank is currently running its operation with twenty-two branches in various part of kingdom.

Figure 2: Share Holding Pattern of Nepal SBI Bank Ltd.



Nepal SBI Bank offer products and services like conventional deposit scheme like fixed, saving and current, credit by way of term loan as well as working capital, letter of credit, bank guarantee, retail finance, SWIFT transfer, ATM cards etc.

Present Capital Structure of Nepal SBI Bank

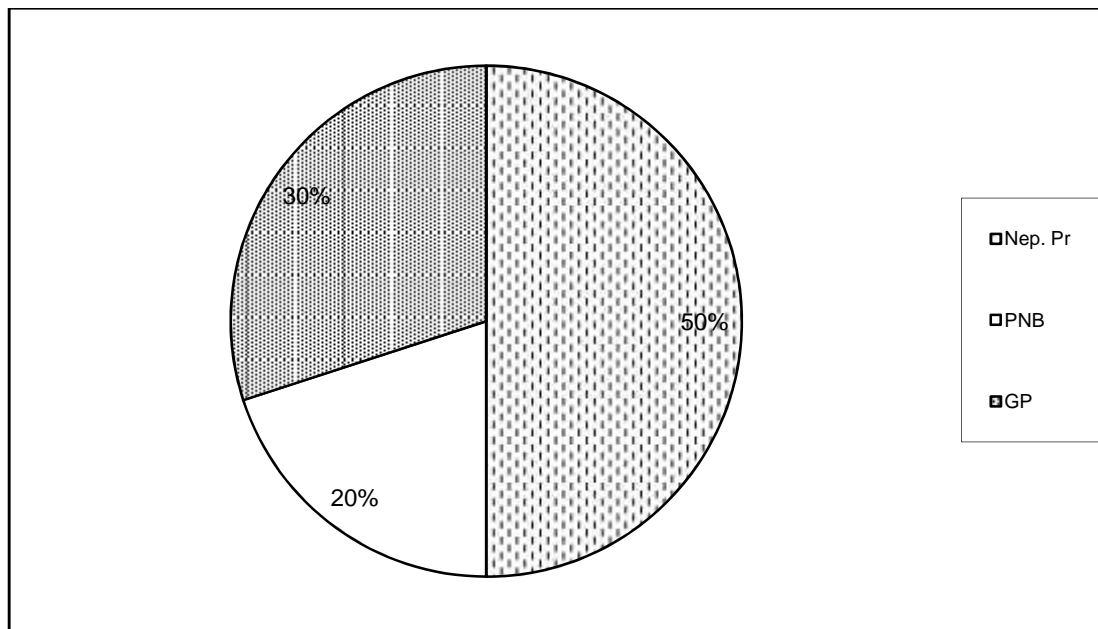
Authorized Capital	1,000,000,000
Issued Capital	877,500,000
Paid up Capital	874,527,840

(Source: www.nepalshi.com.np)

Everest Bank Ltd. (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 holds 20% equality of the banks share capital, 50% held by Nepalese promoters (Nep. Pr) and 30% of share capital is held by general public (GP). The board of director contain eight members.

Figure 3: Shareholding Pattern of EBL



EBL has 26 branches across the kingdom, EBL offers services like deposit loan and advances, trade finance activities, remittance facilities, foreign exchange foreign currency deposits, SWIFT transfer T.T. transfer, L.C. facilities, deposit locker, drawing arrangement etc.

Present Capital Structure of EBL

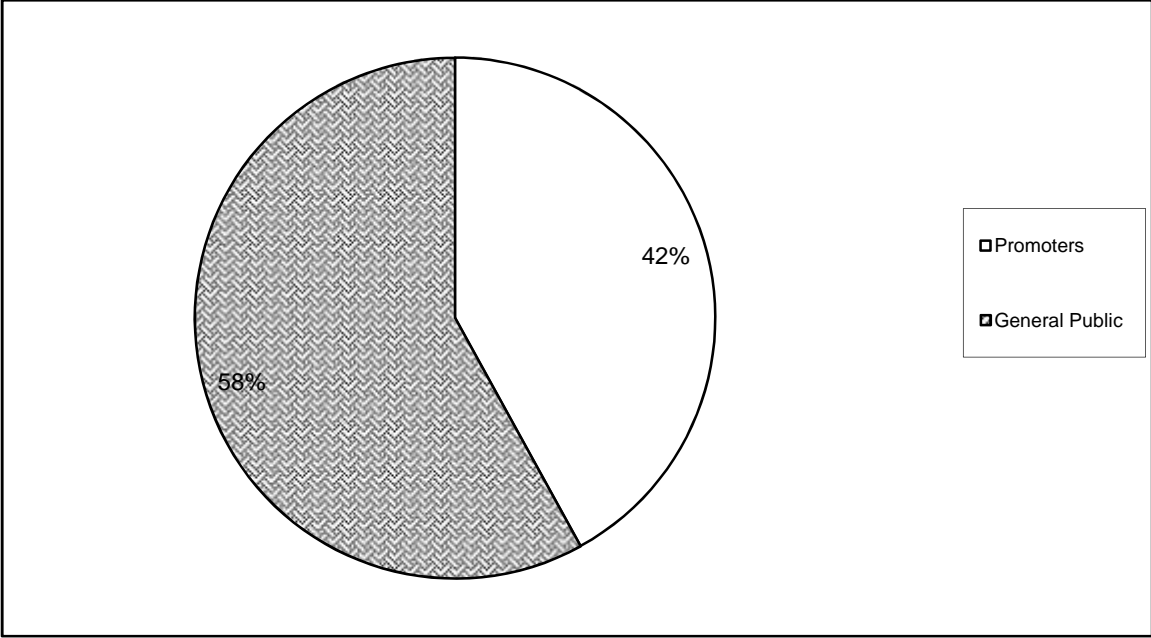
Authorized Capital	1,000,000,000
Issued Capital	843,200,000
Paid up Capital	831,400,000

(Source: www.everestbankltd.com)

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 in collaboration with SIAM Commercial Bank Public Company Limited, Thailand in which 42% equality share is held by promoters and 58% is held by general public. The bank at present has 22 branches around the kingdom. It has 8 members in board of director and head office in Kathmandu.

Figure 4: Share Holding 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 locker etc.

Present Capital Structure of BOKL

Authorized Capital	1,000,000,000
Issued Capital	606,173,300
Paid up Capital	603,141,300

3.4 Data Collection Procedure

This research study is mainly based on secondary (Published) data however, to certain extent. Primary data are also used. The required data for the study are collected from the concerned publications form different publishers. For the purpose of the study, the secondary data are gathered form various sources such as

book, journals articles and annual report, especially from profit and loss account and balance sheet.

1. Financial tools and
2. Statistical tool

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.

Ratio analysis

Financial ratio is the mathematical relationship between two accounting figures. "Ratio analysis is a part of whole process of analysis statements of any business or industrial concern specially to take out put and credit decision".

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

A. Liquidity ratio

Liquidity ratio are used to judge the ability of banks to meet it short term liabilities that are likely to mature in the short period. From them, such insights can be obtained into 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 bank's assets

can be converted into cash to meet deposit withdrawal and other current obligations.

- i. Current ratio
- ii. Cash and bank balance to total deposit ratio
- iii. Cash and bank balance to current asset ratio
- iv. Investment on government securities to current asset ratio
- v. Loan and advance to current access ratio

i. Current ratio

It refers to the relationship between current assets and current liabilities of a firm that also measure the short-term solvency of the firm. Current asset involve cash and bank balance, money at call or short, loan and advances, investment on government securities and other interest receivables, overdraft, bills purchased and discounted and miscellaneous current assets. Similarly, current liabilities include deposits and other short-term loan, bills payable, tax provision, staff bonus, dividend payables and other miscellaneous current liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current Liabilities}}$$

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.

ii. Cash and bank balance to total deposit

Cash and bank balance are the most liquid current assets of firm, cash and bank balance to total deposit ratio measure the percentage of most liquid assets to pay depositors immediately. This ratio is computed dividing the amount of cash and bank balance by the total deposits.

It can be presented as,

$$\text{Cash and bank balance to total deposit} = \frac{\text{Cash and bank balance}}{\text{Total deposit}}$$

iii. Cash and bank balance to current asset ratio

This ratio measure the percentage of liquid assets i.e. cash and bank balance among the current assets of a firm. Higher ratio shows the higher capacity of firm to meet the cash demand. This ratio is calculated dividing cash and bank balance by total current assets and can be presented as,

$$\text{Cash and bank balance to current assert ratio} = \frac{\text{Cash and bank balance}}{\text{Current assets}}$$

iv. Investment on government securities to current assets ratio

This ratio is calculated to find out the percentage of current assets invested in government securities, treasury bills and development bonds. This ratio can be calculated dividing the amount of investment on government securities by the total amount of current assets and can be stated as follows.

$$\text{Investment on government securities to current asserts ratio} = \frac{\text{Investment on government securities}}{\text{Current assets}}$$

v. Loans advances to current assets ratio

Loan 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.

This ratio can be computed by dividing loans and advances by current assets.

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

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

B. Assets management ratio

Asset management ratio is here used to indicate how efficiently the selected banks have arranged and invested their limited resources. The following financial ratios interpretations are made by these calculations.

- i. Loan and advances to total deposit ratio
- ii. Loan and advances to total working fund ratio
- iii. Total investment to total deposit ratio
- iv. Investment on government securities to total working fund ratio
- v. Investment on share and debenture to total working fund ratio
- vi. Loan loss ratio

i. Loan and advances to total deposit ratio

This ratio is calculated to find out how successfully the selected banks and finance companies are utilizing their total collections/ deposits on loan and advances for the purpose of earning profit. Greater ratio shows the better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposits, which can be shown as,

$$\text{Loan and advances to total deposit ratio} = \frac{\text{Total loan and advances}}{\text{Total deposit}}$$

ii. 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 return. This can be calculated by dividing loan and advances by total working fund which is shown below.

$$\text{Loan and advances to total working fund ratio} = \frac{\text{Loan and advances}}{\text{Total working fund}}$$

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

iii. Total investment on total deposit ratio

Investment is one of the major sources of earning income. This ratio indicate how properly firms deposits have been invested on government securities, share and debenture other companies. This ratio can be computed dividing total amount of investment by total amount deposit collection, which can be shown as.

$$\text{Total investment to total deposit ratio} = \frac{\text{Total invesment}}{\text{Total deposits}}$$

iv. 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,

$$\text{Investment on government securities to total working fund ratio} = \frac{\text{Investment on government securities}}{\text{Total workign fund}}$$

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

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

Investment on share and debenture to total working fund ratio shows the investment of banks and finance companies on the share and debenture of other companies in term of total working fund. This ratio can be obtained dividing on share and debenture by total working fund. That can be calculate as,

Investment on share and debenture to total working fund ratio=

$$\frac{\text{Investment on share and debenture}}{\text{Total working fund}}$$

Where total investment includes investment on government securities, investment on debenture and bonds, share of other companies.

vi .Loan loss ratio

This ratio shows the possibility of loan default of a bank. It indicates how efficiently it manages its loan and advances and makes effort 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:

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

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

c. Profitability ratio

Profitability ratios are used to indicate and measure the overall efficiency of a firm in term of profit and financial position and performance of any institution. For better financial performance, profitability ratio of firm should be higher.

Profitability position of the firm can be presented through the following different ways.

- i. Return on total working fund (Total assets)
- ii. Return on loan and advance ratio
- iii. Total interest earned to total working fund ratio
- iv. Total interest paid to total working fund ratio
- v. Total interest earned to total outside assets ratio

i. Return on total working fund (Total assets) ratio

This ratio indicates the overall profitability of all working funds, i.e. total assets, it is also known as return on assets (ROA). 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.

$$\text{Return on total assets (ROA)} = \frac{\text{Net profit (loss)}}{\text{Total loan and advances}}$$

iii. 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 indicates the better performance of financial institutions in the form of interest earning on its working fund. This ratio is calculated dividing total interest earned from investment by total working fund and is mentioned as below.

$$\text{Total interest earned to total working fund ratio} = \frac{\text{Total interest earned}}{\text{Total working fund}}$$

iv. 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:

$$\text{Total interest paid to total working fund ratio} = \frac{\text{Total interest paid}}{\text{Total working fund}}$$

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

v. Total interest earned to total outside assets ratio

This ratio measure 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 type of investment. The numerator comprises of total interest income from loan and advances, cash credit and overdraft, government securities and other investments.

d. Risk ratio

Risk means uncertainty, which lies in the business transaction of investment management. When a firm wants to bear risk and uncertainty, profitability and

effectiveness of the firm increases. This ratio checks the degree of risk involved in the various financial operation. For this study following risk ratio are used to be analyze and interpret the financial data and investment policy.

i. Liquidity risk ratio

ii .Credit risk ratio

i. Liquidity risk ratio

The liquidity risk ratio measure the level of risk associated with the liquid assets, i.e. bank balance that are 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 asset, i.e. total cash and bank balance by total deposit. It can be computed dividing liquid assets by total deposits.

$$\text{Liquidity risk ratio} = \frac{\text{Liquid assets}}{\text{Total deposits}}$$

ii. Credit risk ratio

Credit risk ratio helps to check the probability of loan non repayment or the possibility of loan to go in to default. Credit risk ratio is calculated in percentage dividing total loan and advances by total assets. It can expressed as,

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

e. Growth ratio

Here, the growth ratio represent how well the commercial banks are maintaining their economic and financial condition. The higher ratio represent the better

performance of the selected firms to calculate, check and analyze the expansion and growth of the selected banks the following growth ratios are calculated Growth ratios are directly related to the fund mobilization and investment of those firms.

$$D_n = D_o (1+g)^{n-1}$$

Where,

D_n = Total variable in 4th year of sample banks

D_o = Total variable in initial year of sample banks

G = Growth rate

N = number of period of study

- i. Growth ratio of total deposits
- ii. Growth ratio of loan and advance
- iii. Growth ratio of total investment
- iv. Growth ratio of net profit

3.4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of the study. In this study, statistical tools such as correlation coefficient analysis, standard deviation, coefficient of variance, least square linear trend and hypothesis testing have been used.

A. Karl Pearson correlation co-efficient analysis

This statistical tools has been used to analyze, identify and interpret the relationship between two or more variables. It interprets whether two or more variables are correlated positively or negatively. Statistical tools analyzes the

relationship between those variables and the helps the selected banks to make appropriate investment policy regarding to profit maximization and deposit collection, fund utilization through providing loan and advances or investment on other companies. Karl Pearson's' coefficient of correlation has been used to find out the relationship between the following variables.

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

The above tools analyzes the relationship between these variables and helps the bank to make appropriate policy regarding deposit collection, found utilization (loan and advances and investments) and maximization of profit.

To find out those relationship, the following formula is used

$$r = \frac{N \sum xy - \sum x \sum y}{\sqrt{N \sum x^2 - (\sum x)^2} \sqrt{N \sum y^2 - (\sum y)^2}}$$

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

When,

- i. $r = +1$, there is perfect positive correlation.
- ii. $r = -1$, there is perfect negative correlation.
- iii. $r = 0$, there is no correlation.
- iv. r lies between 0.7 to 0.999 (-0.7 to -0.999) there is a high degree of positive (or negative) correlation.

v. r lies between 0.5 to 0.699, there is a moderate degree of correlation.

vi. r is less than 0.5, there is low degree of correlation.

B. Trend Analysis

This topic analyzes the trend of deposits. Loan and advances investment and net profit of selected joint venture banks from 2003/04 to 2007/08 and helps to make the forecasting for the next five years till 2012/013. Under this topic, the trend of following have been analyzed.

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

C. Test of hypothesis

Under this analysis the effort has been made to test the significances level regarding the parameter of the population of the basis of sample drawn from the population. The following step have been followed for the test of hypothesis.

1. Setting hypothesis

Null hypothesis, H_0 : $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3 = \hat{\mu}_4$, i.e. means of sample bank's (HBL, SBIL, EBL & BOKL).

Variables are equal to one another. There is no significant difference in variables of sample bank.

Alternative hypothesis, $H_1: \hat{\mu}_1 \neq \hat{\mu}_2 \neq \hat{\mu}_3 \neq \hat{\mu}_4$, i.e. the means of sample bank's (HBL, SBIL, EBL & BOKL) variables are not equal to one another. There is significant difference in variables of sample banks.

(Total investment to total deposit ratio, total interest earned to total outside assets ratio, loan and advance to total deposit ratio, return on loan and advance ratio are the variables of sample banks.)

2. Calculate the total T of all observations in all same banks. Thus

$$T = Ex_1 + Ex_2 + Ex_3 + Ex_4$$

3. Find the correction factor by using the formula.

$$\text{Correction factor} = \frac{T^2}{N}$$

4. Calculate the sum of square of all the values (or observation) in sample banks

and subtract the correct factor $\frac{T^2}{N}$ from this sum to obtain the total sum of

square (SST). Thus, $SST = T = X_1^2 + X_2^2 + X_3^2 + X_4^2 - \frac{T^2}{N}$.

5. Find the square of the sum of the values of each sample banks and divided each such squared value by the number of values in the corresponding sample banks and calculate the total of all the results thus obtained and subtract the correction factor from this total. This final results gives the sum of squares of deviation between the samples.

$$SSC = \frac{(X_1)^2}{n_1} + \frac{(X_2)^2}{n_2} + \frac{(X_3)^2}{n_3} + \frac{(X_4)^2}{n_4} - \frac{T^2}{N}$$

6. Calculate SSW i.e. the sum of square within the sample by subtracting SSC from SST thus, $SSW = SST - SSC$.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Data Presentation and Analysis

This is analytical chapter, where the researcher has analyzed and evaluated those measure financial items, which mainly effect the investment management and fund mobilization of SBIL, BOKL, EBL and HBL in comparison. There are many types of financial ratios but those ratio are calculated and analyzed which are very important to evaluated fund mobilization of commercial banks.

4.1.1 Financial Analysis

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the item of balance sheet. For the purpose of this study, ratio analysis has been mainly used any with the help of it, data has been analyzed. Only those ratio 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.

- I. Liquidity ratio
- II. Asset management ratio
- III. Profitability ratio
- IV. Growth ratio

I. Liquidity ratio

Commercial banks collects the fund from community of commitment of return their money when demand it. So, they must maintain its sufficient liquidity

position not fulfill that commitment of return depositor's deposit, withdraw, convert non cash assets to cash to satisfy immediate needs without any loss to bank and consequent impact on long-rung profit.

a. Current ratio

Current ratio indicates the ability of the bank to meet its current obligation. It measure the liquidity position of financial institutions current ratio is calculating dividing current assets by current liabilities. The standard current ratio is 2:1 for banking and seasonal business current ratio of 1:1 is also said to be OK. The current ratio, mean, standard deviation and coefficient of variation of HBL, SBIL, EBL and BOKL are given in the following table.

Table No. 4.1
Current Ratio (Times)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	0.79	1.06	1.05	1.04
2004/05	0.80	1.05	1.08	1.01
2005/06	0.84	1.08	1.02	1.01
2006/07	0.88	1.07	1.04	1.00
2007/08	0.89	1.08	1.05	0.99
Mean	0.84	1.068	1.048	1.010
S.D.	0.0405	0.01166	0.01939	0.01673
C.V.(%)	4.82	1.09	1.85	1.66
Industry Average= 0.99				

See appendix- 5

From the above table we can see that current assets of BOKL are more than current liability except in the F/Y2007/08, which indicates that this bank are not able to pay their current obligation during the year and HBL also not able to pay their current obligation in 5 year period.

The current assets of SBIL and EBL are also more than their current liability.

In average the liquidity position of SBIL is greater than other banks, and the HBL has maintained the low liquidity position. i.e. $1.068 > 1.048 > 1.0107 > 0.84$ due to high mean ratio. It shows that the liquidity position of SBIL is better than other banks.

While comparing the industry average of selected banks with the mean of each bank, it can be seen that except the HBL, all the other banks have mean ratio above the overall or industry average.

Likewise, the coefficient of variation (CV) of SBIL is less than other banks, i.e. $1.09 > 1.66 > 1.85 > 4.82$. It can be said that CR of SBIL is more consistent than other banks.

Though, the optimal standard of CR should be 2:1, it seems that except HBL other three banks do not have poor liquidity position.

b. Cash and bank balance to total deposit ratio

Cash and bank balance consist of cash on hand, foreign each hand, cheques and other cash items, balance with domestic banks. These ratio measure the availability of banks highly liquid or immediate funds to meet it unanticipated calls on all types of deposits. This ratio is calculated as

$$\text{Cash and bank balance to total deposit ratio} = \frac{\text{Cash and bank balance}}{\text{Total deposite}}$$

Table No 4.2

Cash and bank balance to total deposit ration (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	9.09	12.01	7.83	10.11
2004/05	8.12	8.36	10.40	8.28
2005/06	6.48	10.16	11.25	6.95
2006/07	5.85	9.81	13.15	10.62
2007/08	4.55	9.79	11.13	9.09
Mean	6.82	10.03	10.75	9.01
S.D.	1.615	1.16894	1.72066	1.31034
C.V.(%)	23.69	11.65	16.01	14.54
Industry average= 9.15				

See appendix- 6

A high ratio indicates the greater ability to meet their deposits and vice-versa. The given table shows the cash and bank balance to total deposit ratio of HBL, SBIL, EBL and BOKL.

Above table shows that the comparative cash and bank balance to total deposit ratio, which is in fluctuating trend of HBL than other banks. HBL higher ratio is 9.09% in FY 2003/04 and lower ratio is 4.55 in FY 2007/08. SBIL higher ratio is 12.01 in FY 2003/04 and lower ratio in FY 2004/05. Similarly in case of EBL and BOKL higher ratio is 13.15% and 10.62% in FY 2006/07 and lower ratio in FY 7.83% and 6.95% in FY 2003/04 and 2005/06 respectively. The mean ratio if HBL,

SBIL, EBL and BOKL are 6.82, 10.03, 10.75 and 9.01 respectively. EBL has higher mean ratio than other bank i.e. $10.75\% > 10.03\% > 9.01\% > 6.82\%$. Except HBL and BOKL the other banks has higher ratio than industry average. On the other hand, CV is SBIL is comparatively lower which shows the high consistency than the other three banks, i.e. $CV \text{ of SBIL } 11.65\% < 14.54\% < 16.01\% < 23.69\%$.

The above analysis helps to conclude that the cash and bank position of EBL with respect to deposit is better against the readiness to serve its customer deposit than other banks. In constraints a high ratio of non-earning cash and bank balance may be unfit which indicates the banks inability to invest its funds in income generations sectors. Comparatively, HBL has low ratio which shows that there may be some difficulties to meet the demand of its customer on their deposit to pay at any time. But it may earn more due to invested funds to different sectors.

c. Cash and bank balance to current assets ratio

This ratio shows the banks liquidity capacity on the basis of each and bank balance that is the most liquid asset. High ratio indicates the banks ability to meet daily cash requirement of their customer deposit and vice versa. But high ratio is not preferred as the bank has to pay more interest on deposit and will increase the cost of fund. Lower ratio is also very dangerous as the bank may not be able to make the payment against the cheque presented by its customer. Therefore, bank has to balance the cash and bank balance to current assets ratio in such as manner that it should have adequate cash for the customers demand against deposit when required and less interest is required to be paid against the cash deposit. This ratio is calculated as:

$$\text{Cash and bank balance to current assets ratio} = \frac{\text{Cash and bank balance}}{\text{Current assets}}$$

Table No. 4.3

Cash and bank balance to current asset ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	10.76	10.34	6.71	8.41
2004/05	9.74	7.05	9.09	7.95
2005/06	7.42	8.65	10.25	6.37
2006/07	6.38	8.32	11.40	9.69
2007/08	4.90	7.89	10.05	8.87
Mean	7.84	8.45	9.50	8.26
S.D.	2.14886	1.08652	1.57653	1.1023
C.V.(%)	27.41	12.86	16.59	13.38
Industry average= 8.15				

See appendix- 7

From the above table it is clear that cash and bank balance to current asset ratios of HBL is more fluctuating than other banks. HBL has higher ratio in FY 2003/04 and lower ratio in FY 2007/08 i.e. 10.76% and 4.90% respectively. SBIL has higher ratio 10.34% and lower ratio 7.05% in FY 2003/04 and 2004/05 respectively. EBL has higher ratio 11.40% in FY 2006/07 and lower ratio 6.71% in FY 2003/04. Similarly BOKL has higher ratio in FY 2006/07 and lower ratio in F/Y 2005/2006 i.e. 9.69% and 6.76% respectively.

The comparative table listed above shows the mean ratio of HBL is lower than other banks i.e. $7.84\% < 8.26\% < 8.45\% < 9.50\%$ EBL has the higher mean ratio than other banks i.e. $9.50\% > 8.45\% > 8.26\% > 7.84\%$. Except EBL the other three banks have lower ratio than industry average i.e. $9.50\% > 8.45\% > 8.26\% > 7.84\%$. As a

result, we can say that in spite of fluctuating trend in ratio, EBL has maintained high cash and bank balance to current asset ratio and higher liquidity position than other banks.

However, the CV of HBL is comparatively higher than other bank sand SBIL is comparatively lower than other banks i.e. $27.41\% > 16.59\% > 13.38 > 12.86\%$. Which shows that HBL is variability of ratio are more than other banks and SBIL has the minimum variability in comparison other three banks.

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

d. Investment on government securities to current asset ratio

The major objective of this ratio is to examine the portion of a commercial banks current assets, which is invested on various government securities issued by the government. More or less, each commercial bank is interested to invest their collected fund of 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 in to cash in other ways.

This ratio shows that out of total current assets, how much percentage of its has been occupied by the investment on government securities. This ratio is computed by dividing investment on government securities by current assets.

Table No. 4.4

Investment on government securities to current assets ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	18.45	22.60	26.18	25.48
2004/05	26.44	25.23	18.19	25.06
2005/06	22.22	27.79	23.43	23.23
2006/07	23.42	17.39	22.42	17.17
2007/08	25.27	17.84	18.16	13.01
Mean	23.16	22.17	21.68	20.39
S.D.	2.76932	4.06768	3.11338	4.60294
C.V.(%)	11.96	18.35	14.36	22.57
Industry average= 21.85				

See appendix- 8

From the above table, it is seen that the ratios of all the banks are in fluctuating trend. Comparatively, HBL has maintained the high ratio investing on government securities. The table shows that the mean of investment on government securities to CA ratio of HBL is higher than other banks, i.e. 23.16%>22.17%>21.68%>20.39. It means HBL has invested more portion of CA in government securities than other banks. The mean of investment on government securities to current ratio of BOKL is lower than other bank. It means BOKL has invested low portion of CA is government securities.

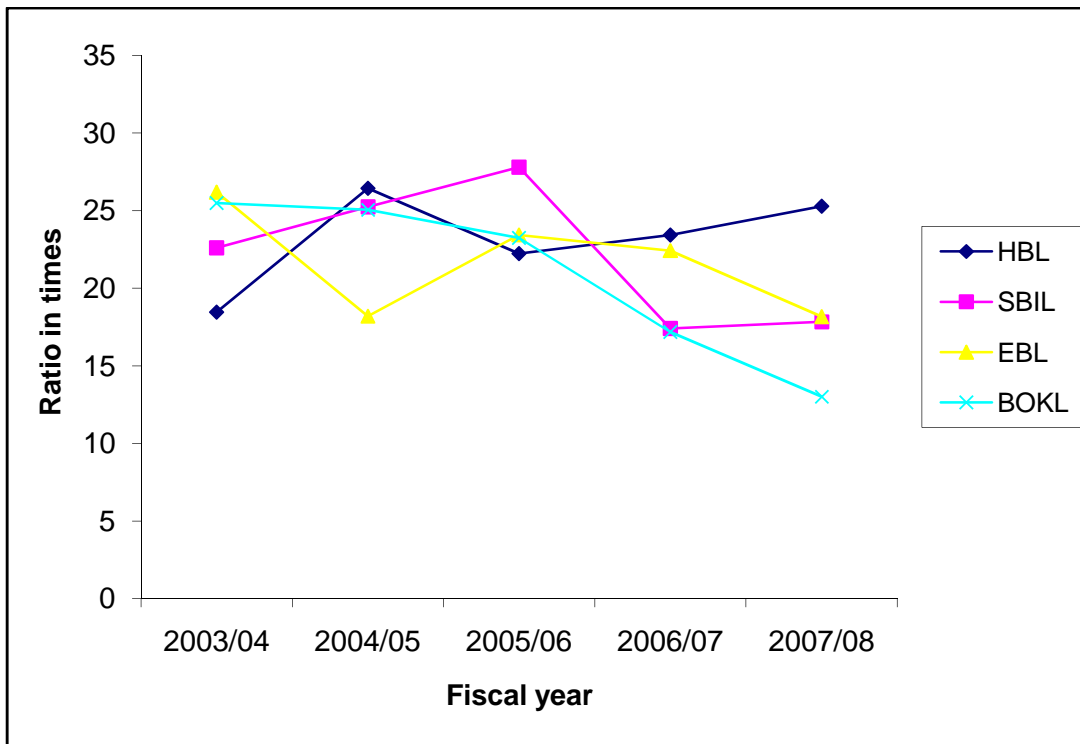
On the other hand, CV in ratio of HBL is lower than other banks. BOKL has maintained the higher CV than other banks i.e. 11.96%<14.36%<18.35%<22.57%. Which means that the variability of ratio of HBL more consistent and

homogeneous than other banks and BOKL is less consistent and homogeneous than other three banks.

From this analysis, we can say that HBL has invested more portion of C.A. in government securities and BOKL has invested two portion of C.A. in government securities. It means BOKL has invested its current assets in other income generation sector. SBL and EBL has invested more portion of C.A. in government securities that BOKL and low portion than HBL.

Investment on govt. securities to current assets ratio of the four banks is graphically presented below.

Figure 5: Investment on government securities to CA ratio



The figure no. 5 shows that HBL has invested more portion in government securities and BOKL has invested low portion in government account than other banks.

e. Loan and advance to current asset ratio

A commercial bank should not keep all its collected fund as cash and bank balance but they should be invested as loan and advances to the customers because they must earn high profit by mobilizing funds for the long term survival of the bank. They must pay interest on the deposit funds even if they do not grant loan and advances and may also be harmful because they can only 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 asset.

Table No. 4.5

Loan and advances to current asset ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	62.55	61.53	62.21	60.67
2004/05	60.06	59.11	65.99	62.63
2005/06	62.18	57.69	64.50	63.26
2006/07	61.06	68.77	64.93	68.96
2007/08	65.12	70.23	68.99	76.39
Mean	62.19	63.47	65.32	66.38
S.D.	1.7046	5.0984	2.2097	5.7141
C.V.(%)	2.74	8.03	3.38	8.61
Industry average= 64.34				

See appendix- 10

From the table 5 we can see that the ratio of all banks are in fluctuating trend. The higher ratio of HBL is 65.12% and lower ratio is 60.06% in FY 2007/08 and 2004/05 respectively. SBIL has higher ratio 70.23% and lower ratio 57.69% in FY 2007/08 and 2005/06 respectively. Likewise, EBL has maintained higher ratio 68.99% in FY 2007/08 and lower ratio 62.21% in FY 2003/04. Similarly BOKL has higher ratio 76.39% in FY 2007/08 and lower ratio in FY 60.67% in FY 2003/04.

While examining the mean ratio BOKL has the highest mean ratio and HBL has the lower ratio i.e. $66.38\% > 65.32\% > 63.47\% > 62.19\%$ and CV of BOKL is the highest in comparison to the other three banks which indicates less uniform values or ratios of this bank. The most consistent bank among these four in regard to loan and advances to CA ratio is HBL, i.e. $2.47\% < 3.38\% < 8.03\% < 8.61\%$. While analyzing the industry average we can see that except HBL and SBIL the banks have mean ratio higher than company average, it indicates HBL's and SBIL's lower potential to mobilize current assets as loan and advances.

So, we can conclude that HBL and SBIL are poor in mobilizing its fund as loan and advances with respect to current asset in comparison to EBL, and BOKL. On the other hand, BOKL has highly mobilized its fund as loan and advances comparatively. Where HBL shows more consistency in the nation and BOKL shows the least consistency.

II. Assets management ratio

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

a. Loan and advances to total deposit ratio. This ratio actually measure the bank's success in mobilizing the deposit on loan and advances for the purpose of profit generation.

A higher ratio indicate better mobilization of collected deposit 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 in dividing loan and advances by total deposit. The following table shows the loan advances to total deposit ratio of the four banks throughout the study period.

Table No. 4.6
Loan and advances to total deposit ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	52.86	71.47	72.68	72.94
2004/05	50.07	70.07	75.45	65.20
2005/06	54.34	67.78	70.79	69.04
2006/07	56.01	81.03	74.91	75.62
2007/08	60.48	87.11	76.40	78.37
Mean	54.34	75.49	74.05	72.23
S.D.	3.4659	7.3579	2.0360	4.6753
C.V.(%)	6.33	9.75	2.75	6.47
Industry average= 69.13				

See appendix- 9

From the above listed table, we can see that the ratio of all banks are in fluctuating trend. Among the four banks EBL has least fluctuating trend.

SBIL has maintained the highest loan and advances to total deposit mean ratio and HBL has the lowest mean ratio which mean HBL has mobilized lowest portion of deposit to loan and advances and SBIL has mobilized highest portion of deposit in loan and advances and there is slight difference of EBL, BOKL and SBIL in mean ratio i.e. $75.49\% > 74.05\% > 72.23\% > 54.75\%$.

Except, HBL's mean ratio all other three banks have higher ratio than industry average ratio. It shows that HBL is comparatively poor in mobilizing deposit as loan and advances i.e. $54.75\% < 69.13\%$ and $75.49\% > 74.05\% > 72.23\% > 69.13\%$.

EBL has the lowest CV of 2.75% which indicate more consistent and SBIL has the highest CV of 9.75% which indicate least consistent, i.e. $9.75\% > 6.47\% > 6.33\% > 2.75\%$.

From this analysis, we can say that SBIL is successful in mobilizing its total deposit as loan and advances and maintain least consistency in the ratio in comparison to the other three banks. But while granting loans and advances, so many factor has to be considered, such as risk analysis, diversification, social responsibility, bank credit policy and limits of lending policy etc. HBL is not success to mobilize is deposit as loan and advances to generate more profit and high ratio also not better from the point of view of liquidity as loan and advances is not as liquid as cash and bank balance.

b. 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 or non-financial companies.

Now effort has been made to measure the extend to which the bank are successful in mobilizing the total deposit on investment.

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

This ratio is calculated by dividing total investment by total deposit and the ratio of HBL, SBIL and BOKL is presented in following table.

Table No. 4.7
Total investment to total deposit ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	42.22	26.50	31.44	32.00
2004/05	47.12	30.13	21.08	29.06
2005/06	41.10	32.82	30.44	32.22
2006/07	39.35	23.24	27.41	24.18
2007/08	41.89	22.52	21.11	20.25
Mean	42.34	27.04	26.30	27.54
S.D.	2.5901	3.9527	4.4492	4.6591
C.V.(%)	6.12	14.62	11.92	16.92
Industry average= 28.95				

See appendix- 11

The above table shows that the ratio of all banks are in 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. 42.34% > 27.54% > 27.04% > 26.30%. This shows that SBIL and BOKL also have mobilized minimum amount in investment. While comparing the mean ratio with industry average, it is seen that only HBL has higher mean ratio while other three banks have lower ratio.

The above table shows that the HBL is highly consistent in ratios through the study period with CV of 3.45% whereas the other three are highly inconsistent in comparison to HBL.

This analysis shows that HBL is in good position in mobilizing total deposit investment and has also maintained consistency in this ratio whereas the other three banks have inconsistent ratio and have mobilized only a little amount of total deposit into investment.

c. Loan and advances to total working fund ratio

A commercial bank's working fund should play a very significant role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on loan and advances for the purpose of income generation. A high ratio indicates a better mobilization of funds as loan and advances and vice-versa.

This ratio is computed by dividing loan and advances by total working fund (total assets). The following table exhibits the ratio of loan and advances to total working fund of HBL, SBIL, EBL and BOKL during the study period.

Table No. 4.8**Loan and advances total working fund ratio (%)**

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	46.99	60.94	60.99	59.46
2004/05	45.31	58.62	64.94	59.15
2005/06	48.86	57.20	61.22	58.96
2006/07	50.21	66.72	63.56	64.30
2007/08	53.23	69.52	67.47	70.02
Mean	48.92	62.60	63.64	62.38
S.D.	2.7203	4.7459	2.4184	4.3061
C.V.(%)	5.56	7.58	3.80	6.90
Industry average= 59.38				

See appendix -12

The comparative table listed above shows that the ratios of all banks are in fluctuating trend whereas the ratio of BOKL is slightly stable in FY 2003/04 and 2004/05.

EBL has maintained highest mean ratio of 63.64% which indicate EBL has mobilized its working fund (total assets) more than other banks. HBL has lowest mean ratio than other bank, it means that HBL has mobilized minimum fund of working fund as loan and advance than other bank. SBIL and BOKL has slightly different mean ratio. SBIL and BOKL has mobilized more than HBL and slightly low than EBL, i.e. $63.64\% > 62.60\% > 62.38\% > 48.92\%$.

Except, the bank HBL, all other three banks have maintained high ratio than industry average i.e. $59.38\% > 48.92\%$ and $59.38\% < 62.38\% < 62.60\% < 63.64\%$.

Above table also shows that the CV of EBL is lowest than other banks which mean HBL is more consistent and SBIL has higher CV of 7.58%, it is inconsistent. Other two banks (HBL and BOKL) is also inconsistent in comparison of EBL.

From the analysis, it can be concluded that EBL's fund mobilization in terms of loan and advances with respect to total working fund is more satisfactory than other three banks where as that of HBL is less satisfactory because its unable to mobilize fund.

Figure 7: A glance of total deposit, loan and advances and total investment of HBL from FY 2003/04 to 2007/08

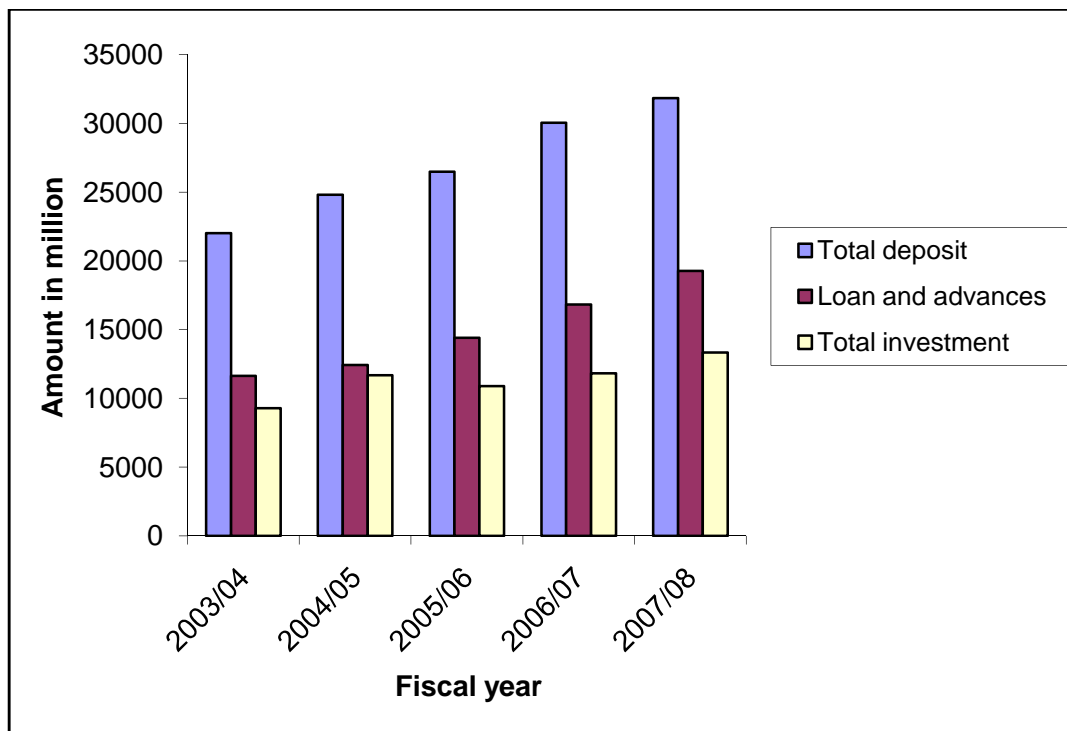


Figure 8: A Glance to total deposit, loan and advances and total investment of SBIL from Fy 2003/04 to 2007/08

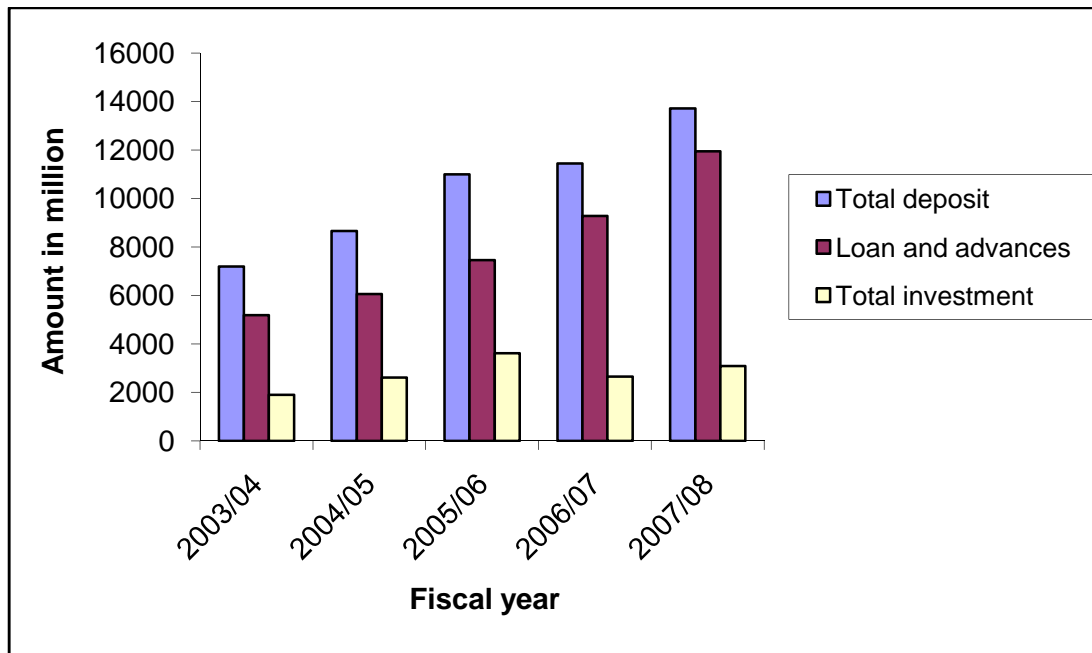


Figure 9: A Glance of Total Deposit, Loan and Advances and Total Investment in EBL from F/Y 2003/04 to 2007/08

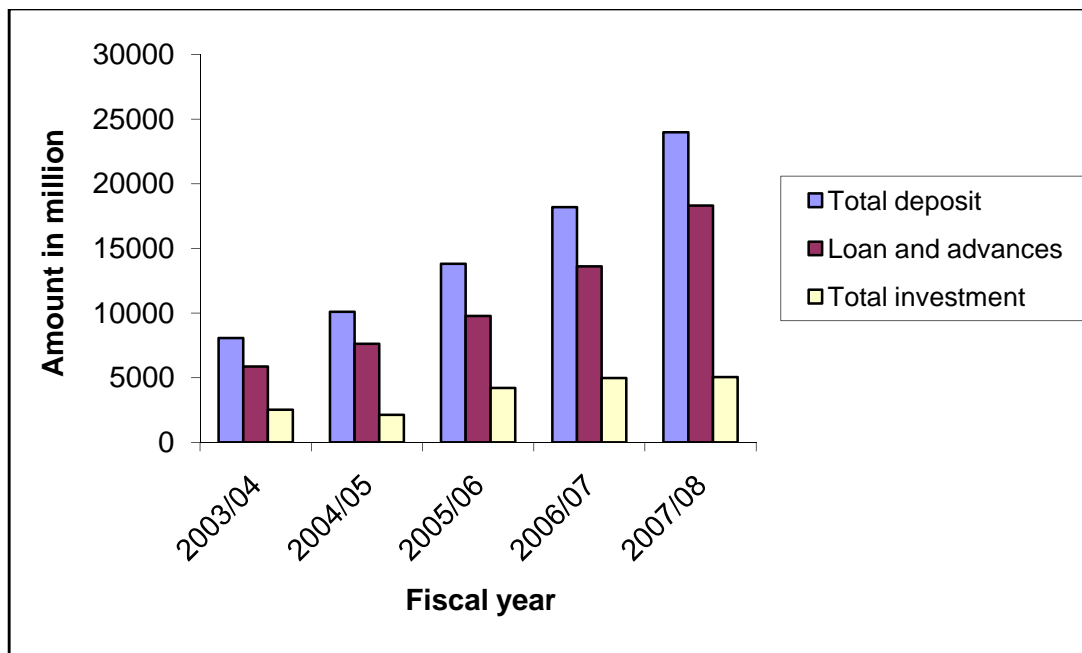
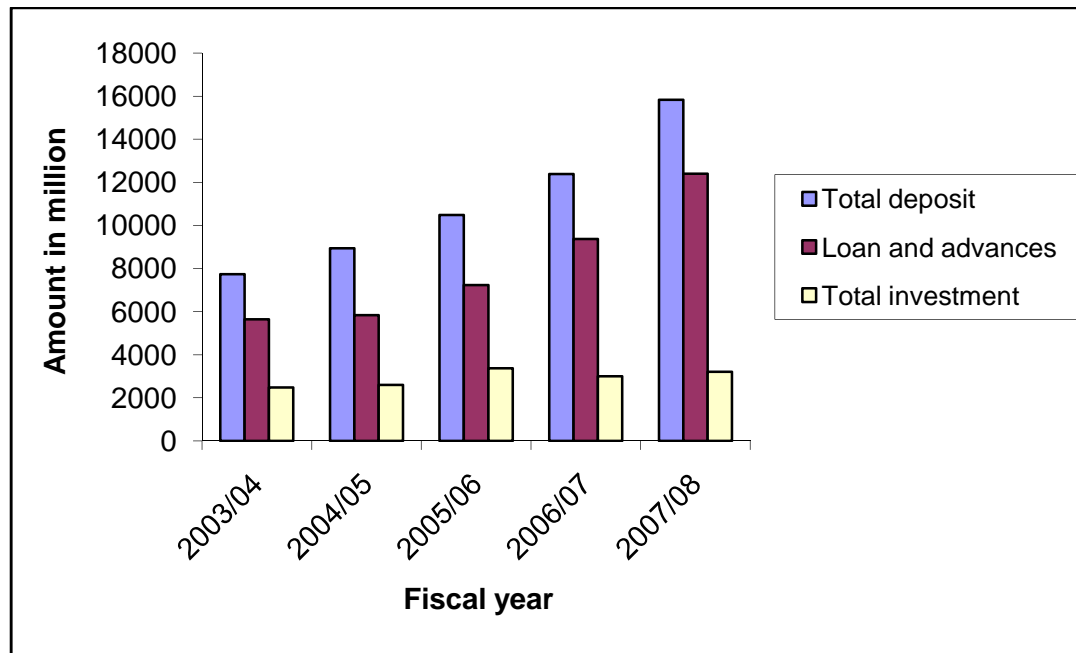


Figure 10: A glance of total deposit, loan and advances and total investment of BOKL from F/Y 2003/04 to 2007/08



d. Investment on government securities to total working fund ratio

This ratio reveals that the banks are successful in mobilizing their total working fund on different type of government securities to maximize the income. The bank should not utilize its all despite in loan and advances and to her form of credit, from securities and liquidity point view. There fore commercial banks seem to be interested to utilize their deposit by purchasing govt. securities. A high ratio indicates better mobilization of fund as investment on government securities and vice-versa.

This ratio is calculated as dividing investment on government securities and by total working fund. The following table shows the ratios of HBL, SBIL, EBL and BOKL.

Table No. 4.9

Investment on government securities to total working fund ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	13.86	22.39	25.67	24.98
2004/05	19.95	25.02	17.90	21.78
2005/06	17.46	27.55	22.24	21.65
2006/07	19.26	16.87	21.95	16.01
2007/08	20.65	17.66	17.76	11.92
Mean	18.24	21.90	21.10	19.27
S.D.	2.4317	4.14274	2.9767	4.6737
C.V.(%)	13.33	18.85	14.11	24.25
Industry average= 20.13				

See appendix- 13

The above comparative table shows that the ratio of all banks are in fluctuating trend. HBL has the highest ratio 20.65% in FY 2007/08 and lowest ratio 13.86% in 2003/04. SBIL has the highest ratio 27.55% in FY 2005/06 and lowest ratio 16.87% in FY 2006/07. EBL has highest ratio 25.67% in FY 2003/04 and lowest ratio in 17.76% in F/Y 2007/08. Similarly, BOKL has the highest ratio 24.98% in FY 2003/04 and lowest ratio in FY 11.92 in 2007/08.

From the above table, the mean ratio of SBIL is highest than other three banks. Its mean that SBIL investment on government securities is high compared to the other three banks. The mean ratio of EBL is slightly different than SBIL. EBL has mobilized its total working fund less than SBIL. HBL and BOKL have invested

very little amount in the government security i.e. 21.90%>21.10%>19.27%>18.24%.

The CV of HBL is 13.33% that it more consistent and homogeneous than other bank and BOKL has maintained CV of 24.25% than is inconsistent i.e. 13.33%<14.11%<18.85%<24.25%.

Hence, the above analysis shows that even SBIL has invested high amount in government securities than other banks but its ratio are less consistent than HBL. The ratio of HBL more uniform than other banks. HBL and BOKL has invested minimum amount of total working fund in government securities.

e. Investment on share and debenture to total working fund ratio

Now days a commercial bank is interested to invest on share and debentures of other different type of companies but not only government securities. During the study period, most of commercial banks of Nepal including HBL, SBIL, EBL and BOKL has purchased the share of other companies too.

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

Table No. 4.10

Investment on share and debenture to total working fund ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	0.14	0.21	0.18	0.24
2004/05	0.14	0.19	0.17	0.94
2005/06	0.13	0.15	0.12	0.79
2006/07	0.22	0.23	0.09	0.62
2007/08	0.25	0.19	0.37	0.64
Mean	0.176	0.194	0.186	0.646
S.D.	0.0492	0.0265	0.0977	0.2335
C.V.(%)	27.97	13.68	52.52	36.15
Industry average= 0.300				

See appendix- 14

From the above comparative table, it has been found that the ratios are in fluctuating trend where as the ratios of HBL is stable in FY 2003/04 to 2004/05.

Comparatively, BOKL has invested high amount in share and debenture of total working fund which has mean ratio of 0.646%. HBL has invested little amount in share and debenture of total working fund which has mean ratio of 0.176% which is comparatively lowest than other banks. SBIL and EBL are in second and third position as their investment in share and debenture of total working fund, i.e. $0.646\% > 0.194\% > 0.186\% > 0.176\%$.

While comparing the mean ratio with industry average of the selected banks, it is found that only BOKL is able to maintain the ratio above the composite average.

The CV in the above table also shows that SBIL is more consistent and has maintained stable ratio than other three banks during the study period. The least consistent is EBL which has high CV comparatively, i.e. $52.52\% > 36.15\% > 27.97\% > 13.68\%$.

Lastly, it has been found that all the four banks have invested nominal percentage of total working fund into share and debenture of other companies as in all case the ratio percentage is less than 1%. However, in comparison, BOKL has invested more than other three banks. The ratio of SBIL are more uniform than other banks, it has more consistency than other bank.

f. Loan loss ratio

The loan loss occur when the borrower fails to repay the loan. The banks failure in loan recovery leads to loss of its loan. So, the control of loan loss in 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 the ratio is calculated by dividing loan loss provision by total loan and advances of the bank. The following table shows the comparative loan loss ratio of the four banks.

Table No. 4.11

Loan loss ratio%

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	1.60	2.13	1.39	2.37
2004/05	0.59	3.14	0.98	2.01
2005/06	1.00	1.83	0.5	0.84
2006/07	0.50	0.62	0.62	0.83
2007/08	0.27	0.47	0.53	0.30
Mean	0.79	1.64	0.81	1.27
S.D.	0.4679	0.9935	0.3309	0.7845
C.V.(%)	59.23	60.58	40.84	61.77
Industry average= 1.13				

See appendix- 15

The above comparative table shows that the loan-loss ratios of all banks are in fluctuating trend, where the ratio of BOKL are in decreasing trend.

From the table, SBIL has highest mean ratio and HBL has lowest mean ratio than other three banks, which means that SBIL has invested highest loan and advances therefore it is in higher risk of loan loss and HBL is in lower risk of loan loss. So, SBIC has made higher provision for loan loss and BHL has made lower provision for loan loss. BOKL has higher mean loan loss ratio than EBL.

Similarly, comparing the mean ratio of each bank with industry average, HBL and EBL are lower and SBIL and BOKL are higher than the industry average.

III. Profitability ratio

The main objective of commercial bank is to earn profit by providing different types of banking services to its customers. To meet various objective like maintaining good liquidity position, meet fixed internal obligations, overcome to future contingencies, grab hidden investment opportunity, expand banking transaction in different places, finance government in need of development funds etc a commercial bank have to earn sufficient profit.

Of course, the profitability ratios are the best indicators of overall efficiency. Here, mainly those major ratio are presented and analyzed through with the effort has been made to measure the profit earning capacity of HBL, SBIL, EBL and BOKL.

a. Return on total working fund ratio

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

The ratio is calculated by diving net profit by total working fund or total assets. The following table shows the profitability position with respect to total working fund of HBL, SBIL, EBL and BOKL.

Table No. 4.12

Return on total working fund ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	1.06	0.72	1.49	1.34
2004/05	1.12	0.55	1.43	1.42
2005/06	1.55	0.90	1.49	1.65
2006/07	1.46	1.83	1.38	1.80
2007/08	1.75	1.44	1.66	2.04
Mean	1.39	1.09	1.49	1.65
S.D.	0.2615	0.4764	0.0944	0.2544
C.V.(%)	18.81	43.70	6.34	15.42
Industry average= 1.40				

See appendix- 16

Above listed comparative table implies that the ratios of all banks are in fluctuating trend. 1.75% is the highest ratio of HBL in FY 2007/08 and lowest ratio is 1.06% in FY 2003/04. SBIL has maintained highest ratio of 1.83% in FY 2006/07 and lowest ratio in FY 0.55% in FY 2004/05. The highest ratio of EBL is 1.66% in FY 2006/07. Similarly, BOKL has highest ratio of 1.80% in FY 2006/07 and lowest ratio of 1.34% in FY 2003/04.

When the mean ratio are observed, BOKL seems to have earned higher return on total working fund (total assets) of 1.65% and SBIL has earned the lowest return of 1.09% in comparison with other banks, i.e. $1.65\% > 1.49\% > 1.39\% > 1.09\%$. The composite average also shows that HBL and SBIL has low ratio than industry average and EBL and BOKL has high ratio than industry average.

However, coefficient of variation of EBL seems more consistent having ratio of 6.34% and SBIL seems inconsistent having ratio of 43.70% comparatively, EBL

has the more consistent and SBIL has more inconsistent ratios, i.e. 43.70%>18.81%>15.42%>6.34%.

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 ratio than that of EBL. On the other hand, comparatively SBIL is highly inconsistent and has low capacity regarding return of total working fund (total assets).

b. Return on loan and advances ratio

Return on loan and advances ratio measure the earning capacity of a commercial bank through its mobilized fund as loan and advances. A high ratio indicates greater success to mobilized funds as loan advances and vice-versa.

The ratio is calculated by dividing net profit by loan and advances. The following table shows that return on loan and advances ratio of HBL, SBIL, EBL and BOKL.

Table No. 4.13
Return on loan and advances ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	2.26	1.18	2.45	2.26
2004/05	2.48	0.95	2.21	2.39
2005/06	3.18	1.57	2.43	2.80
2006/07	2.92	2.75	2.17	2.80
2007/08	3.30	2.07	2.46	2.91
Mean	2.83	2.07	2.34	2.63
S.D.	0.3997	0.6464	0.1268	0.2572
C.V.(%)	14.12	38.02	5.42	9.78
Industry average= 2.37				

See appendix- 18

The above comparative table implies that the return on loan and advances ratios of all banks are in fluctuating trend. Where as the ratio of BOKL is in increasing trend and stable in FY 2005/06 to 2006/07. The highest ratio of HBL is 3.30% and lowest ratio is 2.26% in FY 2007/08 and FY 2003/04 respectively. SBIL has highest ratio of 2.75% in fiscal year 2006/07 and lowest ratio of 0.95% in FY 200/05. EBL has maintained highest ratio of 2.46% in FY 2007/08 and lowest ratio of 2.17% in FY 2006/07. Similarly, BOKL has maintained highest ratio of 2.91% in FY 2007/08 and lowest ratio of 2.26% in FY 2003/04.

The mean ratio of HBL is comparatively highest ratio than other bank which indicate that the return on loan and advances of HBL bank is high than other banks. EBL and BOKL has mobilized its deposits as loan and advances less than HBL and more than SBIL that why EBL and BOKL has the ratio of return on loan and advances more than SBIL and less than HBL. SBIL has the lowest ratio is indicate that the funds mobilization capacity of SBIL as loan and advances is lowest than other banks, i.e. $2.83\% > 2.63\% > 2.34\% > 1.70\%$. Above table also shows that SBIL and EBL are unable to maintain the industry average ratio where as HBL and BOKL has highest ratio then industry average.

Observing the CV, EBL has the more stable and homogeneous ratio than other three banks and secondary comes BOKL. The CV of HBL and SBIL shows that they have highly inconsistent ratio in comparison with other two banks.

From the above analysis we can say that profit earning capacity of HBL is highest than other three banks. It has high capacity to mobilize its deposit as loan and advances than other three banks. SBIL profit earning capacity by utilizing available resources is very weak than other three banks. EBL has more consistent ratio and HBL has high inconsistent ratio.

c. Total interest earned to total working fund ratio

To represent the earning capacity of a commercial bank in its total working fund (total assets), this ratio is very helpful. In other words, this ratio reflects the extents to which the banks are successful in mobilizing their total assets to acquire higher interest income. A high ratio is indicator of high earning power of a 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. The following table represents the ratio of four banks.

Table No.4.14

Total interest earned to total working fund ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	5.03	5.85	6.84	5.97
2004/05	5.28	5.59	6.13	6.16
2005/06	5.52	5.44	5.66	5.85
2006/07	5.30	5.98	5.34	5.62
2007/08	5.43	5.65	5.70	5.84
Mean	5.31	5.70	5.93	5.89
S.D.	0.1661	0.1914	0.5181	0.1768
C.V.(%)	3.13	3.36	0.74	3.00
Industry average= 5.71				

See appendix- 19

The above comparative table shows that the HBL has the highest ratio of 5.52% in fiscal year 2005/06 and lowest ratio of 5.03% in fiscal year 2003/04. SBIL has

highest ratio of 5.98% and lowest ratio of 5.44% in FY 2006/07 and FY 2005/06 respectively. EBL has highest ratio of 6.84% in FY 2003/04 and lowest ratio of 5.34% in FY 2006/07. Similarly, BOKL has highest ratio of 6.17% in FY 2004/05 and lowest ratio in FY 5.62% in FY 2006/07.

Observing the mean ratio from the above table, EBL has the highest capacity to mobilize total assets and earn interest income whereas HBL has the low capacity comparatively other three banks. SBIL and BOKL has high mean ratio than HBL and low ratio than BOKL, i.e. $5.93\% > 5.89\% > 5.70\% > 5.31\%$. Likewise above table shows that HBL and SBIL has maintained lower ratio than average industry and EBL and BOKL has maintained higher ratio than industry average. The table also shows that BOKL has lowest CV and 3.00% which indicate the BOKL has more homogeneous ratio than other three banks and more consistency. Where as EBL has the highest ratio which represents that the EBL has high inconsistency. HBL and SBIL has little more ratio than BOKL which are less consistent than BOKL.

Thus, we can conclude that EBL is able to earn high interest income from the total working fund in comparison to other three banks. BOKL has more consistent and EBL has high inconsistent than other three banks.

d. 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.

The ratio is calculated by dividing total interest paid by total working fund. The following table shows the total interest paid to total working fund ratio of four banks.

Table No. 4.15

Total interest paid to total working fund ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	1.99	3.03	3.29	3.01
2004/05	2.05	2.50	2.55	2.45
2005/06	2.20	2.57	2.52	2.51
2006/07	2.29	2.97	2.41	2.33
2007/08	2.28	2.65	2.33	2.36
Mean	2.16	2.74	2.62	2.53
S.D.	0.1216	0.2152	0.23441	0.2474
C.V.(%)	5.63	7.85	13.13	9.78
Industry average= 2.51				

See appendix- 20

The above table shows that the ratio of EBL is in decreasing trend, it has highest ratio 3.29% in FY 2003/04 and lowest ratio of 2.33% in FY 2007/08. HBL has highest ratio of 2.29% in FY 2006/07 and lowest ratio of 1.99% in FY 2003/04. SBIL has highest ratio of 3.30% in FY 2003/04 and lowest ratio of 2.50% in FY 2004/05. BOKL has highest ratio of 3.10% in FY 2003/04 and lowest ratio of 2.33% in FY 2006/07.

The table also shows that the SBIL has the highest mean ratio of 2.74% which indicates that the SBIL has paid more interest to total working fund and HBL has lowest mean ratio of 2.16% which represents that HBL has paid less interest to total working fund comprising with three banks, i.e. $2.74\% > 2.62\% > 2.53\% > 2.16\%$.

While, observing the industry average, HBL has less-ratio than industry average and other three banks are over than industry average.

HBL has lowest CV than other three banks, it has more homogeneous ratio and more consistent than other three banks EBL has highly inconsistent, its CV is highest than other three banks.

From the above table analysis we can conclude that SBIL has paid more interest than other three banks. HBL has paid less interest than other three banks. The position of HBL is very good, it has paid less interest and its CV is more consistent. EBL has highest CV and high inconsistent.

e. Total interest earned to total outside asset ratio

The main assets of commercial banks are its outside assets, which include loan and advances investment on government securities, investment on share and debenture 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 indicate high earning power on such outside assets and vice versa.

This ratio is calculated by dividing total interest earned by total outside assets. The following table shows the ratio total interest earned to total outside assets of HBL, SIBL, EBL and BOKL during the study period.

Table No. 4.16

Total interest earned to total outside assets ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	5.76	7.00	7.64	6.75
2004/05	5.89	6.47	6.97	6.87
2005/06	6.13	6.11	6.42	6.40
2006/07	5.85	6.65	6.14	6.47
2007/08	5.89	6.26	6.52	6.57
Mean	5.90	6.50	6.74	6.61
S.D.	0.1226	0.3108	0.5242	0.1746
C.V.(%)	2.08	4.78	7.78	2.64
Industry average= 6.44				

See Appendix -17

The above comparative table show that the ratio of all banks are in fluctuating trend. HBL has highest ratio of 6.13% in FY 2005/06 and lowest ratio of 5.67% in FY 2003/04. The highest ratio of 7.00% is maintained by SBIL in FY 2003/04 and lowest ratio of 6.11 is maintained in FY 2005/06. EBL has highest ratio of 7.64% in F/Y 2003/04 and lowest ratio of 6.14% in FY 2006/07. Similarly, BOKL has highest ratio of 6.87% in FY 2004/05 and lowest ratio of 6.40% in FY 2005/06.

While analyzing mean ratios, we can see that EBL has the highest ratio of 6.74% which represent that EBL has earned more interest comparatively than other three banks and HBL has lowest mean ratio of 5.90% which indicate HBL is unable to earn more interest than other three banks. BOKL and SBIL has maintained 2nd and 3rd position as their interest earned capacity to total outside assets, i.e.

6.74%>6.61%>6.50%>5.90%. Except, HBL other three banks have maintained high ratios than industry average.

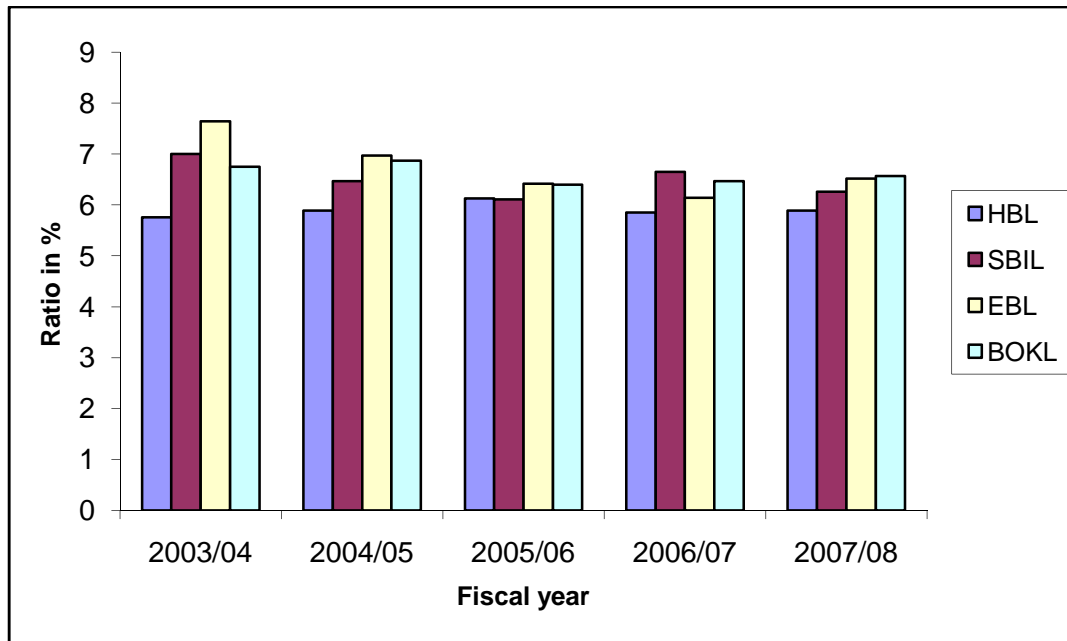
In the case of CV, HBL has the more homogeneous ratios and more consistent ratio compared to the other three banks and EBL has the more inconsistent ratio.

From the above analysis we can conclude that EBL has the highest capacity to earn more interest income from the outside assets and HBL has lower capacity. Even, HBL has the lowest capacity to earn interest income form out side assets it has homogeneous ratios and more consistent ratio than EBL. EBL has earned more interest also it has highest inconsistent.

The comparative total interest earned to total outside assets ratio of the four banks is presented in the bar-diagram below.

Figure 11

Interest earned to total outside assets ratio



IV. Risk ratio

Risk always sticks with return. If there is return, risk will definitely be there. Higher the risk, higher will be the return. Risk is very closely associated with investment. A bank has to take high risk if it expects high return on its investment. Therefore bank has to accept and manage high risk to get high profit. Risk has made the job investment a very challenging job.

Though following ratios, effort has been made to measure the level of risk essential in the NBBL and EBL comparatively.

a. Credit risk ratio

Bank utilize its collected fund in providing credit to different sectors. There is risk of default or non-repayment to loan. While making investment, the bank examines credit risk involved in the project. This ratio is computed by dividing total loan and advances to total assets. The following table shows the credit risk ratio of HBL, SBIL, EBL and BOKL under the study period.

Table No. 4.17
Credit risk ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	46.99	60.94	60.99	59.46
2004/05	45.31	58.62	64.94	59.15
2005/06	48.86	57.20	61.22	58.96
2006/07	50.21	66.72	63.56	64.30
2007/08	53.23	69.52	67.47	70.02
Mean	48.92	62.60	63.64	62.38
S.D.	2.7203	4.7459	2.4184	4.3061
C.V.(%)	5.56	7.58	3.80	6.90
Industry average= 59.38				

See appendix -21.

From the above comparative table, we can see that the ratio of all banks are in fluctuating trend. In fiscal year 2007/08 the HBL has the highest ratio and in FY 2004/095 it has the lowest ratio of 45.31%. SBIL has maximum ratio of 69.52% in FY 2007/08 and minimum ratio of 57.20% in FY 2005/06. EBL has maximum ratio of 67.47% in FY 2007/08 and minimum ratio of 60.99%. Similarly, BOKL has highest ratio of 70.02% in fiscal year 2007/08 and lowest ratio of 58.96% in fiscal year 2005/06.

While analyzing the mean ratios EBL has the highest mean ratios of 63.64% which indicates that EBL has the high credit risk than other three banks. HBL has lowest credit risk, it has lowest mean ratio of 48.92%. SBIL and BOKL are in 2nd and 3rd position in credit risk, i.e. $63.64\% > 62.60\% > 62.38\% > 48.92\%$.

From the above table it has been found that $SBIL < EBL$ and BOKL has higher ratio than the composite average and HBL has low ratio than the industry average.

In case of C.V. EBL has more consistent than other banks which has lowest ratio than other three banks. SBIL has least consistent other three banks having highest C.V. i.e. $7.58\% > 6.90\% > 5.56\% > 3.80\%$.

From above analysis, EBL has highest credit risk and HBL has lowest credit risk. EBL has more consistent credit policy and SBIL has less consistent.

b. Liquidity Risk Ratio

Liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit, as the liquidity needs. The ratio of cash and bank balance to total deposit is 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 flow loan, its profitability increases and also the

risk. Thus higher liquidity ratio indicates less risk and less profitable bank and vice versa. This ratio is calculated by dividing cash and bank balance to total deposit. The following table shows that the liquidity risk ratio in HBL, SBIL, EBL and BOKL in comparison.

Table No. 4.18
Liquidity Risk Ratio (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	9.09	12.0	7.83	10.11
2004/05	8.12	8.36	10.40	8.28
2005/06	6.48	10.16	11.25	6.95
2006/07	5.85	9.81	13.15	10.62
2007/08	4.55	9.79	11.13	9.10
Mean	6.82	10.02	10.75	9.01
S.D.	1.6157	1.1656	1.7207	1.3105
C.V.(%)	23.70	11.63	16.01	14.54
Industry average= 7.32				

See Appendix 22.

The above comparative table shows that the ratios of all banks are in fluctuating trend. HBL ratios are in decreasing trend, its highest ratio is 9.09% and lowest ratio is 4.55% in FY 2003/04 and 2007/08 respectively.

While observing the mean ratio we can see that EBL has highest mean ratios than other three banks. It means EBL has the highest liquidity than other three banks. HBL has the lowest mean ratio than other three banks. HBL is able to maintain lowest liquidity. BOKL and SBIL are second and third position in the case of

liquidity risk ratio. Except HBL all three banks has high ratio than industry average. It implies that SBIL, EBL and BOKL has high liquidity risk than HBL.

In the case C.V., SBIL has the lowest C.V. and HBL has the highest C.V. SBIL ratios are more homogeneous and more consistent than other three banks. HBL has less consistent ratio.

From the analysis it is clear that HBL has lowest liquidity risk and has less consistent HBL has operate with high risk in investment sector to earn more profit. On the other hand, EBL higher liquidity risk which indicate that it operates in lower risk and lower profit. SBIL has more consistent and it has been operating higher risk than HBL and lower risk than EBL.

V. 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:

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

Table No. 4.19

Growth Ratio of Total Deposits (%)

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	22010.33	7198.33	8063.90	7741.69
2004/05	24814.01	8654.77	10097.69	8942.75
2005/06	26490.85	11002.04	13802.44	10485.396
2006/07	30048.85	11445.29	18186.25	12388.92
2007/08	31842.79	13715.39	23976.30	15833.74
Growth rate (%)	9.67	17.49	31.31	19.59

See appendix 26.

The above comparative table shows that the growth ratio of four banks. HBL has the lower ratio than other three banks, HBL has the lower ratio than other three banks, it means that the performance of HBL to collect deposits year by year is lower compared to other three banks. SBIL has lower ratio than EBL and BOKL, higher ratio than HBL It indicates that SBIL deposits collecting capacity is higher than HBL and lower than EBL and BOKL. EBL has higher ratio than other three banks, it means its deposits collecting capacity is higher than other three banks. BOKL has higher ratio than HBL and SBIL also has lower ratio than EBL, which indicates that BOKL is in second position to collect deposit in comparison with three banks, i.e. $31.31\% > 19.59\% > 17.49\% > 9.67\%$.

Table No. 4.20**Growth Ratio of Loan and Advance**

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	11635.31	5143.66	5860.54	5646.70
2004/05	12424.52	6064.60	7618.67	5831.07
2005/06	14395.84	7457.25	9770.92	7239.09
2006/07	16831.89	9274.33	13623.69	9368.58
2007/08	19257.71	11948.03	18317.17	12408.31
Growth ratio (%)	13.42	23.45	32.96	21.75

The above comparative table shows that EBL has higher growth ratio of loan and advance which means that EBL has better position to grant loan and advances than other three banks. HBL has lower growth ratio of loan and advances than other three banks, it means that HBL has granted loan and advances lower than other three banks year by year. BOKL and SBIL has maintained 2nd and 3rd position in the case of granting loan and advances, i.e. 32.96% > 23.45% > 21.75% > 13.42%.

Table No. 4.21**Growth Ratio of Total Investment**

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	9292.10	1907.52	2535.66	2477.41
2004/05	11692.34	2607.68	2128.93	2598.60
2005/06	10889.03	3611.31	4201.32	3378.13
2006/07	11822.98	2659.45	4985.11	2995.19
2007/08	13340.18	3088.88	5061.15	3206.82
Growth rate (%)	9.46	12.81	18.86	6.66

The above comparative table shows that the growth ratio of total investment of EBL is higher than other three banks, it means that the EBL has invested its resources higher year by year than other three banks. BOKL has lower growth ratio of total investment, which means that BOKL has less invested its collected deposits funds than other three banks year by year. SBIL and HBL has maintained 2nd and 3rd position in the case of growth ratio of total investment respectively, i.e. 18.86% > 12.81% > 9.46% > 6.66%.

Table No. 4.22

Growth Ratio of Net Profit

FY	Bank			
	HBL	SBIL	EBL	BOKL
2003/04	263.05	60.85	143.56	127.47
2004/05	308.27	57.38	168.21	139.53
2005/06	457.46	117.00	237.30	202.44
2006/07	491.82	254.91	296.41	262.38
2007/08	635.87	247.77	451.22	361.49
Growth ratio (%)	24.69	42.05	33.15	29.77

The above comparative table shows that the growth ratio of net profit of SBIL is higher than other three banks. It means that the SBIL has earned higher profit than other three banks year by year. HBL has lower growth ratio of net profit than other three banks, which indicates that HBL has earned lower profit than other three banks year by year. EBL and BOKL has maintained 2nd and 3rd position respectively i.e. 42.05% > 33.15% > 29.77% > 24.69%.

From the above analysis, it can be concluded that EBL is comparatively in a better position in collecting proportionately more deposits, granting loans and advances and making investment year by year whereas HBL is not in a better position in collecting deposits, granting loans and advances and earning profit. BOKL is in the lowest position in making proportionately more investment. On the other hand, SBIL is in a better position in earning more net profit than the other three banks year by year.

4.1.2 Statistical Analysis

In this chapter some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, investment and net profit are used to achieve the objective of the study. Such tools are as follows:

- i. Coefficient of correlation analysis.
- ii. Trend analysis.
- iii. Test of hypothesis.

I. Coefficient of Correlation Analysis

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 and loan and advances and net profit.

a. Coefficient of correlation between deposits and total investment

The coefficient of correlation between deposit and loan and advances measures the degree of relationship between the two variables. Here, deposit is an independent

variable (x) and loan and advances are dependent variable (y) to justify whether deposit are significantly used as loan and advances in proper way or not, we are computing 'r' between these two variables.

The following table shows the values of r, r^2 , P.E.r and 6P.E.r. of those of HBL, SBIL, EBL and BOKL.

Table No. 4.23

Correlation between Deposits and Total Investment

Banks	Evaluations of criterions			
	r	r^2	P.E.r	6P.E.r
HBL	0.8901	0.7922	0.0627	0.3761
SBIL	0.7018	0.4926	0.1531	0.9183
EBL	0.8968	0.8043	0.0590	0.3542
BOKL	0.6835	0.4672	0.1607	0.9643

See appendix-23.

From the above table we can see that the value of correlation (r) between deposit (independent) and total investment (dependent) is 0.8901 in case of HBL which shows that there is very high degree of positive relationship between these two variables. Similarly, coefficient of determination (r^2) is 0.7922 which indicate that 79.22% of the total variation in dependent variable (total investment) is due to the effect of independent variable (deposits) and remaining $100\% - 79.22\% = 20.78\%$ due to the effect of other factors. Further, the value of 6P.Er. is 0.3761, so we can say that the coefficient of correlation (r) between deposit and total investment is significant because 'r' is greater than 6 times of P.Er., i.e. $0.8901 > 0.3761$.

In case of SBIL, coefficient of correlation between deposit and total investment is 0.7018 which indicate the high degree of positive relationship between these two variables. Coefficient of determination (r^2) is 0.4926. It means 49.26% of the variation in investment is due to the deposit. On the basis of 6 P.Er., it can be said that 'r' is insignificant because it is lower than 6 P.Er., i.e. $0.7018 < 0.9183$.

In case of EBL, coefficient of correlation between deposit and total investment of EBL is 0.8968, it means that there is moderate positive relationship between these two variable. Moreover, we evaluate the value of coefficient of determination (r^2), which is 0.8043, it means 80.43% of variation in the dependent variable (total investment) has been explained by the independent variable (deposit). Similarly, on the basis of 6 P.Er. we can say that 'r' is significant because 'r' is greater than 6 P.Er., i.e. $0.8968 > 0.3542$. Which shows that there is significant relationship between deposit and total investment.

Likewise, when we observe correlation between total deposit and total investment of BOKL the coefficient of correlation (r) between deposit (independent) and total investment (dependent) variable is 0.6835, which indicate higher positive correlation between these two variables. Similarly, the value of coefficient of determination (r^2) is 0.4672, which shows that 46.72% in the dependent variable has been explained by the independent variable. Moreover, by application of 6 P.Er. i.e. 0.9643. which means the relationship between deposit and total investment is insignificant, i.e. $0.6835 < 0.9643$.

From the above analysis, it can be conclude that all four banks are successful in mobilizing their deposit as investment and they all have high degree of positive correlation between these two variables. Value of 'r' and ' r^2 ' of the four banks are positive, HBL and EBL has value of 'r' and ' r^2 ' greater than 6 times P.Er. on the

other hand SBIL and BOKL has value of 'r' and 'r²' less than 6 times P.Er. EBL has greater value of 'r' than other three banks, which indicate that the EBL is comparatively successful in mobilizing deposit as investment. On the other hand, BOKL has lowest value of 'r' than other three banks which indicates that BOKL is comparatively not better in mobilizing deposit as investment HBL and EBL has significant relationship between deposit and total investment and SBIL and BOKL has insignificant relationship between deposit and total investment.

b. Coefficient of Correlation between Total Outside Assets and Net Profit

Loan and advances and all types of investment of a commercial bank's are considered as outside assets. In this analysis, total outside assets is independent variable (x) and net profit is dependent variable (y). From this calculation we can draw the conclusion about the relationship between total outside assets and net profit.

The following table shows the value of r, r², P.Er. and 6 P.Er. between outside assets and net profit of HBL, SBIL, EBL and BOKL.

Table No. 4.24

Correlation between Total Outside Assets and Net Profit

Banks	Evaluations of criterions			
	r	r ²	P.E.r	6P.E.r
HBL	0.9692	0.9394	0.0183	0.1096
SBIL	0.8778	0.7705	0.0692	0.4154
EBL	0.9858	0.9718	0.0085	0.0509
BOKL	0.9977	0.9954	0.0014	0.0084

The above comparative table shows that the coefficient of correlation between independent variable (total outside assets) and dependent variable (net profit) of HBL is 0.9692, which indicate high and positive degree of relationship between

these two variables. When considering the value of coefficient of determination (r^2) i.e. 0.9394, it indicates that 93.94% of the variation in the dependent variable has been explained by the independent variable. Moreover, by considering the probable error, we can say that there is significant relationship between total outside assets and net profit because the value of 'r' is greater than value of 6 P.Er. i.e. $0.9692 > 0.1096$.

In the case of SBIL, the coefficient of correlation (r) between total outside assets and net profit is 0.8778, which indicate that high degree of positive relationship between these two variable., When considering the value of coefficient of determination (r^2) of 0.7705, which means only 77.05% of variation in the dependent variable (net profit) has been explained by the independent variable (outside assets). Further, on the basis of comparison between the value of 6 P.Er. and 'r', we can say that there is significant relationship between these two variables because 'r' is greater than 6 P.Er. is $0.8778 > 0.4154$.

In the case of EBL, coefficient of correlation between total outside assets (independent variable) and net profit (dependent variable) is 0.9858 which means that there is high degree of positive relationship between these two variables. While considering the coefficient of determination (r^2) i.e. 0.9718, which means only 97.18% of change in net profit has been explained by the total outside assets. ON the basis of 6 times P.Er. we can say that there is significant relationship between total outside assets and net profit because 6 P.Er. is less than 'r' i.e. $0.9858 > 0.0509$.

Likewise, the coefficient of correlation between total outside assets and net profit of BOKL is 0.9977, which indicates that there is high degree of positive relationship between these two variables. While considering the coefficient of

determination (r^2) of 0.9954, which means that the 99.54% change has been occurred in net profit due to the total outside assets. On the basis of 6 times P.Er. we can conclude that there is significant relationship between total outside assets and net profit because 6 times P.Er. is less than coefficient of correlation (r), i.e. $0.9977 > 0.0084$.

From the above analysis we can conclude that all four banks have high degree of positive relationship between total outside assets and net profit. All four banks are successful to earn profit from mobilizing their funds as outside assets. The value of ' r ' and ' r^2 ' of all banks are positive and higher than the 6 P.Er. it means all banks are in better position. BOKL has higher ' r ' than other three banks which indicate BOKL is more successful to earn net profit by mobilizing its funds as outside assets. Whereas SBIL has the lower ' r ' than other three banks which indicate that SBIL is less successful to mobilize its funds as total outside assets to earn net profit. And all four banks has significant relationship between total outside assets and net profit.

c. Coefficient of Correlation between Deposits and Loan and Advances

Coefficient of correlation between deposits and loan and advances is used to measure the degree of relationship between these two variables. Here, deposit is independent variable ' x ' and loan and advances is depended variable ' x '. The main objective of computing ' r ' between these two variables is to justify whether deposits are significantly used as loan and advances is proper way or not.

The following table shows that value of r , r^2 , P.Er. and 6 P.Er. between deposits and loan and advances of all four banks.

Table No. 4.25

Correlation between Deposits and Loan and Advances

Banks	Evaluations of criterions			
	r	r ²	P.E.r	6P.E.r
HBL	0.9806	0.9615	0.0116	0.0697
SBIL	0.9674	0.9359	0.0193	0.1161
EBL	0.9984	0.9968	0.00097	0.0058
BOKL	0.9917	0.9835	0.00496	0.0298

The above comparative table shows that the coefficient of correlation (r) between deposits and loan and advances of HBL is 0.9806, it indicates that there is positive and high degree of relationship between these two variables. When observing coefficient of determination (r²), we found the value of 0.9615, which means 96.15% of the variation in the loan and advances has been explained due to the deposits and remaining 3.85% has been explained by other factors. On the basis of 6 P.Er., it implies that there is significant relationship between deposit and loan and advances because the value of 6 P.Er. is less than the value of coefficient of correlation (r), i.e. 0.0697 < 0.9806.

In case of SBIL, the value of coefficient of correlation between deposits and loan and advances is 0.9674, which means that there is high degree of positive relationship between these two variables. The value of coefficient of determination is found 0.9359, which shows that 93.59% variation has been explained by the deposits in loan and advances. Further, value of 6 P.Er. is 0.1161, it shows that the value of coefficient of correlation (r) is higher than the value 6 P.Er, which means that the value of r is significant. In other words, there is significant relationship between deposits and loan and advances.

In the case of EBL, the value of coefficient of correlation between deposit and loan and advances is 0.9984, which means that there is high degree of positive relationship between these two variables. Similarly, coefficient of determination is 0.9968, which indicates that 99.68% variation in the loan and advances is explained by the deposits and 0.32% due to the other factors. We considering the value of 6 P.Er., it shows that there is significant relationship between deposits and loan and advances because coefficient of correlation (r) is greater than 6 P.Er, i.e. $0.9984 > 0.0058$.

Likewise, the value of coefficient of correlation between deposits and loan and advances in the case of BOKL is 0.9917, which means that there is high degree of positive relationship between deposits and loan and advances. Similarly, coefficient of determination is 0.9835, which indicates that 98.35% variation in loan and advances has been explained by the deposits. While considering the value of 6 time P.Er, coefficient of correlation (r) is greater than 6 P.Er., which means there is significant relationship between deposits and loan and advances.

From the above analysis, it can be concluded that all four banks are successful in mobilizing their deposits as loan and advances and they all have high degree of positive correlation between these two variables. Value of r and r^2 of the four banks are positive and greater than the value of 6 times P.Er. The value of ' r ' is greater in case of EBL, which indicates that comparatively EBL is more successful in mobilizing deposits and loan and advances. On the other hand, SBIL has the lowest value of ' r ' which indicates that SBIL is comparative not in better condition to mobilize deposit as loan and advances. However, in case of probable error, all the four banks, i.e. HBL, SBIL, EBL and BOKL's has significant relationship between deposits and loan and advances because all four banks has ' r ' greater than 6P.Er.

d. Coefficient of Correlation between Loan and Advances and Net Profit

Coefficient of correlation between loan and advances and net profit is used to be find out the relationship between these two variable. In this analysis, loan and advances is dependent variable (x) and net profit is the dependent variable (y).

The following table shows the value of r , r^2 , P.E.r. and 6 P.E.r. between loan and advances and net profit of HBL, SBIL, EBL and BOKL.

Table No. 4.26

Correlation between Loan and Advances and Net Profit

Banks	Evaluations of criterions			
	r	r^2	P.E.r	6P.E.r
HBL	0.9794	0.9592	0.0123	0.0738
SBIL	0.9169	0.8408	0.0480	0.2881
EBL	0.9906	0.9813	0.00565	0.0339
BOKL	0.9966	0.9933	0.0020	0.0121

The above comparative table shows that the value of coefficient of correlation between loan and advances and net profit is 0.9794 in the case of HBL, which means that there is high degree of positive relationship between these two variable. Similarly, coefficient of determination is 0.9592, which indicates that 95.92% of variation, in the net profit (dependent variable) has been explained by the (independent variable) loan and advances. Further the value of 6 P.E.r. is 0.0738 which is the lower than the coefficient of correlation (r), which means that there is significant relationship between loan and advances and net profit, i.e. $0.0738 < 0.9794$.

In the case of SBIL, the value of coefficient of correlation between loan and advances and net profit is 0.9169, which means that there is high degree of positive relationship between these two variables. In the case of coefficient of determination, SBIL has the value of 0.8408. It means that the 84.08% of variation in net profit has been explained by the loan and advances., On the basis of 6 P.Er., there is significant relationship between loan and advances and net profit because 6 P.Er. is less than the coefficient of correlation, i.e. $0.2881 < 0.9169$.

In the case of EBL, coefficient of correlation between loan and advance is 0.9906, which indicate there is high degree of positive relationship between loan and advances and net profit. The coefficient of determination is 0.9813, which means that 98.13% of variation in net profit has been explained by the loan and advances. On the basis of 6 P.Er., there is significant relationship between loan and advances and net profit because 6 P.Er. is less than the coefficient of correlation (r), i.e. $0.0339 < 0.9906$.

Likewise, coefficient of correlation in the case of BOKL is 0.9966, which means that there is high degree of positive relationship between two variables. Similarly, the value of coefficient of determination is 0.9933 which means there is 99.33% variation in the net profit has been explained by loan and advances. The value of 6 P.Er. is 0.0121 which is less than the value of coefficient of correlation (r), which means that there is significant relationship between loan and advances and net profit.

From the above analysis, it can be concluded that four banks are successful in earn net profit by mobilizing funds as loan and advances. Value of 'r' and 'r²' of the four banks are greater than 6 P.Er. All four banks have high degree of positive correlation between loan and advances and net profit. Also, these banks have

significant relationship between loan and advances and net profit. The table shows that BOKL has the highest value of 'r' i.e. 0.9966 which indicates BOKL is more successful to earn net profit than the other three banks. SBIL has 0.9169 which is lowest than other three banks which means SBIL is not better in earn profit by loan and advances comprising with three banks. The 'r²' of BOKL also shows that low percentage of dependency in comparison with three banks.

II. Trend Analysis and Projection for Next Five Years

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

The projections are based on the following assumptions:

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

a. Trend Analysis of Loan and Advances

Here, the trend values of loan and advances of HBL, SBIL, EBL and BOKL is calculated for five years from the Fy 2003/04 to 2007/08 and forecast also has been done for next five year from the Fy 2007/08 to 2012/013. The following table shows the trend value of loan and advances for ten years from 2003/04 to 2012/13 of HBL, SBIL, EBL and BOKL.

Table No. 4.27

Trend Values of Loan and Advances of HBL, SBIL, EBL and BOKL

Year	Trend value of HBL	Trend values of SBIL	Trend values of EBL	Trend value of BOKL
2003/04	10978.61	4613.87	4854.54	4686.61
2004/05	12943.83	6295.72	7946.37	6392.68
2005/06	14909.05	7977.57	11038.20	8098.75
2006/07	16874.27	9659.42	14130.03	9804.82
2007/08	18839.49	11341.27	17221.86	11510.89
2008/09	20804.71	13023.12	20313.69	13216.96
2009/10	22769.932	14704.97	23405.52	14923.03
2010/11	24735.15	16386.82	26497.35	16629.10
2011/12	26700.37	18068.67	29589.18	18335.17
2012/13	28665.59	19750.52	32681.01	20041.24

The above comparative table shows that the loan and advances of the four banks ink increasing regularly. Other thing remaining same in Fy 2012/13 HBL has 28665.59, SBIL has 19750.52, EBL has 32681.01 and BOKL has 2004.24 which are the highest in the study period.

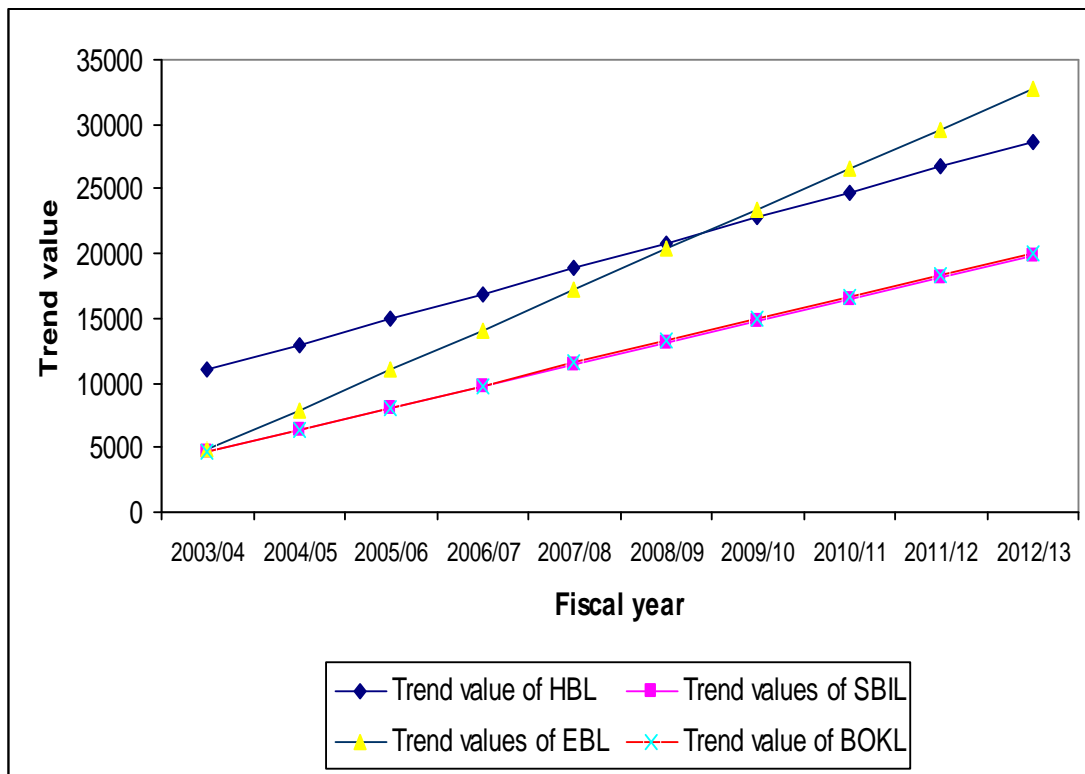
The above table presents that EBL has the highest loan and advances, which means EBL is better position than other three banks in terms of utilization of deposit as loan and advances. SBIL has lowest loan and advances, which means SBIL is not

better position to mobilize their funds as loan and advances. Similarly, other two banks HBL and BOKL have maintained second and third position in term of loan and advances.

The above calculated trend values of loan and advances of HBL, SBIL, EBL and BOKL are fitted in the trend lines given below.

Figure 12

Trend value of Loan and Advances



b. Trend Analysis of Total Investment

Here, the trend values of total investment of HBL, SBIL, EBL and BOKL is calculated for five years from the Fy 2003/04 to 2007/08 and forecast also has been

done for next five years from the Fy 2007/08 to 2012/13. The following table shows the trend value of investments for ten years from Fy 2003/04 to 2012/13 of HBL, SBIL, EBL and BOKL.

Table No. 4.28

Trend Values of Total Investments of HBL, SBIL, EBL and BOKL

Rs. in million

Year	Trend value of HBL	Trend values of SBIL	Trend values of EBL	Trend value of BOKL
2003/04	9761.97	2292.07	2200.99	2560.15
2004/05	10584.65	2533.52	2991.71	2745.69
2005/06	11407.33	2774.97	3782.43	2931.23
2006/07	12230.01	3016.42	4573.15	3116.77
2007/08	13052.69	3257.87	5363.87	3302.31
2008/09	13875.37	3499.32	6154.59	3487.85
2009/10	14698.05	3740.77	6945.31	3673.39
2010/11	15520.73	3982.22	7736.03	3858.93
2011/12	16343.41	4223.67	8526.75	4044.47
2012/13	17166.09	4465.12	9317.47	4230.01

The above comparative table shows that the trend value of total investments of all four banks are in increasing trend. In the fiscal year 2012/13 HBL has 17166.09, SBIL has 4465.12, EBL has 9317.18 and BOKL has 4230.01 which are the highest value in the study period.

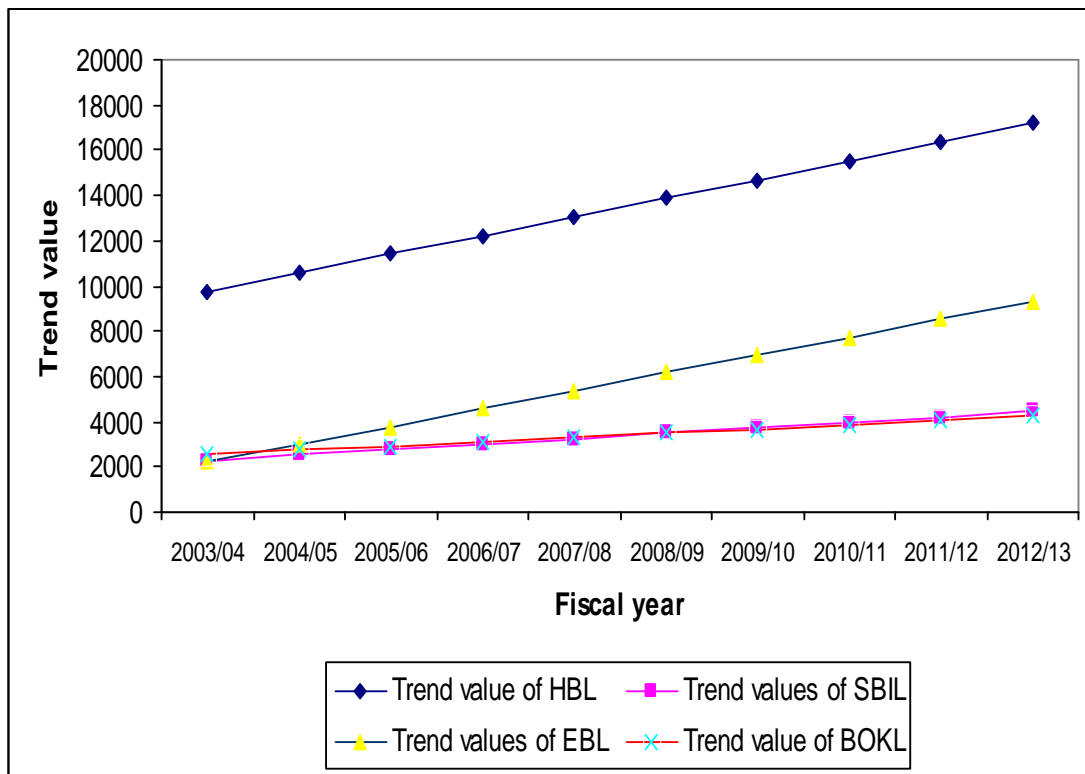
The table shows that HBL has the highest investment in all the ten years than the other three banks. BOKL has the highest investment in Fy 2003/04 to 2005/06 than the SBIL, thereafter BOKL has lowest value than the SBIL. EBL has the lowest value in Fy 2003/04 than SBIL and BOKL, thereafter it has highest value than the

SBIL and BOKL, thereafter, it has highest value than the SBIL and BOKL. So, comparatively, HBL is better position in investments than the other three banks and EBL is second position among the four banks.

The above calculated trend values of investments of HBL, SBIL, EBL and BOKL are fitted in the trend lines given below.

Figure 13

Trend Value of Total Investments



c. Trend Analysis of Total Deposits

Here, the trend values of deposits of HBL, SBIL, EBL and BOKL for five years from the Fy 2003/04 to 2007/08 and forecast has been done for next five years

form the Fy 2007/08 to 2012/13. The following table shows the trend value of deposits for ten years from Fy 2003/04 to 2012/13 of HBL, SBIL, EBL and BOKL.

Table No. 4.29

Trend Value of Total Deposits of HBL, SBIL, EBL and BOKL

Rs. in million

Year	Trend value of HBL	Trend values of SBIL	Trend values of EBL	Trend value of BOKL
2003/04	22061.42	7238.24	6842.64	7152.40
2004/05	24551.35	8820.70	10833.98	9115.44
2005/06	27041.28	10403.16	14825.32	11078.48
2006/07	29531.21	11985.52	18816.66	13041.52
2007/08	32021.14	13568.08	22808.00	15004.56
2008/09	34511.07	15150.54	26799.34	16967.60
2009/10	37001.00	16733.00	30790.68	18930.64
2010/11	39490.93	18315.46	34782.02	20893.18
2011/12	41980.86	19897.92	38773.36	22856.72
2012/13	44470.79	21480.38	42764.70	24819.76

See: Sample calculation in appendix-24.

The above comparative table shows that the value of total deposits of all banks are increasing regularly. Other thing remaining same, total deposit of HBL is 44470.79, total deposit of SBIL is 21480, total deposit of EBL is 42764.70 and total deposit of BOKL is 24819.76 in Fy 2012/13, which is the highest value of all four banks.

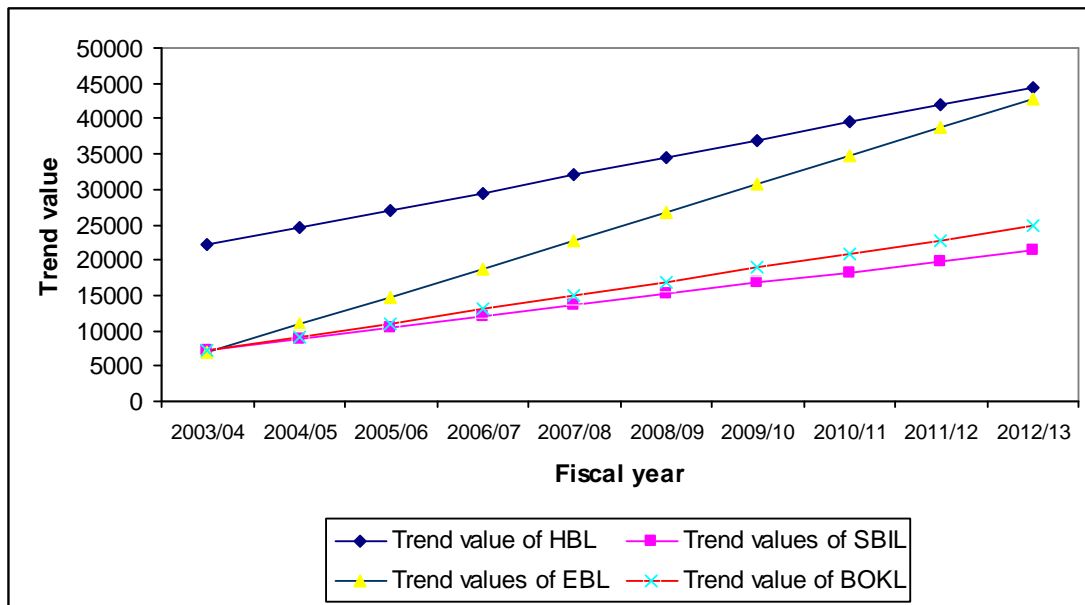
From above table, HBL has the better position in term of deposit collection than other three banks in all years. SBIL has collected higher deposit in Fy 2003/04 than EBL and BOKL, thereafter it has collected less than EBL and BOKL. SBIL has

collected less deposit than other three banks. Except F/Y 2003/04 EBL has collected higher deposit than BOKL. EBL and BOKL has maintained second and third position among the four banks.

The above calculated trend values of total deposits of HBL, SBIL, EBL and BOKL are fitted in the trend lines given below:

Figure 14

Trend Value of Total Deposits



d. Trend Analysis of Net Profit

Here, the trend values of net profit of HBL, SBIL, EBL and BOKL for five years from the F/Y 2003/04 to 2007/08 and to 2012/2013. The following table shows the trend value of net profit for ten years from F/Y 2003/04 to 2012/013 of HBL, SBIL, EBL and BOKL.

Table No. 4.30

Trend Values of Net Profit of HBL, SBIL, EBL and BOKL

Rs. in million

Year	Trend value of HBL	Trend values of SBIL	Trend values of EBL	Trend value of BOKL
2003/04	245.46	33.31	110.64	100.48
2004/05	338.38	90.45	184.99	159.57
2005/06	431.29	147.58	259.34	218.66
2006/07	524.23	204.72	333.69	277.75
2007/08	617.13	261.86	408.04	336.84
2008/09	710.05	319.00	482.40	395.93
2009/10	802.97	376.13	556.75	455.02
2010/11	895.89	433.27	631.10	514.11
2011/12	988.81	490.40	705.45	573.20
2012/13	1081.73	547.54	779.80	632.29

From the above comparative table, it is clear that the net profit of all the four banks are in increasing trend. Other thing remaining same or constant, net profit in F/Y 2012/13 is predicted to be 1081.73 million, 547.54 million, 779.80 million, 632.29 million of HBL, SBIL, EBL and BOKL respectively, which are the highest under the study period.

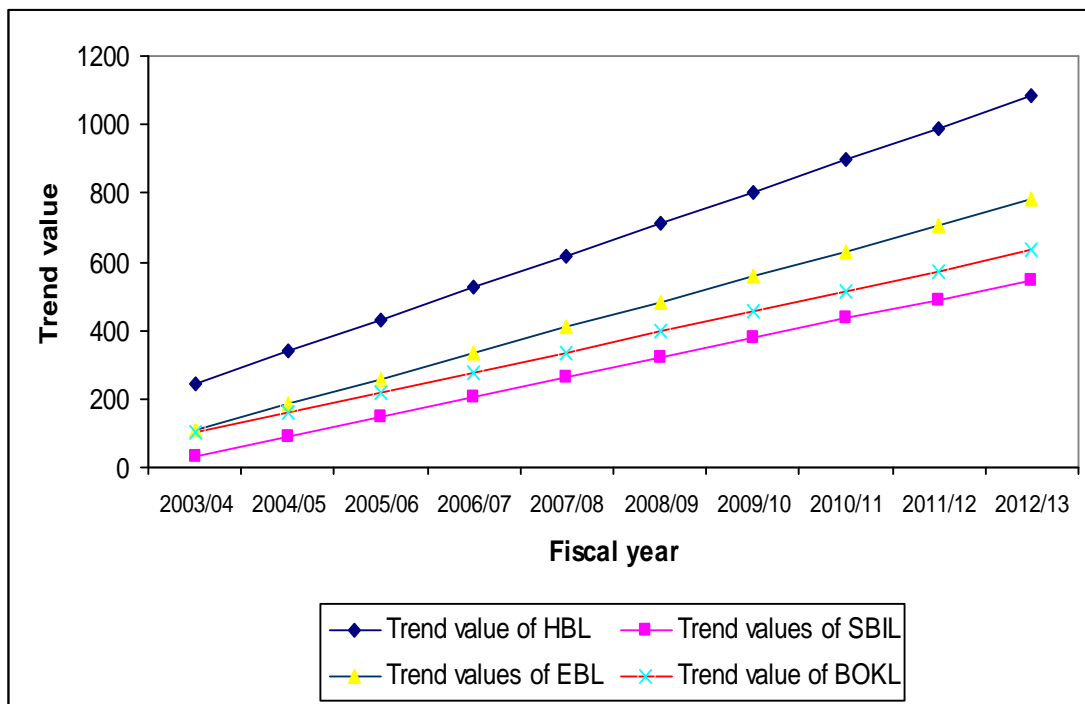
Comparatively, HBL is successful to earn highest net profit than the other three banks in all years of the study period SBIL is less successful to earn net profit because it has the lowest net profit than the other three banks in the all years of the study period (i.e. 2003/04 to 2012/13). EBL is less successful than the HBL but more successful than the SBIL and BOKL. BOKL has high profit than the SBIL

and lowest profit than the HBL and EBL. We can be concluded that HBL is more successful to utilize their funds and SBIL less successful to utilize their fund to earn net profit.

The above calculated trend value of net profit of HBL, SBIL, EBL and BOKL are fitted in the trend lines given below:

Figure 15

Trend Value of Net Profit



III. Test of Hypothesis

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

1. Formulating hypothesis (null hypothesis and alternative hypothesis).

2. Computing the test statistics.
3. Fixing the level of significance.
4. Making decision.

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

a. Test of Hypothesis of Total Investment to Total Deposit Ratio of HBL, SBIL, EBL and BOKL

Null hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3 = \mu_4$, i.e. there is no significant difference between mean ratios of total investment to total deposit of HBL, SBIL, EBL and BOKL or the ratio do not differ significantly among themselves.

Alternative hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$, i.e. there is significant difference between mean ratios of total investment to total deposit of HBL, SBIL, EBL and BOKL or the ratios differ significantly among themselves.

Test of statistics, under H_0 , The one-way ANOVA f-test statistic is $F = MSC/MSE$ with degree of freedom (k-1, n-k).

One-way ANOVA

Table No. 4.31

Sources of variation	Sum of squares (SS)	d.f.	Mean sum of square (MSS)	F-ratio (MSC/MSE)
Between sample	SSC = 890.51	k-1 = 4-1 = 3	MSC = 296.84	14.88
Within samples	SSE = 319.18	n-k = 20-4 = 16	MSE = 19.95	
Total	TSS = 1209.69	n - 1 = 20-1 = 19		

From above ANOVA table, we get.

Calculated $f(3, 16) = 32.75$

The tabulated value f at 5% level of significance for (3, 16) is 3.24

i.e. $F_{0.05(3, 16)} = 3.24$

Decision: Since the calculated value of F is more than the tabulated value of F (calc $F >$ tab. F), alternative hypothesis (H_1) is accepted. Therefore we conclude that there is significant difference between mean ratios of total investment to total deposit of HBL, SBIL, EBL and BOKL.

b. Test of hypothesis of total interest earned to total outside assets ratio of HBL, SBIL, EBL and BOKL

Null hypothesis (H_0): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3 = \hat{\mu}_4$, i.e. there is no significant difference between mean ratios of total interest earned to total outside assets of HBL, SBIL, EBL and BOKL or the ratios do not differ significantly among themselves.

Alternative hypothesis (H_1): $\hat{\mu}_1 \neq \hat{\mu}_2 \neq \hat{\mu}_3 \neq \hat{\mu}_4$, there is significant difference between mean ratios of total interest earned to total outside assets of HBL, SBIL, EBL and BOKL or the ratios differ significantly among themselves.

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

One-way ANOVA

Table No. 4.32

Sources of variation	Sum of squares (SS)	d.f.	Mean sum of square (MSS)	F-ratio (MSC/MSE)
Between sample	SSC = 2.02	k-1 = 4-1 = 3	MSC = 0.68	5.23
Within samples	SSE = 2.09	n-k = 20-4 = 16	MSE = 0.13	
Total	TSS = 4.13			

We can get, from above one-way ANOVA table;

Calculated value of $F_{0.05(3,16)} = 5.23$

The tabulated value of F at 5% level of significant for (3, 16) is 3.24

i.e. $F_{0.05(3,16)} = 3.24$

Decision: Since the calculated value of F is greater than the tabulated value of F (calc F > tab F), the alternative hypothesis (H_1) is accepted. Therefore, we conclude that there is significant difference between mean ratios of total interest earned to total outside assets of HBL, SBIL, EBL and BOKL.

c. Test of hypothesis of loan and advances to total deposits ratio of HBL, SBIL, EBL and BOKL

Null hypothesis (H_0): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3 = \hat{\mu}_4$, i.e. there is no significant difference between mean ratios of loan and advances to total deposits of HBL, SBIL, EBL and BOKL or the ratio do not differ significantly themselves.

Alternative hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$, i.e. there is significantly difference between mean ratios of loan and advances to total deposits of HBL, SBIL, EBL and BOKL or the ratio differ significantly among themselves.

Test of statistics, under H_0 : The one way ANOVA F-test statistics is $F = MSC/MSE$ with degree of freedom (k-1, n-k).

One-way ANOVA

Table No. 4.33

Sources of variation	Sum of squares (SS)	d.f.	Mean sum of square (MSS)	F-ratio (MSC/MSE)
Between sample	SSC = 1405.02	k-1 = 4-1 = 3	MSC = 468.34	16.26
Within samples	SSE = 460.79	n-k = 20-4 = 16	MSE = 28.80	
Total	TSS = 1865.81	n - 1 = 20-1 = 19		

See, Sample calculation in Appendix-15.

We can get, from above ANOVA table,

Calculated value of $F_{0.05(3, 16)} = 16.26$.

The tabulated value of F at 5% level of significance for (3, 16) is 3.24.

i.e., $F_{0.05(3, 16)} = 3.24$

Decision: Since the calculated value of F is more than the tabulated value of F (cal $F > \text{tab } F$), alternative hypothesis (H_1) is accepted. Therefore, we conclude that there is significant difference between mean ratios of loan and advances to total deposit of HBL, SBIL, EBL and BOKL.

d. Test of hypothesis return on loan and advances ratio of HBL, SBIL, EBL and BOKL

Null hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3 = \mu_4$, i.e. there is no significant difference between mean ratios of return on loan and advances of HBL, SBIL, EBL and BOKL or the ratios do not differ significantly among themselves.

Alternative hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$, i.e. there is significant difference between mean ratio of return on loan and advances of HBL, SBIL, EBL and BOKL or the ratios differ significantly among themselves.

Test of statistics, under H_0 , the one-way ANOVAS F-test statistic is $F = MSC/MSE$ with degree of freedom (k-1, n-k).

One-way ANOVA

Table No. 4.34

Sources of variation	Sum of squares (SS)	d.f.	Mean sum of square (MSS)	F-ratio (MSC/MSE)
Between sample	SSC = 3.61	k-1 = 4-1 = 3	MSC = 1.20	5.71
Within samples	SSE = 3.31	n-k = 20-4 = 16	MSE = 0.21	
Total	TSS = 6.92	n - 1 = 20-1 = 19		

From above ANOVA table, we get,

Calculated value of $F(3, 16) = 5.71$

The tabulated value of F at 5% level of significance for (3, 16) is 5.71.

i.e. $F_{0.05(3, 16)} = 5.71$

Decision: Since the calculated value of F is more than the tabulated value of F (calc F > f tab), alternative hypothesis (H1) is accepted. Therefore, we conclude that there is significant difference between mean ratio of return on loan and advances of HBL, SBIL, EBL and BOKL.

4.2 Primary Data Analysis

This heading is dedicated to the analysis of primary data collected on the basis of questionnaire distributed to customer and staff of the banks. The basic objective is to gain the viewpoints of customer and staff about investment policy of these banks. The questionnaire was distributed to total of 60 persons consisting 20 HBL, 20 SBIL, 20 BOKL and 20 EBL respondents . The customer are Selected on the judgmental basis during the visit of purpose of simplifying the presentation, the number of respondent have been converted into percentage. The analysis is presented below .

Q.No 1 What is the reason behind selecting this bank?

First question was put forward to know the reason for selecting these banks.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Accessibility	3	15	6	30	5	25	7	35
2	Instant Service	13	65	12	60	9	45	10	50
3	Credibility	4	20	2	10	6	30	3	15
Total		20	100	20	100	20	100	20	100

This question was asked to the customers of four banks separately. From the above table it can be concluded that answer from four banks are almost the same 65% of customers in HBL 60% customer in SBIL, 45% customer in EBL and 50%

customer in BOKL though that in this business competitive age banks give maximum instant service to its customer comparing with other banks

Q.No. 2 How often has you borrowed loan from this bank with in one year?

Another question was put forward to know how often they have borrowed loan from this bank with in one year

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Once	2	10	5	25	2	10	1	5
2	Twice	1	5	3	15	4	20	-	-
3	More than twice	4	20	2	10	-	-	3	5
4	None	13	65	10	50	14	70	16	80
	Total	20	100	20	100	20	100	20	100

This question was asked to the customers to know the either how often they have taken loan or not. From the above table it is clear that most of the customer have not taken loan. 65% of HBL, 50% of SBIL 70% of EBL and 80% of BOKL customer have not taken loan from the above data it is clear that more than 50% customer of all four bank have not taken loan

Q.No. 3. Have you got loan easily from this bank?

This question was asked to those customers who have taken loan to know whether or not they have got loan easily from this bank.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Yes	7	35	9	45	10	50	8	40
2	No	13	65	11	55	10	50	12	60
Total		20	100	20	100	20	100	20	100

From the above table, it can be seen that 50% and above 50% customer of all four banks have not got easily loan from their banks, 35% customer of HBL, 45% customer of SBIL, 50% customer of EBL and 40% customer of BOKL have not easily got loan. The customer of all banks who have not easily got loan said that lending procedure is difficult.

4. What do you think is the reason behind taking loan from this bank ?

This question was asked to the customer to know the reason behind their selection to take loan only from these banks.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Accessibility	6	30	8	40	5	25	4	20
2	Low interest rate	4	20	3	15	4	20	3	15
3	Minimum collateral	7	35	5	25	6	30	6	30
4	Proper Management	3	15	4	20	5	25	7	35
Total		20	100	20	100	20	100	20	100

From the above table 30% customer of HBL, 40% customer of SBIL, 25% customer of EBL and 20% customer of BOKL take loan because of accessibility

20% of HBL, 15% of SBIL, 20% of EBL and 15% of BOKL customer take loan because of low interest rate 35% of HBL 25% SBIL 30% of EBL and 30% of EBL and 30% of BOKL customer have taken loan because of low collateral and 15% of HBL, 20% of SBIL, 25% of EBL and 35% of BOKL customer taken won because of proper management this analysis shows that 35% customer of HBL taking loan because of minimum collateral, 40% of customer of SBIL taking loan because of accessibility, 30% customer and 35% customer of BOKL taking loan because of proper management

5. In your opinion what should the bank do to attract more customer?

This question was asked to the customer to know their opinion and to get suggestion how to attract more and more customer

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Better Service	9	45	12	60	7	35	11	55
2	High interest	11	55	8	40	13	65	9	45
3	Open more branches								
4	Other								
Total		20	100	20	100	20	100	20	100

From the above table we can see that the customer of HBL and EBL gave opinion about better service, 55% of HBL and 65% EBL suggest for high interest. 60% of SBIL and 55% of BOKL customer suggest for the better service. The above analysis reveals that most of the respondents are in favor of better service.

Questionnaire to the bank staffs

1. What is your opinion in which sector should your bank investment?

This question was asked to Bank's banks staffs to know the sector in which the bank prefers to make investment

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Educational	1	10	1	10	2	20	-	-
2	Agricultural	3	30	2	20	1	10	4	40
3	Industrial	4	40	6	60	4	40	5	50
4	Under Privileged	2	20	1	10	3	30	1	10
	Total	10	100	10	100	10	100	10	100

From the above table most of the staffs of all four banks preferred option 03. They thought the bank should invest its fund to that sector which could contribute the development of the country. In present context of Nepal industrial sector seem to be deteriorated which need to be festered to achieve pace of development of country for what investment in industrial sector essential . But most of staffs of total respondents i.e. 30% of HBL, 20% of SBIL, 10% of EBL and 40% of BOKL have chosen option 02. They thought we should invest in agriculture sector. According to them Nepal is an agriculture country . When almost 80% of the total population depend on agriculture. So the development of country can be perceived only through the development of the agriculture sector from the above analysis we can conclude that the bank should give investment prioritized in both agriculture sector and Industrial sector and also invest in under privileged sector.

2. What do you think is the main profit generating sources of banks ?

This question was also asked to banks staffs to know about the profit generating sources of their banks.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Return on Investment in different sector	4	40	3	30	5	50	4	40
2	Interest earned from loan and advances made to customer	6	60	7	70	5	50	6	60
3	The miscellaneous fees and commission of banks	-	-	-	-	-	-	-	-
Total		10	100	10	100	10	100	10	100

From the above table it was found that respondents from the four banks have almost same type of answer to this question 60% of BOKL replied that interest earned from loan and advances to be the major profit generating sources. But 40% of HBL, 30% of SBIC, 50% of EBL and 40% of BOKL staffs thought that return on investment in different sector is the main profit generating sources of bank.

Q.No. 3. What may be the crucial reason behind not providing facilities to the rural areas?

This question was asked to the bank staffs to know the reason behind not providing facilities to the rural are as:

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	The bank doesnot want to take any kind of risk related to investment.	6	60	4	40	3	30	5	50
2	Accessibility	2	20	2	20	3	30	2	20
3	Lack of communication facilities	1	10	3	30	4	40	2	20
4	Others	1	10	1	10	-	-	1	10
Total		10	100	10	100	10	100	10	100

From the above table, we can see that out of 40 respondents 60% of HBL 40% of SBIL 30% of EBL and 50% of BOKL have chosen option 1. 20% of HBL, 20% of SBIC, 30% EBL and 20% of BOKL have chosen option 2. 10% of HBL 30% of SBI 40% of EBL and 20% of BOKL have chosen option 3 and 10% of HBL 10% of SBIL 10% of BOKL have chosen option 4. We can make out from the respondents points of view the joint venture banks are profit oriented and do not want to take any kind of risk and they give less contribution towards the development of the country.

Q.No.4. In your opinion how should your bank follow the portfolio management which is less risk?

This question was asked to the banks staffs to know about investment portfolio management and minimize risk.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Equity	-	-	2	20	2	20	2	20
2	Debt	1	10	1	10	-	-	-	-
3	Mixture of debt equity	7	70	6	60	5	50	6	60

4	Government securities	2	20	1	10	3	30	2	20
Total		10	100	10	100	10	100	10	100

From the above table we can see that 20% of SBIL, 20% of EBL and 20% of BOKL have chosen option 01. 10% of HBL, 10% of SBIL have chosen option 02. 70% of HBL, 60% of SBIL, 50% of EBL and 60% of BOKL have chosen option 03. 20% of HBL, 10% of SBIL, 30% of EBL, 20% of BOKL have chosen option 04. Here, in the respondents points of debt and equity is less risk and minimize the risk

Q. No 5. How do you rate the investment system of your bank in comparison to other bank?

This question was asked to the staffs of banks to know the position of their bank among the other banks

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	Good	2	20	3	30	2	20	3	30
2	Fair	7	70	5	50	6	60	6	60
3	Poor	-	-	-	-	-	-	-	-
4	Not satisfactory	1	10	2	20	2	20	1	10
Total		10	100	10	100	10	100	10	100

Form the above table we can get that out of 40 respondents 20% of HBL, 30% of SBIL, 20% of EBL and 30% of BOKL have chosen option 1. Most of the staff have chosen option 2. i.e. 70% of HBL, 50% of SBIL, 60% EBL and 60% of BOKL. No one have chosen option 3. 10% of HBL, 20% of SBIL, 20% of EBL and 10% of BOKL have chosen option 4. Form the above analysis we can

conclude that the respondents are rating their banks in fair position and not in poor position

6. Why is the bank not being able to generate more profit even it has adopted better investment portfolio management?

This question was asked to the staffs of bank to know why is the bank not being able to generate more profit.

Table

Option	Answers	Respondents							
		HBL		SBIL		EBL		BOKL	
		No.	%	No	%	No	%	No	%
1	No enough investment opportunity in the country	6	60	5	50	7	70	6	60
2	Less return on investment due to bad judgment	3	30	4	40	3	30	4	40
3	Fewer funds with banks to invest	1	10	1	10	-	-	-	-
Total		10	100	10	100	10	100	10	100

From the above table we can found that out of 40 respondents 60% of HBL, 50% of SBIL, 70% of EBL and 60% of BOKL have chosen option 1. 30% of HBL, 40% of SBIL, 30% of EBL and 40% of BOKL have chosen option 2. 10% of HBL and 10% of BOKL have chosen option 3. From the above analysis we can found that most of response dents are in favor of no enough investment opportunity in the country

4.3 Major Finding of the Study

From Secondary Data Analysis:

Having completed the basic analysis required for the study, the final and the most important task of the researcher is to enlist the finding of the study.

The main findings of the study are derived on the basis of financial and statistical analysis of HBL, SBIL, EBL and BOKL, which are given below:

I. Liquidity ratio

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

The mean current ratio of SBIL is higher than HBL, EBL and BOKL. It means that SBIL has maintained higher liquidity position in comparison to other three banks. HBL has maintained lower liquidity position than other three banks because it has lower mean current ratio than SBIL, EBL and BOKL. EBL has mean current ratio more than HBL and BOKL and less than SBIL. Also, BOKL has more than HBL and less than SBIL and EBL, whereas, SBIL is more consistent, it has lower C.V. and HBL is less consistent because it has more C.V. than other three banks. ON the other hand, except HBL all other three banks have above mean current ratio than the industry average.

The mean cash and bank balance to total deposit ratio of EBL is comparatively higher than other three banks, it means that cash and bank balance to total deposit as liquidity position of EBL is higher than HBL, SBIL and BOKL. HBL has lower liquidity position because it has lower mean ratio of cash and bank balance to total deposit ratio. SBIL has higher mean ratio than BOKL. Whereas, SBIL has less C.V. than other three banks and HBL has higher C.V. than other three banks, which represents that SBIL is more consistent than other three banks and HBL has inconsistent ratio than other three banks. On the other hand, HBL and BOKL has lower ratios than the industry average and SBIL and EBL has higher ratio.

The mean cash and bank balance to current assets ratio of EBL is higher than the other three banks, it means EBL is better liquidity position than other three banks.

HBL is not better position because it has lower mean cash and bank balance to current assets ratio than other three bank. SBIL has more than BOKL and HBL and less than EBL. Whereas, SBIL has more consistent and homogeneous ratios than other three banks because it has lower C.V. and HBL has variability ratio and inconsistent than other three banks because it has higher C.V. On the other hand, except EBL, other three banks has lower mean ratio than the industry average.

The mean ratio of HBL is higher in the case of investment on government security to than the other three banks and BOKL has lower ratio. HBL has invested on government security comparatively other three banks. HBL has more consistent and homogeneous ratio than other three banks and BOKL has inconsistent ratio because it has highest C.V., on the other hand all banks has mean ratio above than the industry average.

The mean ratio of loan and advance to current assets of BOKL is higher than HBL, SBIL and BOKL, it implies that BOKL has invested. More funds than other three banks in loan and advances sector. HBL has lower mean ratio than other three banks. EBL has higher ratio than HBL and SBIL and has lower ratio than BOKL. HBL has more consistent and BOKL has more inconsistent than other banks. On the other hand EBL and BOKL has high mean ratio of loan and advance to current ratio than the industry average.

The above analysis represents that in overall HBL has maintained the lowest liquidity position. SBIL has higher current ratio, which means that SBIL is more successful to meet its current obligation. Overall, SBIL has maintain more homogeneous and more consistent ratio than other three banks. EBL has maintained highest cash and bank balance to total deposit ratio, cash and bank balance to current assets ratio, it means that EBL is in good liquidity position and

meet the daily cash requirement. HBL has maintained highest ratio on the investment of government securities, it means that HBL has mobilized its funds on investment of government securities. BOKL has highly mobilized its funds as loan and advances than other three banks, except SBIL other three banks has fluctuating ratios, it shows HBL, EBL and BOKL have not properly formulated any stable policy.

II. Asset Management Ratio

The assets management ratio on HBL, SBIL, EBL and BOKL are as following:

- The highest mean ratio of loan and advance to total deposit ratio is maintained by SBIL and lower mean ratio is maintained by HBL, which represent that SBIL is in better position to mobilize their deposit as loan and advance and HBL is not better position to mobilize their deposit as loan and advance. EBL has more than BOKL and BOKL has more than HBL in the case of mobilizing deposit as loan and advances. Whereas, SBIL has less consistent ratio and EBL has more consistent ratio comparatively than other banks. On the other hand, except HBL other three bank have mean ratio above the industry average ratio.
- The mean ratio of total investment to total deposit of HBL is higher than other three banks, it means that HBL has maintained better position to investment their deposits than SBIL, EBL and BOKL. EBL is not good position to invest their total deposit, it has lower mean ratio than other three banks. SBIL and BOKL has little different on the mean ratio of total investment to total deposit. Whereas, HBL has more consistent and EBL and BOKL has less inconsistent. On the other hand except HBL, other three

banks have lower mean ratio of total investment to total deposit than the industry average.

- EBL has the highest mean ratio and HBL has lowest mean ratio of loan and advances to total working fund ratio. However, EBL has more consistent and homogeneous ratio and SBIL has inconsistent and variability ratio. Whereas, except HBL all three bank has higher mean ratio of loan and advances to total working fund ratio than the industry average.
- The mean ratio of investment on government security to total working fund ratio of SBIL is higher and HBL is lower than other banks. It means SBIL is better position and HBL is not better position to invest their working fund on the government security. EBL and BOKL has maintained. Second and third position among the three banks on the case of investment on government security. However, HBL is more consistent and BOKL is highly inconsistent than other three banks.
- From the analysis, it has found that all four banks have invested nominal percentage of working fund into share 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 three banks and has maintained less consistent ratio. On the other hand, except BOKL, other three bank have maintained lower mean ratio than the industry average.
- The mean loan loss ratio of SBIL is higher than other three banks, it means that SBIL has invested highest in loan and advances than other three bank there it has made highest provision. HBL has made lowest provision than other three banks therefore it has lowest ratio of loan loss provision than other three banks. The mean loan loss provision of BOKL is higher than

HBL and SBIL but lower than SBIL. On the other hand EBL has homogeneous and consistent ratios and BOKL has variability and inconsistent ratios than other banks. And C.V. of other two bank (HBL and SBIL) lies between EBL and BOKL.

- The above analysis reveals that SBIL is more successful to mobilize deposit as loan and advances, investment of working fund in government securities and high loan loss provision for possible loan and advances losses. HBL has seen more efficient to invest its total deposit to different investment sector to earn profit. However, HBL is inefficient to mobilize its total deposit as loan and advances, mobilize working fund as loan and advances, investment of total working fund in government security, investment in other companies share and debenture and provision for possible, loan loss in other words HBL has not maintained better assets management position. EBL is more successful to mobilize total working fund as loan and advances and its is least successful to invest its total deposit in different investment sector, BOKL has highly invested their working fund in different companies share and debenture than other banks. However, EBL has more consistent in regarding loan and advance to total deposit, loan and advance to total working fund ratio and loan loss ratio. EBL is inconsistency regarding.
- Total investment tot total deposit ratio sand investment on share and debenture to total working fund ratio. HBL has adopted more stable policy regarding investment on government securities to total working fund. SBIL is more consistent regarding investment on share and debenture to total working fund and it is unstable regarding loan and advances to total deposit, loan and advances to total working fund ratio. As a whole, HBL has adopted

stable policy and BOKL has adopted unstable policy regarding assets management ratios.

III. Profitability Ratio

The profitability ratio of four banks are as follows:

- The mean ratio of return on total working fund of BOKL is higher, it means BOKL has higher capacity to earn higher return on total working fund. SBIL has less capacity to earn high return on total working fund than other three banks. EBL has higher mean ratio of return on total working fund than HBL and SBIL. HBL has higher mean ratio than SBIL. However, EBL has maintained more consistent and SBIL has maintained more inconsistent than other three banks. Except SBIL, all three banks has higher ratio than industry average.
- HBL has the highest mean ratio of return on loan and advances. It means that HBL is more successful to earn high return through mobilizing their funds as loan and advances. SBIL is less capable to earn return through loan and advances. BOKL is also successful than the EBL to earn return through loan and advances whereas, EBL is more consistent and SBIL is highly inconsistent than other three banks.
- The mean ratio of total interest earned to total working fund ratio of EBL is higher than other three banks, it represents that EBL is more successful to earn interest through mobilizing their total working fund. HBL has maintained lowest mean ratio of total interest earned to total working fund ratio and BOKL has higher mean ratio than the SBIL. However, BOKL has more consistent and homogeneous ratio and EBL has less consistent and

variability ratio than other three banks. Except EBL and BOKL, other two banks has mean ratio under the industry average.

- The mean ratio of total interest paid to total working fund ratio of SBIL is higher, it means that SBIL has paid more interest than other three banks. HBL has paid lowest interest than other three banks. However, HBL is more consistent and EBL is less consistent than other three banks. Only, HBL has the lower mean ratio than industry average.
- EBL has the highest mean ratio of total interest earned to total outside assets ratio, which represent that EBL is in better position to earn interest from total outside assets than other three banks. HBL is not in better position because it has lowest mean ratio than other three banks. However, HBL is more consistent and HBL is less consistent among the four banks. Only, HBL has not higher value than the industry average.

From the above results, it is concluded that HBL is in profitable position regarding return on loan and advances, however, HBL is not better position in utilizing total working fund, total interest paid to total outside assets, and total interest earned to total outside assets. SBIL is not in profitable position in overall comprising with other three banks, it has maintained better position in total interest paid to total outside assets ratio. EBL has maintained better position in total interest earned to total working fund and total interest earned to total outside assets ratio. EBL is found to have the higher capacity in utilizing total working fund and total outside assets. BOKL is successful to utilize total working fund, it has better position in return total working fund ratio, and total interest earned to total working fund ratio. On the other hand, EBL has more stable ratio in the case of return on total working fund ratio and return on loan and advances ratio. HBL is also stable regarding total

interest earned to total outside asset and total interest paid to total working fund ratio. All over, the four banks have fluctuating ratio, which means they have not formulated any stable policy regarding profitability.

IV. Risk ratio

The risk ratio of the four bank are as follows:

- The mean credit risk ratio of EBL is highest and HBL is the lowest, which means EBL has the higher credit risk or HBL has the lowest credit risk or in other words there is high risk involved in loan and advances of EBL and low risk involved in loan and advances of HBL. Likewise, SBIL also has higher credit risk ratio than HBL and BOKL. However, EBL has more consistent ratio and SBIL has the least consistent ratio.
- The mean liquidity risk ratio of EBL is higher than other three banks which represents that there is high risk involved in liquid assets and HBL has lower mean liquidity ratio which means that there is low risk involved in liquid assets. In other words EBL has higher liquidity risk and HBL has lower liquidity risk. However, HBL has highly inconsistent ratio and SBIL has more consistent ratio than other three banks.

From the analysis of above mentioned that HBL has less risk involved in investment and EBL has high risk involved in investment. EBL is more stable in the case of credit risk ratio and SBIL is more stable in the case of liquidity risk ratio. It can be summed up that all four banks has not properly adopted stable policy regarding risk.

IV. Growth ratio

The analysis of growth ratios represent that:

- The growth ratio of total deposits of EBL is the highest and HBL is the lowest, whereas BOKL has higher ratio than the SBIL and HBL but not than EBL.
- The growth of loan and advances of EBL is the highest and HBL is the lowest, whereas SBIL has higher than the HBL but not than EBL and BOKL.
- The growth ratio of total investment of EBL is higher than other three banks and BOKL is the lowest HBL has the higher ratio than the BOKL but not than SBIL and EBL.
- The growth ratio of net profit of SBIL is higher than other three banks and HBL has lowest ratio among the four banks.

From the above analysis, EBL is in better position regarding total deposit, loan and advances and investment year by year. On the other hand BHL is not in good position regarding collection deposit, granting loan and advances. SBIL is also in better position to earn profit year by year and BOKL is not in better position to earn more profit.

VI. Coefficient of correlation

Coefficient of correlation between different variable of HBL, SBIL, EBL and BOKL reveals that:

- Coefficient of correlation (r) between deposit and total investment of all four bank has positive value which means the bank have positive relation between two variables. Further, it has been found that HBL and EBL has

significant relationship between deposit and total investment but SBIL and BOKL has insignificant relationship between deposits and total investments BOKL has the lowest value of correlation of coefficient, which means BOKL is not in better position whereas EBL has the highest value of coefficient of correlation.

- Coefficient of correlation (r) between total out side asset and net profit of all four banks are positive high value, it means that there is high degree of positive relationship between variables. Further, it has been found that all four bank has significant relationship between two variable. However, the value of ' r ' is greater of BOKL which means that BOKL is more successful to earn net profit from outside assets than other three banks. Comparatively, SBIL is not more successful than other three banks.
- The value of coefficient of correlation (r) of four banks are positive and high which means that there is high degree of positive relationship between deposit and loan and advances. There is significant relationship between deposit and loan and advances of all four banks. However, EBL has the highest value of coefficient of correlation (r) than other three banks and SBIL has the lower value which means that EBL is more successful to mobilize deposit as loan and advances and SBIL is less successful than other three banks.
- The value of coefficient of correlation between loan and advances and net profit of all four banks are positive and high value which represents that there is high degree of positive relationship between two variables. Also, there is significant relationship of all four banks in the case of loan and advances and net profit. However, BOKL has the higher value and SBIL has

the lower value of r , which means that BOKL is in better position to earn profit and SBIL is not in better position to earn profit through mobilizing the funds as loan and advances.

From the above analysis, it can be concluded that SBIL and BOKL has not significant relationship between deposit and total investment. In the case of HBL and EBL all the correlations of different variable are significant. In the case of SBIL and BOKL except the correlation between deposit and total investment all the correlation of different variable and significant. However, EBL is more capable to invest their deposit and BOKL is less capable, BOKL is more successful and SBIL is least successful to earn profit through outside assets, EBL is more capable and SBIL is less capable to mobilize their deposit as loan and advances and BOKL is more successful and SBIL is least successful to earn profit from loan and advances.

VII. Trend analysis

Trend analysis of loan and advances, trend analysis of total investment, trend analysis of total deposits and trend analysis of net profit and projection for the next five years of HBL, SBIL, EBL and BOKL reveals that:

- Trend value of loan and advances of all four banks are found to be increasing trend. The trend value in FY 2012/13 of HBL, SBIL, EBL and BOKL will be Rs. 28665.59 million, 19750.52 million, 32681.01 million and 20041.24 million. It can be seen that EBL will grant highest loan and advances and SBIL will grant lowest loan and advances in FY 2012/13.
- The trend value of investment of all banks are increasing trend. The value of investment of HBL, SBIL, EBL and BOKL will be Rs. 17166.09 million,

4465.12 million, 9317.47 million and 42.30.01 million in FY 2012/13 respectively. Whereas, HBL will have higher amount of investment BOKL will have lowest value of investment in FY 2012/13.

- Trend value of total deposit of all four banks are in increasing trend. The trend value in FY 2012/13 of HBL, SBIL, EBL and BOKL will be 44470.79 million, 21480.38 million, 42764.70 million and 24819.76 million respectively. HBL will have the highest value of deposit and SBIL will have the lowest value of deposit of deposit in FY 2012/13.
- The net profit of all the four banks are in increasing trend. Net profit of HBL, SBIL, EBL and BOKL will be 1081.73 million, 547.54 million, 779.80 million and 632.29 million in the FY 2012/13 respectively. Among the four bank HBL will have highest profit and SBIL will have lowest profit in FY 2012/13.

From the above analysis it can be concluded that all the four banks are in increasing trend. Among the four banks, HBL has predicted to have highest value of investment, deposit, and net profit than other three banks. SBIL has predicted to have lowest value of loan and advances, total deposit and net profit than other three banks. EBL will have the highest value in the case of loan and advances and BOKL will have the lowest value in the case of investment in FY 2012/13.

VIII. Test of hypothesis

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

- There is significant different between mean ratios of total investment to total deposit of HBL, SBIL, EBL and BOKL.

- There is significant difference between mean ratios of total interest earned to total outside assets ratio of HBL, SBIL, EBL and BOKL.
- There is significance difference between mean ratios of loan and advances to total deposit ratio of HBL, SBIL, EBL and BOKL.
- There is significance difference between mean ratios of return on loan and advances of HBL, SBIL, EBL and BOKL.

From the above analysis, it can be concluded that all four banks have significant difference between mean ratios of total investment to total deposit, total interest earned to total outside assets, loan and advance to total deposit and return on loan and advances.

Major Finding Primary Data

Primary data are analyzed on the basis of respondents (customer and staff of concerned bank) attitude and view towards these banks from the analysis of primary data some findings are made which are as follows:

Customers profile

1. Most of the customer select these banks due to their instant service made to customer some customer also said that they selected these bank due to accessibility and creditability.
2. Out of the 80 customer most of the customer have not taken any loan from these banks within one year they said they come there for only deposit money in their account and other purpose
3. Most of the customer who have taken loan from these bank the not got loan easily the customer of BOKL got loan easily that HBL, SBIL customer got loan easily than BOKL and BOKL customer got loan easily than SBIL in comparison. The customer of these bank said proper management for loan and loan procedure was lengthy.

4. Most of the customers of HBL select this bank due to minimum collateral, customers of SBIL select this bank due to accessibility customers of EBL select this bank due to minimum collateral and customers of BOKL select this bank due to proper management . And other some customer select these bank due to low interest rate. They said that these banks charge low interest than other banks.
5. The most of the customers of HBL and EBL have given priority to high interest and most of the customers of SBIL and BOKL has given priority to better service therefore according to the customers the bank should give better service and high interest to attract the customer

Staffs Profile

1. As highest percentage of bank staffs selected industrial area and agricultural area and rest staff have selected the educational and venter privileged area. So it is clear that bank should invest in agricultural area industrial area and they also should invest in under privileged area .
2. Most of the respondents of all four banks thinks that the main profit generating sources of banks is interest earned from loan and advances made to customer and other staffs thinks the main profit generating sources of banks is return on investment in different sector .
3. Most of the respondents of four banks says that the main reason behind not providing loan in rural areas are the bank doesn't want to take any kind of risk related to investment and accessibility and some of respondents says the main reason behind it is lack of communication facilities
4. Most of the respondents of four banks said that the bank should follow diversifiable investment portfolio management which also minimize risk some of them also said investment into government securities and equity also minimize risk

5. Most of the respondents of all banks said that the investment system of their banks is fair in comparison to other banks and some of them says their bank is in good in comparison to other bank .
6. Most of the respondents said that the bank has not being able to generate more profit even though it has adopted appropriate investment portfolio management due to not enough opportunity in the country some of them also said that the reason behind not generating more profit is less return on investment due to bad judgement.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

The last chapter of this study is conclusion and recommendations developed from the completion of analysis part on the investment policy of sample JV banks. Conclusion and recommendation consists of two parts, which is drawn from the major findings of this study and second one is recommendation to those banks. Which are taken as sample in this study, to solve the problems found on the basis of analysis and conclusion.

5.1 Summary

In this study, the primary as well as secondary sources of data have been used. The analysis is performed with the help of financial and statistical tools. The presentation and analysis of data provides the clear picture in term of investment strength the clear picture in term of investment strength and weakness of joint-venture banks. The analysis is associated with comparison and interpretation. Under financial analysis, various financial ratio related to investment function of JVBs are analyzed such as liquidity ratio assets management ratio, profitability ratio, risk ratio, growth ration and statistical tools like 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 dada which were employed in this research are secondary in nature. They are obtained from the annual report of the concerned bank. The analysis and interpretation of data has been by applying the wide variety of methodology as stated in chapter three major finding are derived in earlier chapter.

In this study, the objectives, functional investment policies have been analyzed the financial performance of banks and also to identify the contribution towards the

national economic development, The objectives of the study also analyzed the relationship between total investment, deposit, loan and advances, net profit and outside assets. Main issue and findings have been taken from analysis of data.

Primary data also has been analyzed all banks are less informative to their client. They are unable to provide their service in rural area and under privileged area.

5.2 Recommendation

Recommendation are the final output of the whole study. It helps to take corrective action in their activities in future. Different analysis were done till arrive this step. On the basis of above analysis and findings of the study following suggestions can be advances to overcome weakness, inefficiency and satisfactory improvement of the investment policy of HBL, SBIL, EBL and BOKL.

To the concerned bank

- **Increase more deposit**

The main source of commercial banks is collection deposit from publics who don't need that fund recently. Without enough deposit collection, banks cannot operate effectively. It has been found that comparatively SBIL, EBL and BOKL's deposit collection are lower than HBL. So, it is recommended to them to collect more amount as deposit through large variety of deposit schemes and faculties, like cumulative deposit scheme, prize bonds scheme, gift cheque scheme, recurring deposit scheme (life insurance), monthly interest scheme. Similarly, customerization of credit card, provide facility of transfer money to there home that live in foreign country. The maximum amount needed to open an accounted should be minimized.

- **More investment on share and debenture**

To get success it in comparative market and to rise financial and economic development of the country a commercial bank must mobilize its funds in different sector such as purchase share and debenture of other financial and non-financial companies and other government and non government companies. It is also genuine means of utilization of resources. Thus those company may get chance to rise and that help to develop of the country. In this research study, it has been found that all the four banks invested a very low amount of total working fund on shares and debentures but among them BOKL has invested a little more. So, it is strongly recommended to all the four banks to invest its more funds in share and debenture of different types of other companies in different area.

- **More investment in government securities**

From the study, it has been reveals that SBIL, EBIL and BOKL have not invested more amounts in government security comparing with HBL. Increasing large amount on assets, as cash and bank balance. is not considered good form the profitable point of view of the bank as it does not earn any return. Investment on those securities issued by government i.e. treasury bills, development bonds, saving certificates are free of risk and highly liquid in nature and such security yield to low interest rates of particular maturity due to lowest risk in future, it is more better in regard to safety that other means of investment. So, strongly recommended to all bank to give more importance to invest more funds in government securities instead of keeping them idle with this proverb "Some thing is better than nothing".

- **Effective portfolio management**

Portfolio management is very important for every investor. In each investment, risk is involved. Risk is the change of loss or the variability of the return of a certain period. The greater variability of the returns the riskier project. So, it is kept in mind while investing in the project, which would be lower risk and higher return. Portfolio management play vital role with dividing total investment in different areas. 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 confliction goal of maximum yield and minimum risk can be achieved. So, portfolio condition of HBL and EBL have better than SBIL and BOKL. HBL and EBL have been increasing its total investment in different sector in every year. SBIL and BOKL have less invested its fund in different investment sector. So, portfolio condition of all four banks should be examine carefully from time to time and alternation should be made to maintain equilibrium in portfolio condition as for as possible. Therefore, it can be said that all the egg should not be kept in the same basket. These banks should utilize effective portfolio management to increase total investment.

- **Liberal lending policy and credit collection policy**

To get success in competitive banking market, commercial bank must utilize their deposit as loan and advances. Loan and advances are the main source of income and also means of utilization resource of commercial banks. Negligence in administration these could be the cause of liquidity crisis in bank and one of the main reasons of the bank failure. When bank grants loan and advances it must be collected after a certain period. Collection of loan has been most challenging task of commercial banks. These days, increasing on non-performing assets disclose the failure of commercial bank in recovery of loan. BOKL has its large portion of current assets invested as loan and advances and EBL has it large portion of total

working fund invested as loan and advances. HBL and SBIL have not properly use their existing fund as loan and advances. To overcome this, these banks are recommended to follow liberal lending policy, invest more portion of total deposit in loan and advances and maintain more stability on the investment policy.

- **Extend branches all over the country**

Economic development of the country depends upon the growth of commercial banks. If the service of commercial banks expands all over the country it collect idle money from every corner of the country and can be utilize for income generation purpose. So that commercial banks should expand its hand all over rural and urban area of country, not only in capital. HMG/N has also encouraged the join venture banks to expand banking service in rural areas and communities only with urban areas.

- **Innovation approach to bank marketing**

In the light of growing competition in the banking sector, the business of the bank should customer oriented. Marketing is an effective tool to attract customers so it should be strong sand active. Without effective marketing strategy any one be along behind in today's comparative environment. Different marketing techniques like advertisement through audio-visual, published website, documentary etc are followed. Similarly, draw attention of customer through new technology like e-banking, increase investment through their wide international banking network should be introduced. So, it recommended to follow appropriate marketing tools to be successful in the competitive market.

- **Mobilize of fund in rural areas**

In practice, the joint venture banks are urban based, serve quite a few elite, affluent, big customer and are heavily depended on fee based activities. To meet social responsibilities, it is recommended that all banks should promote and mobilize the funds in rural areas by bringing new and easy scheme which help to upgrade the economic development of this country.

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 sector.

Concluding remarks

Nepal is a developing country and its economic environment is also not in good condition. The strong economic structure is needed for the rapid overall development. Commercial bank face several 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 professional business institutions. If commercial banks follow above-mentioned suggestions, they would be successful in reaching to the modern and competitive banking market. This suggestions will be helpful to the commercial banks to develop new system in the banking.

5.3 Conclusion

From the above analysis and finding of the study, the researcher has been able to draw certain conclusion that all four banks have different type of results.

From this study, it can be concluded that EBL has good liquidity position whereas HBL needs to increase cash and bank balance to increase liquidity, however it is successful in investing more in government securities. BOKL is in good position in mobilizing current assets as loan and advances.

From the analysis it is found that assets management of SBIL is satisfactory as for as mobilizing deposit as loan and advances, investment of working fund in government security and high loan loss provision and SBIL should invest its total deposit in different sector to earn more profit. In the case of HBL, it is successful to invest total deposit in different sector but it has not maintained better position in other assets management ratios. EBL has mobilized its total working fund as loan and advances however it has least invested its total deposit in different investment sector therefore it should invest in investment sector to earn more profit. BOKL has also maintained good position in investment of other companies share and debenture by utilizing its total working fund.

From the view of profitability HBL is better position than the other three banks, except interest earned to total working fund ratio and total interest earned to total outside assets. SBIL is less successful on the view of profitability than other three banks. EBL is bettering interest earned to total working fund ratio and total interest earned to total outside assets ratio. BOKL also better in return on total working fund.

In overall, it can be concluded that EBL and HBL are performing higher risk than SBIL and BOKL to earn more profit. SBIL and BOKL has been bearing moderate risk.

From the growth point of view, 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. HBL is not in better position in collecting deposit, granting loan and advances and earning profit. Major findings shows that SBIL also in better position in earning profit. On the other hand BOKL is also not in better position in total investment year by year.

On the other hand all four banks have high degree of positive correlation between the variables. HBL has significant relationship in all coefficient correlation analysis, SBIL has insignificant relationship between deposit and total investment, significant relationship between total outside assets and net profit, deposit and loan and advances, loan and advances and net profit. EBL has significant relationship between total outside assets and net profit, deposit and loan and advances, loan and advances and net profit but it has insignificant relationship between deposit and total investment.

From the view of trend analysis and projection for next five years, it can be concluded that the trend value of all four banks have been increasing trend year by year. Among the four banks EBL has highest value and SBIL has lowest value. Similarly, to her tow banks HBL and BOKL have maintained second and third position.

The investment policy of SBIL is good with comparison to other three banks. SBIL has mobilized its fund in different sector. HBL has also invested its fund in different sector to earn more profit. The investment policy of EBL and BOKL is not good with comparison to SBIL and HBL. It is found that at times, banks

focuses most of its attention to one sector giving to other sector low priority. So it is recommended to touch all the sector and balance it effectively so as to have the optimal performance of the bank.

Branches existing in some limited areas will not be able to boost up its campaign of deposit mobilization and credit disbursement as desired. Therefore HBL, SBIL, EBL and BOKL recommended to open new branches at certain place every year after making feasibility study. In the case of deposit utilization, SBIL has mobilized its deposit as loan and advances and HBL has invested its deposit in different investment sector. EBL and BOKL are weak to mobilize their deposit in different sector.

Loan default in CBs is a result of various factor such as political influences, lack of necessary skills of project appraisal, improper collateral evaluation, irregular supervision and lack of entrepreneurship attitude. The CBs may experience many difficulties in recovering loan and their large amount of loan is being blocked as non-performing assets. Therefore, there is needed to work out a suitable mechanism through which overdue loan can be realized with in time. SBIL has invested its funds higher in loan and advances and HBL has lower loan and advances. So, SBIL has made higher loan loss provision and HBL has made lowest loan loss provision.

Portfolio management of bank assets refers to the allocation of fund in to different components of its assets having different degree of risk and varying range of return in such a way that the conflicting goal of maximum yield and minimum risk can be achieved. So portfolio condition of SBIL and BOKL should be examined from time to time and attention should be made to maintain equilibrium in the portfolio condition.

BIBLIOGRAPHY

Books and Journals

Ahuja, B.N. *Dictionary of Management*, 2nd Edition Academic (India) Publisher.

Annual Report, Everest Bank Ltd., 2003/04-2007/08.

Annual Report, Everest Bank Ltd., 2003/04-2007/08.

Annual Report, Himalayan Bank Ltd., 2003/04-2007/08.

Annual Report, Nepal SBI Bank Ltd., 2003/04-2007/08.

Baidhaya, Shakespears (1997). *Banking Management Monitor Nepal*, P.46-47.

Bhattarai, Rabindra, (2005), *Investments Theory and Practice* 2nd Edition, Buddha Academic Publisher and Distributors Pvt. Ltd. Kathmandu, Nepal.

Charles, Parkers Jones, (1998). *Investment Analysis and Management*, P.3.

Chiney, John M. and Moses, Edward (1992). *Fundamental of Investment*, (St. Praul, USA, West Publishing Company, P.13)

Commercial Bank Act, 1974, P.4.

Frances, Jack Clark (1991). *Investment Analysis Management*, 5th Edition (Singapore MC Graw Hill Book Co., P. 1.

Frank and Reilly, (1986). *Investment*, Second Edition, The Dryden Press, CBS Publishing Japan Ltd.

Gitman and Jochnk, (1990). *Fundamental of Investment*, P.5.

Grywinski, Ronald (1991). *The New Function Banking*, Harvard Business Review, P. 87.

Gupta, D.P., (1984). *The Banking System, Its Role in Export Development the Financing of Export Developing Countries*, International Trade Center, UNCTAD/GATT- P. 15.

Jones, Charles Parker (1998). *Investment Analysis and Management*, P.2.

Kothari, C.R., (1989). *Research Methodology: Method and Techniques*, New Delhi.

Panday, I.M., (1999). *Financial Management*, 8th Edition, New Delhi, Bikash Publication House, P. 407.

Panta, P.R. and Wolf, H.K., (1999). *Research Methodology*, 2nd Edition, Buddha Academic Enterprises, Pvt. Ltd. P.2.

Pantha, Y. (May-June, 2003), "Info Himalayan", Bimonthly Newsletter.

Principle of Bank Operation, (1972). *American Institute of Banking*, USA, P. 345.

Sharma, Bhaskar, (2000). *Banking the Future on Competition*, Business Age.

Sharma, Murari R., (1988). *A Study of Joint Venture Banks in Nepal*, Co-existing and Crowding Out, P. 120.

Shrestha K.N. and Manandhar, K.D., (2056). *Statistics and Quantitative Techniques*.

Singh, Dr. Preeti (1992). *Investment Management*, Himalayan Publishing House, Bombay.

The World Book Encyclopedia, (1976). New York, Encyclopedia American Corporation International, *World Book*. P. 366.

Van Horne, James C (2003), *Financial Management and policy*, 10th Edition, New Delhi, Prentice-Hall of India Pvt. Ltd.

Unpublished Master Thesis

Aryal, B.B. (2005). *Investment Policy of JVBs in Nepal*, An Unpublished Master Degree Thesis.

Dhital, Rajesh (2004). *A Comparative Study of Investment Policy of Standard Chartered Bank Nepal Ltd and Bank of Kathmandu*, T.U. Kathmandu.

Joshi, Rabindra (2003). *A Comparative Study on Investment Policy of Standard Chartered Bank Nepal Ltd. and Everest Bank Ltd*, An Unpublished Master Level Thesis, T.U.

Subedi, Krishna (2006). *A Study of Investment Policy of NABIL in Comparison to Other Joint Venture Banks of Nepal*, An Unpublished Master's Degree Thesis, Shankar Dev Campus.

APPENDICES

APPENDIX -1

Sample of Questionnaire

Format questionnaire to various respondents for the purpose of collect primary data. Questions to the customers of the bank.

Dear Sir/Madam

I am an MBS final year student of Balkumari College preparing a project report on "A Comparative Study on Investment Policy of Joint Venture Banks" to fulfill the partial requirement of my study. Therefore, I request you to fill up this questionnaire and help me to carry out my study your valued responses will be taken as very confidential and will not be provided for any publication.

1. What is reason behind selecting this bank?
 - a. Accessibility
 - b. Instant service
 - c. Credibility
 - d. High interest rate
2. How often have you borrowed loan from this bank?
 - a. One
 - b. Twice
 - c. More than two
 - d. None
3. Have you got the lone easily from this bank?
 - a. Yes
 - b. No
4. What do you think, is the reason behind taking loan from this bank?
 - a. Accessibility
 - b. Low interest rate
 - c. Minimum collateral
 - d. Proper management
5. In your opinion, what should the bank do to attract more customers?
 - a. Should give better service than the existing ones
 - b. Should give the high interest than the existing ones
 - c. Should open more branches
 - d. Others

Thank you for accepting to complete questionnaire your opinion and suggestion are precious to my research. I would like to ensure that all your answer and suggestions are highly appreciated and will be taken into consideration eventually.

Question to the Staff of the Bank

Dear Sir/Madam

I am an MBS final year student of Balkumari College preparing project report on "A Comparative Study on Investment Policy of Joint Venture Banks" to fulfill the partial requirement of my study. I therefore, request you to fill up this questionnaire and help me to carry out my study your valued response will be taken as very confidential and will not be provided for my publication.

1. What is your opinion in which sector should your bank investment?
 - a. Education
 - b. Agricultural
 - c. Industrial
 - d. Under Privileged
2. What do you think is the main profit generating sources of banks?
 - a. Return on investment in different sector
 - b. Interest earned form loan and advances made to customers
 - c. Other miscellaneous fees and commission of banks
3. What may be the crucial reason behind not providing facilities to the rural areas?
 - a. The bank doesn't want to take any kind of risk related investment
 - b. Risk of not earning adequate profit through smaller transaction
 - c. Lack of modern facilities for running bank.
4. In your opinion, how your bank should follow the portfolio management which is less risk?
 - a. Equity
 - b. Debt
 - c. Mixture and debt equity
 - d. Government securities

5. How do you rate the investment system of your bank in comparison to other banks.
- a. Good
 - b. Fair
 - c. Poor
 - d. Not satisfactory
6. Why is the bank not being able to more generate profit even it has adopted better investment portfolio management?
- a. No enough investment opportunity in the country.
 - b. Less return on investment due to bad judgment.
 - c. Fewer funds with banks to invest

Appendix 2
Himalayan Bank Ltd.

"Rs. in Million"

Particular	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	18602.01	20685.80	23153.12	27564.20	29570.65
Current liabilities	23595.38	25730.67	27549.15	31238.22	33115.51
Cash and bank balance	2001.18	2014.47	1717.35	1757.34	1448.14
Total deposit	22010.33	24814.01	26490.85	30048.42	31842.79
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Investment on govt. securities	3431.73	6469.73	5144.31	6454.87	7471.67
Investment on share and debenture	34.26	39.91	39.91	73.42	89.56
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Total interest paid	491.54	561.96	648.84	767.41	823.74
Net profit	263.05	308.27	457.46	491.82	635.87
Total assets employed	24762.02	27418.16	29460.39	33519.14	36175.53
Liquid assets	2001.18	2014.47	1717.35	1757.34	1448.14
Loan loss provision	186.22	73.90	145.15	83.84	52.42
Total outside assets	21612.87	24557.94	26536.87	30351.00	33356.22
Total investments	9292.10	11692.34	10889.03	11822.18	13340.18
Total interest earned	1245.89	1446.47	1626.47	1775.58	1963.65

Appendix 3
Nepal SBI Bank Ltd.

"Rs in Million"

Particular	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	8360.17	10259.38	12925.57	13486.26	17013.89
Current liabilities	7862.45	9724.17	11936.23	12627.59	15673.06
Cash and bank balance	864.42	723.74	1118.16	1122.70	1342.96
Total investment	1907.52	2607.68	3611.31	2659.45	3088.88
Total deposit	7198.33	8654.77	11002.04	11445.29	13715.39
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Investment on govt. securities	1889.63	2588.14	3591.77	2345.58	3035.55
Investment on share and debenture	17.88	19.54	19.54	31.94	32.82
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Total interest earned	493.60	578.37	708.72	831.12	970.51
Total interest paid	255.92	258.43	334.77	412.26	454.92
Net profit	60.85	57.38	117.00	254.91	247.77
Total assets employed	8440.40	10345.37	13035.84	13901.20	17187.45
Total outside assets	7051.18	8944.67	11600.71	12469.90	15506.60
liquid assets	864.42	723.74	1118.16	1122.70	1342.96
Loan loss provision	109.56	190.27	136.76	57.90	56.68

Appendix 4
Everest Bank Ltd.

"Rs in Million

Particular	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	9420.97	11545.23	15147.86	20982.80	26550.88
Current liabilities	8995.80	10684.41	14804.78	20089.36	25145.02
Cash and bank balance	631.80	1049.99	1552.96	2391.42	2667.97
Total investment	2535.66	2128.93	4201.32	4985.11	5061.15
Total deposit	8063.90	10097.69	13802.44	18186.25	23976.30
Loan and advances	5860.54	7618.75	9770.92	13623.69	18317.17
Investment on govt. securities	2466.43	2100.29	3548.61	4707.63	4821.60
Investment on share and debenture	17.12	19.39	19.89	19.89	101.15
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Total interest earned	657.25	719.30	903.41	1144.41	1548.66
Total interest paid	316.36	299.56	401.70	517.17	632.61
Net profit	143.56	168.21	237.30	296.41	451.22
Total assets employed	9608.57	11732.51	15959.28	21432.57	27149.34
Total outside assets	8607.22	10317.60	14068.78	18648.40	23744.69
liquid assets	631.80	1049.99	1552.96	2391.42	2667.97
Loan loss provision	81.79	74.95	53.52	84.45	97.74

Appendix 5
Bank of Kathmandu Ltd.

"Rs. in Million"

Particular	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	9307.08	9310.27	11443.88	13585.23	16243.35
Current liabilities	8902.77	9201.15	11337.36	13509.14	16346.25
Cash and bank balance	782.88	740.52	728.70	1315.90	1440.47
Total investment	2477.41	8942.75	10485.36	12388.92	15833.74
Loan and advances	5646.70	5831.07	7239.09	9368.58	12408.31
Total deposit	7741.64	8942.75	10485.36	12388.92	15833.74
Investment on govt. securities	2371.77	2146.62	2658.37	2332.04	2113.22
Investment on share and debenture	22.81	93.01	96.87	90.17	114.05
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.92
Total outside assets	8396.43	8839.70	11227.84	12651.04	15739.38
Total interest earned	567.09	607.095	718.12	819.00	1034.16
Total interest paid	286.30	241.64	308.15	339.18	417.54
Net profit	127.47	139.53	202.44	262.38	361.49
Total assets employed	9496.34	8839.70	11227.84	12651.04	15739.38
Liquid assets	782.88	740.52	728.70	1315.90	1440.47
Loan loss provision	133.92	116.98	61.03	78.16	37.43

Appendix 6
Current ratio
HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	18602.01	20685.80	23153.12	27564.20	29570.65
Current liabilities	23595.38	25730.67	27549.15	31238.22	33115.31
Ratio (%)	78.84	80.39	84.04	88.24	89.30

SBIL

"Rs in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	8360.17	10259.38	12925.57	13486.36	17013.89
Current liabilities	7862.45	9724.17	11936.23	12627.57	15673.06
Ratio (%)	106.33	105.50	108.29	106.80	108.5

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	9420.97	11545.23	15147.86	20982.80	26550.88
Current liabilities	8995.80	10684.41	14804.78	20089.36	25145.02
Ratio (%)	104.73	108.06	102.32	104.45	105.59

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Current assets	9307.08	9310.27	11443.88	13585.23	16243.35

Current liabilities	8902.77	9210.15	11337.36	13509.36	16346.25
Ratio (%)	104.54	101.19	100.94	100.94	99.34

Appendix 7

Cash and bank balance to total deposit ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	2001.18	2014.47	1717.35	1757.34	1448.14
Total deposit	22010.33	24814.01	26490.85	30048.48	31842.79
Ratio (%)	9.09	8.12	6.48	5.85	4.55

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	864.42	723.74	1118.16	1122.70	1342.96
Total deposit	7198.33	8654.77	11002.04	11445.29	13715.39
Ratio (%)	12.01	8.36	10.16	9.81	9.79

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	631.80	1049.99	1552.96	2391.42	2667.97
Total deposit	8063.90	10079.69	13802.44	18186.25	23976.30
Ratio (%)	7.83	10.40	18.25	13.15	11.13

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	782.88	740.52	728.70	1315.90	1440.47
Total deposit	7741.64	8942.75	10485.36	12388.92	15833.74
Ratio (%)	10.11	8.28	6.95	10.62	9.09

Appendix 8**Cash and bank balance to current ratio****HBL**

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	2001.18	2014.47	1717.35	1757.34	1448.14
Current assets	18602.01	20685.80	23153.11	27564.20	29570.65
Ratio (%)	10.76	9.74	7.42	6.38	4.90

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	864.42	723.74	1118.16	1122.70	1342.96
Current assets	8360.17	10259.38	12925.57	13486.26	17013.89
Ratio (%)	10.34	7.05	8.65	8.32	7.89

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	631.80	1049.99	1552.96	2391.42	2667.97

Current assets	9420.97	11545.23	15147.86	20982.80	26550.88
Ratio (%)	6.71	9.09	10.25	11.40	10.05

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Cash and bank balance	782.88	740.52	728.70	1315.90	1440.47
Current assets	9307.08	9310.27	11443.88	13585.23	16243.35
Ratio (%)	8.41	7.95	6.37	9.69	8.87

Appendix 9

Investment on govt. securities to current assets ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. securities	3431.73	5469.73	5144.31	6454.87	7471.67
Current assets	18602.01	20685.80	23153.11	27564.20	29570.65
Ratio (%)	18.45	26.44	22.22	23.42	25.27

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. securities	1889.63	2588.14	3591.77	2345.58	3035.55
Current assets	8360.17	10259.38	12925.57	13486.26	17013.89
Ratio (%)	22.60	25.23	27.79	17.39	17.84

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. securities	2466.43	2100.298	3548.61	4704.63	4821.60
Current assets	9420.97	11545.23	15147.86	20982.80	26550.81
Ratio (%)	26.18	18.19	23.43	22.42	18.16

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. securities	2371.77	2146.62	2658.37	2332.04	2113.22
Current assets	9307.08	9310.27	11443.88	13585.23	16243.35
Ratio (%)	25.48	23.06	23.23	17.17	13.01

Appendix 10

Loan and advances to total deposit ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Total deposit	11010.33	24814.01	26490.85	30048.42	31842.79
Ratio (%)	52.86	50.07	54.34	56.01	60.48

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Total deposit	7198.33	8654.77	11002.04	11445.29	13715.39
Ratio (%)	71.47	70.07	67.78	81.03	87.11

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	58.60	7618.67	9770.92	13623.69	18317.17
Total deposit	8063.90	10097.69	13802.44	18186.25	23976.30
Ratio (%)	72.68	75.45	70.79	74.91	76.40

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5646.70	5831.07	7239.09	9368.58	12408.31
Total deposit	7741.64	8942.75	10485.36	12388.92	15833.74
Ratio (%)	72.94	65.20	69.04	75.62	78.37

Appendix-11**Loan and advance to current asset ratio****HBL**

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Current assets	18602.01	20685.80	23153.11	27564.20	29570.65
Ratio (%)	62.55	60.06	62.18	61.06	65.12

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.02
Current assets	8360.17	10259.38	12925.57	13486.26	17013.89

Ratio (%)	61.53	59.11	57.69	68.77	70.23
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EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5860.54	7618.67	9770.92	13623.69	18317.17
Current assets	9420.97	11545.23	15147.86	20982.80	26550.88
Ratio (%)	62.21	65.99	64.50	64.93	68.99

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5646.70	5831.07	7239.09	9368.58	12408.31
Current assets	9307.08	9310.27	11443.88	13585.23	16243.35
Ratio (%)	60.67	62.63	63.26	68.96	76.39

Appendix-12

Total Investment to Total Deposit Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total investment	9292.10	11692.34	10889.03	11822.98	13340.18
Total deposit	22010.33	24814.01	26490.85	30048.42	31842.79
Ratio (%)	42.22	47.12	41.10	39.35	41.89

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total investment	1907.52	2607.68	3611.31	2659.45	3088.88
Total deposit	7198.33	8654.77	11002.04	11445.29	13715.39
Ratio (%)	26.50	30.13	32.82	23.24	22.52

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total investment	2535.66	2128.93	4201.32	4985.11	5061.15
Total deposit	8063.90	10097.69	13802.44	18186.25	23976.30
Ratio (%)	31.44	21.08	30.44	27.41	21.11

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total investment	2477.41	2598.60	3378.13	2995.19	3206.82
Total deposit	7741.64	8942.75	10485.36	12388.92	15833.74
Ratio (%)	32.00	29.06	32.22	24.18	20.25

Appendix-13

Loan and Advances to Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	46.99	45.31	48.86	50.21	53.23

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	60.94	58.62	57.20	66.72	69.52

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	56960.54	7618.67	9770.92	13623.69	18317.17
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	60.99	64.94	61.22	63.56	67.47

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5860.54	5831.07	7239.09	9368.58	12408.31
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.91
Ratio (%)	59.46	59.15	58.96	64.30	70.02

Appendix-14

Investment on Government Security to Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. security	3431.73	5469.73	5144.31	6454.87	7471.67
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	13.86	19.95	17.46	19.26	20.65

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. security	1889.63	2588.14	3591.77	2345.58	3035.55
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	22.39	25.02	27.55	16.87	17.66

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. security	2466.43	2100.29	3548.61	4704.63	4821.60
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	25.67	17.90	22.24	21.95	17.76

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on govt. security	2371.77	2146.62	2658.37	2332.04	2113.22
Total working fund	9496.34	9857.13	12278.39	14570.10	17721.92

Ratio (%)	24.98	21.78	21.65	16.01	11.92
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Appendix-15

Investment on Share and Debenture to Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on share and debenture	3431.73	39.91	39.91	73.42	89.56
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	0.14	0.14	0.13	0.22	0.25

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on share and debenture	17.88	19.54	19.54	31.94	32.82
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	0.21	0.19	0.15	0.23	0.19

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on share and debenture	17.12	19.39	19.89	19.89	101.15
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.37
Ratio (%)	0.18	0.17	0.12	0.09	0.37

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Investment on share and debenture	22.81	93.02	96.87	90.17	114.05
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.92

Ratio (%)	0.24	0.94	0.79	0.62	0.64
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Appendix-16
Loan Loss Ratio
HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan loss provision	186.22	73.90	145.15	83.84	52.42
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Ratio (%)	1.60	0.59	1.00	0.50	0.27

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan loss provision	109.56	190.27	136.76	57.90	56.68
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Ratio (%)	2.13	3.14	1.83	0.62	0.47

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan loss provision	81.79	74.95	53.52	84.45	97.74
Loan and advances	5860.54	7618.67	9770.92	13623.69	18317.17
Ratio (%)	1.39	0.98	0.55	0.62	0.53

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan loss provision	133.92	116.98	61.03	78.16	37.43
Loan and advances	5646.70	5831.07	7239.09	9368.59	12408.31
Ratio (%)	2.37	2.00	0.84	0.83	0.30

Appendix-17

Return on Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	263.05	308.27	457.46	491.82	635.87
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	1.06	1.12	1.55	1.46	1.75

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	60.85	57.38	17.00	254.91	247.77
Total working fund	8440.46	10345.37	13035.84	13901.20	17187.45
Ratio (%)	0.72	0.55	0.90	1.83	1.44

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	143.56	168.21	237.30	296.41	451.22
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	1.49	1.43	1.49	1.38	1.66

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	127.47	139.53	202.44	262.38	361.49
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.92
Ratio (%)	1.34	1.42	1.65	1.80	2.04

Appendix-18

Total Interest Earned to Total Outside Assets Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	1245.89	1446.47	1626.47	1775.58	1963.65
Total outside assets	21612.87	24557.94	26536.87	30351.00	33356.22
Ratio (%)	5.76	5.89	6.13	5.85	5.89

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	493.60	578.37	708.72	831.12	970.51
Total outside assets	7051.18	8944.67	11600.71	12469.90	15506.60
Ratio (%)	7.00	6.47	6.11	6.65	6.26

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	657.25	719.30	903.41	1144.41	1548.66
Total outside assets	8607.22	10317.60	14068.78	18648.40	23744.64
Ratio (%)	7.64	6.97	6.42	6.14	6.52

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	567.09	607.09	718.12	819.00	1034.16
Total outside assets	8396.43	8839.70	11227.84	12651.04	15739.38
Ratio (%)	6.75	6.87	6.40	6.47	6.57

Appendix-19

Return on Loan and Advances Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	263.05	308.27	457.46	491.82	635.87
Loan and advances	11635.31	12424.52	14395.84	16831.89	19257.71
Ratio (%)	2.26	2.48	3.18	2.92	3.30

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	60.85	57.38	117.00	254.91	247.77
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Ratio (%)	1.18	0.95	1.57	2.75	2.07

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	143.56	168.21	237.30	296.41	451.22
Loan and advances	5860.54	7618.67	9770.92	13623.69	18317.17
Ratio (%)	2.45	2.21	2.43	2.17	2.46

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Net profit	127.47	139.53	202.44	262.38	361.48
Loan and advances	5646.70	5831.67	7239.09	9368.59	12408.31
Ratio (%)	2.26	2.39	2.80	2.80	2.91

Appendix-20

Total Interest Earned to Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	1245.89	1446.47	1626.47	1775.58	1963.65
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	5.03	5.28	5.52	5.30	5.43

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	493.60	578.37	708.72	831.12	970.51
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	5.85	5.59	5.44	5.98	5.65

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	657.25	719.30	903.41	1144.41	1548.66
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	6.84	6.13	5.66	5.34	5.70

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest earned	567.09	607.09	718.12	819.00	1034.16
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.92
Ratio (%)	5.97	6.16	5.85	5.62	5.84

Appendix-21

Total Interest Paid to Total Working Fund Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest paid	491.54	561.96	648.84	767.41	823.74
Total working fund	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	1.99	2.05	2.20	2.29	2.28

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest paid	255.92	258.43	334.77	412.26	454.92
Total working fund	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	3.03	2.50	2.57	2.97	2.65

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest paid	316.36	299.56	401.40	517.17	632.61
Total working fund	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	3.29	2.55	2.52	2.41	2.33

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Total interest paid	286.30	241.64	308.15	339.18	417.57
Total working fund	9496.34	9857.13	12278.33	14570.10	17721.92
Ratio (%)	3.01	2.45	2.51	2.33	2.36

Appendix-22
Credit Risk Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	11635.31	12424.52	14395.84	16831.89	12257.71
Total assets	24762.02	27418.16	29460.39	33519.14	36175.53
Ratio (%)	46.99	45.31	48.86	50.21	53.23

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5143.66	6064.60	7457.25	9274.33	11948.03
Total assets	8440.40	10345.37	13035.84	13901.20	17187.45
Ratio (%)	60.94	58.62	57.20	66.72	69.52

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5860.54	7618.67	9770.92	13623.69	18317.17
Total assets	9608.57	11732.51	15959.28	21432.57	27149.34
Ratio (%)	60.99	64.94	61.22	63.56	67.47

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Loan and advances	5646.70	5831.07	7239.09	9368.59	12408.31
Total assets	9496.34	9857.13	12278.33	14570.10	17721.92
Ratio (%)	59.46	59.15	58.96	64.30	70.02

Appendix-23
Liquid Risk Ratio

HBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid assets	2001.18	2014.47	1717.35	1757.34	1448.14
Total deposit	22010.33	24814.01	26490.85	30048.42	31842.79
Ratio (%)	9.09	8.12	6.48	5.85	4.55

SBIL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid assets	864.42	723.74	1118.16	1122.70	1342.96
Total deposit	7198.33	8654.77	11002.04	11445.29	13715.39
Ratio (%)	12.00	8.36	10.16	9.81	9.79

EBL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid assets	631.80	1049.99	1552.96	2391.42	2667.97
Total deposit	8063.90	10097.69	1382.44	18186.25	23976.30
Ratio (%)	7.83	10.40	11.25	13.15	11.13

BOKL

"Rs. in Million"

Fiscal Year	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid assets	782.88	740.52	728.70	1315.90	1440.47
Total deposit	7741.64	8942.75	10485.36	12388.92	15833.74
Ratio (%)	10.11	8.28	6.95	10.62	9.10

Appendix-24

Sample Calculation of Coefficient of Correlation between Deposit and Total Investment of HBL

Rs. in million

Fy	Deposit (x)	Investment (y)	xy	x ²	y ²
2003/04	22010.33	9292.10	204522187.4	484454626.4	86343122.41
2004/05	24814.01	11692.34	290133841.7	615735092.3	136710814.7
2005/06	26490.85	10889.03	288459660.4	701765133.7	118570974.3
2006/07	30048.42	11822.98	355261868.7	902907544.5	139782856.1
2007/08	31842.79	13340.18	424788550.3	101396327	177960402.4
Total	135206.40	57036.63	1563166109	3718825672	659368169.9

Here, n = 5

$$\begin{aligned} \Sigma x &= 135206.40 & \Sigma y &= 57036.63 \\ \Sigma xy &= 1563166109 & \Sigma x^2 &= 3718825672 \\ \Sigma y^2 &= 659368169.9 \end{aligned}$$

Coefficient of correlation (r) can be calculated by using the following formula:

$$\begin{aligned} r &= \frac{N \Sigma xy - \Sigma x \Sigma y}{\sqrt{N \Sigma x^2 - (\Sigma x)^2} \sqrt{N \Sigma y^2 - (\Sigma y)^2}} \\ &= \frac{5 | 1563166109 - \frac{135206.40 \times 57036.63}{5} |}{\sqrt{5 | 3718825672 - \frac{(135206.40)^2}{5} |} \sqrt{5 | 659368169.9 - \frac{(57036.63)^2}{5} |}} \\ &= \frac{104113134.6}{17701.91 | 6607.85} = 0.8901 \end{aligned}$$

$$\text{Then, } r^2 = (0.8901)^2 = 0.7922$$

Calculation of probable error:

$$\begin{aligned} \text{P.Er.} &= 0.6745 \frac{1 - r^2}{\sqrt{N}} \\ &= 0.6745 \frac{1 - 0.7922}{\sqrt{5}} \\ &= 0.0627 \end{aligned}$$

Then, $6 \times \text{P.Er.} = 6 \times 0.0627$
 $= 0.3761$

Appendix-25

Sample Calculation of Trend Values of Total Deposit of HBL

Fy (t)	Deposit (y)	$x = t - 2006$	x^2	xy
2003/04	22010.33	-2	4	-44020.66
2004/05	24814.01	-1	1	-24814.01
2005/06	26490.85	0	0	0
2006/07	30048.42	1	1	30048.42
2007/08	31842.79	2	4	63685.58
Total	135206.40	0	10	24899.33

Here, $n = 5$, $\Sigma y = 135206.40$, $\Sigma x^2 = 10$, $\Sigma xy = 24899.33$ $\Sigma x = 0$

We have,

Least square equation

$y = a + bx$ -----(i)

$y = na + b \Sigma x$ ----- (ii)

$\Sigma xy = a \Sigma x + b \Sigma x^2$ ----- (iii)

Since $\Sigma x = 0$

Then, $y = na + b \Sigma x$

or, $135206.40 = 5a + b \times 0$

or, $a = \frac{135206.40}{5} = 27041.28$

$a = 27041.28$ (From eqⁿ. (ii))

and,

$\Sigma xy = a \Sigma x + b \Sigma x^2$

$24899.33 = 5 \times 0 + b \times 10$

$$\text{or, } b = \frac{24899.33}{10} = 2489.93 \text{ (From eq}^{\text{n}} \text{. iii)}$$

The trend value of total deposit of HBL (2008/09 – 2012/013)

Fy (t)	x = (t – 2006)	Trend value (y = a + bx)
2008/09	3	$y = 27041.28 + 2489.93 \times 3 = 34511.07$
2009/10	4	$y = 27041.28 + 2489.93 \times 4 = 37001.00$
2010/11	5	$y = 27041.28 + 2489.93 \times 5 = 39490.93$
2011/12	6	$y = 27041.28 + 2489.93 \times 6 = 41980.86$
2012/13	7	$y = 27041.28 + 2489.93 \times 7 = 44470.79$

Appendix-26

Sample Calculation of ANOVA (One-Way)

Test of hypothesis of loan and advances to total deposit ratio of HBL, SBIL, 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 SBIL

x_3 = Loan and advances to total deposit ratio of EBL

x_4 = Loan and advances to total deposit ratio of BOKL

Calculation of $x_1, x_2, x_3, x_4, (x_1)^2, (x_2)^2, (x_3)^2, (x_4)^2$

Fy	x_1	x_2	x_3	x_4	x_1^2	x_2^2	x_3^2	x_4^2
2003/04	52.86	71.47	72.68	72.94	2794.18	5107.96	5282.38	5320.24
2004/05	50.07	70.07	75.45	65.20	2507.00	4909.80	5692.70	4251.04
2005/06	54.34	67.78	70.49	69.04	2952.84	4594.13	5011.22	4766.52
2006/07	56.01	81.03	74.91	75.62	3137.12	6565.86	5611.51	5718.38
2007/08	60.48	87.11	76.40	78.37	3657.83	7588.15	5836.96	6141.86
Total	273.76	377.46	370.23	361.17	15048.97	28765.91	27434.78	26198.05

Now,

$$\begin{aligned}\text{Grand total (T)} &= x_1 + x_2 + x_3 + x_4 \\ &= 273.76 + 377.46 + 370.23 + 361.17 \\ &= 1382.62\end{aligned}$$

$$\begin{aligned}\text{Correction factor (C.F.)} &= \frac{T^2}{N} \\ &= \frac{(1382.62)^2}{20} \\ &= 95581.90\end{aligned}$$

$$\begin{aligned} \text{Total sum of square (TSS)} &= (x_1^2 + x_2^2 + x_3^2 + x_4^2) - C.F \\ &= (15048.97 + 28765.91 + 27434.78 + 26198.05) - 95581.90 \\ &= 1865.81 \end{aligned}$$

Sum of square between sample (SSC) =

$$\begin{aligned} &\frac{(x_1)^2}{n_1} \Gamma \frac{(x_2)^2}{n_2} \Gamma \frac{(x_3)^2}{n_3} \Gamma \frac{(x_4)^2}{n_4} \text{ Z.C.F.} \\ &= \frac{(273.76)^2}{5} \Gamma \frac{(377.46)^2}{5} \Gamma \frac{(370.23)^2}{5} \Gamma \frac{(361.17)^2}{5} - 95581.90 \\ &= 1405.02 \end{aligned}$$

Sum of square within sample (SSE) = TSS – SSC

$$\begin{aligned} &= 1865.81 - 1405.02 \\ &= 460.79 \end{aligned}$$

The mean sum of square between sample (MSC) = $\frac{SSC}{k \text{ Z1}}$

$$= \frac{1405.02}{4 \text{ Z1}} = 468.34$$

The mean sum of square within sample

$$(MSE) = \frac{SSE}{n \text{ Z1}} \times \frac{460.79}{20 \text{ Z4}} = 28.80$$

$$\text{Finally, F-ratio} = \frac{MSC}{MSE} = \frac{468.34}{28.80} = 16.26$$

Appendix-27

Sample calculation of growth rate of total deposit of HBL

Let,

D_n = Total deposit in the nth year

D_0 = Total deposit in the initial year

g = Growth rate

n = Number of period of study

Then, we have

$$D_n = D_0 (1+g)^{n-1}$$

$$\text{or, } 31842.79 = 22010.33 (1+g)^{5-1}$$

$$\text{or, } \frac{31842.79}{22010.33} = (1+g)^{1/4}$$

$$\text{or, } g = 0.0967$$

$$\text{or, } g = 9.67\%$$

Appendix-28

Sample calculation of mean, standard deviation, coefficient of variation of current ratio of HBL

Fy	Current ratio (x_1)	\bar{x}_1	$(x_1 - \bar{x}_1)^2$
2003/04	0.79	0.84	0.0025
2004/05	0.80	0.84	0.0016
2005/06	0.84	0.84	0.0
2006/07	0.88	0.84	0.0016
2007/08	0.89	0.84	0.0025
Total	$\phi x_1 = 4.20$		0.0082

$$\text{Mean } (\bar{x}) = \frac{\sum x_1}{n} = \frac{4.20}{5} = 0.84$$

$$\text{Standard deviation (S.D.)} = \sqrt{\frac{\sum (x_1 - \bar{x}_1)^2}{n}}$$

$$= \sqrt{\frac{0.0082}{5}}$$

$$= 0.0405$$

$$\text{Coefficient of variation (C.V.)} = \frac{\text{S.D.}}{\bar{x}} \times 100$$

$$= \frac{0.0405}{0.84} \times 100$$

$$= 4.82\%$$