CHAPTER I

INTRODUCTION

1.1 Background of the Study

The development of any country depends upon its economic development. The speedy development of any country is possible when the competitive banking service reaches several part of the nation.

Banks are those financial intermediaries who collects funds as saving from public and invests them full into the most desirable and highly yielding sector to support a process of economic development. It develops saving habit of people so bank and banking has always played a significant role for the financial activities in the business.

Banking industry has acquired a key position in mobilizing resources for finance and social economic development of a country. No function is important to the economy and its constituent part than financing. "Bank assists both the flow of goods and services from the products to the consumers and financial activities of the government. Banking provides the country with the monetary system of making payment and is in important part of the financial system. Which makes loans to maintain and increase the level of consumption and production in the economy" (American Institute of Banking: 1972:162)

Banks are one of the vital aspects of this sector, which deals in the process of channelising the available resources in the needed sector. They provide capital for the development of industry, trade and business and other resources. In this way it is the intermediary between the deficit and surplus of financial resources. All the economic activities are directly or indirectly channeled through these banks. People keep their surplus money as deposits in the bank and hence bank can provide such funds to finance the industrial activities in the form of loans and advances. Commercial bank renders numerous services to their customer to increase their economic and social life. People are interested to invest in the bank for their safetyness, good return, liquidity, denomination last not least convenience.

1.2 Focus of the Study

The concentration of this research is to emphasize the investment policies of the joint venture banks namely Nepal Investment Bank and Everest Bank Ltd. This will surely help to bridge the gap between deposit and investment policies. Furthermore, the study will help the management of the banks to take necessary actions in investment policies.

1.3 Investment Policy of Commercial Bank

Investment operation of commercial bank is risky one. In this view commercial bank have to pay due consideration while formulating investment policy is one fact of the overall spectrum of policies that guide banks investment operation. A healthy development of any banks depends upon it's formulate sound investment policies which eventually contribute in the economic development. A formulation of sound investment policies can be effective one for the economy to attain the economic objective directed towards the acceleration of the pace of development. A good investment policy attracts both borrowers and lenders which help to increase the volume and quantity of deposit, loan and investment. The loan provided by commercial bank is guide by several principles such as length of time, profitability safety etc. These fundamental of commercial banks investment are considered while making investment policy.

Investment policies are the strategies which find the answer of the question like where to invest and why to invest? The initial step setting an investment policy involves determining the investor's objectives and the amount of his or her investable wealth, because there is a positive relationship between risk and return for an investor to say that his or her objective is to "make lot of money". What is appropriate for an investor in this situation is to state that the objective is to attempt to make a lot of money while recognizing that there is some chance that large loss may be incurred. Investment objectives should be stated in terms of both risk and return. Setting a clear investment policy also involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio.

Nowadays there is very much competition in banking market but less opportunity to make investment. In this situation commercial banks can take initiation in search of new

opportunities. So that they can survive in the competitive market and earn profit. But an investment is very risky job. For a purpose of safe, profitable investment, bank must follow sound investment policy. The fundamental principles of investment must be followed thoroughly for a profitable investment.

Investment policy should ensure minimum risk and maximum profit. Good investment policy ensures maximum amount of investment to all sectors with proper utilization. There is highly liquidity in the market but there seems no profitable place to invest. Following of money hundred times more than required when there were called by the banks and financial institutions is the example of the high liquidity in the money market. At the same time, the banks and financial institutions are offering very low deposit interest rate. In this situation Nepalese Banks are required to explore new opportunities to make investment of they want to survive in the competitive market.

1.4 Statement of the Problems:

The commercial Banks Act 1974 removed the entry barriers on commercial banks. Consequently the doors were open to foreign banks and the private sector were encouraged to under take banking activities the number of joint venture bank is increasing now a days. In this contest the political instability led down the economic growth, many business sectors are not doing well. There is high flow of money in the market but the people are scared of investing their money due to unreliable and lack of safe investable project.

Today's new banks are being established and existing banks are opening their branches in different areas. There is vast competition among the banks. Joint venture banks are at high time to focus their eyes for the better productive management for survival and growth.

Commercial banks also have lot of deposits but very little investment opportunities they are even discouraging people by offering very low interest rate. That is why people are now interested to invested to invest on land, building, Vehicles, ornaments rather than banks. This will definitely make bad impact on economy of the country. Commercial

banks have not formulated their investment policy in an organized manner. They mainly relay upon the instruction and guide line of Nepal Rastriya Bank. It seems that banks are interested to invest on a short-term project rather than the long-term project due to safety purpose. Considering this, they have insufficient return so must of the joint venture bank may have problem in long run. This ultimately proves that some joint venture banks have poor investment policy.

In this way, it is important that bank should follow proper investment policy for the betterment of both management and shareholder. Thus, present study will make a modest attempt to analyze investment policy of investment Bank and Everest Bank Limited. Does their fund mobilization and investment policy are more effective and efficient.

The main problem area of the studies is to find out the comparative investment policy of the two banks.

1. What are the relationship between investment, Loan and advances, deposits, net profit and outside assets?
2. What is the liquidity, profitability position of the bank?
3. What are the trends of deposit utilization on investment of firms?
4. How the proper investment decision affects profitability position of the bank?

1.5 Objectives of the Study

The basic objectives of the study are to examine and evaluate the investment policy of investment Bank and Everest Bank Ltd. To be more precise the specific objectives of the study are:

i. To compare investment policy and mobilization of fund of EBL and NIBL
ii. To evaluate the liquidity, asset management efficiency, profitability and risk position of EBL and NIBL
iii. To determine the growth rate of bank interms of deposit, loan and advances, investment and profitability of the banks.
iv. To provide suitable suggestions and possible guidelines to improve investment policy and its problem.

1.6 Limitation of the Study

This study is simply for practical fulfillment of the requirement of master in Business Studies (MBS). To make the research more specific, the study has been conducted with certain limitation as follows.

a) Only two banks are the concern of the study to the inadequate time period.
b) The study is focus on those factors which is Related with investment policy.
c) The study is based on last five years data of Investment Bank and Himalayan Bank.
d) The Whole study is based on Secondary data collected form the respective companies and web-sites.
e) The research study will be conducted on the basis of published documents such as balance sheet, profit and loss account which are circulated at the end of fiscal years.

1.7 Organization of Study

The study is divided into five parts.

Chapter I is concern with the introduction of the study. It includes the Background of the study. Investment policy of commercial Bank, statement of the problem, objective of the study, limitation of the study and organization of the study.

Chapter II, is review of literature. This part deals with different article, Journal, books, relevant thesis and research gap related to investment policy are study.

Chapter III, includes research design, data collection, and method of analysis and research variables, Population and sample, financial analysis and statistical analysis.

Chapter IV include financial analysis and interpretation of data where different part of ratio analysis are analyze like liquidity ratio, profitability ratio, assets management ration, risk ratio and growth ratio. Statistical analysis and interpretation of data where study analyze the trend analysis, correlation analyses between variable terms like total deposit, investment, net profit and loan and advances.

Chapter V is the last part of the study. It deals with summary, conclusion and recommendation. The bibliography and appendices are also included as supplements to the above chapters.

CHAPTER II
REVIEW OF LITERATURE

2.1 Introductions

Review of literature is the study of previous research, article, book or previous thesis in related field or topics for following the past studies, conclusions and deficiencies that may be known for further research. And also this chapter mainly concentrates on the study of literature relating to the investment policy of joint venture commercial banks. The past or historical knowledge provides the base. Therefore the present study is based on the previous knowledge.

2.2 Conceptual Framework

2.2.1 Commercial Bank

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

Commercial bank deals with other People's money. They have to find ways of keeping their assets liquid so that they could meet the demands of their customers. In their anxiety to make profit, the banks can't afford to lock up their funds in assets, which are not easily realizable. The depositor's confidence could be secured only if the bank is able to made the demand for cash promptly and fully. The banker has to keep adequate cash for this purpose. Cash is and idle asset and hence the banker cannot afford to keep a large portion of his assets in the form of cash. Cash brings in no income to the bank. Therefore, the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity.

Commercial Bank Act 1975 A.D. (2031 B.S.) defined " A commercial bank is one which exchange money deposits, accepts deposits, grant loans and performs commercials banking functions and co-operatives, agriculture and industries for such specific purpose."

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 service.

Commercial Bank has its own role and contribution in the economic development. It is a resource of the economic development. It maintains economic confidence of various segments and extends credit to people.

The main function of the commercial bank is the accumulation of the temporarily idle money of the general public for the purpose to provide short-term loan necessary for trade and commerce. It accepts deposit and grants loan, exchanges, purchases and discount bill for promissory notes, exchange, foreign currency, commercial banks earn profit by proper mobilization of their resources.

2.2.2 Joint Venture

"Joint venture banks are such type of commercial banks incorporated by joining forces between two or more enterprises for the purpose of carrying out a specific operation (industrial or commercial) investment, production or trade."

(Gupta,, 1984:15)

They accept fund from all part of the country in the form of various types of deposits for the purpose of advancing it to other in the form of loan.

The main purpose of the joint ventures is to join economic forces in order to achieve desired end. In order to operate a business organization under joint venture basis, there should be at least two partners from two different countries.

Joint venture banks one of the important role is to search new field of investment so that they can mobilize their funds as much as possible. The objectives of establishing joint venture banks are to help (economically) finance for country's industries trade etc. It always looks for profit.

2.2.3. Profile of sample Bank

Nepal Investment Bank

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd. The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital
- Rashtriya Banijya Bank holding 15% of the Capital.
- Rashtriya Beema Sansthan holding the same percentage.
- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

Service Offered:-

- Deposits: Int. Rates, Individual A/c [Documents Req.] Business A/c [Documents Req.], Fixed Deposit [Download Form
- Ezee Saving: Features, Advantages
- eBanking: Introduction, Features, Advantages, FAQ, Download Form
- ATM: Services Offered / ATM Locations
- Loans and Advances: Interest Rate, Documents Required
- Credit Card: Introduction, FAQ, Advantages, Safety, Terms & Conditions, Download Form, Charges
- Safe Deposit Locker: Specifications, Timings, Requirements, Features, Download Forms
- Premier Banking: Services, Benefits, Terms & Conditions
- Vehicle Loans: Offer, Eligibility, Documentation

- NTC Mobile Bill Payment: Mode of payment, Branches Facility Available at
- Debit Card: Introduction, Features, Advantages, Safety tips, Terms & Conditions, Download Form, Download Visa Prepaid form, Charges
- 365 Days Service: Specifications, Timings & etc.

(*Source:-www.nibl.com.np)*

Everest Bank Limited

Everest Bank Limited (EBL) started its operation in 1994 with a view and objectives of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer friendly services through a network of 27 branches across the nation.

Punjab National Bank (PNB), our joint venture partner (holding 20% equity in the bank) is the largest nationalized bank in India having 113 years of banking history. PNB is a technology driven bank serving over 35 billion customers through a network of over 4500 branches spread all over the country with a total business of around INR 2178.74 billion.

The bank has been conferred with "Bank of the Year 2006, Nepal" by the banker, a publication of financial times, London. The bank was bestowed with the "NICCI Excellence award" by Nepal India chamber of commerce for its spectacular performance under finance sector.

Service Offered:-

- Deposits
- Loan & Advance
- Fc Deposits/lending
- Trade Finance Activities
- Remittance Facilities
- Foreign Exchange
- Facilities for NRN
- Other Facilities

Sources: - www.ebl.com.np

2.2.4. Feature of sound investment policy.

The commercial banks are inspired with the goal of earning profit. There are many reasons after the goal of gaining profit. In order to reach their desired goal, they must invest the resources. It is not better to keep the available resources idle. The bank should be able to make clear the policy of its investment by making a deep study on the subjects that which sector would be the trust worthier and dependable to invest the funds collected in the bank. They should have the ability to use the policy of banking investment and to implement it much more carefully otherwise bank may be unsuccessful in its goal. The income and profit of the bank depends upon its investment policy and lending procedure of its funds in different securities. The greater the credit created by the bank the higher will be the profitability. A sound lending and investment policy is not only prerequisite for the bank's profitability, but also crucially significant for the promotion of commercial saving of a backward county like Nepal. Therefore the following principles or features of investment policy must be abided by the commercial banks in order to achieve the goals.

a) Safety and Security

Every bank must take care while investing its fund. It should never invest its fund in those securities, which are subject to grater depreciation and fluctuation for example common stock, since a little difference may result in a great loss. It must not advance its funds to speculative business, which may earn millions in minute or may become bankrupt the another minute. Since risk is overpriced during recession and under priced during boom banks should invest in medium grade and high-grade securities during recession and boom respectively. Banks should buy securities, which are commercially durable, marketable and have high market price. In this regard, "MAST" should be followed while investing,

Where, M =Marketability
A = Ascertainability
S =Stability
T = Transferability

b) Liquidity

Liquidity is defined as bank's capacity to pay cash in exchange of deposits. People deposit their money in banks because they believe that the bank will repay their money on demand. In order to retain good credit standing and trust and confidence of its customers every banks must maintain enough liquidity to meet its various obligations.

c) Profitability

Commercial banks can maximize its volume of wealth through maximization of return on their investments and lending. They must invest their fund in available sectors where they can earn maximum profit. Their return depends upon the interest rate, volume of loan, duration of the loan and nature of investment in different securities.

d) Purpose of Loan

It is important to be reminded that most of the bank failures in the banking world are due to shrinkage in the value of loan and advances. The first substantive question a banker must examine how loan proceeds will be used. If the loan purpose conflicts with commercial policy, such as loan for some speculative purpose not acceptable to the banker such loans should not be processed. If customers misuse their borrowings, there is risk involved in repayment and the bank will incur heavy bad debts. Detailed information about the plan and scheme of project should be collected and examined before borrowing.

e) Diversification

Investment and credit concentrated on same geographical region, same sector of business and few customers is risker. Hence the policy should fix a cap on all these aspect. As the saying goes "A bank should not put all its eggs in the same basket", therefore, in order to minimize the risk, a bank should diversify its investment in different securities. This diversification or portfolio investment helps to earn good return and at the same time minimize the risks and uncertainty.

f) Legality

A commercial bank must follow the rules and regulations and statuary directives issued by Nepal Rastra Bank, Ministry of Finance and others wile issuing securities and

mobilizing their funds. In Nepal, NRB restrict financial institution licensed by it to invest in securities of each other.

2.3 Some Important Terms

Assets

Assets, representing economic resources are the valuable possessions owned by the firm. These possessions should be capable of being measured in monetary terms. Assets are the future benefits. They represent: (a) stored purchasing power (e.g. cash), b) money claims (e.g. receivables stock) and (c) tangible and intangible assets that can be sold or used in business to generate earnings. Tangible items include land building, plant equipment or stocks of materials and finished goods and all such other items, which have physical value. Intangible items do not have physical existence, but they have value to the firm. They include patents, copyrights, trade name or goodwill. Assets may be current asset or long-term assets. Current assets are those assets that are expected to be converted into cash within the accounting period. Long-term assets normally include fixed assets, long-term investment and other non-current assets that are held for longer periods for use in business.

Loan and Advances

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

Investment on Government Securities, Shares and Debentures

A commercial bank can earn some interest and dividend from the investment on government securities, shares and debentures. However it is not the major portion of income, but it is treated a secondary source of income of banking business. A commercial bank may extend credit by purchasing government securities bond and shares for several reasons.

Some of them are given as:

- It may want to space its maturity so that the inflow of cash coincide with expected withdrawals by depositors or large loan demands of its customers.
- It may also be forced to invest because the demand for its loan is decreased or is not sufficient to absorb its excess reserves.
- It may wish to have grade marketable securities to liquidate if its primary reserve becomes inadequate.

However, investment portfolio of commercial bank is established and maintain primarily with a view of nature of bank liabilities that is since depositors may demands fund in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in value.

Deposits

Financial institutions collect deposits from the customers in various accounts, like: current account, saving account and fixed account. Therefore, the sums of money collected by the financial institutions from the depositors in various accounts are called deposits. Deposit is the main source of fund of the financial institutions.

Bond

A bond is the source of long term finance issued by an organization in written form under which the organization or the borrower agrees to pay principal and interest to the lender on specific date. It may be secured i.e. mortgage bond with fixed assets pledged a security or unsecured like debenture bond.

Liquidity position

Liquidity assets are those assets that can be quickly converted into cash. Liquid assets determine the liquidity position of the organization. Higher the liquid assets better the liquidity position. Liquidity position refers to the state of owning things of value that can easily be changed into cash.

Retained Earning

It represents total undistributed earnings. It is that portion of firm's earnings, which is kept for use and contingencies. It is also an internal source of financing.

Liability

Liabilities are debt payable in future by the firm to its creditors. They represent economic obligations to pay cash or provide goods or services in some future period. Generally, borrowing money or purchasing goods or services on credit creates liabilities. Examples of liabilities are creditors, bills payable, wages and salaries payable, taxes payable etc.

Other use of Fund

A commercial bank must maintain the minimum bank balance with NRB i.e. 6% for fixed deposits and 8% for each of current and saving deposit account in local currency. Similarly 3% cash balance and local cash balance, in local currency. Accounts must be maintained in the vault of the bank. Again a part of the fund should be used for bank balance in foreign bank and to purchase fixed assets like land, building, furniture, computers and stationary etc.

Off-balance Sheet Activities

Off-balance sheet activities involve contracts for future purchase and sale of assets and all these activities are contingent obligations. These are not recognized as assets and liabilities on balance sheet. Some good examples of these items are letter of credit (L/C), letter of guarantee, bills of collection etc. Now a days, some economist and finance specialists, to expand the modern transaction of a bank stressfully, highlight such activities.

2.4 Review of Previous Studies

2.4.1Review of Books

Commercial banks are financial institutions, which deal in money. Its substitute4s, credit and credit instrument. The good mobilization of the credit is the most important factor for the survival of banks. The weak decision in mobilizing funds and fluctuation of flow of credit is harmful to the bank and economy as a whole. Hence, the effective collection of funds and its use is very challenging task for the banks. The decisions pertaining to the investment of funds is the factor of survival and extinction of banks.

William J. Sharpe and Alexander J. Gorden has defined the term 'Investment' as the sacrifice of money today for the prospective money tomorrow. They write "investment in its broadest sense, means the sacrifice of current dollars for future dollars. Two dimension are generally involved, time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude is uncertain. In some cases the element of time predominates (e.g. government bond). In other cases, risk is the dominant attribute (e.g. call option on common stock). In yet both time and risk are important" (Sharp and Gorden, 2000:1).

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 investor's wealth, which is the sum of current income and present value of all future income". (Charles, 1988:2)

James B. Baxley expresses his views as " Investment policy fixed responsibilities for the investment disposition of the banks assets in term of allocation funds for investment and loan and establishing responsibility for day to day management of those assets" (Baxley, 1987:12)

Jack Clark Francis states that, 'Default risk arises because firms may eventually go bankrupt. Some default risk is not diversifiable because it is systematically related to the business cycle, which affects almost all investments. However, some default risk may be diversified away in a portfolio of independent investments" (Clarke 1991:1)

S.P. Singh and S. Singh puts their view as, 'The investment (credit) policies of banks are conditional, to great extent, by the national policy framework, every banker has to apply his own judgment for arriving at a credit decision, keeping of course, his ban's credit policy also in mind" (Singh & Singh, 1983:5).

Likewise**, Cheney and Moses** are concerned with the degree of returns. They write ' the investment objective is to increase systematically the individual's wealth: defined as assets minus liabilities. An investor seeking higher return must be willing to face higher level of risk" (Cheney and Moses, 1999:13).

Dr. Sunity Shrestha has expressed similar view on investment. She stresses on the fulfillment of credit needs of various sectors which ensures investment. She expressed in her book 'Portfolio Behaviors of Commercial Banks in Nepal', "The commercial banks fulfill the credit needs of various economic sectors including policy of commercial banks which is based on the profit maximization of the institute as well as the economic enhancement of the country (Shrestha, 1999:51) .

2.5. Review of Journal/Article

Under this heading some related articles published in different books, economic journals, World Bank Bulletin, Magazines, newspaper has been examined and reviewed.

Shiba Raj Shrestha in his article "**Portfolio Management in commercial Bank, Theory and practice**" (Shrestha, 2055:13) has emphasized that portfolio management is essential for individual and institutional investors. Though in the case of small investor as they are not left with mush of an option it may be limited to small saving, but for large investors, diversification through investment in mutual funds, shares, debentures should be practiced as any rational investor would seek to derive the maximum return on investment although assuming some risk at the same time. A best mix of investment assets fulfilling the under mentioned aspects are preferred by prudent (large) investors.

They are:

a) Higher return which is comparable with alternative opportunities available not undermining the risk taking capability of the investor.
b) Adequate liquidity with sufficient safety and profitability of investment.
c) Maximum tax concessions.
d) Certain capital gain and flexibility of investment.
e) Economic, efficient and effective mix of investment etc.

With these in view, the following strategies need to be adopted:

1) To have a portfolio of different securities and not just holding a single security.
2) Don't put all the eggs in the same basket. (For instance don't invest in a single company or single sector). Diversification of investment should be practiced for adequate safety, liquidity and profitability.
3) Choose such a portfolio of securities, which ensures maximum return with low degree of risk and uncertainty.

Bodhi R. Bajracharya in his article "**Monetary Policy and Deposit Mobilization in Nepal" (1991:93)** writes " Mobilization of domestic savings is one of the prime objectives of the monetary policy in Nepal and for this purpose, commercial banks stood as the active and vital financial intermediary for generating resources in the form of deposit of the private sector and providing credit to the investors in different aspects of the economy.

Mr. Ramesh Lal Shrestha in his article **"A study on deposits and credits of commercial bank in Nepal"** concluded that the credit deposit ratio would be 51.30% other things remaining the same in Nepal, which was the lowest under the period of review. He strongly recommended that the commercial banks should try to give more emphasis on entering new field as far as possible; otherwise they might not be able to absorb even the total expense.

Mr. Bhaskar Sharma in his article **"Banking the future on competition" (2000:13)** has highlighted that majority of commercial banks are being established and have operation in urban areas only. They have shown no interest to open branches in rural

areas. The branches on NBL and RBB are only running in those sectors. The commercial banks are charging higher interest rate on lending, they are offered maximum tax concession, they do not property analyze the credit system.

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

Mr. Shekhar Bahadur Pradhan in his article **"Deposit mobilization its problem and prospects" (1996:9)** points out that deposit in the lifeblood of every financial institution. The latest financial/accounting figures of most bank and financial companies produce a strong feeling that serious review must be made with regards to problem and prospect of deposit sectors. Leaving a few joint venture banks other organizations rely heavily on the business deposit and credit disbursement.

Mr. Pradhan has highlighted the following problems of deposit mobilization in the Nepalese context.

1) Most Nepalese people do not go for institutional savings due to lack of adequate knowledge. They are much used to savings in the form of cash and ornaments. Their half heartedness to deal with institutional system is governed by the lower level of understanding about financial organization process, withdrawal system, availability of deposit facilities and so on.
2) Unavailability of institutional services in rural areas.
3) Due to lesser office hours of banking system, people prefer holding cash in their personal possession.
4) Improper mobilization and improvement of the employment of deposits towards various sectors.

Mr. Bhagat Bista in his research paper **"Nepalma Adhunik Banking Byabastha" (2048:48)** has made an attempt to highlight some of the important indicators, which have contributed to the efficiency and performance of joint venture banks. He writes that the

establishment of JVB's a decade ago marks the beginning of modern banking era in Nepal. The JBV's have brought in many new banking techniques such as computerized hypothecation, consortium finance and modern fee based activities into the economy. This is needed a significant milestone in the financial development process of the economy.

2.6 Review of Thesis

The researchers had conducted studies on various aspects of commercial banks such as financial performance, lending policy, investment policy, interest rate structure, resource mobilization and capital structure. The following theses were reviewed, as they are relevant to this present research.

Bohara (1992), in his thesis titled "A Comparative Study of the financial performance of Nepal Arab Bank Ltd. and Nepal Investment Bank Ltd.," had made efforts to examine the financial performance in terms of their liquidity activity and profitability along with other parameters. He has concluded that bank performance cannot be judge solely in the term of profit, as it may have earned profit by maintaining adequate liquidity and safety position. But it should also be evaluated on the ground of the contribution; it has made to the community, government and national economy or on the social and national priority discharged by bank. This means, the bank should come forward with national priority tasks i.e. more deposit collection, resource mobilization. The tasks are possible when they extend branches, more employment opportunities, service to more customers, developing skills and expertise in local staffs, satisfactions on profit earning and exchange of autonomy provided by them. Following their rules, regulations, instructions directives and priorities can discharge the accountability.

Jyoit Thapa (2002) has conducted a research entitled **"Investment Policy of Commercial banks in Nepal.**

The objectives of the study were:

a) To discuss fund mobilization and investment policy of EBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction of NABIL and BOKL.
b) To evaluate the liquidity, efficiency, profitability and risk position.
c) To evaluate the growth ratios of loans and advances and total investment with other financial variables.
d) To analyze the trends of deposits utilization towards total investment and loan and advances and its projection for next five years.
e) To conduct hypothetical test to find out whether there is significant difference between the important ratios of EBL, NABIL & BOKL.
f) To provide packages of workable suggestions and possible guidelines to improve investment policy of EBL and other banks.

Dilip Roy (2003) has conducted a research entitled **"An Investment Analysis or RBB in comparison with NBL".**

The specific objectives of the study were.

a) To evaluate liquidity, activity and profitability ratios of RBB in comparison with NBL and industry average.
b) To analyze relationship of loan and advance and total investments with total deposit and net profit of RBB and to compare it with that of NBL and industry average.
c) To use trend analysis to compare loan and advance, total investment, total deposit and net profit of RBB and to compare the same with other two.
d) To examine the loan loss provision of RBB and NBL.
e) To provide suggestion and recommendation on the basis of findings.

Pokharel (1983), carried out a study on "Investment Pattern and Policy of Rastriya Banijya Bank," with the following goal:

The research was conducted mainly on the basis of secondary data; but interview technique had also been used.

- To find out whether the bank has been fully utilizing the deposits mobilized or not.
- To establish the relationship between deposits, loans and advances and the impact of change of interest rate on the those items
- To study the investment policy of RBB
- To suggest for the improvement in the investment policy adopted by the bank.

The conclusions of the study are follows:

- There was no effect of interest rate on raising deposits and investment extension
- The bank has not been able to use its deposits properly, which in turn shows the lack of definite policy of the bank
- The investment pattern was observed to be directed towards the security of gold and silver
- From the study it has revealed that there was no clear and definite investment policy followed by the bank; though it has followed the directives of the central bank.

Rabindra Joshi (2004) in his thesis entitled **"A comparative study of Investment policy of SCBNL & EBL"** has made an endeavor to examine and interpret the Investment policy adopted by SCBNL in comparison to EBL.

The objectives of the research were:

1) To compare the investment policy of concerned banks and discuss the fund mobilization of the sample banks.
2) To find out empirical relationship between total investment, deposit & loan & advance and net profit and outside assets and compare them.
3) To analyze the deposit utilization & projection for next five years of SCBNL and EBL.

4) To evaluate comparatively the profitability & risk position liquidity asset management efficiency of SCBNL & EBL.
5) To provide a package of possible guidelines to improve investment policy, its problems and way to solve some problems and provide suggestions and recommendation on the basis of the study.

The main findings of the study were as follows:

1) Both the banks have good deposit collection. EBL has higher but fluctuating liquidity position. It is in a good position to meet daily cash requirement and current obligation.
2) SCBNL has successfully maintained and managed its assets towards different income generating activities. SCBNL has invested high portion of total working fund in government securities and share and debentures of other companies.
3) The profitability position of SCBNL is comparatively better than EBL.
4) The liquidity risk ratio, credit risk ratio of SCBNL is lower than that of EBL.
5) SCBNL has not been successful to increase its sources o funds and its mobilization i.e., loans and advances and total investment.

Thapa, Samiksha (2000), on her study "**A comparative study on investment policy on Nepal Bangladesh Bank Limited and other joint venture Bank**" on her study, the major objectives were to evaluate the liquidity, asset management efficiency profitability and risk position of NB banking Comparison to NABIL and NGBL. To analyze the relationship between loan and advance and total investment with other financial variables of sample bank. To examine the fund mobilization and investment policy of NB bank through off-balance sheet and on-Balance sheet activities in comparison to the other two banks. To study the various risk in investment and to analyze the deposit utilization trend and it's projection for next five years of sample banks. And to provide the suggestion for improving the investment policy of NB Bank on the basis of findings of the analysis.

M/S Thapa, has found that the liquidity position of NB bank is comparatively better than that if NABIL and NGBL. It has the highest cash and bank balance to total deposit, cash

and bank balance to current assets ratio. It has good deposit collection, it has made enough loan and advance but it has made the negligible amount of investment in government securities. The NB bank is not in better position regarding its on balance as well as off-balance activities in compare to NABIL and NGBL. It does not deem to follow any definite policy regarding the management of it's assets. She further found that the profitability position of NB Bank is comparatively worse that of NABIL and NGBL. The bank must maintain its high profit margin for the well being in future.

NB Bank has maintained high a growth rate in comparison to other banks through it is not successful to make enough investment and can say that the bank is successful in increasing its source of funds and its mobilization. Finally she concluded that there is significant relationship between 'deposit and loan and advance' and 'outside assets and net profit' of NB bank NABIL and NGBL. But there is no significant relationship between deposit and its investment of NB bank only. NB Bank has maintained high growth rates in comparison to other banks through it are not successful to make enough investment. The position of NB bank in regard to utilization of the fund to earn profit is not better in compare to NABIL and NGBL. NB bank has not provided ATM Facility, credit card facility and branch bank facilities and we site etc. But these facilities are providing by the NABIL and NGBL.

Dipak Pandit (2007) has conducted a research entitled **"Investment policy Analysis of Joint Venture Bank (with special reference of NSBIL & EBL)"**

The objectives of the study were as follows:

a) To evaluate the liquidity management, assets management efficiency, profitability position, risk position and investment practices of NSBIL, BOKL & EBL).
b) To find out the relationship between deposit and total investment, deposit and loan and advance, and net profit and outside asset.

His major findings are enumerated below:

a) NSBIL has better liquidity position. It is in a good position to meet its daily cash requirement and current obligation. Liquidity position of EBL & BOKL has not been satisfactory.
b) NSBIL's loan and advance to total deposit ratio is lower than EBL & BOKL. It does not seem to follow any definite policy regarding the management of its assets.
c) The profitability position of all the banks is not satisfactory. The banks have not adopted sound investment policy in utilizing their surplus funds.
d) BOKL & EBL are exposed to high credit risk and capital risk.
e) NSBIL & BOKL have not been successful to increase their sources of fund. EBL has been successful in maintaining its higher growth rate of total deposit.
f) There is significant relationship between deposits and total investment of BOKL & EBL but the same is not significant in case of NSBIL.

Commercial banks have huge deposit collection. These deposits need to be properly utilized. Effective utilization of collected fund is possible only through implementation of sound investment policy. NABIL and SCBNL are the best examples of JVB's in Nepal that have been able to mobilize the funds in an effective manner and achieved phenomenal growth and profit year after year by formulating and implementing sound investment policy.

2.7 Research Gap

This study comprises of two successful Bank's as sample NIBL and EBL. This study is also different from previous studies in view of the time period its covers. During this period the country has witnessed political uncertainty, deteriorating security situation that have rendered the economy further sluggish. There has been a restructuring in the banking business. This study gives a new dimension to the research topic in the sense that it has adhered to most to the fresh guidelines and directives issued by NRB to commercial banks, which previous studies lack.

And also this study will reveal the strength and weaknesses of the sample bank and serve as a valuable input in decision-making process of the concerned banks and other emerging banks in formulating appropriate investment policy.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Introduction

Research methodology refers to the various sequential steps to adopt by a research in studying a problem with certain objectives interview in other words, research methodology describes the methods and process applied in the entire aspect of the study. (Kothari, 1989:3), The main objective of the study is to evaluate the policy procedure adopted by banks. This research work draws the conclusion to the point that what kinds of position joint ventures have got and suggest the precious and meaningful point. So that all concerned persons achieve something from this study. To accomplish this goal, the study follows the research methodology described in the chapter.

3.2 Research Design

Research design is the plan, structure and strategy of investigation conceived. A true research design gives the guidelines to the researcher to collect the data for analysis and draw a relevant conclusion.

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure: (Kothari, 1992:25). This study is an analytical nature to fulfill the objective of this study: some financial and statistical tools are adopted.

3.3 Sources of Data

Once the purpose of statistical investigation has been defined, the next step is to collect the data which are relevant for analysis in a meaningful manner. Thus, the collection of data is considered as an integral part of the research activity. The sources of information are generally classified as primary and secondary.

Primary Data: Data collected by the researcher through agent for the first time from related field and possessing original characters are knows as primary data.

Secondary Data: Data collected by someone else, used already and are made available to others in the form of published statistics are known as secondary data. Once primary data have been used, it loses its originality and becomes secondary.

3.4 Population and Sample

Population covers the whole or total of the observation that have selected for the study Sample is the part of population which represents population with regards to the study.

There are nineteen commercial banks functioning all over the kingdom and most of their stock are actively traded in stock market. Among those are banks are to be taken for research work. These banks are compared as per Investment activities. It is not possible to research all the data related with concerned bank. Thus, data from fiscal year 2003/04 to 2008/09 are analyzed for the fulfillment of the objective.

3.5 Tools for Analysis

Analysis and presentation of the data is the main part of every research work. To draw the strong conclusion and make the analysis more effective, convenience reliable and authentic, various financial statistical and accounting tools have been used. Financial tools and statistical tools have been used to achieve the certain goals.

3.5.1 Financial Tools

Financial tools measure, the financial strengths and weaknesses of the firm by establishing relationships between the items of the balance sheet and the profit and loss account. Financial tools are as follows to analyze the Data. In brief financial analysis is the process of solution, relation and evaluation. Ratio analysis is an extensively used financial tools.

Ratio Analysis

Ratio analysis is as the systematic use of ratio to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance and count financial condition can be determined. *"Ratio Analysis is part of the whole process of analysis of financial statement of any business or industrial concern especially to take out put and credit decision." (Kothari, 1992:265)*

With the help of this analysis, the qualitative judgment can be done regarding firm's performance and status. Although there are many types of ratios used to analyze and interpret the financial statement, only following listed Ratios related to investment policy of the bank have been covered in this study.

1. Liquidity Ratio
2. Assets management. ratio
3. Profitability Ratio
4. Risk Ratio

Now, the following sections of this study explain the above-mentioned five types of ratios in detail.

Liquidity Ratio

Liquidity ratio is the ability of a firm to meet its current/short term obligations. It reflects the short-term financial strength of the bank. In fact, liquidity is a pre-requisite for the very survival of a firm. These ratios are used to know the capacity of the concern to pay its short-term liability. The analysis of liquidity needs the preparation of cash budgets, cash fund but liquidity ratios by establishing provide a guidance measure of liquidity. These ratios provide the insights into present cash solvency of the bank and its ability to remain solvent in the even of adversities. It is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdraw and other current obligations. The five types of liquidity ratios are applied in this study, which are discussed below.

a. Current Ratio
b. Cash and Bank Balance to Total Deposit (Cash Reserve Ratio)
c. Cash and Bank Balance to Current Assets Ratio
d. Investment of Government Securities to Current Assets Ratio

e. Loan and Advances to Current Assets Ratio

The following paragraphs discuss the each type of liquidity ratio in detail providing its mathematical representations.

a. **Current Ratio**

The current ratio is the ratio of total current assets to total current liabilities. It is computed by dividing current assets by current liabilities. The current assets as ready stated represent those assets, which can be in the ordinary course of time converted into cash within a short period of time normally not exceeding one year. This includes cash and bank balance, money at call or short-term notice. Loans and advances, investment in government securities and other interest receivable and miscellaneous current assets . Likewise, The current liability is defined as liabilities which are short-term maturing obligations to be met as originally contemplated within a year, which includes deposits and other accounts of short-term loan, bills payable, tax provision, staff bonus, dividend payable and miscellaneous liabilities.

Although there is no such hard and fast rule, conventionally, current ratio of 2:1(current assets twice current liabilities) is considered satisfactory.

The following relation is used to ascertain this ratio.

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

The computation of this ratio is done dividing cash and bank balance by total deposit. This ratio is also called as cash reserve ratio. It consists of the most liquid assets cash an bank balance and deposits made. The ratio can be stated as:

$$\text{Cash Reserve Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits}}$$

bank and balance held abroad similarly, total deposits included current, savings and fixed deposits, money at call and short notices and other deposits.

c. **Cash and Bank Balance to Current Assets Ratio**

Cash and bank balance to current assets ratio is calculated by cash an bank balance divided by current assets as presented below. Higher the ratio, higher will be the capacity of the bank to meet the cash demand.

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

The items, which are included in cash an bank balance and current assets, have already been listed in the above ratios.

d. **Investment on Government Securities to current Assets Ratio**

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

$$\text{Investment on Government Securities to current Assets Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

The percentage of current assets invested on government securities.

e. **Loan and Advances to Current Assets Ratio**

The above ratio is calculated dividing loan and advances by current assets. It is stated as follows.

$$\text{Loan and Advance to Current Assets Ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

Loan and advances include items such as loans, advances, cash credit, loan and foreign bills purchased and discounted.

Asset Management Ratio/Activity Ratio/Turnover Ratio

The second group of financial tool used to analyze the data in this research is asset management ratio. It is concerned with measuring the efficiency in asset management. At times these ratios are called efficiency or asset utilization ratios. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into revenue generating. Greater the rate of turnover of conversion, the more efficient the utilization or management other thins being equal. For this reason, such ratios are also called turnover ratios. Turnover ratio is the primary mode for measuring the extent of efficient employment of assets by relating the assets to revenue. Thus, assets management ratio is a test of the relationship between

revenue and the various assets of a firm. These are used to measure the bank's ability to utilize their available resources. The following listed ratios are used in this study.

a. Loan and advances to Total Deposit Ratio
b. Total Investment to Total Deposit Ratio
c. Loan and Advances to total Working Fund Ratio
d. Investment on Government Securities to Total Working Fund Ratio
e. Investment on Shares and Debentures to Total Working Fund Ratio

The following paragraphs discuss the each type of asset management ratio in detail providing its mathematical representations.

a. **Loan and Advances to Total Deposit Ratio**

This ratio is computed to figure out how successful are the banks in utilizing their total deposits on loans and advances for profit making. Greater ratio signifies that better use has been made of total deposits. This is obtained by dividing loan and advances by total deposits. This ratio can be stated as:

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

b. **Total Investment to Total Deposit Ratio**

The above ratio is computed dividing total investment by total deposit. Investment is one of the major credits created to earn income. This implies the utilization of banks' deposit on investment in government securities and share debentures of other companies and banks. It is represented as:

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

Other companies and other investments.

c. **Loan and Advances to Total Working Fund Ratio**

The above ratio is calculated by dividing loan and advances by total working fund. Loan and advances make the major portion of the total working fund i.e. Total assets which indicates the ability of bank to channel its deposits in the form of loan and advances to generate more return. The ratio is stated as:

$$\text{Loan and Advance to Total Working Fund Ratio} = \frac{\text{Loan and Advances}}{\text{Total Workign Fund}}$$

d. **Investment on Government Securities to Total Working Fund Ratio**

This ratio is calculated dividing investment on government securities by total working fund. It compares the bank's investment on government securities with the total working fund. This ratio is stated as:

$$\text{Investment on government Securities to Total Working Fund Rato} = \frac{\text{Investment on Govern Sevcureites}}{\text{Total Working Fund}}$$

e. **Investment on Government Securities to Total Working Fund Ratio**

This ratio is calculated dividing investment on government securities by total working fund. It compares the bank's investment on government securities with the total working fund. This ratio is stated as:

$$\text{Investment on Share \& Bebentures to Total Working Fund Ratio} = \frac{\text{Investment on Share \& Debentures}}{\text{Total Workign Fund}}$$

Profitability Ratio

The profitability ratio is concerned with profit. Profit only appears when there is positive difference between total revenues and total costs over certain period of time. The management of the business concern/bank is eager to measure its operating efficiency. This ratio shows the overall efficiency of the bank. The earning capacity of a bank is measured by profitability ratio. It is a true indication of the financial performance of each and every business firm. It is the net result of the number of policies and decisions. The ratios thus discussed so far in this study provide some information about the way the firm is operating. But the profitability ratios show the combined effects of liquidity and assets management ratios. Here, the profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets. The following types of profitability ratios are discussed.

a. Return on Total Working Fund Ratio
b. Total Interest Earned to Total Outside Assets Ratio
c. Return on Loan and Advances Ratio
d. Total Interest Earned to Total Working Fund Ratio
e. Total Interest Paid to Total Working Fund Ratio

a. Return on Total Working Fund Ratio

The ratio of net profit to total working fund measures the return on total working fund ratio, which is stated as follows.

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

The numerator of the ratio indicates with portion of income left tot the internal equities after all costs, charges, expenses have been deducted.

b. **Total Interest Earned to Total outside Assets Ratio**

This ratio is calculated by dividing total interest earned by total outside assets and is presented as:

$$\text{Total Interest Earned to Total Outside Assets Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

Total Interest Earned includes total interest income from loands, advances, cash credit and overdrafts, government securities, inter-bank and other investment.

Total Outside assets includes loan and advances and all types of investment

c. Return on Loan and Advances Ratio

The ration of net profit to loan and advances measures the return on loan and advances ratio. This is stated as follows:

$$\text{Return on Loan \& Advance Ratio} = \frac{\text{Net Profit}}{\text{Loan \& Advance}}$$

This ratio gives the percentage to interest earned to total assets (working funds). Higher ratio implies better performance of the bank in terms o f interest earning on its total working funds. The following relation calculates this ratio:

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

e. Total Interest Paid to Total Working Fund Ratio

This ratio is calculated dividing total interest paid by total working fund, which is mathematically presented below:

$$\text{Total Interest Paid to Total Working Fund Ratio} = \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

The total interest paid portion of the above ratio consists of deposit liabilities, loan and advances (borrowing) and other deposits.

Risk Ratio

Risk is the chance of receiving actual returns other than expected, which simply means there is variability in the returns or outcomes from the investment. The investment made by banks is more susceptible to risk. Risk taking is the main job of bank's investment management. The risk ratio helps to indicate the amount of risk connected with the various banking operation, which helps in decision making of the investment policy and finally increases the effectiveness and profitability of the bank. The following two ratios are under study:

a. Credit Risk Ratio

b. Capital Risk Ratio

a. Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank by definition. It is expressed as the percentage of non-performing loan to total loan and advances. The ratio of total loan and advances to total assets measures the credit risk ration and is stated as below:

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan \& Advance}}{\text{Total Assets}}$$

b. Capital Risk Ratio

This ratio of a bank shows how much assets values may decline before the position of depositors and other creditors put at risk. Capital ratio is directly related tot he returns on equity (ROE). Higher the ratio, lower is the capital risk. The ratio of Capital (paid-up capital plus reserves) to risk weighted assets (RWA) measures the capital risk ratio, according to BASLE committee formula, and it is stated as follows:

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid - up Plus Reserves)}}{\text{Risk Weighted Assets (RWA)}}$$

The following listed growth ratios are examined and analyzed in this study:

a. Growth ratio total deposit

b. Growth ratio of total loan and advances

c. Growth ratio of total investment and

d. Growth ratio of net profit

3.5.2 Statistical Tools

In this study some important statistical tools have been used to present and analysis the data for achieving the objectives. Which are as follows.

1. Standard Deviation (S.D.)

It is the best measure of dispersion as is satisfies most of the requisites of a good measure of dispersion and it is the absolute measure of dispersion.

Standard deviation is defined as the positive square root of the mean of the square of the deviations taken from the arithmetic mean. It is also known as 'Root Mean Square Deviation'. It is denoted by Greek letter small sigma.

2. Co-efficient of Variation

The coefficient of Variation is the most commonly used measure of relative variation. The relative measure of dispersion based on standard deviation is called co-efficient of standard deviation. The one hundred times the co-efficient of standard deviation is called coefficient of variation. It is a pure number and is independent of the units of measurement and thus is suitable for comparing the variability, homogeneity of uniformity of two or more distributions.

A distribution having greater C.V. is said to be more variable or more heterogeneous of less consistent that other and less C.V. is said to be less variable or more homogeneous or more consistent than other. This nature of C.V. is used in working capital management of NTC to see actual size of working capital.

$$\text{Coefficient of Variation} = \frac{\text{Standard deviation}}{\text{Mean}} \times 100$$

3. Co-Efficient of Correlation(r)

Correlation is the states statistical tool that we can use to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always between +1 and -1, when r=+1, it means there is perfect relationship between two variables. The Pearson's 1 formula is:

$$r = \frac{\Sigma(X - \overline{X})(Y - \overline{Y})}{\sqrt{\Sigma(X - \overline{X})^2 \Sigma(Y - \overline{Y})^2}}$$

Where,

R = coefficient of correlation

X = independent variable

Y = dependent variable

N = no. of periods

4. Probable Error of the Coefficient of Correlations

After the calculation of co-efficient of correlation the next thins is to find out the extent ot which it is dependable. For this purpose the probable error of the coefficient of correlation is calculated. If the probable error is added to and subtracted from the co-efficient of correlation it would give two such limits with in which we can reasonable accept the value of co-efficient of correlation to vary. The formula for finding out the probable of error of the Karl Pearson's co-=efficient of correlation is:

$$P.Er = o.6745 \times \frac{(1 - r2)}{\sqrt{N}}$$

Where,

P.E.r= probable error of coefficient of correlation

r=co-efficient of correlation

n=number of Pairs of observations.

In order to conclude whether the co-efficient of correlation is significant or not. The following points should be kept in mind.

- If the co-efficient of correlations is less than its probable error, it is not at all significant.
- It the co-efficient of correlations is more then six times of probable error it is definitely significant.
- If the probable error is not much and if the co-efficient of correlation is 0.5 or more it is generally to be significant.

5. Trend Analysis

Trend Analysis is an analysis of a firm's financial ratios over time. This measures the change of data over a period of time. This reveals whether the firm's ratio are improving or deteriorating

over time. Under segment, current and projected trend, total investment. Total deposit, total loan and total net profit are calculated.

a) Trend analysis of Total Deposits
b) Trend analysis of Loans and Advances
c) Trend analysis of Total Investment
d) Trend analysis of Net Profit

CHAPTER IV
PRESENTATION AND ANLYSIS OF DATA

4.1 Introduction

The present chapter as the name suggests is an analytical chapter. The main objective of this chapter is to study, evaluate and analyze the major financial items, which are the key indicators of financial performance of the financial institutions, and that are relevant to investment management and fund mobilization of the sample banks i.e. NIBL Bank with comparison to Everest Bank Limited. The types of financial ratios are very vast and this study has limited the computation and analysis of those ratios that are most important to evaluate fund mobilization of commercial banks. The following two sets of tools have been used for in-depth analysis of data.

- Financial Analysis
- Statistical Analysis

4.2 Financial Analysis

Financial analysis is the process of evaluating relationships between component parts of financial statements to obtain a better understanding of firm's position and performance. Thorough this analysis firm's financial strength and weakness is identified. The analysis of financial statements is an important aid to financial analysis.

The focus of this section of the chapter is on ratio analysis as it is the most widely used technique of financial analysis. Various ratios pertaining tot he investment management and fund mobilization are presented and discussed to evaluate and analyze the performance of NIBL in comparison to Everest Bank Limited. All these calculations are based on financial statements of the concerned banks. The ratios in the followings parts of the study are considered in the light of fund mobilization and investment policy and also show the significant relationship between the items in the financial statement. The

important financial ratios, which are calculated for the purpose of this study, are mentioned below.

- Liquidity ratio
- Asset Management ratio
- Profitability ratio
- Risk Ratio

4.2.1 Liquidity Ratio

The liquidity ratios measure the ability of a firm to meet its current obligations and reflect the current financial strength or solvency of as firm. These ratios are used to know the capacity of the concern to repay its short-term liabilities. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community. Commercial banks collect the fund from community in commitment to return their money demanded. so, they must maintain its sufficient liquidity position to fulfill that commitment of return of depositor's deposit, withdraw, and convert non cash-assets to cash to satisfy immediate needs without any loss to bank and consequent impact on long-run profit. Liquidity ratios by showing the relationship between cash and other liquid assets to current liabilities provides a guide measure of liquidity with out having to prepare cash budgets.

The following ratios are evaluated and interpreted under liquidity ratio. Liquidity position of NIBL in comparison to EBL is studied through the following ratios.

1. Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio)
2. Cash and Bank Balance to Current Assets ratio
3. Investment on Government Securities to Current Assets Ratio

The computation of ratios of sample banks-NIBL and EBL from fiscal year 2002/2003 to 2006/2007 are tabulated in their respective tables. The average means (A.M.), standard deviation (S.D.) and Coefficient of Variation (C.V.), which are tabulated in the following tables, is calculated using the functions available in Microsoft spreadsheet application.

The following tables are referenced to their corresponding annexes. Attached at the end of the report, from where the data have been extracted.

1. Cash and Bank Balance to Total Deposit Ratio

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

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

Table 4.1

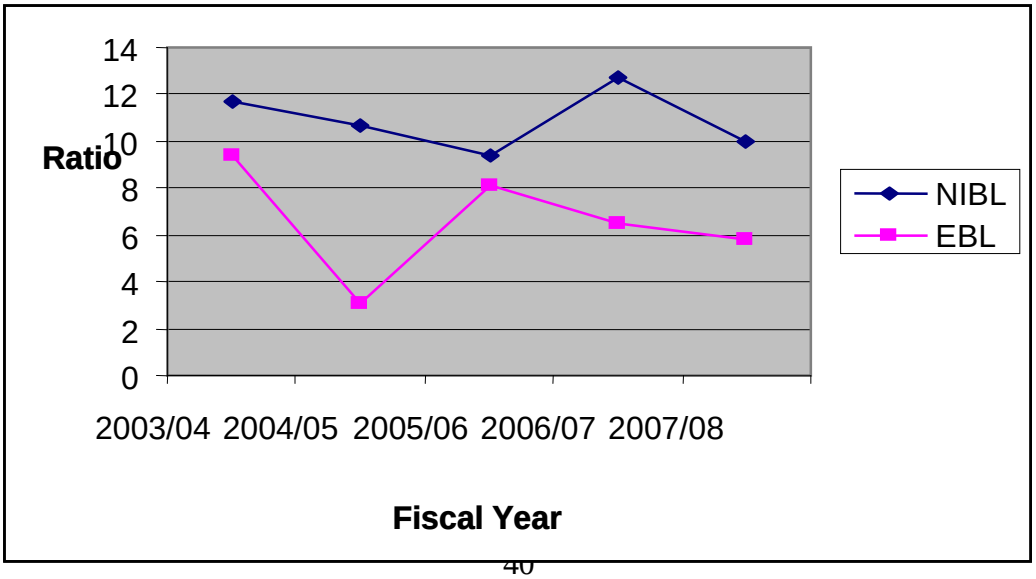
Cash and bank Balance to total deposit Ratio

Banks	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D	CV
NIBL	11.69	10.65	9.40	12.71	9.96	10.88	1.08	10.01
EBL	9.42	3.09	8.12	6.48	5.84	7.79	1.41	9.92

(As per annexure 1 and schedule 1)

Figure 4.1

Cash and Bank Balance to Total Deposit Ratio



In the table 4.1 and figure 4.1 shows the percentage of cash and bank balance to total deposit ratio position of two banks and they both have the fluctuating trend in this regard. During the five-year period, NIBL has maintained the highest ratio than EBL. Hence, NIBL has the highest average too.

In average, NIBL has the highest cash and bank balance to total deposit ratio than EBL. It proves the liquidity position of NIBL is better in this regard. On the other hand, EBL has lowest mean ratio and its coefficient of variation is 9.92% which is lower than NIBL. Hence, it can be explained that EBL has better maintenance of its liquidity which indicates the high performance of the bank.

2. Cash and Bank Balance to Current Asset Ratio.

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

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

Table 4.2

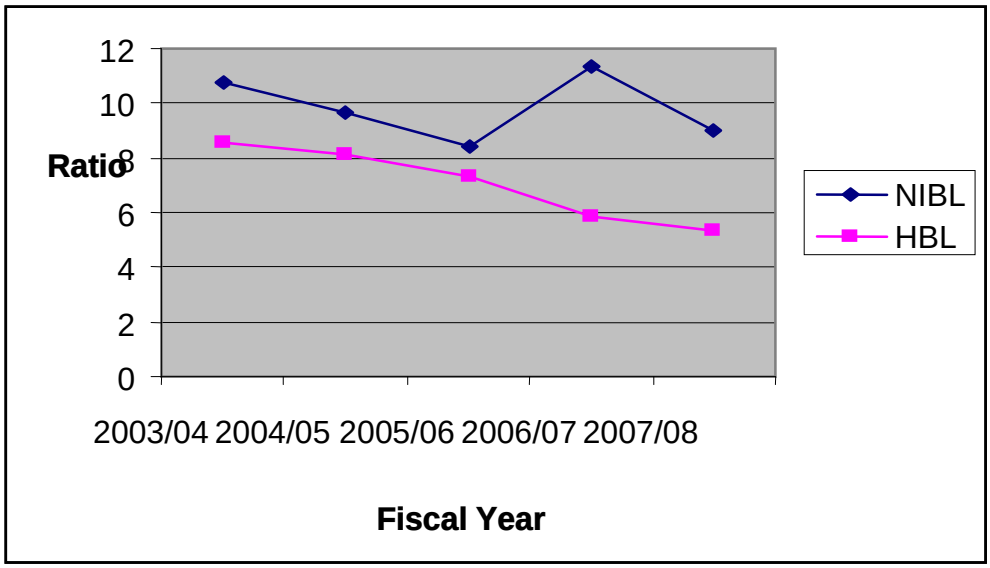
Cash and Bank Balance to Current Assets Ratio

Banks	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D	CV
NIBL	10.78	9.63	8.45	11.36	9.01	9.85	1.045	10.61
EBL	8.55	8.14	7.30	5.85	5.31	7.03	1.26	17.92

(As per annexure 2 and schedule 1)

Figure 4.2

Cash and Bank Balance to Current Assets Ratio



The table 4.2 and same figure show that cash and bank balance to current asset ratios are in fluctuating trend during the five-year period. NIBL has maintained a highest ratio of (11.36) in the F/Y 2006/07. Similarly, EBL have maintained the highest ratio of (8.55) in the F/Y 2003/04.

In average, NIBL has higher ratio than EBL. It supports the conclusion that NIBL has been successful in maintaining its higher cash and bank balance to current assets ratio in comparison to EBL. And also the coefficient of variation of ratio of NIBL is lower than that of EBL (i.3. 10.61 %< 10.92%). So, NIBL has higher consistency than EBL

3. Investment on Government Securities to Current Asset Ratio

This ratio is calculated to find out the percentage current asset invested in government securities such as treasury bills and government bonds etc. The government securities are not so much liquid as cash and bank balance. But they can earning be sold in the market or they can be converted into cash in other ways. The ratio is computed as;

$$\text{IGSCA Ratio} = \frac{\text{Investment on Government Securities}}{\text{Current Assets}}$$

Table 4.3

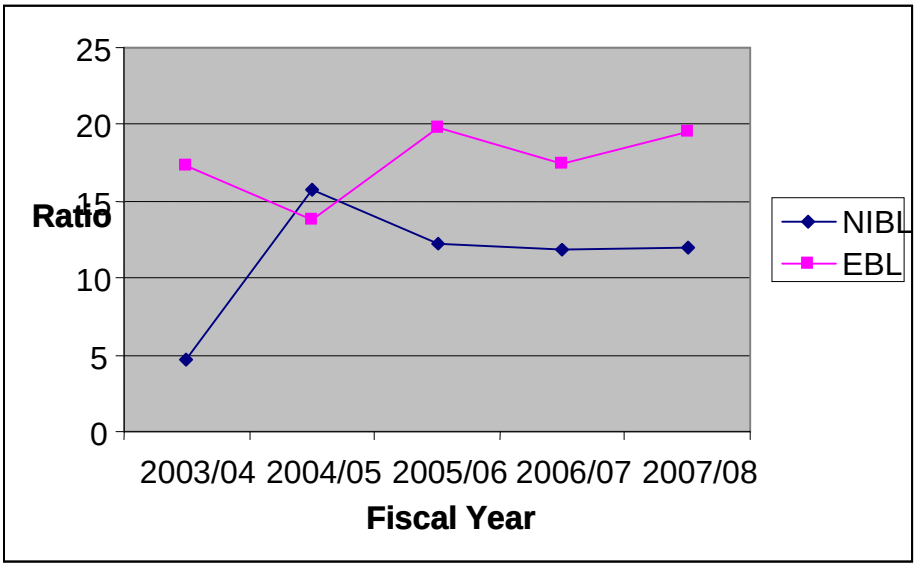
Investment on government Securities to Current Assets Ratio

Banks	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D	CV
NIBL	4.65	15.71	12.28	11.90	12.02	4.312	3.62	32.00
EBL	17.27	13.76	19.82	17.51	19.51	17.614	2.09	11.89

(As per annexure 3 and schedule 1)

Figure 4.3

Investment on Government Securities to Current Asset Ratio



The result shows the investment on government securities to current assets ratio of both banks i.e. NIBL and EBL in fluctuating trend (figure 4.3). However, NIBL has the highest ratio (15.71) in 2004/05 and the lowest (4.65) in 2004/05 and the lowest (4.65) in 2003/04, whereas EBL has the highest ratio. (19.82) in 2005/06 and the lowest (13.96) in 2004/05. The mean ratio of investment on government securities to current asset of NIBL

is lower (11.32) than that to the EBL (17.614). And in the other hand, coefficient of variation of NIBL (32%). is higher than that of EBL (11.89%). In shows that EBL invests more current assets in government securities than NIBL. Thus, EBL is more consistent than the NIBL.

4.2.2 Assets Management Ratio

Assets management ratio shows how a bank is managing its assets. It shows how successfully the bank is mobilizing its deposits. It also shows how and in which sectors the deposit is utilized or invested. These are shown with the help of following ratios'

1. Loan and Advance to Total Deposit Ratio

This ratio assists to find out how successfully the banks are utilizing their total deposits on loans and advances for profit generating purpose. Greater the ratio implies the better utilization of total deposits. The ratio is computed as;

$$\text{Loan and advance to total Deposit Ratio} = \frac{\text{Loan and Advance}}{\text{Total Deposit}}$$

Table 4.4

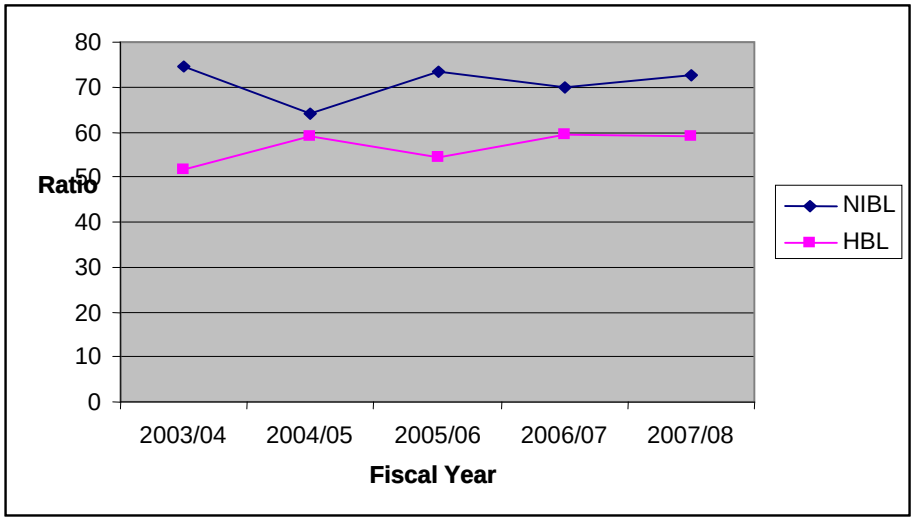
Loan and Advance to Total Deposit Ratio

Banks	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D	CV
NIBL	74.74	64.1	73.33	70.02	72.56	70.95	3.75	5.28
EBL	51.62	59.10	54.21	59.51	59.22	56.73	3.22	6.67

(As per annexure 4 and schedule 1)

Figure 4.4

Loan and Advance to Total Deposit Ratio



Looking at the two banks performance (Table and Figure 4.4) loan and advance to total deposit ratios are in fluctuating trend.

In average, NIBL has higher ratio of 70.95 in comparison to 56.73 of EBL. It shows that NIBL. Coefficient of variation of NIBL and EBL are 5.28% and 5.67% respectively. Again NIBL has lesser C.V. than that of EBL, it indicate its loan and advances more stable and consistent than those of EBL. Thus, NIBL is in strong position regarding mobilizing of total deposits on loan and advances maximizing return.

2. Total Investment to total Deposit Ratio

Investment is one of the major credits created to earn profit. This implies the utilization of a bank's deposit on investment in government securities, share and debenture of other companies and banks. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

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

Table 4.5

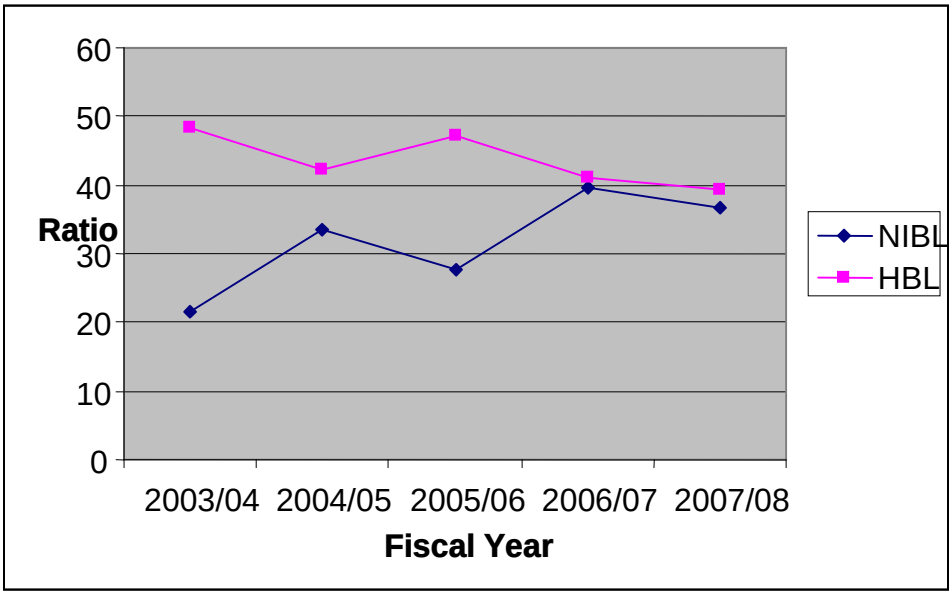
Total Investment to Total Deposit Ratio

Banks	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D	CV
NIBL	21.52	33.51	27.59	39.60	36.56	27.76	3.92	14.12
EBL	48.44	42.22	47.12	41.10	39.35	43.65	3.52	8.06

(As per annexure 5 and schedule 1)

Figure 4.5

Total Investment to Total Deposit Ratio



It is clear from the above table and figure 4.5, that the total investment to total deposit ratios of two banks are fluctuating trend. The mean value of EBL is higher than NIBL and its coefficient of variation between the ratio is also lower at 8.06% clearly indicating investment policy of EBL is better than NIBL and has more homogeneous investment in total deposit.

3. Loan and advance to Total Working Fund Ratio

Loan and advance is the major element in the total working fund (total asset) which indicates the ability of a bank to channelize its deposit in the form of loan and advance to earn the utmost return. A high ratio indicates better in mobilization of funds as loan and advances and vice-versa.

$$\text{Loan and advances to total Working Fund} = \frac{\text{Loan and Advance}}{\text{Total Working Fund}}$$

Table 4.6

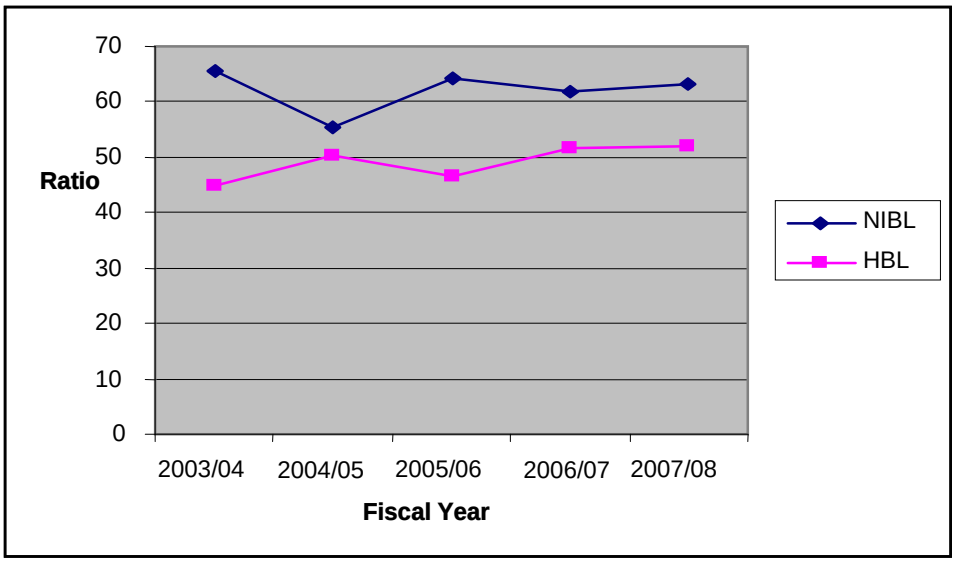
Loans and Advances to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	65.69	55.36	64.23	61.78	63.04	62.02	33.57	5.76
EBL	44.81	50.21	46.59	51.54	51.85	49	2.80	5.71

(As per annexure 6 and schedule 1)

Figure 4.6

Loans and Advances to Total Working Fund Ratio



The figure 4.6 shows that loan and advance to total working fund ratios are in fluctuating trend during the five year period. NIBL has the highest ratio of 65.69% in the FY 2003/04 and the lowest of 55.36% in the FY 2004/05. EBL have maintained their highest ratio of 51.85% in 2008/09 and its lowest ratio is 44.81% in 2003/04.

In average, NIBL has maintained higher loan and advance to total working fund ratio indicate NIBL is more successful for better mobilization of loan and advances for the purpose of income generation in comparison to EBL but EBL has higher consistency to loan and advances than NIBL.

4. Investment on Government Securities to Total Working Fund (IGSTWF **) Ratio**

This ratio indicated the relationship between the banks investment on securities in comparison to total working fund. Government securities are a safe medium of investment though it is not as liquid as cash and bank balance. This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund on different type of government securities to maximize its income and to minimize its risk assets. It is calculated as

$$\text{IGSTWF Ratio} = \frac{\text{Investment on government Securities}}{\text{Total working fund}}$$

Table 4.7

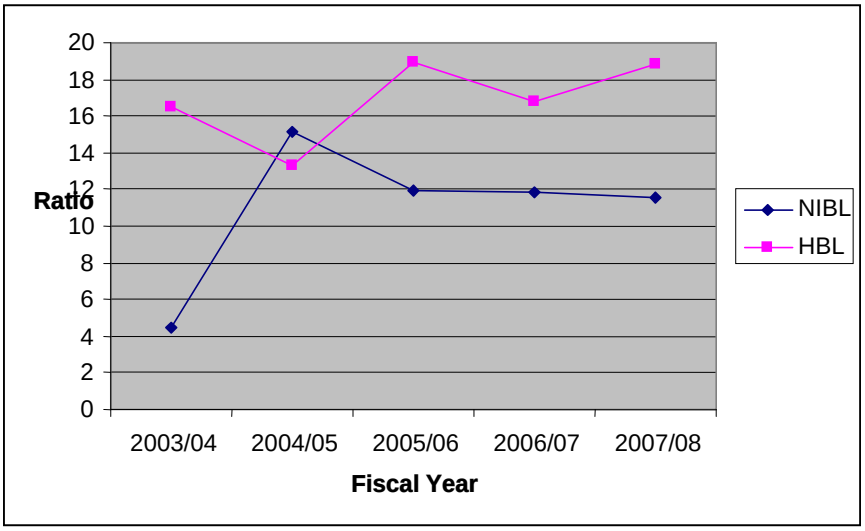
Investment on Government Securities to Total Working Fund Ratio

Banks	Fiscal Year					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	4.44	15.10	11.97	11.82	11.55	10.97	3.51	31.99
EBL	16.52	13.34	18.94	16.82	18.81	16.88	2.03	12.02

(As per annexure 7 and schedule 1)

Figure 4.7

Investment on Government securities to Total Working Ratio



From the table 4.7 NIBL has maintained the highest ratio of (15.10) in 2004/05 with the lowest of (4.44) in 2003/04, similarly EBL has maintained highest in FY 2005/06 of 18.94% and lowest in 2004/05 of 13.34%

NIBL has lower ratio considering the average value than EBL indicating its poor performance in this regard. The coefficient of variation is also higher indicating its variability than EBL. Here, due to the highest mean and low coefficient of variation EBL has become more successful for better utilization on investment in government securities and also has higher consistency to investment of government securities.

5. Investment on shares and Debentures to Total Working Fund (ISDTWF**) Ratio**

The ratio reflects the banks investments in shares and debentures of subsidiaries and other companies. Banks may invest in shares and debentures of any one organized institution not exceeding 10% of the paid of capital of such organized institution.

$$\text{ISDTWF} = \frac{\text{Investement on shares and debentures}}{\text{Total working fund}}$$

Table 4.8

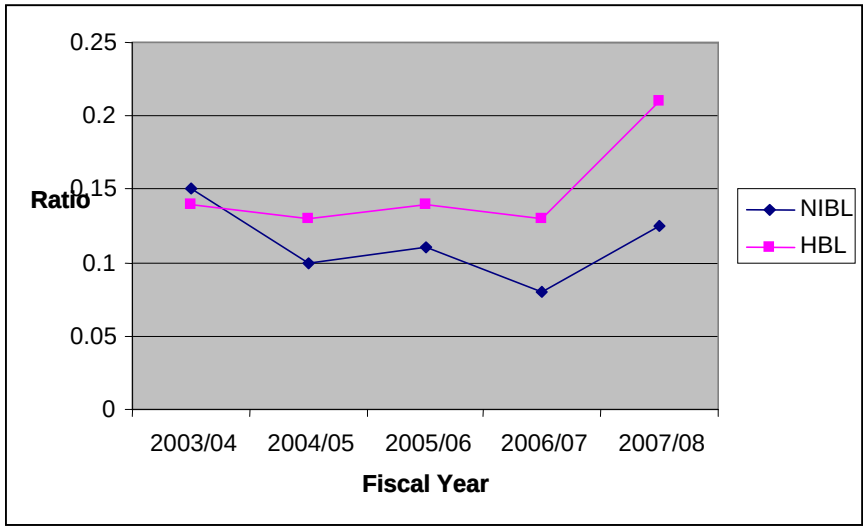
Investment on Shares and Debenture to Total Working fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	0.15	0.10	0.11	0.08	0.125	0.11	0.035	31.82
EBL	0.14	0.13	0.14	0.13	0.21	0.15	0.030	20.22

(As per annexure 8 and schedule 1)

Figure 4.8

Investment on share and Debenture to Total Working Fund Ratio



The result revealed that both the bank has fluctuating trend (figure 4.8) in the ratio however, NIBL has highest ratio (0.15) in FY 2003/04 and the lowest (0.08) in FY 2006/07. Whereas EBL has the highest ratio (0.21) in FY 2008/09 and lowest (0.13) in two years 2004/05 and 2006/07/. The mean value of NIBL is lesser (0.11) than of EBL (0.15). The coefficient of variation of EBL has also lower (20.22) than the NIBL (31.82). It indicate that EBL is more successful for better utilization of investment on shares and

debenture than NIBL and it is more consist ant to investment on shares and debenture on NIBL.

4.2.3 Profitability Ratio

These ratio measures the efficiency of the banks activities and its ability to generate profit. This is directly related to the income generated by the bank.

$$\text{Return on Loan and Advances Ratio} = \frac{\text{Net Profit (Loss)}}{\text{Loan and Advances}}$$

Table 4.9

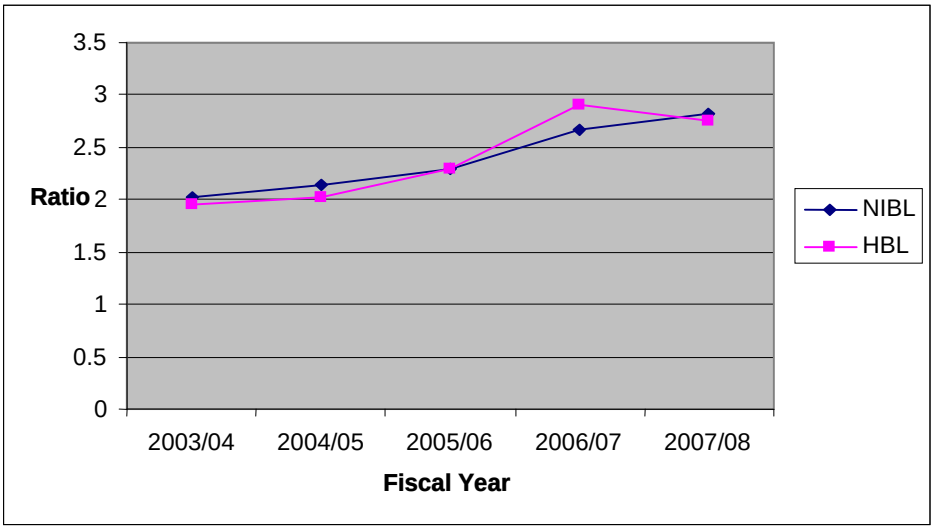
Return on Loan and Advance Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	2.02	2.14	2.29	2.66	2.82	2.38	0.30	12.60
EBL	1.95	2.03	2.29	2.90	2.76	2.38	0.38	15.96

(As per annexure 9 and schedule 1)

Figure 4.9

Return on Loan and Advance Ratio



The figure 4.9 illustrates that NIBL and EBL has the fluctuation trend in the last five years. The table 4.9 shows NIBL has the highest return (2.82) in the FY 2008/09 and the lowest (2.02) in FY 2003/04. Where as EBL have the highest return (2.90) in FY 2006/07 and the lowest (1.95) in FY 2003/04.

Mean ratio of both the bank is equal. It indicates both are successful to earn high return on its loan and advances. However the CV of NIBL is indicating high consistency in return than EBL.

2. Return on Total Working Fund Ratio

This is also known as return on assets and this ratio assists in calculating the over all profitability of total working fund which should be satisfactory for its survival. In the present study, this ratio is calculated and analyzed to measure the profitability of all financial resources invested in the banks assets. A higher ratio usually indicated efficiently in the utilization its overall resources and vice versa.

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Profit (Loss)}}{\text{Total Working Fund}}$$

Table 4.10

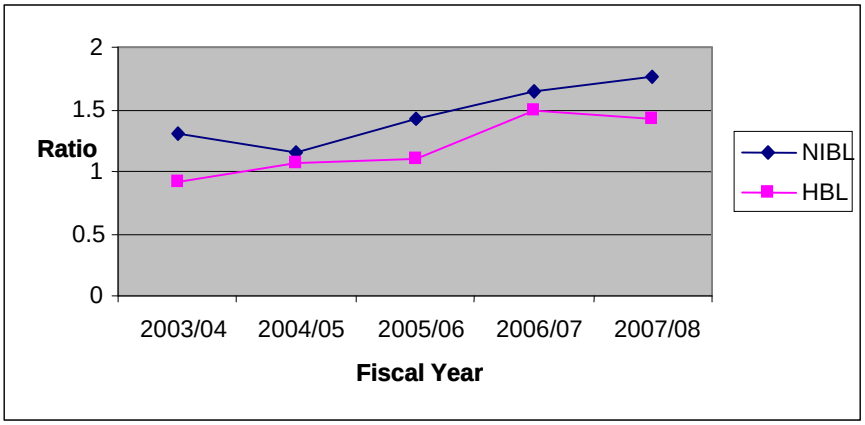
Return on Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	1.30	1.15	1.43	1.64	1.77	1.46	0.22	15.07
EBL	0.91	1.06	1.11	1.49	1.43	1.2	0.22	18.33

(As per annexure 10 and schedule 1)

Figure 4.10

Return on Total Working Fund Ratio



NIBL has increasing tendency (figure 4.10) from FY 2005/06 onwards and has earned the highest of (1.77) FY 2008/09. EBL bank has fluctuating trend of the ratio, which is the highest (1.49) in FY 2006/07 and (0.91) in FY 2003/04.

Considering the mean ratio NIBL has the higher of (1.46) than of EBL (1.2). Its coefficient of variation is lower than EBL which conclude its more consistency. From the prospect of analysis, the conclusion would be NIBL is more efficient in terms of profitability with respect to its financial resources.

3. Total Interest Earned to Total Working Fund Ratio

Interest earned to total working fund ratios reflects the extent to which the banks are successful in mobilizing their total assets to generate high income as interest. A high ratio is indicator of high earning power of the bank on its total working funds and vice versa. This ratio is computed to proportion of total interest earned to total working fund of total asset and it computed as:

$$\text{Total Interst Earned to Total Working Fund Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

Table 4.11

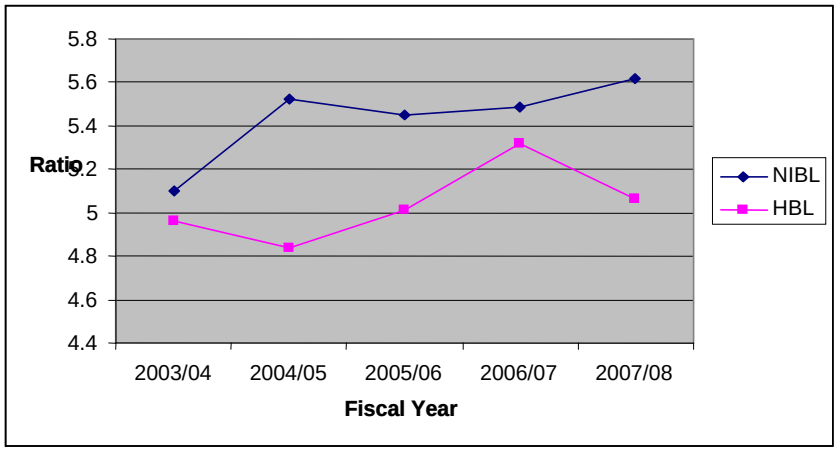
Total Interest Earned to Total Working Fund Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	5.10	5.52	5.45	5.49	5.49	5.62	5.44	3.26
EBL	4.96	4.84	5.01	5.32	5.17	5.06	0.168	3.31

(As per annexure 11 and schedule 1)

Figure 4.11

Total Interest Earned to Total Working Fund Ratio



The table and figure 4.11 clearly shows a fluctuating trend of ratio of both banks NIBL has highest ratio of 5.62 in FY 2008/09 and similarly EBL has the highest of 5.32 in FY 2006/07. In average NIBL has the highest ratio of 5.44 in compare to 5.06 of EBL. In addition NIBL has lower coefficient of variation than EBL. In conclusion NIBL has greater position with respect to the income earned form total working fund in comparison to EBL as it is aso more consistent than EBL.

4.2.4 Risk Ratio

Risk ratio is very important in determining the extent of irks. The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on investment. The risk taken is compensated by the increase in profit. Bank has to take high risk if it expects highest return on its investment. So, the bank opting or high profit has to accept the risk and manage if effectively. Thorough the following ratios, effort have been made to measure the level of risk.

1. Credit Risk ratio

Credit risk ratio measures the possibility that loan will not be repaid to that investment will deteriorate in quality or go into default with consequent loss to the bank. Actually credit risk ratio shows the proportion of non-performing assets in total loan and advances of a bank.

This ratio is computed as:

$$\text{Credit Risk Ratio} \frac{\text{Total Loan and Advance}}{\text{Total Assets}}$$

Table 4.12

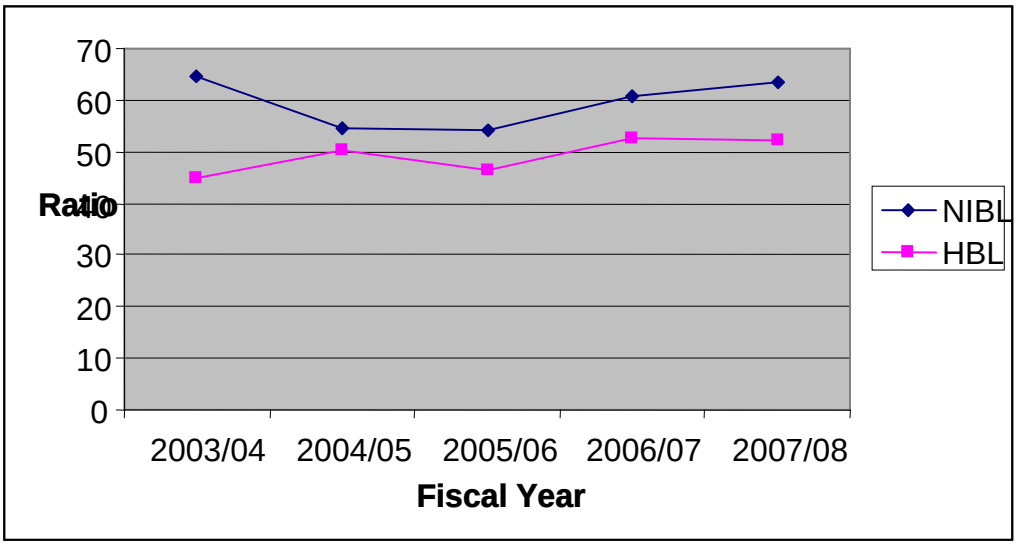
Credit Risk Ratio

Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	64.62	54.50	54.10	60.64	63.30	61.43	3.76	6.12
EBL	45.02	50.21	46.60	52.54	52.05	49.08	2.85	5.81

(As per annexure 12 and schedule 1)

Figure 4.12

Credit Risk Ratio



During the five year period of study both banks credit risk ratio is in fluctuating trend (figure 4.12). NIBL has highest ratio of (64.62) in the FY 2003/04 with the lowest being (54.50) in the FY 2004/05. Similarly, EBL has the highest credit risk ratio of (52.05) in FY 2008/09. The above table shows NIBL has the highest average ratio i.e. (61.43) than that of EBL i.e. (2.85) it indicate that NIBL has more stable credit policy however the coefficient of variation is higher than EBL. It indicated that NIBL has less consistent risk than EBL.

2. Liquidity Risk Ratio

The liquidity risk ratio of a bank defines its liquidity need for deposit the cash and bank balance are the most liquid assets and they are considered as bank's liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposits is an indicator of bank liquidity need.

This ratio is worked out as:

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

Table 4.13

Liquidity Risk Ratio

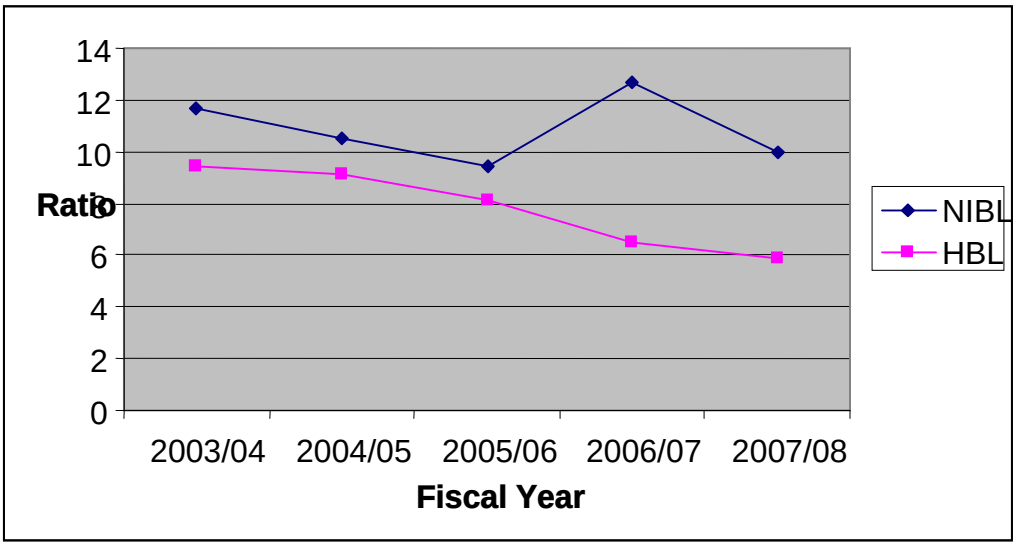
Banks	Fiscal Years					Mean	Standard Deviation	Coefficient of Variation
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIBL	11.69	10.55	9.40	12.71	9.97	10.88	1.19	10.93
EBL	9.42	9.09	8.12	6.48	5.85	7.792	1.40	18.09

(As per annexure 13 and schedule 1)

The analysis (table & figure 4.18) illustrate that the total net profit of NIBL and EBL is in increasing trend. The total net profit of NIBL in FY 2011/2012 will be Rs. 947.621million, which is slightly greater than that of the EBL (874.201 million) in the same year, and the highest under the study period. This means the NIBL, pertains relatively higher total net profit than the EBL but both have increasing trends. We can see that net profit of EBL is also in increasing trend. We can conclude that it can be also better portion in future.

Figure 4.13

Liquidity Risk Ratio



The figure 4.13 evidently shows the fluctuating trend of liquidity risk ratio of two banks during the five year of study. NIBL has maintained the highest ratio of (12.71) in 2006/07 and lowest ratio of (9.40) in 2005/06. Similarly, EBL has the highest ratio of (9.42) in 2003/04 and lowest ratio of (5.85) in 2008/09.

In average, EBL has the lowest liquidity risk ratio of (7.792) compared to NIBL (10.88) and also the coefficient of variation of EBL is higher (18.09%) than NIBL (10.93%), so it indicate that NIBL liquidity risk position is better.

4.3 Analysis of Statistical Tools

In order to achieve the effective of this study, some essential statistical tools are using such a trend analysis, Coefficient of correlation analysis standard deviation and coefficient of variation.

4.3.1 Trend Analysis

Analysis of trend of loan advance, total deposits, total investment, and total net profit of NIBL and EBL banks are estimated and forecasted for next five years under this heading. The following assumptions are considered for the analysis.

a. Other things will remain unchanged.

b. The banks will run in position.

c. The economy will remain in the present state.

d. The forecast will be true only when the limitation of square method is carried out.

1. Trend analysis of Investment of NIBL and EBL

Here, for five years from FY 2003/04 to 2008/09 and forecasted the same for next five years till 2011/12. The following table shows the trend values of total investment of NIBL and EBL for 10 years FY 2003/04 to 2011/12.

Table 4.14

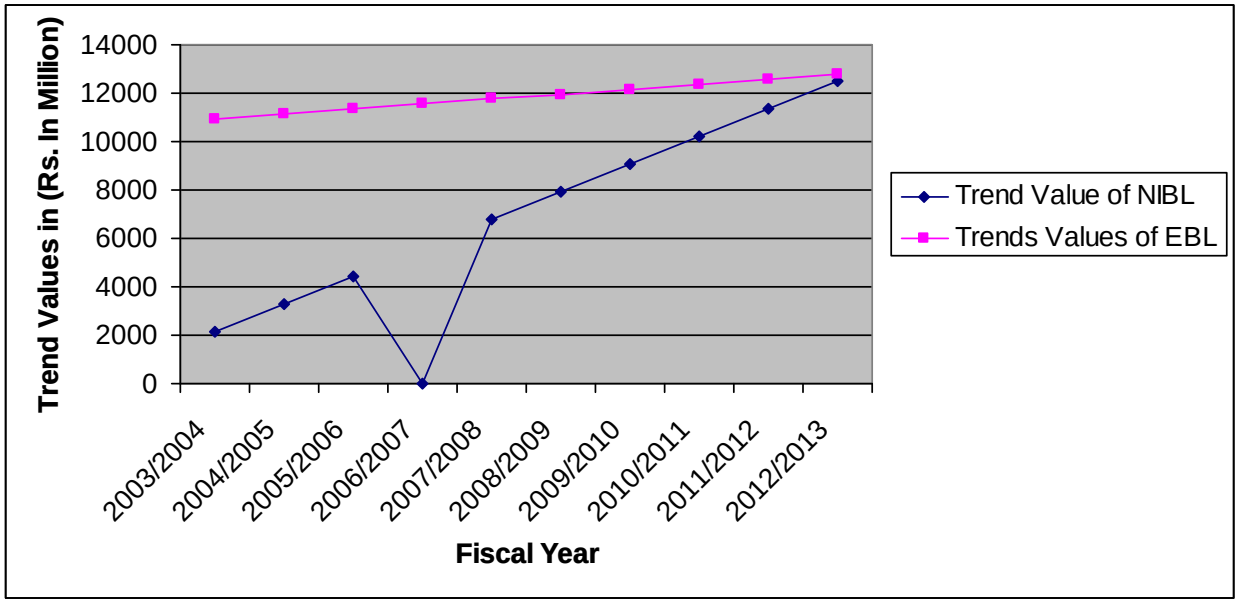
Trend Values of Total Investment of NIBL and EBL (2003/04 to 2012/013)

Years	Trend Value of NIBL	Trends Values of EBL
2003/2004	2140.262	10927.548
2004/2005	3293.977	11133.856
2005/2006	4447.692	11340.164
2006/2007	5601/407	11546.472
2007/2008	6755.122	11752.78
2008/2009	7908.837	11959.088
2009/2010	9062.552	12165.396
2010/2011	10216.267	12371.701
2011/2012	11369.982	12578.012
2012/2013	12523.697	12784.32

Source=schedule 5(i), 5(ii)

Figure 4.14

Trend values of Total Investment of NIBL and HBL (2003/04 to 2012/013)



From the above table and figure 4.14 information; it is clear that the total investment of NIBl & EBL is in increasing trend. Others things remaining the same, the total investment of NIBL in FY 2012/2013 will be Rs. 12523.697 million of the same year, and it will be Rs. 12784.32 million of the EBL in the same year, which is the under highest study period. It is obvious that EBL deposit utilization position in relation to investment is greater than that of the NIBL but it has increasing trend. NIBL is increasing there investment year by, it shows that EBL total investment can be in better position in future.

2. Trend Analysis of Total Deposit of NIBL and EBL

Here, an effort has been made to calculate the trend values of total deposit of Nepal investment Bank and Himalayan for five years from FY 2003/04 to 2008/09 and forecasted the same for next five years till 2012/2013.

Table 4.15

Trend Values of Total Deposits of NIBL and EBL

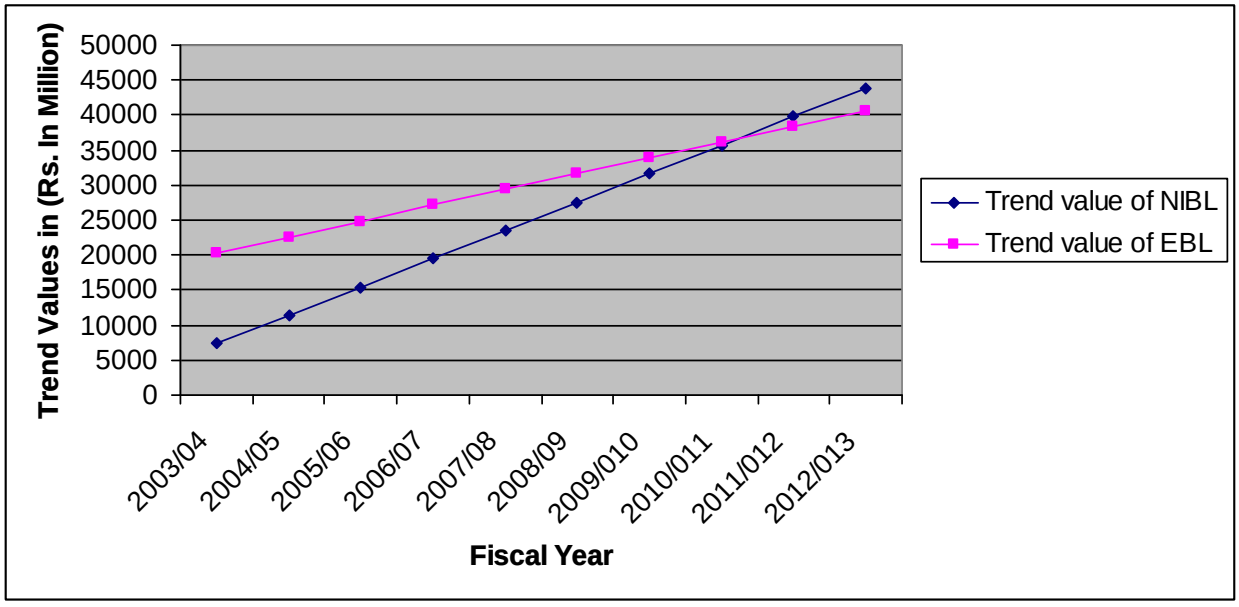
(2003/04 to 2012/013)

Year	Trend value of NIBL	Trend value of EBL
2003/04	7316.68	20361.678
2004/05	11370.16	22617.938
2005/06	15423.64	24874.198
2006/07	19477.12	27130.458
2007/08	23530.60	29386.718
2008/09	27584.08	31642.978
2009/010	31637.56	33899.328
2010/011	35691.04	36155.498
2011/012	39744.53	38411.758
2012/013	43796.01	40668.018

Source: Schedule 2(i), 2(ii)

Figure 4.15

Trend values of Total Deposit of NIBL and HBL (2003/04 to 2012/013)



Study period. It is apparent that the NIBL's total deposit is greater than that of the EBL but it has increasing trend. It is found that deposit position of NIBL is increasing higher than EBL.

3. Trend Analysis of Total loan and Advance of NIBL and EBL

The trend values of loan and advances of NIBL and EBL have been calculated for 5 years from 2003/04 to 2007/08 and forecasted for next 5 years from 2008/09 to 2012/013. The trend value of total loan and advances of both banks are given here under:

Table 4.16

Trend Values of Total Loan and Advance of NIBL and EBL

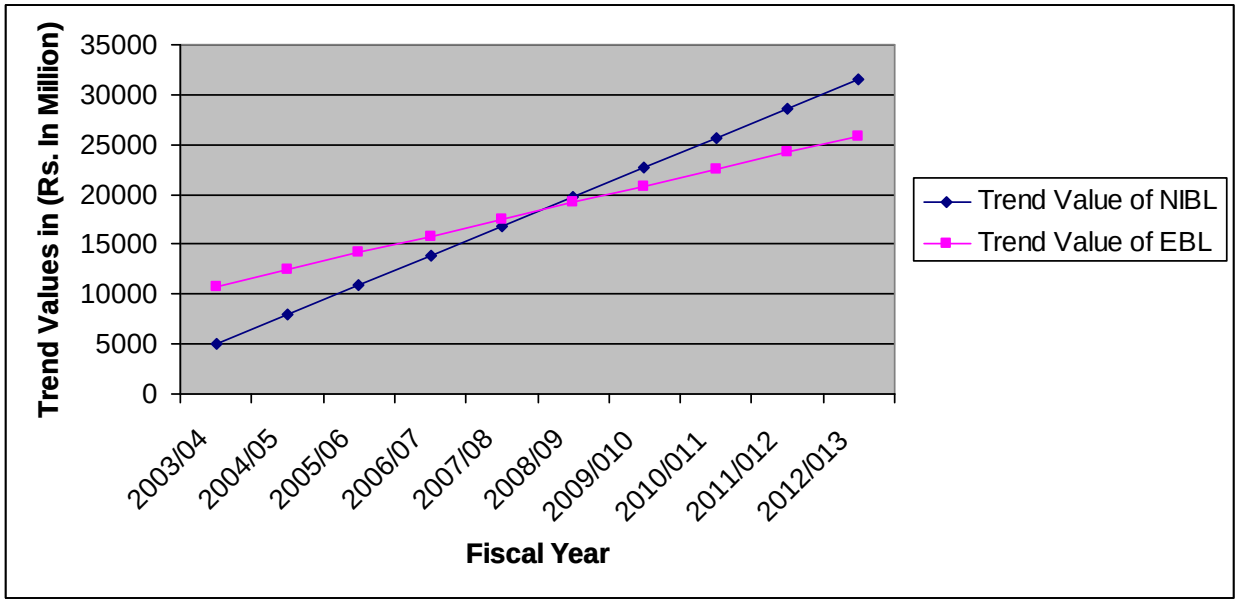
(2003/04 to 2012/013)

Years	Trend Value of NIBL	Trend Value of EBL
2003/04	5025.314	10806.108
2004/05	7978.734	12480.165
2005/06	10932.154	14154.222
2006/07	13885.154	15828.279
2007/08	16838.998	17502.336
2008/09	19792.414	19176.396
2009/010	22745.834	20850.47
2010/011	25699.254	22524.507
2011/012	28652.674	24198.564
2012/013	31606.094	25872.621

Source: Schedule 3(i), 3(ii)

Figure 4.16

Trend values of Total and Advances of NIBL and HBL (2003/04 to 2012/013)



The above table and figure 4.16 depict that the total loan and Advances of NIBL and EBL is in increasing trend. The total loan and advance of the NIBL in FY 2012/013 will be Rs. 31,606.094 million and it will be Rs. 24,872.621 of the EBL in the same year, which is the highest under the study period. It is evident that the NIBL position in total loans band advances is greater than that of the EBL, but it has increasing trend. We can say that NIBL has pertains large portion of total loans and advances and also it has high increasing tend than EBL. Thus, it can be concluded that total loans and advances of concluded that total loans and advances of NIBL is increasing and it will be in better position in future.

4. Trend Values of Total Net Profit of NIBL and EBL

The trend values of total net profit of NIBL and EBL has calculated for 5 years from 2003/04 to 2007/08 and forecasted for next 5 years from 2008/09 to 2012/013. The value of net profit of both NIBL and EBL are given hereunder:

Table 4.17

Trend Values of Total Net Profit of NIBL and EBL

(2002/ 03 to 2012/013)

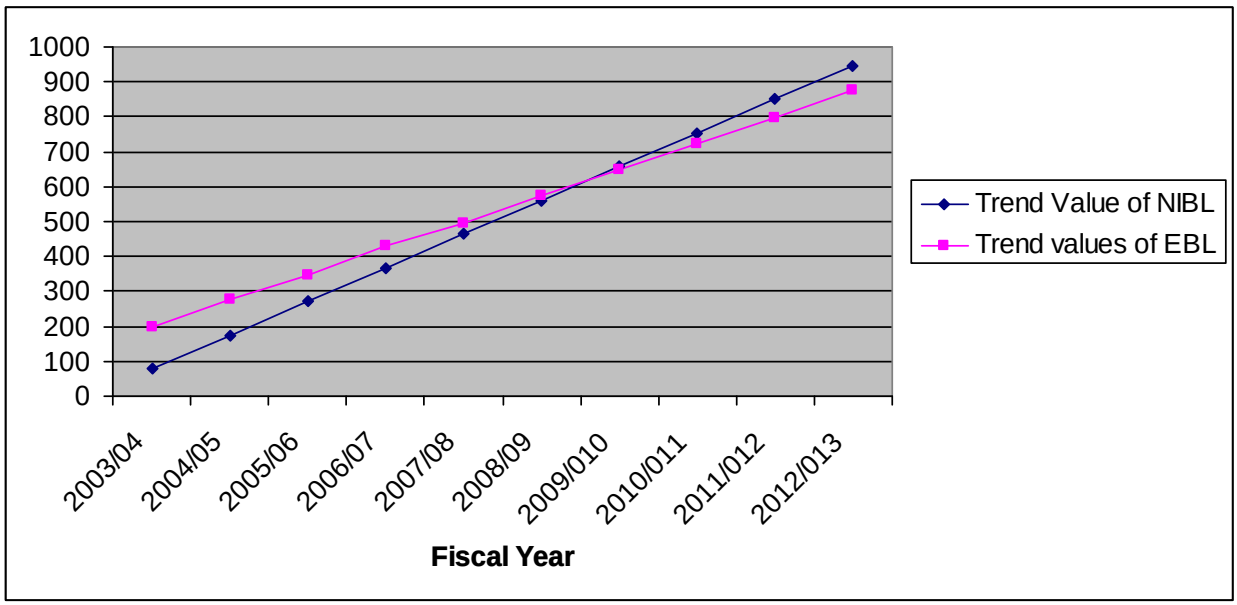
Years	Trend Value of NIBL	Trend values of EBL
2003/04	77.312	195.79
2004/05	174.013	275.169
2005/06	270.714	346.548
2006/07	367.415	431.927
2007/08	464.116	497.306
2008/09	560.817	572.685
2009/010	657.518	648.064
2010/011	754.219	723.443
2011/012	850.92	798.822
2012/013	947.621	874.201

Source: Schedule 4(i), 4(ii)

Figure 4.17

Trend Values of Total Net Profit of NIBL and EBL

(2003/04 to 2012/013)



The above table and figure 4.17 illustrate that the total net profit of IBL an EBL is in increasing trend. The total net profit of NIBL in FY 2011/2012 will be Rs. 947.621 million, which is slightly greater than that of the EBL (874.201 million) in the same year, and the highest under the study period. This means the NIBL, pertains relatively higher total net profit than the EBL but both have increasing trends. We can see that net profit of EBL is also in increasing trend. We can conclude that it can be also better portion in future.

4.3.2 Coefficient of Correlation Analysis

Under the analysis, Karl Pearson coefficient of correlation is used to uncover the relationship between total deposit and loan and advance, total deposit and total investment and outside asset and net profit.

1. Coefficient of Correlation between Total Deposit and Loan & Advance.

Coefficient of correlation(r) between deposit and Loan & Advance measures the degree of relationship between these two variables. The main objectives of the correlation analysis between deposit and loan advance is to find out whether deposit is significantly used as loan & advance of not.

Table 4.18

Coefficient of Correlation between Total Deposit and Loan Advance

Evaluation Criteria	r	r^2	P.Er	6×P.Er	Significance
NIBL	0.9941	0.9882	0.00356	0.0213	Highly significant
EBL	0.9718	0.9444	0.01678	0.1006	Significant

As per Schedule 6(i), 6(ii)

Here, deposit is the independent variables (x) and loan & advance is dependent variable (yu). The main objectives of computing 'r' between these two variables are to justify, whether deposit is significantly used as loan & advance or not. The above table shows the value of 'r' P.E. r and 6×P.Er between the deposit and loan & advance of NIBL with comparison to EBL during the study period. 2003/04 to 2008/09 From the above table in respect to NIBL is found that coefficient of correlation between the deposit and loan & advance is 0.9941 positive. Furthermore, when we consider the value of coefficient of determination (r^2), it is 0.982 which does mean only 98.82% of the variation in the dependent variable is explained by the independent variable. At the same time considering the value of 'r" and comparing it with 6p.Er, we found than the r is much high value of '6×P.Er.' which does mean that the value of 'r' is highly significant. Hence there is significant relationship between deposit and loan advance of NIBL this indicates that IBL is successful to mobilize its deposit appropriately.

On the other hand EBL also have the positive relationship between deposit and loan advance. The relationship is significant as their value of 'r' 0.9718 is higher than 6×P.Er i.e. 0.1006 and the value of r^2 it is 0.9444 which does mean only 94.44% of the dependent variable which has been explained by the independent variable. This indicates that NIBL and EBL are successful in mobilizing their deposit and loan and advance. However, NIBL is at the better position in mobilizing deposit and loan and advances in comparison to EBL.

2. Coefficient of Correlation between Total Deposit and Total Investment

Coefficient of correlation (r) between Deposit and Total investment measures the degree of relationship between these two variables. The main objective of correlation analysis between deposit and total investment is to find out whether deposit is significantly used as investment or not.

Table 4.19

Coefficient of Correlation between Total Deposit and Total Investment

Evaluation Criteria	r	r^2	P.Er	6×P.Er	Significance
NIBL	0.967	0.935	0.0196	0.1176	Significant
EBL	0.9485	0.8997	0.0303	0.1815	Significant

As per schedule 7(i), 7(ii)

Here, Deposit is the independent variable (x) and total investment is dependent variable (y). The main objectives of computing 'r' between these two variables is to justify whether deposit is significantly uses as total investment or not. The above table shows the value of 'r', PEr and 6×PEr between deposit and total investment of NIBL with comparison to EBL during the study period 2002/2003 to 2006/2007. From the above table in respect to IBL, it is found that coefficient of correlation between deposit and total investment is 0.967. It shows that positive relationship between these two variables. Furthermore, when we consider the value of coefficient of determination (r^2), It is 0.935 which does mean 96.7% of the variation in the dependent variable is explained by the independent variable. At the same time, considering the value of 'r' and comparing with 6×P.Er, we found the 'r' is higher than value of '6×P.Er' which does mean that NIBL is capable in investment mobilizing its deposit.

Likewise EBL have also the positive relationship between deposit and total investment. Their values of 'r' i.e. 0.9485 are more than values of ' 6×P.Er i.e. 0.1815 the relationship is significant and the value of r^2 it is 0.8997 which does mean only 89.97% of the dependent variable which has been explained by the independent variable. This indicates that both banks are successful in maximizing the investment of their deposit.

3. Coefficient of Correlation between Outside Asset and Net Profit

Coefficient of correlation (r) between outside asset and Net Profit measures the degree of relationship between these two variables. The main objective of correlation analysis

between outside asset and net profit is to find out capability of earning net profit mobilizing its outside asset.

Table 4.20

Coefficient of Correlation between Outside Asset and Net Profit

Evaluation Criteria	R	r^2	P.E.r.	6×P.Er.	Significance
NIBL	0.9838	0.9679	0.0097	0.0581	Higly Significant
EBL	0.9480	0.8987	0.0305	0.183	Significant

As per Schedule 8(i), 8(ii)

Here outside asset is the independent variable (x) and net profit is dependent variable (Y). The main objective of computing 'r' between these two variables is to justify whether net profit is significantly correlated with respect to total asset or not. The above table shows the value of 'r' P.E.r and 6×P.Er between outside asset and net profit of NIBL with comparison to EBL during the study period 2003/2004 to 2007/08. From the above table in respect to NIBL, it is found that coefficient of correlation between outside asset and the net profit is 0.9838. It shows that the positive relationship between these tow variables. Furthermore when we consider the value of coefficient of determination (r^2), it is 0.9679 which does shows higher percentage 96.79% of the variation in the dependent variable is explained by the independent variable. Considering the value of 'r' and comparing it with the value of '6×P.E.r', we found that r is much higher than the value of 6×P.Er which does mean that NIBL is highly significant.

Likewise EBL have the positive relationship between outside asset and net Profit. The relationship is significant of EBL as its value of 'r' i.e. 0.9480 is higher than 6×P.Er. i.e. 0.183 and the value of r' i.e. 0.8987 which does mean only 9.87 of dependent variable which has been explained by the independent variable. EBL has significant relationship

as its value or 'r' is greater than '6×P.Er'. This does indicate that NIBL and EBL have significant correlations between mobilization of Funds and return. Whereas NIBL is at better position in generate profit by utilizing its outside asset.

4.4 Major Findings of the Study

The main finding of the secondary data is derived on the basis analysis of financial data of NIBL & EBL which are given below.

- The mean ratio of cash and bank balance to total deposit of NIBL is higher than that of EBL. It states that the liquidity position of NIBL is better than that of EBL. But EBL has more consistent to maintain of its liquidity position than that of NIBL because of EBL has less C.V. then that of NIBL.

- The mean ratio of cash and bank balance to current assets ratio of NIBL is higher then that of EBL. It states that the NIBL has utilized its fund better then that of EBL. And, also NIBL has more Consistency to utilize its fund than that of EBL because of NIBL has lower C.V than that of EBL.

- The mean ratio of investment on government securities to current asset of NIBL is lesser than that of EBL. It states that EBL uses to invest its current assets in government securities more than that of NIBL. EBL has more consistent to maintain of its uses to invest current asset than that of NIBL because of EBL has less C.V. than that of NIBL.

- The above result shows that the liquidity position of NIBL is comparatively higher than that of EBL. It has higher cash and bank balance to total deposit, cash and bank balance to current assets ratio, loan and advances to current assets ratio but NIBL mean ratio of investment on government securities to current asset is lower. It reveals that NIBL has better liquidity position than that of EBL.

- The mean ratio of loans and advances to total deposit of NIBL is higher than that of EBL. NIBL also has less C.V than EBL, it indicates that loans and advances of NIBL is stable and Consistent or we can say that NIBL has strong position regarding the mobilization of total deposit on loans and advance.

- The mean ratio of total investment to total deposit ratio of NIBL is lower than that of EBL. It can conclude that EBL has better utilization of deposits to investment than NIBL. EBL has more Consistency than that of NIBL because of EBL has less C.V than that of NIBL.

- The mean ratios of loan and advance to total working fund ratio of NIBL is higher than that of EBL. It indicates that NIBL has better mobilization its fund than EBL. But EBL has more Consistency to loan and advance than that of NIBL because of EBL has less C.V. Than that of NIBL.

- The mean ratio of investment on government securities to total working fund ratio of NIBL is lower than that of EBL. It can be concluded that EBL has investment policy is more variable than that of NIBL. EBL has more consistency than NIBL because of EBL has less C.V.

- The mean ratio of investment on shares and debenture to total working fund ratio of NIBL has lower than that of EBL. EBL has investment in shares and debenture seems to stable than NIBL. EBL has more consistency than NIBL because of EBL has less C.V.

- From the above analysis, it can be concluded that NIBL has higher investment policy towards loans And advances to total deposit, loans and advances to total working fund but it has lowest investment To total deposit, Investment on

government securities to total working fund, investment on shares And debenture to total working fund. EBL has stable and consistent than that of NIBL.

- The mean ratio of return on loans and advances to net profit of NIBL and EBL is same. It indicates that both banks has equal variability of return on loans and advances But NIBL has more Consistency than EBL because of NIBL has less C.V.

- The mean ratio of return on total working fund ratio of NIBL is higher than EBL. It can be concluded that NIBL has success to maintain the high ratio in return on working fund. NIBL has more consistent than EBL because of less C.V. than that of EBL.

- The mean ratio of return on equity of NIBL is greater than that of EBL. It indicates NIBL has Better to EBL. And its C.V is lowers than that of EBL. This does signify its consistency.

- The mean ratio if interest earned to total outside asset of NIBL is greater than that of EBL. It indicates that the NIBL has average position toward income earned from total outside asset in Comparison to EBL. NIBL is more consistency income earned than that of EBL because of NIBL has less C.V.

- The mean ratio of interest earned to total working fund ratio of NIBL is greater than that of EBL. It indicates that NIBL has better to EBL. And NIBL has more consistency than that of EBL because of the interest earned to total working fund ratios C.V. of NIBL is less than that of EBL.

- The mean ratio of total interest paid to total working fund of NIBL is greater than that of EBL. It means that NIBL has paid higher interest than that of EBL. And also NIBL has more consistency Paid interest hat that of EBL because of NIBL has lower C.V.

- The mean ratio of credit risk of NIBL is greater than that of EBL. Therefore NIBL has higher Credit risk than that of EBL. But EBL has more consistency than that of NIBL because of EBL has less C.V.

- The mean ratio of liquidity risk of NIBL is greater than that of EBL. NIBL has more consistency Because of lesser C.V. than that of EBL.

- The mean ratios of Capital risk of NIBL are from the above finding, it can be concluded that NIBL has high risk ratio. The bank should maintain Risk against credit fund to earn high profit.

- The total investment of both banks is in increasing trend where it will be Rs. 11701.004 million of NIBL and Rs. 12784.32 million of EBL in FY 2011/2012. This means EBL use relatively a large portion of its deposit as investment but it has less increasing trend than the NIBL so, the NIBL will be in a better position in future.

- The total deposit of both banks is also in an increasing trend. It will be Rs. 43798.01 million of NIBL and Rs. 40668.018 of the EBL in FY 2011/2012. The NIBL pertains relatively large portion of their deposit. The NIBL has high increasing trend then that of EBL.SO.NIBL will be in better position in future

- The total loan and advances of both banks are in increasing trend. It will be Rs. 31606.094 Million of NIBL and Rs. 25872.621 million of EBL in FY 2011/2012

indicating greater position of NIBL. NIBL has more increasing trend. So, it will be in a better position in future.

- The total net profit of both banks is still in increasing trend. The total net profit of NIBL Will be Rs. 947.621 million while it will be Rs. 874.201 million in FY 2011/2012. The NIBL pertain relatively higher total net profit than the EBL. Though both have increasing tend, the total net profit of both banks will be in better position in future.

- The coefficient of correlation (r) between deposit and loans and advances of NIBL and EBL are 0.9941 and 0.9718 respectively, which shows the higher positive relationship between these tow variables of both banks. The coefficient of determination i.e. r^2 of NIBL is 0.9882 whereas it is 0.9444 in case of EBL indicating that the 98.82% of variation of loans and advances is caused by deposit in NIBL and 94.44% of it is caused deposit in EBL, while rest part of variation in the is due to other unexplained variable. The probable error of NIBL is lower (0.0213) than that of EBL (0.1006) exhibiting a significant relationship between deposit and loans and advances. Thus, both the banks are successful in mobilizing their deposit and loans and advances, however, NIBL is better in mobilizing deposit and loan and advances in comparison to EBL.

- The deposit and total investment of both banks are highly correlated exhibiting (r) values 0.967 and 0.9485 of NIBL and EBL respectively. The NIBL has greater (0.935) coefficient of determination (r^2) than EBL (0.8997) indicating that deposits at the rate of 93.5% and 89.97% cause the variation in total investment of NIBL and EBL respectively. Rest of the variation independent variable is caused by other unexplained variables. However, the value of 6P.Er is 0.1815 is grater (0.1815) than in NIBL (0.1175). NIBL is more successful (r-value is high) in maximizing the investment of their deposits in comparison to the EBL.

- There is a highly positive relationship between net profit and outside assets of both NIBL (r=0.9838) and EBL (r=0.9480). The coefficient of determination (r^2) is higher (0.9679) in NIBL than in EBL (0.8987) indicating that about 96.79% of variation in et profit of NIBL and 89.87% of variation in net profit of EBL is caused due to outside asset, whereas rest of the variation is caused due to other unexplained variable. Hence, NIBL value of r is greater than that of EBL; it is at the better position in generating profit by utilizing its outside utilizing its outside asset.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The economic development of country depends upon the development of commerce and industry and there is no doubt that banking promotes the development of Commerce because banking itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was very slow in earlier years. It has caught its full swing after restoration of democracy in the country. At present, overall economic growth rate is still declining year by year. Reasons behind this decline are insecure situation faced by industry; decrease in the tourist arrival, and deep in the production and export of carpet Garment and pashmina industry and political situation.

The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepal, the history of banking is not more than six decades. After the declaration of liberal and free market economy based policy, Nepalese bank and financial sectors have greater network and access to national and international markets. Commercial banks play a vital role dealing with other people's money and stimulate saving by mobilizing idle resources to those sectors having investment opportunities. Modem banks provide various services to their customers in view of facilitating their economic and social life.

The objective of commercial banks is to mobilize idle resources into the most profitable sectors. But, commercial bank should be careful while performing the credit creation function; the bank should never invest its funds in those securities, which are too much

fluctuating. Investment is a commitment of money and other resources that are expected to generate additional money and resources in the future.

The main objectives of this study are to evaluate the investment policy of Nepal Investment Bank Limited and Everest Bank Limited and to recommend corrective measure, if any, in order to improve its performance. So this researcher has focused this research mainly to highlight and examine the investment of the selected banks ignoring other aspects of bank's transaction to highlight the investment of bank. The applied design is descriptive and core perspective because the secondary data have been mainly applied for analysis. It includes all the process of collecting, verifying, evaluating and comparing recent information systematically and objectively to reach the final conclusion. Various financial parameters and effective research technique are employed to especially identify the strength and weaknesses in investment policy of the banks.

Financial and statistical tools are used to analyze the collected data and to achieve the results of the study. Ratios are very important financial tools to interpret the financial performance of a firm. Only six ratios have been taken in this study: liquidity ratios, assets management ratio/activity ratios, profitability ratios, risk ratios, and growth ratios. Statistical tools such as trend analysis, coefficient of correlation, standard deviation, mean and coefficient of variation, etc. have been used to make the decision.

5.2 Conclusion

On the basis of analysis and major finding of the fourth chapter, following conclusion can be made:

The liquidity position of the Nepal investment bank limited is comparatively higher than that both the Everest bank limited. Everest bank limited has the highest investment on government securities to current ratio.

Thorough the assets management ratio, Nepal investment bank limited has stronger investment policy towards loan and advance to total deposit, Loan and advance to total working fund, but weaker in to investment to total deposit, Loan and advance to total working fund, but weaker in to investment to total deposit, Investment on government

securities to total working fund, investment on shares and debentures to total working fund. In analysis of profitability returns on loans and advances of both banks is same. Return on total working fund and return on equity, total interest earned to total outside assets and interest earned to total working fund, interest paid to total working fund of Nepal Investment Bank is higher than that of Everest bank limited. Everest bank limited has low risky assets, net profit of NIBL is in increasing trend and investment position of NIBL is highly increasing trend than EBL.

From the trend analysis both banks have increasing trend in total deposit, total net profit but in total investment, loans and advances NIBL has better increasing trend than that of EBL. It shows that both banks will improve their position in future, however NIBL will be comparatively better.

From the coefficient of correlation between deposit and loans and advances, outside asset and net profit, there is highly significant relationship in case of NIBL. Coefficient of correlation between total deposit and loans and advances, total deposit and total investment, outside assets and net profit, there is significant relationship in cash of EBL. NIBL is comparatively better than EBL.

Through the analysis and finding we can conclude that NIBL has better investment policy, liquidity position, loans advances profitability ratio, and growth rate is also good. Similarly, investment position of NIBL is not good enough. But it has better risk ratio.

EBL has also better total investment to total deposit, investment on government securities to current asset, investment on government securities to total working fund, investment on shares and debentures to total working fund and assets management.

5.3 Recommendations

After going over the analysis and findings, following recommendations are made in order to overcome the weakness and inefficiency and make better policy on utilization and investment. EBL has maintained the ratio of cash and bank balance to total deposit lower than that of NIBL. It is recommended to increase cash and bank balance to meet current obligations and loan demand.

- The study reveals that NIBL has not invested more funds in government securities and so is recommended to invest more funds in this sector and not making them idle because govt. securities are the less risky assets.
- The loan and advances to total deposit of EBL's is lower than NIBL which indicates it has not properly used its fund as loan and advances. Hence, EBL is recommended to follow liberal policy.
- The profitability position on NIBL is greater than EBL. So, it is recommended that EBL should property utilized its loan and advances investment should be done on less risky asset decrease the expenses by controlling the operating expenses. So, it can earn more profit.
- Since, The risk increase effectiveness and profitability of bank, the credit risk and liquidity risk taken by EBL is lower than that of NIBL and its consistency is unstable which may result in loss. The bank should not take high risk, EBL should carefully analyze in above risk to achieve higher returns.
- Coefficient of correlation between outside asset and net profit of both banks are highly positive, however NIBL has higher coefficient of correlation than that of EBL. It shows that there is highly positive relationship between these two variables of both banks. But EBL is less capable to earn profit by mobilizing its total outside assets then NIBL. So, EBL should innovate new strategy changing its current policy for more utilizing its outside assets to earn more profit to compete with the NIBL.

- The commercial banks i.e. Nepal Investment Bank and Everest Bank Limited should go for some new areas of investment like hydro electricity and infrastructure development of the economy as well as bank's operation.
- Nepal Investment Bank and Everest Bank should target their business segment on the middle family. For this they have to keep the affordable minimum balance to open the account. So that they can earn more customer and generate more deposit amount.
- Both commercial banks should support the social welfare event to promote the business. The bank should formulate new strategies of serving customers in a more convenient way.

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ANNEXURE 1

Cash and Bank Balance to Total Deposit Ratio

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	11.69	926.53	7922.75
2004/2005	10.65	1,226.92	11,524.67
2005/2006	9.40	1,340.48	14,254.58
2006/2007	12.71	2406.57	18,927.31
2007/2008	9.96	2441.53	24,488.86
Mean	10.88		
Standard Deviation	1.08		
Coefficient of Correlation	10.01		

Everest Bank Limited

Fiscal Year	Current ratios	Cash & Bank Balance	total Deposits
2003/2004	9.42	1,979.21	21,007.37
2004/2005	9.09	2,001.18	22010.34
2005/2006	8.12	2014.47	24814.01
2006/2007	6.48	1717.35	26490.85
2007/2008	5.84		
Mean	7.79		
Standard Deviation	1.41		
Coefficient of Correlation	9.92		

ANNEXURE 2

Cash and Bank Balance to current Asset Ratio

Nepal Investment Bank Limited

Fiscal Year	Current ratios	Cash & Bank Balance	Current Asset
2003/2004	10.78	926.53	8592.56
2004/2005	9.62	1226.92	12737.97
2005/2006	8.45	1,340.48	15867.83
2006/2007	11.36	2.406.57	21186.54
2007/2008	9.01	2,441.53	27079.264
Mean	9.85		
Standard Deviation	1.045		
Coefficient of Correlation			

Everest Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	8.5	1,979.21	2314.34
2004/2005	8.14	2,00.18	24581.82
2005/2006	7.30	2014.47	27599.82
2006/2007	5.85	1717.35	29373.64
2007/2008	5.31	1757.34	33084.07
Mean	7.03		
Standard Deviation	1.26		
Coefficient of Correlation	17.92		

ANNEXURE 3

Investment on Government Securities to Current Asset Ratio

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	4.65	4,00.00	8593.56
2004/2005	15.71	2,001.10	12737.97
2005/2006	12.28	1,948.50	15678.63
2006/2007	11.30	2,522.30	21186.54
2007/2008	12.02	3,256.40	27079.264
Mean	11.312		
Standard Deviation	3.62		
Coefficient of Correlation	32.00		

Everest Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	17.27	3,998.87	23149.34
2004/2005	13.96	3,431.73	24581.82
2005/2006	19.82	5,469.73	27599.06
2006/2007	17.41	5144.31	29373.64
2007/2008	19.51	6454.87	33048.07
Mean	17.614		
Standard Deviation	2.03		
Coefficient of Correlation	11.89		

Annexure 4

Loan and Advance to Total Deposit Ratio

Nepal Investment Bank Limited

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	74.74	5,921.79	7922.75
2004/2005	64.1	7,338.57	11524.67
2005/2006	73.33	10,453.16	14254.8
2006/2007	70.02	13,178.15	18927.31
2007/2008	72.56	17,769.10	24488.85
Mean	70.95		
Standard Deviation	3.57		
Coefficient of Correlation	5.28		

Everest Bank

Fiscal Year	Ratio (%)	Cash & Bank Balance	Total Deposit
2003/2004	51.62	10,844.61	21007.37
2004/2005	59.10	12,919.63	22010.34
2005/2006	54.21	13.451.17	24814.01
2006/2007	59.51	15.761.98	26490.85
2007/2008	59.22	17,793.72	30048.41
Mean	56.73		
Standard Deviation	3.22		
Coefficient of Correlation	5.67		

ANNEXURE 5

Total Investment to Total Deposit Ratios of NIBL and EBL

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Total Investment	Total Deposit
2003/2004	24.87	1970.27	7922.75
2004/2005	33.51	3862.48	11524.67
2005/2006	27.59	3934.19	1454.58
2006/2007	29.60	5602.87	18927.31
2007/2008	28.04	6868.65	24488.86
Mean	28.72		
Standard Deviation	3.92		
Coefficient of Correlation	14.12		

Everest Bank Limited

Fiscal year	Ratio (%)	Total Investment	Total Deposit
2003/2004	48.44	101745.43	21007.37
2004/2005	55.07	12121.03	22010.34
2005/2006	47.12	11692.34	24814.01
2006/2007	41.10	10889.03	26490.85
2007/2008	39.35	11822.98	30048.42
Mean	46.22		
Standard Deviation	3.52`		
Coefficient of Correlation	8.06		

ANNEXURE 6

Loan and Advance to Total Working Fund Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Loans and Advance	Total Working Fund
2003/2004	65.69	5,921.79	9,014.24
2004/2005	55.36	7,338.57	13,255.50
2005/2006	64.23	10,453.16	16274.06
2006/2007	61.78	13,178.15	21,330.13
2007/2008	63.00	17,769.10	28,183.73
Mean	62.02		
Standard Deviation	3.57		
Coefficient of Correlation	5.76		

Everest Bank Limited

Fiscal year	Ratio (%)	Loan and Advances	current Assets
2003/2004	44.81	10,844.61	24,197.97
2004/2005	50.21	12,919.63	25729.78
2005/2006	46.59	13,451.17	28871.34
2006/2007	51.54	15,761.98	30,579.80
2007/2008	51.85	17,793.72	27,775.53
Mean	49		34,314.86
Standard Deviation	2.80		
Coefficient of Correlation	5.71		

Annexure 7

Investment on Government Securities to Total working fund Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Government Securities	Total Deposit
2003/2004	4.44	400.00	9,014.24
2004/2005	15.10	2,001.10	13,255.50
2005/2006	11.97	1,948.50	16,274.06
2006/2007	11.82	2,522.30	21,330.13
2007/2008	11.55	3,256.40	28,183.73
Mean	10.97		
Standard Deviation	3.51		
Coefficient of Correlation	31.99		

Everest Bank Limited

Fiscal year	Ratio (%)	Government Securities	Total Deposit
2003/2004	16.52	3,998.87	24.197.97
2004/2005	13.34	3,431.73	25,729.78
2005/2006	18.94	5,469.73	28,871.34
2006/2007	16.82	5144.31	30,579.80
2007/2008	18.81	6454.87	34,314.86
Mean	16.88		
Standard Deviation	2.03		
Coefficient of Correlation	12.02		

ANNEXURE 8

Investment on Shares and Debentures to Total Working fund Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Shares and Debentures	Total Working Fund
2003/2004	0.154	12.89	9014.24
2004/2005	0.105	13.89	13255.50
2005/2006	0.109	17.74	16274.06
2006/2007	0.083	17.74	21330.13
2007/2008	0.125	35.25	28183.73
Mean	0.1152		
Standard Deviation	0.035		
Coefficient of Correlation	31.12		

Everest Bank Limited

Fiscal year	Ratio (%)	Shares and Debentures	Total Working Fund
2003/2004	0.14	34.27	24197.97
2004/2005	0.13	34.27	25729.78
2005/2006	0.14	39.91	28871.34
2006/2007	0.13	38.57	30579.80
2007/2008	0.13	73.42	34317.86
Mean	0.15		
Standard Deviation	0.030		
Coefficient of Correlation	20.22		

ANNEXURE 9

Return on Loans and Advances Ratio

Nepal Investment Bank limited

Fiscal year	Ratio (%)	Net profit	Loan & Advance
2003/2004	2.02	116.82	5921.79
2004/2005	2.14	152.67	7338.57
2005/2006	2.29	232.14	10453.16
2006/2007	2.66	350.53	13.178.15
2007/2008	2.82	501.39	17769.10
Mean	2.39		
Standard Deviation	0.30		
Coefficient of Correlation	12.60		

Everest Bank Limited

Fiscal year	Ratio (%)	Net profit	Loan & Advance
2003/2004	1.95	212.12	10844.61`
2004/2005	2.03	263.05	12919.63
2005/2006	2.29	308.28	13451.17
2006/2007	2.90	457.46	15761.98
2007/2008	2.76	491.82	17793.72
Mean	2.38		
Standard Deviation	0.38		
Coefficient of Correlation	15.96		

ANNEXURE 10

Return on Total working Fund Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Net Profit	Total Working Fund
2003/2004	1.30	116.82	9,014.24
2004/2005	1.15	152.67	13.2455.50
2005/2006	1.43	232.14	16,274.06
2006/2007	1.64	350.53	21,330.13
2007/2008	1.77		
Mean	1.46		
Standard Deviation	0.22		
Coefficient of Correlation	15.07		

Everest Bank Limited

Fiscal year	Ratio (%)	Net Profit	Total Working Fund
2003/2004	0.91	212.12	24,197.97
2004/2005	1.06	263.05	25,729.78
2005/2006	1.11	308.28	28,871.34
2006/2007	1.49	457.46	30,579.80
2007/2008	1.43	491.82	34,314.86
Mean	1.2		
Standard Deviation	0.22		
Coefficient of Correlation	18.33		

ANNEXURE 11

Total Interest Earned to Total Working Fund Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Total Interest Earned	Total Working Fund
2003/2004	5.10	459.51	9014.24
2004/2005	5.52	731.40	13255.50
2005/2006	5.45	886.80	16274.06
2006/2007	5.49	1172.74	21330.13
2007/2008	5.62	1584.98	28183.73
Mean	5.44		
Standard Deviation	0.177		
Coefficient of Correlation	3.26		

Everest Bank Limited

Fiscal year	Ratio (%)	Total Interest Earned	Total Working Fund
2003/2004	4.96	1201.23	24.197.97
2004/2005	4.84	1245.89	25729.78
2005/2006	5.01	1446.47	28871.34
2006/2007	5.32	1626.47	30579.80
2007/2008	5.17	1775.58	34314.86
Mean	5.06		
Standard Deviation	0.167		
Coefficient of Correlation	3.31		

ANNEXURE 12

Credit Risk Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Loan and Advance	Total Asset
2003/2004	64.62	5129.79	9163.89
2004/2005	54.50	7338.57	13463.94
2005/2006	64.10	10453.16	16390.65
2006/2007	60.64	13178.15	21732.08
2007/2008	63.30	17769.10	28073.52
Mean	61.43		
Standard Deviation	3.76		
Coefficient of Correlation	6.12		

Everest Bank Limited

Fiscal year	Ratio (%)	Loan and Advance	Total Asset
2003/2004	45.02	10844.61	24197.97
2004/2005	50.21	12919.63	25729.78
2005/2006	46.60	13451.17	28871.34
2006/2007	5154	15761.98	30579.80
2007/2008	52.05	17793.72	34314.86
Mean	49.08		
Standard Deviation	2.85		
Coefficient of Correlation	5.81		

ANNEXURE 13

Liquidity Risk Ratio

Nepal Investment Bank Limited

Fiscal year	Ratio (%)	Cash and Bank Balance	Total Deposit
2003/2004	11.69	926.53	7922.75
2004/2005	10.65	1226.92	11524.67
2005/2006	9.40	1340.48	14254.58
2006/2007	12.71	2406.57	18927.31
2007/2008	9.97	2441.53	24488.86
Mean	10.884		
Standard Deviation	1.189		
Coefficient of Correlation	10.93		

Everest Bank Limited

Fiscal year	Ratio (%)	Cash and Bank Balance	Total Deposit
2003/2004	9.42	1979.21	21007.37
2004/2005	9.09	2001.18	22010.34
2005/2006	8.12	2014.47	24814.01
2006/2007	6.48	1717.35	26490.85
2007/2008	5.85	1757.34	30048.42
Mean	7.792		
Standard Deviation	1.40		
Coefficient of Correlation	18.09		

Schedule 1

NIBL

Fiscal Year	Ratio (X1)	X12
2003/04	1.08	1.1664
2004/05	1.07	1.1449
2005/06	1.09	1.1881
2006/07	1.09	1.1881
2007/08	1.07	1.1449
Total	5.4	5.8324

Mean $(\overline{X}) = \frac{\sum X_1}{5}$

$= \frac{5.40}{5}$

$= 1.08$

Standard Deviation $\pm = \sqrt{\frac{\sum x_1^2}{N} - \sum\left(\frac{X_1}{N}\right)^2}$

$= \sqrt{\frac{5.8324}{5} - (1.08)^2}$

$= 0.0089$

Coefficient of variation $= \left(\frac{\pm}{\overline{X}}\right) \times 100$

$= \frac{0.089}{1.8}$

$= 0.82$

Trend analysis
Schedule 2 (i)

Trend Values of total deposit of NIBL (Rs in million)

Year (t)	Total Deposit (Y)	x=t-2004	x^2	xy	y=a+bx
2003/04	7,922.77	-2	4	-15,845.54	7316.68
2004/05	11,524.68	-1	1	-11,524.68	11370.16
2005/06	14,254.58	0	0	0	15423.64
2006/07	18,927.31	1	1	18,927.31	19477.12
2007/08	24,488.86	2	4	48,977.72	23530.60

Total $\sum y = 77,118.20$ $Ex^2 = 10$ $\sum xy - 40534.81$

N = number of years
$\sum Y$ = Total Deposit

$a = \frac{\Sigma Y}{N}$ $b = \frac{\Sigma xy}{\Sigma x^2}$

$= \frac{77118.20}{5}$ $= \frac{40534.81}{10}$

=15423.64 =4053.481

Trend value of total deposit of NIBL (2008/09 to 2012/013)

Year (t)	x=t-2004	Trend value
2008/09	3	27584.08
2009/010	4	31637.56
2010/011	5	35691.04
2011/012	6	39744.53
2012/013	7	43798.01

The eq $^{n\,th}$ straight line trend is Yc=a+bx
Yc=15432.64+4053.481x

Schedule 2(ii)

Year (t)	Total deposit (y)	x=t-2004	x2	xy	y - a+bx
2003/04	21,007.38	-2	4	-42014.76	20361.678
2004/05	22,010.33	-1	1	22010.33	22617.938
2005/06	24,814.01	0	0	0	24874.197
2006/07	26,490.86	1	1	26,490.85	27130.458
2007/08	30,048.42	2	4	60096.84	19386.718

Total $\Sigma y = 12{,}4370.99$ $\Sigma x^2 = 10$ $\Sigma xy = 2256.26$

$a = \frac{\Sigma Y}{N}$ N = Number of Years $b = \frac{\Sigma xy}{\Sigma x^2}$

=24,874.198 =2256.26

Total Value of total deposit of EBL (2008/09 to 2012/013)

Year(t)	x=t-2004	Trend value (Y=a+bx)
2008/09	3	31642.978
2009/010	4	33899.238
2010/011	5	36155.498
2011/012	6	38411.758
2012/013	7	40668.018

The equation of straight line trend is Yc=a+bx

Yc=24,874.198+2256.26x

Trend Value of loan and advance of NIBL (2008/09 to 2012/013)

Year (t)	x=t-2004	tend value
2008/09	3	19792.414
2009/010	4	22745.834
2010/011	5	25699.254
2011/012	6	28652.674
2012/013	7	31606.094

The eqnth staright line trend is Yc=a+bx

Yc=1032.154+3953.42x

Schedule 3(i)

(a) Trend value of loan and advance of NIBL

Year (t)	**Total loan and Advancement (y)**	**x=t-2004**	**x2**	**xy**	**y=a+bx**
2003/04	5,921.79	-2	4	-11843.58	5o25.314
2004/05	7,338.57	-1	1	-7338.57	7978.734
2005/06	10,453.16	0	0	0	10932.154
2006/07	13,178.15	1	1	13,178.15	13885.574
2007/08	17,769.10	2	4	35538.2	16838.994

$\Sigma Y = 54660.77$ $\Sigma X2 = 10$ $\Sigma xy = 29534.2$

$a = \frac{\Sigma Y}{N}$ N=Number of years $b = \frac{\Sigma xy}{\Sigma x^2}$

$= \frac{54660.77}{5}$ $\Sigma Y =$ Total Deposit $= \frac{29534.2}{10}$

=10932.154 =2953.42

Schedule 3(ii)

Trend value of total loans advance of EBL

Year (t)	Total Loan and Advance (y)	x=t-2004	x2	xy	y=a+bx
2003/04	10,844.6	-2	4	-21689.22	10806.108
2004/05	12,919.63	-1	1	-12,919.63	12480.165
2005/06	12,451.17	0	0	0	14154.222
2006/07	15,761.98	1	1	15,761.98	15828.279
2007/08	17,79372	2	4	35587.44	17502.336

Total $\Sigma Y = 70771.11$ x=10

$\Sigma xy = 16740.57$

$a \frac{\Sigma Y}{N}$ N=Number of years $b \frac{\Sigma xy}{\Sigma x^2}$

$= \frac{70771.11}{5}$ $\Sigma Y =$ Total deposit $= \frac{16740.57}{10}$

=14154.222 =1674.057

Trend value of total loan and advance of EBL (2008/09 to 2012/013)

Year (t)	x=t-2004	Trend Value
2008/09	3	1917.393
2009/010	4	20850.45
2010/011	5	22524.507
2011/012	6	24198.564
2012/013	7	25872.621

The eq^{n}th straight line trend is Yc=a+bx

Yc=14154.222+1674.057x

Schedule 4(i)
Trend value of total Net Profit of NIBL

Year	Total Net Profit (y)	x=t-2004	x2	xy	y=a+bx
2003/04	116.82	-2	4	-233.64	77.312
2004/05	152.67	-1	1	-152.67	174.012
2005/06	312.15	0	0	0	270.714
2006/07	350.54	1	1	350.54	367.415
2007/08	501.39	2	4	1002/78	464.116

Total $\Sigma y = 1353.57$ $\Sigma x^2 = 10$ $\Sigma xy = 967.01$

$a = \frac{\Sigma Y}{N}$ N=Number of Years $b = \frac{\Sigma xy}{x^2}$

$= \frac{1353.57}{5}$ ΣY = Total Net Profit $= \frac{967.01}{10}$

=270.714 =96.701

Trend Value of total Net profit of NIBL (2008/09 to 2012/013)

Year (t)	x=t-2004	Trend Value (Y=a+bx)
2008/09	3	560.817
2009/010	4	657.518
2010/011	5	754.219
2011/012	6	850.92
2012/013	7	947.621

The equation straight line trend is Yc=a+bx

Yc=270.714+96.701x

Schedule 4(ii)

Trend Value of Total Net Profit of EBL

Year (t)	Total Net Profit (y)	x=t-2004	x2	xy	y=a+bx
2003/04	212.13	-2	4	-424.26	195.79
2004/05	263.05	-1	1	-263.05	271.169
2005/06	308.28	0	0	0	346.548
2006/07	457.46	1	1	457.46	421.927
2007/08	491.82	2	4	983.64	927.306

Total $\Sigma Y = 1732.74$ $\Sigma x^2 = 10$ $\Sigma xy = 753.79$

$a = \Sigma Y / N$ N=Number of Years b= $\Sigma xy / \Sigma x^2$

$= \frac{1732.74}{5}$ ΣY = Total Net Profit $= \frac{753.79}{10}$

=346.548 =75.379

Trend value of total Net Profit of EBL (2008/09 to 2012/013)

Year (t)	x=t-2004	Trend value
2008/09	3	572.685
2009/010	4	648.064
2010/011	5	723.443
2011/012	6	798.822
2012/013	7	874.201

The eqn straight line trend is
Yc=a+bx
=346.548+75.379x

Schedule 5(i)

Trend Analysis of Total Investment of NIBL

Year (t)	**Investment (y)**	**x=t-2004**	**x2**	**xy**	**Yc=a+bx**
2003/04	1970.27	-2	4	-39340.54	2140.267
2004/05	3862.48	-1	1	-3862.48	3293.977
2005/06	3934.19	0	0	0	4447.692
2006/07	5602.87	1	1	5602.87	5601.407
2007/08	6868.65	2	4	13737.3	6755.122
Total	22238.46		$\Sigma x^2 = 10$	$\Sigma xy = 11537.15$	

N=5

$a \frac{\Sigma y}{N} = \frac{22238.46}{5}$ =4447.692

$b \frac{\Sigma xy}{\Sigma x^2} = \frac{11537.15}{10}$ =113.715

Trend Values of Investment of NIBL (2008/09 to 2012/013)

(Rs. In Million)

Year (t)	**x=t-2004**	**Yc=a+bx**
2008/09	3	7908.837
2009/010	4	9062.552
2010/011	5	10216.267
2011/012	6	11369.982
2012/013	7	12523.697

The eq^{n}th straight linr trend is Yc=a+bx

Yc=4447.692+1153.715×x

Schedule 5 (ii)

Trend Analysis of Total Investment of EBL

Year (t)	**Investment (y)**	**x=t-2004**	**x^2**	**xy**	**Yc=a+bx**
2003/04	10175.44	-2	4	-20350.88	10927.548
2004/05	1212.03	-1	1	-12121.03	11133.856
2005/06	11692.34	0	0	0	11340.164
2006/07	10889.03	1	1	10889.03	11546.472
2007/08	11822.98	2	4	23645.96	11752.78
Total	$\Sigma Y = 56700.82$		$\Sigma x^2 = 10$	∑xy=2063.08	

N=5

$a = \frac{\Sigma y}{n} = \frac{56700.82}{5} = 1340.164$

$b = \frac{\Sigma xy}{\Sigma x^2} = \frac{2063.08}{10} = 206.308$

Trend values of Investment of EBL (2008/09 to 2012/013)

(Rs. In Million)

Year (t)	**x=t-2004**	**Yc=a+bx**
2008/09	3	11959.088
2009/010	4	12165.396
2010/011	5	12371.701
2011/012	6	12578.012
2012/013	7	12784.32

The eq^n th straight line is Yc=a+bx

yc=11240.164+206.308x

Schedule 6(i)

Coeffcient of Correlation between Total Deposit and Total Loan and Advances of NIBL

Year	Deposits (x)	Loan Advances (y)	X=x-x	Y=y-y	XY	X^2	Y^2
2003/04	7922.75	5921.79	-7500.884	5010.364	37582159.16	56263260.78	25103747.41
2004/05	11524.67	7338.57	-3898.964	-3893.584	14011254.65	15201920.27	12913845.97
2005/06	14254.58	10453.16	-1169.054	-478.994	559969.85	1366687.20	229435.25
2006/07	18927.31	13178.15	3503.676	2245.996	7869242.28	12275745.51	5044498.03
2007/08	24488.86	17769.10	9065.226	6836.945	61978460.64	82178322.43	46743830.61
Total	77118.17	54660.77			122001086.6	167285936.2	90035357.27

P.E.r= $0.6745 \times \frac{1-r^2}{\sqrt{N}}$ $x = \frac{\Sigma x}{N} = \frac{77118.17}{5} = 15423.634$

$= 0.6745 \times \frac{1-0.9882}{\sqrt{5}} = 0.00356$

$Y = \frac{\Sigma y}{N} = \frac{54660.77}{5} = 10932.154$ 6.PER=6×0.00356=0.0213

Coefficient of Correlation: (r) $\frac{\Sigma xy}{\sqrt{\Sigma x2 \times \Sigma y2 =}} \frac{122001086.6}{\sqrt{167285936.2 \times 90035357.27}}$

=0.9941 r^2=0.982

Schedule 6(ii)

Coefficient of Correlation between Total Deposits and Total Loan and Advances of EBL

Year	Deposits (x)	Loan advances (y)	X=x-x	Y=y-y	-XY	X^2	Y^2
2003/04	21007.37	10844.61	-3866.828	-3309.612	12977700.35	14952358.78	10953531.59
2004/05	22010.34	12919.63	-2863.858	-1234.592	3535676.176	8201682.644	1524217.406
2005/06	24814.01	13451.17	-60.188	-703.052	42315.294	3622.575	494282.115
2006/07	26490.85	15761.98	1616.652	1607.758	2599185.186	2613563.689	2584885.787
2007/08	30048.42	17793.72	5174.222	3639.498	18831570.62	26772573.31	13245945.69
Total	124370.99	70771.11			37806467.63	52543801.02	28802862.59

P.E.r $= 0.6745 \times \frac{1-r^2}{\sqrt{N}}$ x= $\frac{\Sigma x}{n} = \frac{124370.99}{5} = 24874.198$

$=0.6745 \times \frac{1-0.9444}{\sqrt{5}} = 0.01678$

$y = \frac{\Sigma y}{N} = \frac{70771.11}{5} = 14154.222$ 6.PER= 6×0.01678=0.1006

Coefficient of Correlation : (r) = $\frac{\Sigma xy}{\sqrt{\Sigma x2 \times \Sigma y2 =}}$ $\frac{37806467.63}{\sqrt{52543801.02 \times 28802862.59}}$

$=0.9718$ $r^2=0.9444$

Schedule 7(ii)

Coefficient of Correlation between Total Deposits and Total Investment in EBL

Year	**Deposits (x)**	**Investment (y)**	**X-x-x**	**Y=y-y**	**XY**	**X^2**	**Y^2**
2003/04	21007.37	10175.43	-3866.828	-598.9428	2316021.163	14952358.78	358736.31
2004/05	22010.34	9292.10	-2863.858	-1482.27	4345027.981	82016.64	2197142.14
2005/06	24814.01	11692.34	-60.188	917.964	3622.595	3622.59	842657.90
2006/07	26490.85	10889.03	1616.652	114.65.4	2613563.69	2613563.69	13145.54
2007/08	30048.42	11822.98	5174.222	1048.604	5425709.89	26772573.31	1099570.35
Total	124370.99	53871.88			14603985.32	52543801.01	4511252.24

P.E.r= $0.6745\times\underline{1\text{-}4^2}\ \text{-}\sqrt{N}$ $x=\frac{\Sigma x}{N}=\frac{124370.99}{5}=24874.198$

$=06745\times\frac{1-0.8997}{Y=\Sigma y}=0.0303$ $=\frac{53871.88}{6\times0.0303}=270.71$ 6.PER=

$\sqrt{56\times0.0303=.0581}$ N5

Coefficient of Correlation: 9r) $=\frac{\Sigma xy}{\sqrt{\Sigma x2\times\Sigma y2=}\frac{14603945.32}{\sqrt{52543801.01\times4511252.24}}}$

=0.9485 r^2=0.9679

Schedule 7(i)

Coefficient of Correlation between Total Deposits and Total Investment in NIBL

Year	Deposits (x)	Investment (y)	X=x-x	Y=y-y	-XY	X^0	Y^2
2003/04	9722.75	1705.24	-7500.884	-2616.85	19628688.3	56263260.78	6847903.92
2004/05	11524.67	3862.48	-3898.964	-459.61	1792002.84	15201920.27	211241.35
2005/06	14254.58	3934.19	-1169.054	-387.9	453476.05	1366687.25	1504666.41
2006/07	18927.31	5602.868	3503.676	1280.778	4487431.14	12275745.51	1640392.24
2007/08	24488.36	6505.67	9065.226	2183.58	19794646.19	82178322.43	4768021.62
Total	77118.17	21610.45			64156244.52	167285936.2	13618025.58

P.E.r= $0.6745\times\frac{1-r^2}{\sqrt{N}}$ $x=\frac{\Sigma x}{n}=\frac{77118.17}{5}=15423.634$ $=0.6745\times\frac{1-0.935083}{\sqrt{5}}=0.0196$

$Y=\frac{\Sigma Y}{N}=\frac{21610.45}{5}=4322.09$ 6.PER= 6×0.0196=0.1176

Coefficient of Correlation : (r) = $\frac{\Sigma xy}{\sqrt{\Sigma x^2\times\Sigma y2=}}$ $\frac{4615624452}{\sqrt{167285936.2\times13618025.58}}$

= 0.967 r^2=0.935089

Schedule 8(i)

Coefficient of Correlation between total outside Assets and Net profit of NIBL

Year	**Outside Assets (x)**	**Net Profit (y)**	**X=x-x**	**-Y=y-y**	**-XY**	**X^2**	**Y^2**
2003/04	9627.99	116.82	-10117.734	-153.89	1557018.085	102368541.3	23682.13
2004/05	15387.15	152.67	-4358.574	-118.04	514486.075	18997167.31	13977.44
2005/06	18188.77	232.14	-1556.954	-38.57	60051.716	2424105.76	1487.64
2006/07	24530.188	350.53	-4784.456	-79.82	381895.278	22891019.22	6371.23
2007/08	30994.53	501.39	11248.806	230.68	2594874.568	126535636.4	5321326
Total	98728.62	1353.55			5108325.722	273216470	98687.7

P.E.r= $0.6745\times -\sqrt{N}$

x= $\frac{\Sigma x}{N} = \frac{98728.62 = 19745.724}{5}$ $=0.6745\times \underline{1-0.9679} = 0.0097 \ \sqrt{5}$

7= $\Sigma y = 1353.55 = 270.71 = 0.0097 (6PER = 6\times 0.0097 = .0581)$

N 5

Coefficient of Correlation: (r) = $\frac{\Sigma xy}{\sqrt{\Sigma x2 \times \Sigma y2}}$ $= \frac{5108325.722}{\sqrt{273216470 \times 98687.7}}$

=0.9838 r^2=09679

Schedule 8(ii)

Coefficient of Correlation between total Assets and Net Profit of EBL

Year	Outside Assets (X)	Net profit (y)	X=x-x	Y=y-y	XY	X2	Y2
2003/04	31182.8	212.12	-4465.774	-134.426	600316.136	19943137.42	18070.35
2004/05	31302.44	263.05	-4346.134	83.496	362884.804	18888880.75	6971.58
2005/06	36506.35	308.28	857.776	-38.266	32823.656	735779.67	1464.29
2006/07	37379.88	457.46	1731.306	110.914	192026.074	3997420.466	12301.91
2007/08	41871.4	491.82	622.826	145.274	904014.834	38723563.43	21104.53
Total	178242.87	173273			2092065.494	81288781.74	59912.66

P.E.r $= 0.6745 \times \frac{1-r^2}{\sqrt{N}}$ x$= \frac{\Sigma x}{n} = \frac{178242.87}{5} = 35648.574$

$= 0.6745 \times \frac{1-0.8987}{\sqrt{5}} = 0.0305$

$y = \frac{\Sigma y}{N} = \frac{1732.73}{5} = 346.546$ 6.PER= 6×0.0305=0.183

Coefficient of Correlation : (r) $= \frac{\Sigma xy}{\sqrt{\Sigma x2 \times \Sigma y2 =}}$ $\frac{2092065.494}{\sqrt{81288781.74 \times 599912.66}}$

=0.9480 r^2=0.8987