

CHAPER -I

INTRODUCTION

1.1 Background of the Study

Nepal is one of the least developed countries characterized by high population growth rate, low per capita income, and low rate of capital formation having unlimited resources. Therefore, Nepal like other developing countries has been facing the problem of accelerating the pace of economic development and Nepal is not the exception.

A sound banking system is a precondition for healthy economy and economic policy formulation. An efficient banking system becomes a top priority as country moves toward free market economy which allows private sectors saving to be retained in the country for the promotion of investment needed for the growth.

Capital formation and its proper utilization are two important aspect of economic development of a country. Private investment can be the significant contributor to economic growth and employment generation in the developing country. “Economic development demands transformation of saving into actual investment. And it is the financial institutions that transfer funds from surplus spending units to deficit units” (NRB, 1996:4). Economic development is supported by financial infrastructure of the country.

Banks are the principal source of credit for millions of individuals and families and for units of government. Moreover, for small local businesses ranging from grocery stores to automobile dealers, banks are often the major source of credit to stock the shelves with merchandise. Banks grant more installment loans to consumer than any other financial institutions.

In most years, banks are the leading buyers of bonds and notes issued by government to finance public facilities, ranging from hospital and football stadium to airport and highways. Moreover, bank reserves the principal channel for government economic

policy to stabilize the economy. And banks are also the most important sources of short-term working capital needed for the businesses. They have become increasingly active in recent years in making long-term business loans for new plant and equipment. When businesses and consumers must make payments for the purchase of goods and services, more often they use bank provided cheques, credit or debit cards, or electronic accounts connected to a computer network. It is the banker to whom they turn most frequently for advice and counsel when they need financial information and financial planning.

An investment in any funds is made to have some positive rate of return. Nobody is ready to bear risk without any return but to have returned one must ready to face some risk. To minimize the risk at the given rate of return the concept of portfolio diversification is necessary. Portfolio is simply a collection of securities gathered to achieve certain investment goals. “Investment positions are undertaken with the goal of earning some expected return. Investors seek to minimize inefficient deviations from this expected rate of return. Diversification is essential to the creation of an efficient investment because it can reduce the variability of returns around the expected return” (Francis, 2003:228).

The growth of any commercial bank depends upon its financing and investment policy. A sound financing and investment policy attracts both borrowers and lenders, which helps to increase the volume and quality deposits and investment. Both the depositors and creditors are customers of the banks. Banks offer various products for deposit mobilization and disburse the credit products as per the portfolio management. Customers as per their need purchase different types of products offered in the market. Deposit products offered to the customers are categorized into general products and special products. Mobilization of deposit simply by increasing the rate of interest is termed as general products and special products are developed in terms of schemes generally refundable at longer period of time. Customers choose the respective better general products and special products from among the products available in the market. Special products focus on some specific value and needs of the customers. Under this comes the

education scheme for the children, daughter's marriage scheme and retirement pension scheme, among others.

A systematic investment process should be followed to win the stock market. Investment process describes how an investor should go about making decisions with regard to what marketable to invest in, how extensive the investment should be and when the investment should be made. A five step procedure for making these decisions forms the basis of the investment process (Baily, 1995:9).

Loans are an essential aspect of commercial banking functions. "First income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in the community strengthens the community-bank relationship. Third, lending money spurs business development and supports a growing economy (Edmister, 1980:82)." Credit being the most important function of commercial banks, affects overall development of the country. So far as pace of economic development is considered, it is directly related to the quality and quantity of credit, which is derived from various financial institutions especially commercial banks of Nepal.

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

1.2 Focus of the Study

In any firm, Portfolio Management is taken as major financial decision, which affects the value of firm. The performance of any business organization largely depends upon its investment policy. Furthermore, investors invest their money analyzing the investment policy of a business organization. Therefore, investment policy is regarded as an important decision with respect to management and investors.

A bank always puts in effort to maximize its profitability. To maximize profit income should be reasonably excess over expenses. The major source of income of a bank is interest income from loans, investments and fee based income. Always bank should apply better portfolio for reduce risk. Portfolio means diverse in investment, loan and advance and landings. Considering the importance of lending to the individual banks and also to the society it serves, it is imperative that the bank meticulously plans its credit operations. Sound credit policy has the following objectives:

To have performing assets.

To give guidance to lending officials.

To establish a standard for control.

To contribute to economic development.

Considering these facts, this study mainly focuses on the Portfolio Management practices of Nepal Industrial and Commercial Bank Ltd and Everest Bank Ltd.

1.3 Statement of the Problem

Portfolio Management is a relatively new concept in Nepalese content. Many companies still have no awareness towards it. The study proposes to the investors' awareness about the portfolio management of the financial institutions while investing.

Investors can be classified into three categories on the basis of risk and return. First type of investors is risk seeker who becomes ready to face high risk in the hope of high return. The second type of investors is risk averters who try to avoid risk and ready to be satisfied in the low return. The third type of investors comes along in between these two investors called risk neutral. These investors are ready to bear medium sized risk and have medium sized return.

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

Thus, in this scenario of Nepalese Commercial banking sector, this study mainly seeks the answers of the following specific problems related to Portfolio Management practices of NIC and Everest Bank Ltd.

1. What is the proportion of profit on total asset, deposit, total loans and advances of the bank?
2. What is the portfolio behavior of the bank?
3. Are the banks' funds mobilization and Portfolio Management effective and efficient?
4. Is there any stability in fund mobilization policy or not?
5. What is the relationship of investment and loans and advances with total deposit and net profit?

1.4 Objective of the Study

The main objective of the study is to compare the Portfolio Management practices of Industrial and Commercial Bank Ltd and Everest Bank Ltd. However the specific objectives are:

-) To compare the liquidity management, asset management efficiency, profitability position, risk position, investment practices of aforesaid Banks.
-) To find out the relationship between deposit and total investment, deposit and loans and advances and net profit.
-) To analyze the risk return ratios of investment the banks.
-) To evaluate the portfolio management of the banks.
-) To provide suggestion through finding.

1.5 Significance of the Study

Commercial banks in the developing countries like Nepal have the greatest responsibility towards the economic development of the country. In modern times, since credit or bank money constitutes bulk is of the economy's aggregate money supply, it mostly changes the volume of bank money or credit rather than changes in the total supply of the high-powered money issued by the reserves held by the bank against their deposit liabilities that account for changes in the aggregated money supply. The main goal of the bank as a

commercial organization is to maximize the surplus by the efficient use of its funds and resources. In spite of being a commercial institution, it too have a responsibility (obligation) to provide social service oriented contribution for the social economic upliftment to the country by providing specially considered loans and advances towards less privileged sectors.

Hence, the study is needed to examine the overall performance of NIC and EBL especially in collection of deposits and its utilization. The study will have to know the overall performance of NIC and EBL. So, it will be useful for the different stakeholders.

1.6 Limitations of the Study]

This study is about the financial analysis of NIC and EBL. Every research has its own limitation, which are as follows:

1. The study is mainly based on secondary data collected from the banks. Research based on secondary data may be far from accuracy due to inherent character.
2. Whole study is based on the data of five years period i.e. from fiscal year 2003/04 to 2007/08 and hence the conclusion drawn confines only to the above period.
3. Only two banks are taken for the study i.e. NIC and EBL. There are many factors that affect portfolio management but only limited ratios are analyzed.

1.7. Organization of the Study

This study is about the portfolio management of NIC and EBL. This study has been divided into five chapters. They are as follows:

Chapter-I: Introduction

This chapter describes the basic concept and background of the study. focus of the study, problems of the study, objectives of the study and need or significance of the study and limitation of the study. It is oriented for readers for reporting giving them the perspective they need to understand the detailed information about coming chapter.

Chapter-II: Review of Literature

The second chapter of the study assures readers that they are familiar with important research that has been carried out in similar areas. It also establishes that the study as a link in a chain of research that is developing and emerging knowledge about concerned field.

Chapter-III: Research Methodology

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. It describes about the various source of data related with study and various tools and techniques employed for presenting the data.

Chapter-IV: Presentation and Analysis of data

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

Chapter-V: Summary, Conclusion and Recommendation

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

The list of bibliography and appendixes are given at the last for references.

CHAPTER – II

REVIEW OF LITERATURE

This chapter is mainly concerned with the competent exploration of the background to the work and a comprehensive review of recent and relevant literature. In this regard, an effort has been made to grasp the knowledge and information that is available from libraries, document collection centers, other information managing bureaus and concerned commercial banks. This chapter helps to take adequate feedback to broaden the information base and inputs to the study. The conceptual framework given by different researchers, authors, practioners, scholars etc is reviewed from research papers, books, annual reports, articles.

2.1 Conceptual Review

A commercial bank is a business organization that receives and holds deposits of funds from others, provides loans or extends credits and transfers funds by written order of deposits. Commercial Bank Act of Nepal (1974) has defined that “A commercial bank is such, which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture and industries or for such specific purpose.”

American Institute of Banking (1972) has defined Commercial bank as a corporation, which accepts demand deposits subject to check and makes short-term loans to business enterprise, regardless of the scope of its other services”. This act has laid emphasis on the functions of commercial bank while defining it. Commercial banks provide short – term debts necessary for trade and commerce. They take deposits from the public, and grant loans in different forms. They purchase discount bills and promissory notes and exchange foreign currencies. They discharge various functions on behalf of their customers and are paid for their services.

Commercial banks, as financial institutions, perform a number of internal functions. Among them, providing credit is considered as most the important one. According to of H.D. Crosse (1963), “Commercial banks are very risky one. For this, commercial banks have to pay due consideration while formulating investment policy regarding loan investment. Investment policy is one facet of the overall spectrum of policies that guide banks investment operations.”

“A bank’s marketing starts with proper relationship with customers either to attract savings or for the loan disbursement. Both the depositors and creditors are customers of the bank. Banks offer various products for deposit mobilization and disburse the credit products as per the portfolio management. Customers as per their need, purchase different types of product offered in the market. Deposit products offered to the customers are categorized into general products and special products. And credit products can be bifurcated into fund based products and non-fund based products” (NRB, 2007:1). The fund based products in practice are developed from the credit products generally known as overdraft, working capital loan, Term loan, bills purchase or negotiation, export and import bills, import/trust receipt loan, export credit, loan against fixed deposit receipt, loan against shares, loan against securities, and loan against bank guarantee and deprived sector loan. The term loan used in practice generally addresses short term loan medium term loan and long term loan to be advanced in various forms such as housing loan, hire purchase loan and bridge financing. The non-fund based product is composed of letter of credit (LC) and bank guarantees in different forms (bid bonds, performance bonds, etc.)

“Among the different banking products available in the market, the product with high demand are consumer credit, export and import credit, term loan, Project loan and syndicate loan. All banks and financial institution on the basis of their capital base and liquidity position offer these credit products but none of them so far have been found to have an expertise in any one of them for marketing. Relying on any one product by portfolio seems more risky. Banks in foreign

countries are known to bring out numerous products. As an example, the bank of America has the vast range of banking business, serving individuals and small firms and a big share of the loan syndicate market” (Economist, 2006:10). It means markets are there for some products and it is created for others. Banks in Nepal are weak in locating the existing market and creating new markets too.

“Loan disbursement is a trade of win-win game lenders and borrowers both get benefited out of it. Customers, who are the ultimate source of income not products. For the analysis of customers several questions need to be answered. These includes questions such as buys the product and how they use it, where do customers buy the product, when do customers buy, how do customers choose, why they prefer that product, how they respond, and will they buy it again. All these data available in the respective files of the customer make the marketing activities quite easier and effective” (NRB, 2007:3)

Market makers play an important role in the contract between the borrowers and the bank. In principle, it is the duty of the consultant to sell the project on behalf of the borrower to the bank. The rejection of the project can raise a question about the knowledge and quality of the consultant. But in Nepal, after the preparation of the project, the duty of the consultant gets over. And it is the borrower who exercises his personal contact to get the project approved.

Each bank follows some process and system for loan approval and for accepting the deposits. At first, the banks demand a detailed proposal of a project along with an application for loan. The respective loan officer accesses the proposal submitted to the bank and recommends for approval if the proposal is found viable. Normally, only feasible projects are accepted. The preparation of project proposal is a professional job assigned to any consulting firm or organization. The company that needs credit lacks that type of expertise with in the organization. To get the bank credit properly and effectively, there is a network of the parties' involved in the borrowing. These parties are: a) Borrower, b) Consulting firm for the project preparation, c) Bank and d) Consulting firm for collateral valuation.

2.1.1 Concept of Portfolio

A Portfolio is the holding of a collection of investment. For some individuals and institutions, it is the entire holdings consisting of both assets and liabilities. An investment held as part of a portfolio is less risky than the same investment held individually. Therefore, every individuals and institutions should manage the portfolio by which the individuals and institutions get maximum return. The concept of portfolio comes from "*not putting all the eggs in one basket*".

2.1.2 Concept of Portfolio Management

The management of portfolio is called the portfolio management. Portfolio theory evaluates the reduction of non-systematic or diversifiable risks through the selection of securities or other instruments in to a composite holding or efficient portfolio. This efficiency means that a portfolio would offer lower risks or more stable returns for a targeted return level. Instruments that have independent returns lower non-systematic risks. In addition, instruments that are inversely related on a return basis reduce the diversifiable risks.

2.1.3 Assumptions of Portfolio Management

The basic theory assumes that returns are independent, investors expectations are homogeneous and that the normalized probability distributions are stable.

2.1.4 Objective of Portfolio Management

The portfolio manager's task is to select the investment weights that will result in dominant investments. Here after, dominant assets will be called "efficient portfolios" whether they content one or many assets. An efficient portfolio than is any assets or combination of assets that has (1) the minimum expected return in its risk class or conversely,(2) the minimum risk at its level of expected return.

Investment positions are undertaken with the goal of earning some expected rate of return. Investors seek to minimize inefficient deviations from this expected

rate of return. Diversification is essential to the creation of an efficient investment because it can reduce the variability of returns around the expected return.

A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy can attract both borrowers and lenders which help to increase volume and quality of deposits, loans and investments. The loan provided by commercial bank is guided by fundamental principles such as length of time, their purpose, profitability, safety and so on. These fundamental principles are fully considered while making investment policy. Emphasizing upon this H. D. Crosse stated, "The investment policy should be carefully analyzed." Commercial bank should ensure minimum risk and maximum profit from lending.

"Commercial bank should consider the national interest followed by borrower's interest and the interest of the bank itself, before investing to the borrowers." To further peruse his views bank lending must be for such purpose of the borrowers that are in keeping with the national policy and bank's overall investment policy" (Clemens, 1994:29).

Optimal investment decision plays a vital role in each and every organization. But especially for the commercial banks and other financial institutions the sound knowledge of investment is the most because the subject is relevant for all surrounding that mobilize funds in view of return. As it is concerned to the commercial banks and other financial institutions, they must mobilize (i.e. investment on different sectors) their collections (deposits) and other funds towards the profitable, secured and marketable sectors so that they will be in profit. For this purpose the banks and financial institutions should gather the sufficient information about the firm (client) to which supposed to be invested. The information include as financial background, nature of business as well as its ability to repay the loan back. These all information should be gathered from the viewpoint of security.

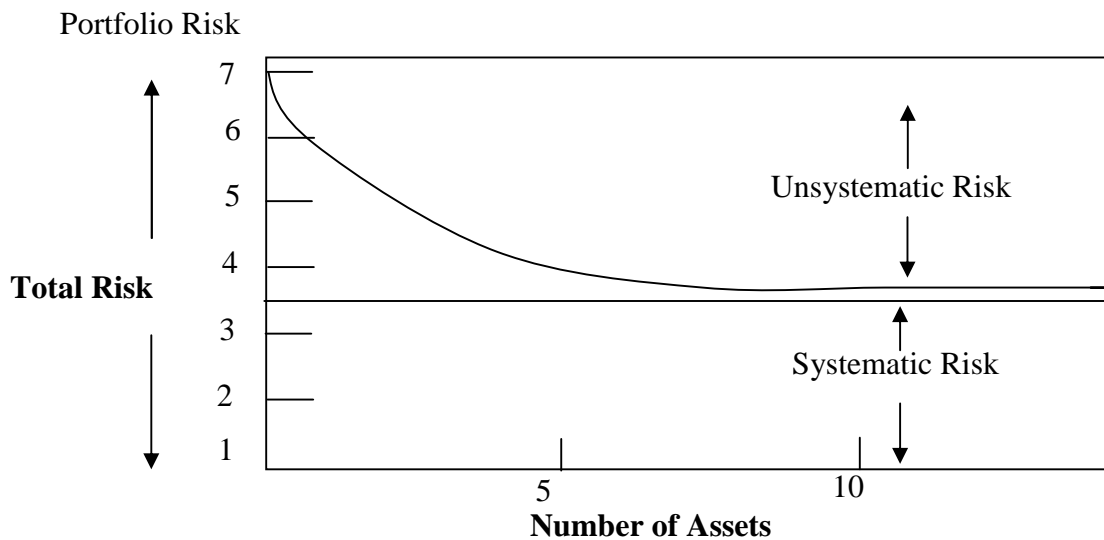
2.1.5 Portfolio Diversification

Portfolio diversification helps to minimize risk and different diversification techniques have been developed for reduction portfolio risk.

Simple diversification

Simple diversification is defined as not putting all the eggs in one basket. Under this diversification securities are selected and are provided equal weight. The portfolio of randomly selected securities can reduce risk. Further, it is not necessary to include too many securities in the portfolio. A portfolio consisting of 10 to 15 randomly selected securities can eliminate almost all-diversifiable risk. The following figure clarifies more about it.

Fig. 2.1 Risk reduction through simple diversification



The x-axis and y-axis in the figure 1.2 represents the number of securities in the portfolio and standard deviation of the portfolio respectively. From the figure, we can see that randomly combining 10 to 15 stocks reduce a portfolio's undiversifiable risk. Further, spreading portfolio's assets randomly cannot be expected to reduce risk any further.

Diversification across Industries

Some investment counselors advocate selecting securities from different industries to achieve better diversification. It is certainly better to follow this advice than to select all securities in a portfolio from one industry. But empirical research has shown that diversifying across industries is not much better than simply selecting securities randomly.

Superfluous Diversification

If 10 to 15 different assets are selected for a portfolio the maximum risk reduction benefit from simple diversification have most likely been attained further spreading of the portfolio's assets is superfluous diversification and should be avoided. Because it will usually result in the following portfolio management problems like high research cost, high transaction cost, impossibility of good portfolio management etc. The performance of portfolio will not improve and will lower the net return to the investor.

Simple Diversification across Quality Rating Categories

Simple diversification reduces risk within categories of stocks that all have the same quality rating. It suggests that portfolio managers can reduce portfolio risk to levels lower than those attainable with simple diversification by not diversifying across lower-quality assets.

Markowitz Diversification

"Markowitz diversification is named after Harry Markowitz who first explored it. Markowitz diversification may be defined as combining assets which are less than perfectly positive correlated in order to reduce portfolio risk without sacrificing portfolio return. It is more analytical than simple diversification and considers assets correlation or covariance in portfolio formation. It shows that lower the correlation between assets, the more that the diversification will be able to reduce the portfolio's risk. The essence of Markowitz diversification is that there should be combined assets having less than perfectly positively correlated securities" (Bhattacharai, 2005:115).

2.1.6 Capital market theory

Capital market theory provides the framework for determining the pricing of the all assets. Capital market theory deals with an equilibrium model of assets prices. Specially, capital market theory postulates the ex.-ante risk-return relationship in individual assets as well as portfolios under equilibrium conditions.

2.1.7 Capital assets pricing model (CAPM)

"Harry M. Markowitz laid down the foundation of modern portfolio theory in 1952; The CAPM was developed 12 years later by William Sharpe, John Lintner and Treynor.

Capital assets are the long term financial as well as real assets and CAPM is based on the pricing of these assets. Modern portfolio theory of Markowitz suggests that the investment decision should be based on the total risk and the price of assets should also be determined on the basis of the total risk. But the CAPM suggests that, any investor can create a portfolio of assets that will eliminate virtually all diversifiable risk, the only relevant risk is non-diversifiable risk, and therefore, the investment decision and the pricing of capital assets should be based on the undiversifiable risk. This is the primary importance of selecting that the price of capital assets should be determined in a way that compensates the systematic risk" (Bhattra, 2005:146). These assumptions are as follows.

- All investors have the same one period investment horizon
- No taxes and no transaction costs for buying and selling securities exits
- No inflation and no change in the level of interest rates exits
- The capital markets are in equilibrium
- All investments are infinitely divisible, fractional shares may be purchased in any portfolio or any individual asset
- All investor are Markowitz efficient diversifiers who delineate and seek to attain the efficient frontier
- An infinite amount of money can be borrowed or lent at the risk-free interest rate

The CAPM reduces the situations to an extreme case. Everyone has the same information and agrees about the future prospects for securities. This means that investors analyze and process information in the same way. There are perfect markets for securities because potential impediments such as finite divisibility, taxes, transaction costs and different risk free borrowing and lending rates have been assumed away. This approach allows the focus to shift from how an individual should invest to, what would happen to security prices if everyone invested in similar manner. By examining the collective behaviors in the market place, the nature of the resulting equilibrium relationship between each securities risk and return can be developed. The following features of CAPM are described as follows.

2.1.8 Capital market line

The CAPM assumes that investor can lend or borrow at the same risk-free rate of interest. In reality, such borrowing is likely to be either unavailable or restricted in amount. If there are no opportunities to borrow or lend at the risk free rate, the efficient set would be curve and many combinations of risky securities would be efficient. All the investors face the same efficient set. The different investor will choose different portfolios from the same efficient set because they have different preference toward risk and return. This means that each investor will spread his or her funds among risky securities in the same relative proportions in order to achieve a personally preferred overall combination of risk and return. This feature of CAPM is often referred to as the separation theorem.

Separation theorem

The optimal combination of risky assets for an investor can be determined without any knowledge of the investor's preferences towards risk and return. In other words, the optimal combination of risky assets can be determined without any knowledge of the shape of an investor indifference curves.

Market portfolio

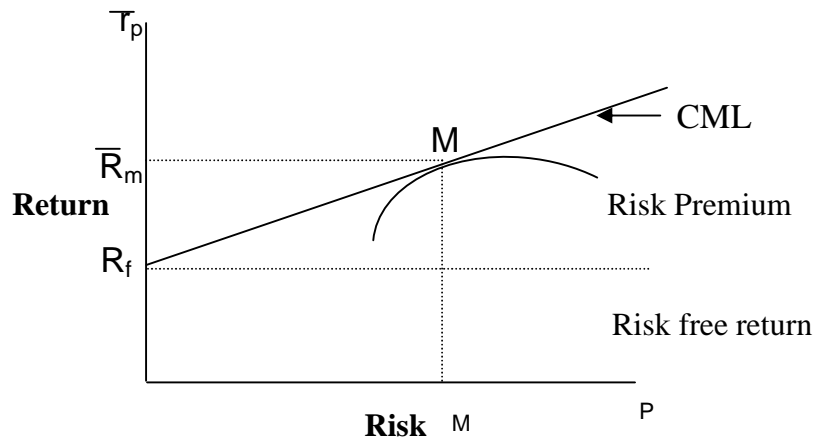
The market portfolio is a portfolio consisting of all the securities where the proportion invested in each security corresponds to its relative market value. The relative market value of a security is simply equal to the aggregate market value of the security divided by the sum of the aggregate market values of all securities.

- It plays a central role in the CAPM because the efficient set consists of an investment in the market portfolio, coupled with a desired amount of either risk free borrowing or lending.

Efficiency set

In the CML it is simple to determine the relationship between risk and expected return for efficient portfolio. The fig. 1.3 clarifies more about it.

Figure-2.2 Capital Market Line (CML)



Point M represents the market portfolio and R_f represents the risk free rate of return. Efficient portfolio plots along the line starting at R_f and going through M and consist of alternative combinations of risk and return. The linear efficient set of CAPM is known as capital market line (CML). All portfolios other than those using the market portfolio and risk free borrowing or lending lie between the CML. It has an intercept of R_f and a slope $[E(R_m)-R_f]/\sigma_m$. Therefore, the equation for the capital market line may be expressed as follows.

Symbolically,

$$E(R_p) = R_f + \frac{R_m - R_f}{\sigma_m} \sigma_p$$

Where,

R_f = Risk free asset.

R_m = Expected return on market portfolio

σ_m = Standard deviation on market portfolio

σ_p = Portfolio risk on efficient

For a portfolio on the CML, the expected return is equal to the risk free rate plus a return proportional to the total risk of the portfolio. The slope of the CML is the same for all portfolios on the CML and is the market price of risk.

$$\text{Slope of CML} = \frac{E(R_m) - R_f}{\sigma_m}$$

Since each of the portfolios on the CML is perfectly diversified, these portfolios have an expected return about the risk free rate proportional to their own total risk.

2.1.9 Security Market Line (SML)

The capital market line (CML) is the relationship between total risk of portfolio, σ_p and expected portfolio return, $E(R_p)$ which consists of the risk free asset and the market portfolio. However, the total risk of an individual asset should not be used to measure its riskiness. Because some of the risk as reflected in total risk can be eliminated by diversification. Therefore, since its beta reflected risk after taking diversification benefits into account, beta rather than σ_i is used to measure individual assets' riskiness to investors. The relationship between individual assets riskiness and their required return is set forth in the security market line (SML). The line is drawn in expected return and beta space. It is linear and positively sloped. Irrespective of whether investors can borrow or lend at a risk free rate, all individuals' securities and portfolios are positioned on the security market line. The relationship between an assets return and its systematic risk can be expressed by SML. The equation for the SML is,

Symbolically,

$$E(R_j) = R_f + [E(R_m) - R_f] S_j$$

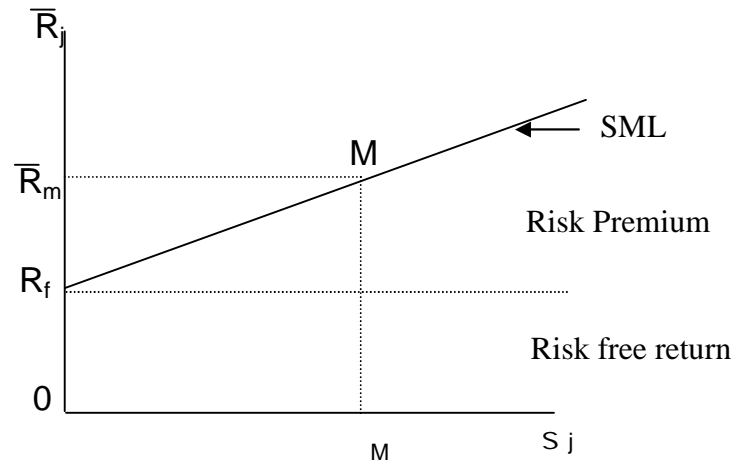
Where,

$E(R_j)$ is the expected return for an assets,

R_f is the risk-free rate (usually assumed to be a short term T-bill rate) equals the expected market return (usually based on NEPSE index) and

S_j denotes the asset's beta. It is a measure of sensitivity of a stock's return to changes in the average market returns.

Fig. 2.3 Security Market Line



Here, SML starts from risk free asset (R_f) and moved ahead linearly with beta (S_j), if the securities beta is greater than 1. Then, it implies that the securities returns fluctuate more than the market returns. If beta is less than 1, the securities returns are less sensitive to the change in the market. The CAPM theory indicates that how much required rate of return of individual securities for bearing the systematic risk.

2.1.10 Empirical test of the CAPM

CAMP was developed on the basis of a set of assumption. If those assumptions were all true, then CAPM would have to be true. However, all the assumptions are not completely correct. The basic SMC equation, $k_i = (K_m - f)$ be might or might not represent an accurate description of how investors behave and how rates are established in the market place.

If many investors are not fully diversified, hence they have not eliminated all diversifiable risk from their portfolio. Then beta would not be accurate measures of risk and the SML would not fully explain how required return is set. If the interest rate that investors must pay borrow money is greater than risk free rate, then the CML would not continue in a straight line. For all the reasons, it is entirely possible that the CAPM is not completely valid. Therefore CAPM must be tested empirically and validated before it can be used with real confidence.

➤ Test of the stability of beta coefficients

According to the CAPM, the beta used to estimate a stock's market risk should reflect investor's estimates of the stock's future volatility in relation to that of the market. Robert Levy, Marshall Blume and others have studied the questions of beta stability in depth. Levy calculated betas for individual security as well as for portfolio of securities. He concluded that:

- i) The betas of individual stocks are unstable; hence the past betas for individual securities are not good estimators of their future risk.
- ii) The beta of the portfolio of ten or more randomly selected stocks is reasonably stable; hence the past portfolio betas are good estimators of future portfolio volatility.

➤ The Fama French Study

A recent study by Eugene F. Fama and Kenneth R. French of the University of Chicago seriously challenges the CAPM. Fama and French examined the relationship between betas and returns on thousands of stocks over the past 50 years. According to the CAPM, high beta stocks should provide higher returns than the low beta stocks. However, the Fama French study revealed no relationship between historical betas and historical returns-low beta stocks provided about the same returns as high beta stocks provided. About the same returns high-beta stocks. It will take more research to decide whether the Fama-French study truly invalidates the CAPM. The CAPM is purely an expectation model, and its logic is sound.

Therefore it again requires a lot of research to decide whether there actually is no relationship between beta coefficient of any stock and its return. Since CAPM is purely an expectation approach it may not valid in actual life. However, there is no strong reason

to believe that there is no relationship between the return of a stock and its beta; therefore we cannot conclude that it is not better to use SML equation for the calculation of required rate of return (Fama and French, 1998:246-273).

2.2 Review of Related Studies

2.2.1 Review of Research Papers

Under this heading, reviews of research papers of researchers are analyzed to find out the investment policies of commercial banks.

Govinda Bahadur Thapa (1994), expresses his views in his research paper “Financial System of Nepal” that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the bank still seems to lack adequate funds. The banks are increasing their lending to non –traditional sectors along with the traditional sectors. Out of all commercial banks (excluding two recently opened regional commercial banks), Nepal Bank Ltd. and Rastriya Banijya Bank are operating with a nominal profit, the later turning towards negative from time to time. Because of growing competition and limitation of investment sectors, the spread between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount. On the contrary, they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected. On the other hand, the foreign joint venture banks have been functioning in an efficient way. They are making profit year after year and have been distributing bonus to their employees and dividends to their shareholders.

He concludes that by its very nature of the public sector, these two domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the

ownership as well as the management of these banks to the private hands (Thapa, 1994:29-37).

Radhe S. Pradhan (2003) in his research paper “Role of Saving, Investment and Capital formation in Economic Development, A case of Nepal,” has studied about the strong role and impact of saving, investment and capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role and impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equations used in this study have been estimated at current prices as well as in real terms with the entire study period divided into different sub periods.

The results presented in this paper suggest that in all cases, GDP is significantly associated with saving, investment and capital formation both at current prices and in real terms. The results of the empirical analysis led to three important conclusions: First, saving, investment and capital formation have positive impact on economic development. Second, the current values and past values of saving, investment and capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment (Pradhan, 2003:123-133).

2.2.2 Review of Thesis

Several thesis works have been conducted by various students regarding the various aspects of commercial banks such as lending policy, investment policy, investment planning, liquidity and investment position, trends of saving investment and capital formation, investment on priority sectors etc. Some of them as supposed to be relevant for the study are presented below.

Shrestha Sunity (1993) has conducted a study on “Investment Planning of Commercial Banks in Nepal” with the objectives:

-) To evaluate the financial performance of commercial banks in Nepal.
-) To examine the investment of commercial banks of Nepal with reference to securities, loans & advances.
-) To establish the relationship of banks’ portfolio variables with the national income and interest rates.

The research findings of the study are summarized as:

-) The general trend of commercial banks asset holding is growing. Deposits have been a major source of funds. The excess reserve level of the banks allows idle money and loss of opportunity. Debt equity ratios are very high, greater than 100%.
-) The return ratios are on the average higher for foreign joint venture banks than for the Nepalese bank but return of asset found to be statistically some. Risk taking attitude is higher in foreign joint venture banks. The total management achievement index is higher in case of foreign banks in comparison to the Nepalese banks.
-) The hypothesis that the commercial banks have non –professional style of decision making in investment has been accepted. The investment of commercial banks in shares and securities is normal and not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.
-) Investment in various economic sectors shows industrial and commercial sector taking higher shares of loan till 1990.
-) Investment in various sectors has a positive impact on the national income from their respective sectors.
-) Lending in priority sector showed cottage and small industry sector sharing higher loans.
-) Priority sector lending showed positive impact on the national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increase with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending and Treasury bill rate. The investment of commercial banks on government securities has been observed to be affected by total deposit, cash reserve requirements and Treasury bill and lending rates. Interest rates, lending rate, deposit rate were found to constitute a set of significant variables affecting the bank portfolio composition (Sherestha, 1993:86).

Wagle Sharad (2000) Study; in his thesis paper “A study on trends of savings, investment and capital formation in Nepal”, he concluded that in Nepal there is large gap between investment and saving rate. The low savings rate implies that majorities of people are poor. Low rate of saving and investment has been the continuing characteristic of the Nepalese economy as compared to some selected Asian countries. The need for the improving internal savings and investment performance in the country has been high in the agenda of Nepalese policy declarations but the performance in has remained rather poor. The rate of investment and capital formation is low in Nepal because of low saving. He has recommended that the government should review existing restriction on foreign direct investment. (Wagle, 2000:72)

Sapkota's (2000) has studied on “Risk and return analysis in common stock investment”. In this study he has included eight commercial banks. Sapkota in his study has concluded commercial stock is the most risky security and lifeblood of stock market because expected, common stock attracts more investors. Private common stock holders are the passive owners of the company. But the private investor’s plays a vital role in economic development of the nation by mobilizing the scattered capital remained in different form in the society. As overall economy, Nepalese stocks market is in emerging state. Its development is accelerating since the political change in 1990 in effect of openness and liberalization in national economy. But lack of information and poor knowledge, Nepalese private investors cannot analyze the securities as well as market properly. Still most of the Nepalese private investor invests in single security. Some of

the investors use their fund on two or more securities but they are not able make any analyze of portfolio. Some of his recommendations are viewed below.

Bajracharya Rabina (2000) in her thesis paper entitled, "Investment of Commercial Banks in Priority Sector" has made an effort to examine the banking procedures and services in disbursing loan in priority sector. She has found that:-

-) The target of 12% investment of total outstanding liabilities in priority sector and 3% out of which has been invested in deprived sector has been met by Rastriya Banijya Bank.
-) The trend of investment are continued to increase in the following years.
-) The regression analysis of the investment and relationship between investment and repayment.

Investment on agriculture is higher than investment on industry and service sector because investment on agriculture benefited a higher number of households. (Bajracharya, 2000:79)

Lamichhane M. D. (2001) in his thesis, "Investment policy of the Joint Venture Banks in Nepal" had analyzed between investment policy and different variables like deposits, commission and discount, net profit, interest on loan and investment. He applied correlation, ratio analysis, t- test, and standard deviations.

He concluded that there is significant relationship between deposit and loan and advances as well as outside assets and net profit but not deposits and total investment in case of Nabil and other joint venture banks. Most of the joint venture banks have focused their banking services especially to big clients such as to purchase shares and debentures of other financial and non-financial companies. (Lamichhane, 2001:69)

Loudari Shiba Raj (2003) conducted a study on “A study on investment policy of Nepal Indosuez Bank Ltd. in comparison to Nepal SBI Bank Ltd.” with the objective of:

-) To examine the liquidity, asset management and profitability position and investment policy of NIBL in comparison to Nepal SBI Bank Ltd.
-) To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal SBI bank ltd.
-) To analyses relationship between deposit and investment, deposits and loan & advances, net profit and outside assets of Nepal Indosuez Bank Ltd. In comparison to Nepal SBI Bank Ltd.

The research findings of the study are as follows:

-) Current ratios for both the banks are satisfactory.
-) Although Cash reserve ratio is managed by both banks as per Nepal Rastrya Bank directives, both banks have not paid sufficient insight towards cash management. Their cash reserves have fluctuated in a high degree.
-) Nepal SBI Bank ltd. has increased investment in government securities where as Nepal Indosuez Bank has decreased.
-) Nepal Indosuez Bank Ltd. has maintained both current ratio and cash reserve ratio better than Nepal SBI Bank Ltd. But its cash and bank balance, investment in government securities and loan and advances in comparison to current assets are lower than that of Nepal SBI Bank Ltd.
-) Deposit utilization of Nepal Indosuez Bank Ltd. is less effective than that of Nepal SBI Bank Ltd. Further Nepal Indosuez Bank Ltd. has invested lesser amount on government securities and shares and debenture than that of Nepal SBI Bank.

-) Nepal Indosuez Bank Ltd. did a better performance in return on total assets and loan and advances and interest earning, but it paid lower interest amount to working fund.
-) The analysis of growth ratios shows that growth ratios of total deposit, loan and advances, total investment and net profit of Nepal Indosuez Bank are less than that of Nepal SBI Bank.

The trend value of loan and advances to total deposits ratio is decreasing in case of both banks. The trend value of total investment to total deposits ratio is also decreasing in case of both banks. (Loudari, 2003:75)

Poudel Kishor (2004) in his thesis paper “Liquidity and Investment Position of Joint Venture Commercial Bank in Nepal” had made an attempt to evaluate liquidity and investment of joint venture Banks, special reference to Everest Bank Ltd. and Nabil Bank Ltd. He has concluded that liquidity position of EBL is comparatively better than Nabil. Growth rate of investment is higher in EBL than Nabil. He further found the banks do not have constant and consistent liquidity and investment policy. There is no standard and uniform rate or ratio for maintaining liquid assets by the commercial banks. A commercial bank at its own judgment may decide to maintain an appropriate level of liquid assets. So he has recommended exploring such investment and to increase its investment on share and debenture and the bank should have laid down policy for timely review of portfolio and to maintain risk and return.(Poudel,2004:78)

Pandit Kul Chandra (2005) in his thesis, “A study on the investment policy analysis of Standard Chartered Bank Nepal Limited in comparison to Nabil and Nepal Bangladesh Bank” has mainly found that SCB’s loan & advances to total deposits ratios are significantly lower than that of Nabil and Nepal Bangladesh Bank, SCB is recommended to follow a liberal lending policy, invest more portion of deposition loan & advances. He has further stated that besides giving priority of investing on government securities, SCB is recommended to invest its fund in the purchase of shares and debentures of other financial, non-financials

companies, hotels and government companies. This also helps in the maintenance of a sound portfolio of the banks. (Pandit, 2005:65)

Joshi S.(2005) has conducted in her study entitled, “Investment Policy of Commercial Bank in Nepal (A comparative study of EBL with NABIL & BOK Ltd).” The main objective of the study was to discuss fund mobilization & investment policy of NABIL and BOK Ltd, to evaluate liquidity, efficiency and profitability, risk position, the growth ratios of loan and advance, total investment with other financial variables.

Through her research Ms. Joshi has found that the liquidity position of EBL is comparatively better than NABIL and BOK. EBL is comparatively average or in between successful in compared to NABIL and BOK. Total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios, EBL is average profitable in comparison to other compared banks.

She has recommended mobilizing its idle cash and bank balance in profitable sector as loan & advances. Banks should invest of its fund in share and debenture of different companies. He has strongly recommended following consistent liberal lending policy and investing more and more percentage of total deposit in loan and advance, minimum more stability on the investment policy. Bank should fix minimum level of bank balance. He has also suggested adopting innovative approach to marketing and formulating new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices.

She has just compared EBL with NABIL and BOK, based on only 5 years period which would not be reasonable to analyze investment policy of any bank as success or unsuccess.

Gurung, A. K. (2006) explored in his research “lending policy and recovery management of Standard Chartered Bank Nepal Ltd and Nabil bank Ltd” has found out the following result.

-) The deposit collection by the banks shows that increasing but in a fluctuating trend. The trend analysis of deposit collection the increase in deposit collection in the forthcoming years will continue.
-) Out of different types of deposit collection account, higher account has been collected in saving deposit account. Out of the total deposit collection, SCBNL has disbursed 36% of average as a loan and Nabil has disbursed 52% of its deposit collection as a loan disbursement to deposit collection ratio of commercial banks, it is around 60%.
-) This ratio is quite low incasing of sample bank especially of SCBNL. It is further proved by the calculation of correlation coefficient, which is 0.75 and 0.23 of SCBNL and Nabil respectively.

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

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

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

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

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

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

Limbu Ram (2008). In his dissertation, “Credit Management of NABIL Bank Limited” highlighted that aggregate performance and condition of Nabil bank. In the aspect of liquidity position, cash and bank balance reserve ratio shows the more liquidity position. Cash and bank balance to total deposit has fluctuating trend in 5 years study period. Cash and bank balance to current deposit is also fluctuating. The average mean of Cash and bank balance to interest sensitive ratio is able to maintain good financial condition.

The main objectives of the research study are as follow.

-) To evaluate various financial ration of the Nabil Bank.
-) To analyze the portfolio of lending of selected sector of banks
-) To determine the impact of deposit in liquidity and its effect on lending practices.
-) To offer suitable suggestions based on findings of this study.

The main findings and conclusions are according to calculated ratio. In the aspect of assets management ratio, assets management position of the bank shows better performance in the recent years. Non-performing assets to total assets ratio is decreasing trend. The bank is able to obtain higher lending opportunity during the study period. Therefore, credit management is in good position of the bank. In leverage ratio, Debt to equity ratio is in an increasing trend. High total debt to total assets ratio posses' higher financial risk and vice-versa. It represents good condition of Total assets to net worth ratio. In the aspect of profitability position, total net profit to gross income, the total interest income to total income ratio of bank is in increasing trend. The study shows the little high earning capacity of NABIL through loan and advances. Earning per share and The Price earning ratio of NABIL is in increasing trend. Loan loss provision to total loan and advances ratio and None-performing loan to total loan and advance ratio of NABIL is

in decreasing trend. The ratio is continuously decreasing this indicates that bank increasing performance. Thus, credit management is in a good position.

In the statistical tools analysis, average mean, correlation analysis and trend analysis have been calculated. Correlation coefficient between total credit and total assets shows high degree of positive correlation. Correlation coefficient between total deposit and loan & advances has high degree of positive correlation it is concluded that increasing total deposit will have positive impact towards loan & advances. Trend analysis tools are done for future forecasting. Trend analysis for total, loan & an advance, Total asset and Net profit is done to see future prospect.

Trend analysis tools are done for future forecasting. Trend analysis for total deposit is calculated to see future deposit trend of the bank. Trend analyses for loan & an advance is done to see future loan & advances. Trend analyses for Total asset is calculate to see future total asset.

The study is conducted on credit management of Nabil Bank, which is one of the leading banks in Nepal. NABIL has been maintaining a steady growth rate over this period. In the study every aspect of banks seems to be better and steady in every year. Its all analysis indicates better future of concern bank.

2.3 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. There are various researchers conduct on lending practice, credit policy, financial performance, credit management and liquidity mobilization of various commercial banks. In order to perform those analysis researchers have used various ratio analysis. in the past research topic on liquidity mobilization the researcher has focused on the limit ratios which are incapable of solving the problems. Actually liquidity mobilization is determined by various factors. In this research various ratio are systematically analyzed and generalized. Past Researchers are not properly analyzed

about investment aspect' mobilization of fund and its impact on the profitability. The ratios are not categorized according to nature. Here in this research all ratios are categorized according to their area and nature.

In this study of portfolio management of NIC Bank and Everest Bank Limited is measuring by using various tools. Financial tools as well as statistical tool are used in this research. Financial tools like various liquidity ratio, activity ratio, profitability ratio, price earning ratio and lending efficiency ratio etc and in statistical tools, mean, standard deviation and correlation coefficient are analyzed. The analyzed data are only five fiscal year but all the data are current and fact. This study tries to define liquidity mobilization by applying and analyzing various financial tools like liquidity ratio, activity ratio, profitability ratio and lending efficiency ratio as well as different statistical tools like mean, standard deviation, coefficient of correlation and probable error. Probably this will be the appropriate research in the area of portfolio management of Bank and financial institutions.

CHAPTER- III

RESEARCH METHODOLOGY

The topic of the study has been selected as “The Comparative study on Portfolio Management of NIC and Everest Bank Ltd.” The sole objective of this study is to compare the Portfolio Management. In order to reach and accomplish the objectives of the study, different activities will be carried out. For this purpose, the chapter aims to present and reflect the methods and techniques that are carried out and followed during the study period. The research methodology that is adopted for the present study is mentioned in this chapter which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology.

3.1 Research Design

To achieve the objective of this study, comparative and descriptive research designs have been used.

3.2 Population and Sample

The objective of the research is to explore and describe the portfolio management in Nepal from the investor’s point of view. However, with regard to the availability of the financial information, two samples were identified purposively from the banking sector, which comprise of nineteen among the listed. The sample represents 10.52% of the entire population of the entire listed banking sector.

The sample bank

NIC Bank limited

Everest Bank Limited

3.3 Data Collection Procedure

Different tools and techniques were adopted while collecting the data for this study. Collected secondary information was analyzed during the course of the deskwork. However, during the desk study, an information gap was found. This gap was fulfilled by

the discussion with the thesis advisor and finance experts of the security board and the NEPSE.

3.4 Sources of Data

The data are collected from the secondary source (i.e. annual reports) of the concerned banks to achieve the objective of the study and also referred the websites for the purpose to complete the thesis.

3.5 Data Analysis Tools

Presentation and analysis of data is one of the important part of the research work. The collected raw data will first be presented in systematic manner in tabular form and then will be analyzed by applying different financial and statistical tools to achieve the research objectives. Besides these some graph charts and tables will be presented to analyze and interpret the findings of the study. The tools applied are-

3.6 Financial Tools

i) Liquidity Ratios: This ratio measures the liquidity position of a firm. It measures the firm's ability to meet its short-term obligations. As a Financial Analytical tools, following liquidity ratios will be used.

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

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

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

b.) Cash and Bank Balance to Total Deposit Ratio: Cash and bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor. This ratio can be computed by dividing cash and bank balance by total deposit and can be presented as:

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

Cash and bank balance includes cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic and foreign banks. The total deposit includes deposits made by customers through different accounts like current (demand deposit), saving, fixed deposit, call deposit and other deposit accounts.

c.) Cash and Bank Balance to Current Assets Ratio: This ratio measures the proportion of most liquid assets viz. cash and bank balance among the total current assets of the bank. Higher ratio shows the bank's ability to meet its demand for cash. The ratio is computed by dividing cash and bank balance by current assets, presented as under;

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

d.) Investment on Government Securities to Total Current Assets Ratio: This ratio is calculated to find out the percentage of current assets invested on government securities viz. treasury bills and development bonds. The ratio is stated as under;

Investment on Govt. securities to total current assets ratio =

$$\frac{\text{Investment on Govt. Securities}}{\text{Current assets}}$$

ii) Assets Management Ratios:

Asset management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. The following are the various ratios relating to determine the efficiency of the subjected bank in managing its assets and in portfolio management.

a.) Loan and Advances to Total Deposit Ratio: This ratio is also called credit- deposit ratio (C D ratio). It is calculated to find out how successfully the bank is able to utilize its total deposits on loan and advances for profit generating purpose. Greater ratio implies better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposit as under;

$$\text{Loan and Advances to total deposit ratio} = \frac{\text{Loan \& advances}}{\text{Total deposits}}$$

b.) Total Investment to Total Deposit Ratio: Investment is one of the major forms of credit creation to earn income. This implies the utilization of firm's deposit on investment on government securities, shares and debentures of other companies and banks. This ratio can be calculated by total investment divided by total deposit as:

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

c.) Loan and Advances to Working Fund Ratio: Loan and advances is the major component in the total working fund (total assets), which indicates the ability of bank to utilize its deposits in the form of loan and advances to earn high return. The ratio is computed by dividing loan and advances by total working fund, which is stated as under;

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

d.) Investment on Government Securities to Total Asset Ratio: This ratio shows that bank's investment on government securities in comparison to the total working fund. This ratio can be computed by dividing investment on government securities by total working fund, which can be presented as;

Investment on Govt. Securities to total working fund =

$$\frac{\text{Investment on Govt. Securities}}{\text{Total working fund}}$$

iv) Profitability Ratios:

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firm should be higher. Under this, the following profitability ratio will be computed.

a.) Return on Loan and Advances Ratio: This ratio indicates how efficiently the bank utilizes its resources in the form loans and advances. This also measures the earning capacity of its loans and advances. This ratio is computed by dividing net profit (loss) by loans and advances which can be expressed as;

$$\text{Return on loan and advances ratio} = \frac{\text{Net profit (loss)}}{\text{Loans \& advances}}$$

b.) Return on Total Asset Ratio (ROA): This ratio measures the overall profitability of all working fund i.e. total assets. It is also known as return on assets (ROA). This ratio is calculated by dividing net profit (loss) by total working funds. This can be presented as;

$$\text{Return on total working fund ratio (ROA)} = \frac{\text{Net profit (loss)}}{\text{Total working fund}}$$

The numerator indicates the portion of income left to the internal equities after deduction all costs, charges and expenses.

c.) Return on Equity (ROE): Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. This ratio measures how efficiently the bank has used funds of the shareholders. This ratio can be computed by dividing net profit by total equity capital (net worth). This can be calculated as;

$$\text{Return on Equity (ROE)} = \frac{\text{Net profit (loss)}}{\text{Total equity capital}}$$

d.) Total Interest Earned to Total Asset Ratio: This ratio is computed to find out percentage of interest earned to total assets (working fund). Higher ratio implies better

performance of the bank in terms of interest earning on its total working funds. This fund is computed by dividing total interest earned by total working fund can be presented as;

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

e.) Total Interest Earned to Total outside Assets Ratio: This ratio measures the interest earning capacity of the bank through the efficient utilization of outside assets. Higher ratio implies efficient use of outside assets to earn interest. This ratio is calculated by dividing total interest earned by total outside assets and can be mentioned as under;

$$\text{Total interest earned to total outside assets ratio} = \frac{\text{Total interest earned}}{\text{Total outside assets}}$$

The numerator includes total interest income from loans and advances and investment where as the denominator comprises loan and advances, bills purchased and discounted and all type investment.

f.) Interest Income to Total Income Ratio: This ratio measures the volume of interest income in total income of the bank. The high ratio indicates the high contribution made by the lending and investing and vice-versa. This ratio can be completed by dividing interest income by total income presented as under;

$$\text{Interest income to total income ratio} = \frac{\text{Interest income}}{\text{Total income}}$$

g.) Total Interest Paid to Total Working Fund Ratio: This ratio depicts the percentage of interest paid on liabilities with respect to total working fund, which can be presented as;

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

V. Risk Ratio

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization can not achieve a good return as per their desires. The

profitability of risk makes banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have idea of the level of risk of risk that one has to bear while investing its funds. Through following ratios, effort has been made to measure the level of risk inherent in the EBL and EBL.

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, credit risk ratio is expressed as the percentage of non-performing loan to total Loan and Advances.

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

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

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

Asset Risk Ratio: - Bank utilizes its collected funds in providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines

the credit risk involved in the project. Generally asset risk ratio shows proportion of non-performing assets in the total investment plus loan and advances of a bank

vi. Other Ratios

a) Earning per Share (EPS): EPS refers to net profit divided by total numbers of share outstanding. EPS measure the efficiency of a firm in relative terms. It is a widely used ratio, which measures the profit available to the ordinary shareholders on per share basis. The amount of EPS measures the efficiency of a firm in relative terms. This ratio is calculated as;

$$\text{Earnings per Share (EPS)} = \frac{\text{Net profit (loss)}}{\text{Total number of shares outstanding}}$$

b) Market Price per Share

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

c) Price Earning Ratio

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

Here, total equity capital includes shareholders' reserve including profit and loss account, general loan loss provision and share capital i.e. ordinary share preference share capital.

2.6.2 Statistical Tools

Some important statistical tools will be used to achieve the objective of this study. In this study statistical tool such as mean, standard deviation, coefficient of variation, coefficient of correlation and trend analysis will be used.

i) Mean:

A mean is the average value or the sum of all the observation divided by the number of observations and it is given by the following formula:

$$\bar{X} = \frac{\sum X}{N}$$

Where, \bar{X} = Mean of the values

$\sum X$ = Summation of the values

N = No. of Observations

ii) Standard deviation:

The standard deviation measures the absolute dispersion. It is said that higher value of standard deviation the higher the variability and vice versa. Karl Pearson introduced the concept of standard deviation in 1823 A. D. and this is denoted by the small Greek letter (pronounced sigma) the formula to calculate the standard deviation is given below:

$$\sigma = \sqrt{\frac{\sum x^2}{N}}$$

Where, $x = X - \bar{X}$

iii) Coefficient of variation:

The calculated standard deviation gives an absolute measure of dispersion. Hence where the mean value of the variables is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation (C.V.) is given by the following formula in the percentage basis:

$$\text{Coefficient of variation (C.V.)} = \frac{\dagger}{X} \times 100$$

iv) Measures of Correlation:

We examine the relation between the various variables. The correlation between the different variables of a bank is compared to measure the performance of these banks. Correlation refers to the degree of relationship between two variables. If between two variables, increase or decrease in one causes increase or decrease in another, then such variables are correlated variables. The reliability of the value of coefficient of correlation is measured by probable error. The correlation coefficient describes the degree of relationship between two variables. It interprets whether variables are correlated positively or negatively. This tool analyses the relationship between those variables by which it is helpful to make appropriate investment policy for profit minimization. The Karl Pearson coefficient of correlation (r) is given by following formula:

$$\text{Coefficient of Correlation (r)} = \frac{xy}{N\dagger_1\dagger_2}$$

$$\text{Where, } x = \sum X Z \bar{X}^A$$

$$y = \sum Y Z \bar{Y}^A$$

$$\dagger_1 = \text{Standard series of X}$$

$$\dagger_2 = \text{Standard series of Y}$$

$$N = \text{Number of pairs of Observations}$$

The Karl Pearson coefficient of correlation always falls between -1 to +1. The value of correlation in minus signifies the negative correlation and in plus signifies the positive correlation. As the value of correlation reaches to the value of zero, it is said that there is no significant relationship between the variables.

v) Trend Analysis:

Among the various methods of determining trend of time series, the most popular and mathematical method is the least square method. Using this least square method, it has

been estimated the future trend values of different variables. For the estimation of linear trends line following formula can be used:

$$y = a + bx$$

Where,

y = Dependent variable

x = Independent variable

a = Y – intercept

b = Slope of the trend line

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

Introduction review of literature and research methodology is presented in the previous chapters that provide the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter collected data are analyzed and interpreted as per the stated methodology in the previous chapter. The main sources of data are secondary data. In this chapter, researcher has analyzed and diagnosed portfolio management of Nepal industrial and commercial Bank Ltd and Everest Bank Ltd. Different tables and diagrams are shown to make the analysis simple and understandable.

4.1 Financial Analysis

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

Various financials ratios related to the investment and portfolio management are presented to evaluate and analyze the performance of commercial Banks i.e. NIC and EBL. Some important financial rations are only calculated in the point of view of fund mobilization and investment patterns. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another.

4.1.1 Ratio Analysis

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

main categories of ratios have been taken in this study that is mainly related to investment policy of banks.

4.1.1.1 Liquidity Ratio

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

A) Current Ratio

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

Table No. 4.1
Current assets to current liability (in times)

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	2.11	2.35	1.79	1.62	1.57	1.89	0.33	0.18
EBL	1.17	1.14	1.13	1.16	1.10	1.14	0.027	0.024

Source: Annual Report of Concern Bank

Above table shows the current ratio of selected commercial banks during the study period. The current ratio of NIC bank is in decreasing trend except in 2004/05 and EBL is also in decreasing trend except in 2006/07 In general, it can be said that all the banks have sound ability to meet their short- term obligations. In the case of NIC current ratio has high ratio in 2004/05 and low in 2007/08. Similarly highest current ratio of EBL in 2003/04 and lowest in 2007/0/8. In an average, liquidity position of NIC is greater than EBL i.e. $1.89 > 1.14$ due to high mean ratio. So, NIC is sound in meeting short-term obligation than EBL. Likewise, S. D. and C.V. of NIC is higher than EBL i.e. $0.33 >$

0.027 and $0.18 > 0.024$. It can be said that current ratio of EBL is more consistent than EBL.

Lastly from the above analysis it is known that all these two banks have better liquidity position because the standard ratio is 2:1. They have met the standard ratio nearly.

B) Cash and Bank Balance to Total Deposit Ratio

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

Table No. 4.2
Cash & Bank Balance to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	6.39	16.19	8.55	5.96	9.11	9.24	4.11	0.45
EBL	7.8	10.4	11.2	13.1	11.1	10.7	1.9	0.177

Source: Annual Report of Concern Bank

The above Table No. 4.2 reveals that the Cash and Bank Balance to Total Deposit Ratio of NIC and EBL are in fluctuating trend. The highest ratio of NIC is 16.19% in FY 2004/05 and lowest is 5.96% in FY 2006/07. Similarly, the highest ratio of EBL is 13.1% in FY 2006/07 and lowers in 7.8 in 2003/04.

The mean ratio of NIC and EBL are 9.24% and 10.7% respectively. EBL has higher ratio than the NIC, which shows its greater ability to pay depositors money as they want. Similarly, the coefficient of variation of NIC is 0.45 times and EBL is 0.177 times. S.D. of EBL is lower than the NIC

The above analysis has to conclude that the cash and bank balance position of EBL with respect to NIC is better in order to serve its customer's deposits. It implies the better

liquidity position of EBL from the viewpoint of depositor demand. In contrast a high ratio of cash and bank balance may be undesirable which indicates the bank's inability to invest its funds income generating areas.

C) Cash and Bank Balance to Current Assets Ratio

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

Following the states the cash and bank balance to current assets NIC and EBL during the study period.

Table No. 4.3
Cash & Bank Balance to Current Asset Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	6.40	16.37	9.38	6.66	10.39	9.84	4.03	0.41
EBL	6.6	9.1	9.8	11.2	9.9	9.3	1.7	0.18

Source: Annual Report of Concern Bank

The above table reveals that cash and bank balance to current assets ratio of NIC and EBL are in fluctuating trend. The mean ratio of NIC and EBL is 9.84% and 9.3% respectively. The higher mean ratio shows NIC's liquidity position is better than that of EBL. Moreover the .S.D and C.V. of NIC is higher than EBL. The higher C.V. of NIC indicates that it has more inconsistency in the ratios in comparison to EBL

Regarding the above analysis, it can be concluded that EBL has a better ability to meet daily cash requirements of their customers but it should be noted that EBL has excess cash due to the low investment opportunities.

D) Investment on Government Securities to Current Assets Ratio

This ratio examines that portion of a commercial bank's current assets, which is invested on different government securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by government in different times to utilize their excess funds and for other purpose. Although those securities can be sold easily in the financial market or they can be converted into cash, they are not very liquid assets like cash and bank balance. It shows the portion of current assets to banks that are invested on various securities. Government securities are the more secured investment alternatives. These securities are also called risk less investment but less return is generated than others risky assets.

Table No. 4.4

Investment on Government Securities to Current Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	24.05	19.34	22.00	12.26	13.47	18.22	5.19	0.28
EBL	25.2	16.1	21.0	17.0	12.0	18.3	5.0	0.274

Source: Annual Report of Concern Bank

The table 4.4 shows investment on government securities to current assets ratio of NIC and EBL. Both Banks has fluctuating type ratios. The table shows the highest ratio of NIC is 24.05% in FY 2003/04 and lowest is 12.26% in FY 2006/07. In the same way, the highest ratio of EBL is 25.2% in FY 2003/04 and lowest is 12.0% in FY 2007/08.

The mean ratio of NIC is 18.22 percent, which is little lower than the mean ratio of EBL 18.3 percent. It means EBL has invested more money in risk free assets than that of NIC. In another words NIC has emphases on little more loan and advances and other short-term investment than investment in govt. securities. Similarly, S.D. is 5.19 and 5.0 and C.V. is 0.28 and 0.274 of NIC and EBL respectively. The higher C.V. of NIC shows the more inconsistency in the ratios with compare to EBL.

4.1.1.2 Assets Management Ratio

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

A) Loan and Advance to Total Deposit Ratio

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

Table No. 4.5
Loan and Advance to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	69.20	75.49	75.93	88.81	86.09	79.10	8.13	0.10
EBL	73	75.4	71.0	75.1	76.5	74.2	2.2	0.03

Source: Annual Report of Concern Bank

The above table shows that the loan & advances to total deposit ratio of NIC is in increasing trend except in 2007/08 and EBL has fluctuating trend. NIC has higher ratio than that of EBL in all fiscal years. When we see mean ratio NIC has higher ratio. It indicates the better mobilization of deposit by NIC from the view point of mean. The mean of NIC and EBL are 79.10% and 74.2% respectively. So NIC has higher ratio than that of EBL. It reveals that the deposit of NIC is quickly converted in to loan and advances to earn income. The bank will be able to better mobilization of collected deposit if there is above 70% to 90% of loan and advances to total deposit according to NRB. So in all of the year the both banks have met the NRB requirement or it has utilized its

deposit to provide loan except 2003/04. The S.D. and C.V of NIC is 8.13, 0.10 similarly EBL has 2.2, 0.03.

B) Total Investment to Total Deposit Ratio

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

Table No. 4.6
Total Investment to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	34.21	25.20	28.29	15.89	17.67	24.25	7.58	0.31
EBL	31.4	21.1	30.4	27.4	21.1	26.3	4.97	0.19

Source: Annual Report of Concern Bank

The above table shows that total investment to total deposit ratio of NIC and EBL. NIC has fluctuating trend total investment to total deposit ratio whereas EBL has also fluctuating trend. Higher ratio of NIC is 34.21% percent in FY 2003/04 and lowest ratio is 15.89% percent in FY 2006/07 in the same way the highest ratio of EBL 31.4% percent in FY 2003/04 and lowest ratio is 21.1% in FY 2007/08. Investment volume of NIC is lower than that of EBL because more funds of NIC were used in profitable loans to achieve optimum mix of interest earning assets.

The mean of the ratio of NIC and EBL are 24.25% and 26.3% respectively so EBL has higher ratio. It signifies EBL has successfully allocated its deposit in investment portfolio to get higher investment return. The S.D and C.V. of NIC is 7.58 and 0.31 and EBL has 4.97 and 0.19 respectively.

C) Loan & Advances to Total Assets Ratio

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

Table No. 4.7
Loan & Advances to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	59.96	62.76	64.10	76.56	73.92	67.46	7.32	0.11
EBL	61.2	64.9	61.4	63.7	67.5	63.8	2.6	0.041

Source: Annual Report of Concern Bank

The above table shows the loan & advances to total assets ratio of NIC is in increasing trend except in 2007/08 and EBL is also in increasing trend except in 2005/06 during the study period. While observing their ratios; NIC is better mobilizing of fund as loan and advances. After seeing mean ratio it seems NIC is a little bit successful in generating higher in comparison of EBL.

The mean of NIC and EBL are 67.46% and 63.8% respectively. So NIC has higher ratio than that of EBL. It reveals that in total assets, NIC has high proportion of loan and advances. NIC has utilized its total assets more efficiently in the form of loan & advances. The higher C.V. of NIC states that it has less uniformity in these ratios throughout the study period than that of EBL. S.D. and C.V. of NIC and EBL have 7.32, 2.6 and 0.11 and 0.041 respectively.

D) Investment on Government Securities to Total Assets ratio

It is not possible to apply all collection, deposit and other resources in to loan & advances for the banks. Therefore, they arrange their total assets in various sectors. Among all

possible sectors, investment on government securities is one, which is very less risky. Invest on government securities to total assets ratio measures how successfully selected banks have applied their total assets on various forms of government securities in profit maximization and risk minimization point of view. The higher ratio represents the better position of fund mobilization into investment on government securities and vice-versa.

Table No. 4.8
Investment on Government Securities to Total Assets ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	20.80	15.91	16.92	9.45	10.14	14.64	4.79	0.33
EBL	25	16	20.8	16.8	11.9	18.1	4.9	0.273

Source: Annual Report of Concern Bank

Above table shows that the investment on government treasury bills to Total assets of NIC is in fluctuating trend and EBL is in decreasing trend. The highest ratio of NIC is 20.80% in 2003/04 and EBL is 25% in 2003/04. And the lowest ratio of NIC and EBL are 9.45% in 2005/06 and 11.9% in 2007/08 respectively.

From the table we notice that mean ratio of NIC and EBL is 14.64% and 18.1% respectively. EBL has higher ratio in every year and mean too. It means EBL has invested more money in risk free assets than that of NIC. In another words NIC has emphases on more loan and advances and other short-term investment than investment in govt. securities. There is more inconsistent in the ratio of NIC during the study period, which is indicated by higher C.V. of NIC.

4.1.1.3 Profitability Ratio

The major performance indicator of any firm is profit. The objective of investment policy is to make good return. Any organization has to desire of earning high profited which helps to survive the firm and indicates the efficient operation of the firm. Profit is the

essential part of business activities to meet internal obligation, overcome the future contingencies, make a good investment policy, expand the banking transaction etc.

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

A) Return on Loan & advances

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

Table No. 4.9
Return on Loan & advances

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	1.92	2.41	1.45	1.77	2.16	1.94	0.37	0.19
EBL	2.4	2.2	2.4	2.2	2.5	2.35	0.13	0.055

Source: Annual Report of Concern Bank

Above table shows that return on loan and advances ratio of NIC is in fluctuating trend EBL is in increasing trend except in 2007/08. The highest ratio of NIC is 2.41% in the year 2004/2005 and lowest ratio 1.45% in year 2005/2006. The mean ratio is 1.94%. Whereas highest ratio of EBL is 2.5% in year 2007/08 and lowest ratio is 2.2% in 2004/05 and 2006/07. The mean ratio is 2.35%. EBL bank shows the good earning capacity in loan and advances whereas NIC show poor earning capacity in form of loan and advances when we compare ratio of each other. However if we see overall ratio both banks have normal earning capacity.

From the table we notice that EBL has higher Ratios in all year except in 2004/05 and mean too. It can be concluded that EBL bank has utilized the loan and advance for the profit generation purpose in proper way.

B) Return on Total Assets

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

Table No. 4.10
Return on Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	1.15	1.52	0.93	1.36	1.60	1.31	0.27	0.21
EBL	1.5	1.5	1.5	1.4	1.7	1.50	0.10	0.07

Source: Annual Report of Concern Bank

Above table shows the Return on Total Assets of NIC and EBL. NIC has increasing trend except in 2005/06. Whereas EBL has constant fluctuating trend. EBL seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is 1.50% of total assets in an average which is higher than that of NIC (i.e. $1.50\% > 1.31$). EBL has also higher ratio in succeeding three years.

Where as S.D. and C.V .of NIC and EBL are 0.27, 0.21 and 0.10 and 0.068 respectively. Higher C.V of NIC shows that it has relatively high incontinences in the ratios.

C) Return on Equity

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

versa. Following table shows the return on equity of NIC and EBL during the study period.

Table No. 4.11
Return on Equity Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	11.00	16.63	12.60	17.26	18.65	15.23	3.26	0.21
EBL	20.2	20.5	24.6	24.7	23.4	22.7	2.19	0.096

Source: Annual Report of Concern Bank

The above listed table shows Return on Equity Ratio of NIC and EBL. Above calculated statistic indicate that NIC has increasing trend except in 2005/06 and EBL has fluctuating trend of return on equity ratio EBL has higher ratios in each year and it has also higher mean ratio (i.e.22.7%>15.23%)

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

D) Total Interest Earned to Total Assets Ratio

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

Table No. 4.12

Total Interest Earned to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	6.11	6.09	5.59	6.21	6.11	6.02	0.25	0.04
EBL	6.8	6.1	5.7	5.3	6.	5.9	0.6	0.097

Source: Annual Report of Concern Bank

They both have increased total interest earned during studied period. Despite the higher Total assets and interest earned in NIC, it seems less conscious about managing its assets in order to earn more interest ratio. Both banks show the fluctuating trend of the interest earned ratio. NIC has average ratio 6.02% whereas EBL has maintained average ratio 5.9%. NIC has higher ratio in each year. The mean ratio of NIC is more than that of EBL. In comparison, NIC seems effective in earning interest to some extent than that of EBL. Moreover, NIC also has higher inconstancies in the ratios during the study period.

E) Total Interest Earned To Total outside Assets Ratio

The main assets of commercial banks are it's out side assets, which includes loan & advances, investment on government securities, investment on shares and debentures and other all types of investment. Thus, this ratio reflects the extent to which the banks are successful to earn interest as major income on all the outside assets. A high ratio indicates high earning on such total assets and vice-versa. The following Table exhibits the ratio of total interest earned to total outside assets of NIC and EBL during the study period.

Table No. 4.13

Total Interest Earned To Total outside Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	6.82	7.28	6.35	6.89	6.86	6.84	0.33	0.05
EBL	6.1	6.2	5.2	5.1	5.8	5.7	0.49	0.086

Source: Annual Report of Concern Bank

Above table shows the total interest earned to total outside assets ratio. The total interest earned to total outside assets ratio of both banks is in fluctuating trend. The highest ratio of NIC is 7.28 percent in 2004/05 and lowest ratio is 6.35 in 2005/06 and similarly the highest ratio of EBL is 6.2 percent in 2004/05 and lowest ratio 5.1 percent is in 2006/07 of. The mean ratio of NIC and EBL are 6.84% and 5.7% respectively. Here NIC seems to have more efficiency in generating total interest through well utilizations of outside assets than that of NIC. But NIC has relatively inconsistent in returns as it has higher C.V than that of EBL.

F) Total interest Earned to Total Operating Income Ratio

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

Table No. 4.14
Interest Earned to Operating Income Ratio

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIC	155.73	156.44	184.21	176.64	170.48	168.70	12.50	0.07
EBL	208	192	199	191	188	196	7.9	0.04

Source: Annual Report of Concern Bank

Above table shows Interest Earned to Operating Income Ratio of NIC and EBL. Both banks has fluctuating ratio during study period. EBL has greater share of total interest earn in its total operating income and mean too. The mean ratio of NIC and EBL are 168.70 % and 196% respectively. EBL has higher ratio, it indicates the high contribution

in operating income made by lending and investing activities (core banking activity).NIC has lower ratio, it indicates that high contribution in operating income do not made by lending and investing activities (core banking activity).High contribution in operating income made by lending and investing activities (core banking activity) is not good for long run but in short run it is not so bad. Thus, from short-term view, EBL is in good condition but from long-term view, NIC is in good condition a little bit. In overall, NIC has managed a little bit sound interest earned to operating income ratio.

The S.D. and C.V of NIC is 12.50 and 0.07 similarly EBL has 7.9 and 0.04. It indicates EBL has relatively inconsistent in interest earned to total operating income as it has higher C.V than that of EBL.

G) Total Interest Paid to Total Assets Ratio

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

Table No. 4.15
Interest Paid to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	3.09	3.01	3.28	3.61	3.32	3.26	0.23	0.07
EBL	3.29	2.55	2.51	2.41	2.3	2.6	0.38	0.147

Source: Annual Report of Concern Bank

Both banks show fluctuating trend. NIC has average ratio of 3.26% and EBL has average ratio 2.6. The highest ratio of NIC is 3.61% in the year 2006/ 2007 and lowest ratio 3.01% in year 2004/2005. Whereas highest ratio of EBL is 3.29% in year 2003/04 and lowest ratio is 2.3% in 2007/08. The C. V. of EBL is a little bit greater than the NIC it indicate high risk and insignificant of EBL rather than NIC.

4.1.1.4 Risk Ratio

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

(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, credit risk ratio is expressed as the percentage of non- performing loan to total Loan & Advances.

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

Table No. 4.16

NPL to total loan and advances

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	4.12	3.94	2.70	1.13	0.87	2.55	1.52	0.60
EBL	1.72	1.63	1.27	0.94	0.691.9	1.25	0.440	0.352

Source: Annual Report of Concern Bank

Above table shows that NPL to total loan and advances of NIC is in decreasing trend except in 2005/06 and EBL is also decreasing trend except in 2004/05..Decreasing trend

is the good sign of the efficient credit management. NIC seems effective in latest two years and EBL seems effective in whole study period. From mean point of view, non-performing loan to total loan and advances ratio of NIC and EBL are 2.55 % and 1.25% respectively during the study period. this indicate EBL better than NIC These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. However, in comparison, EBL has efficient operating of credit management than that of NIC from the mean point of view.

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

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

Table No: 4.17

Liquidity Risk Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	6.39	16.19	8.55	5.96	9.11	9.24	4.11	0.45
EBL	7.8	0.10.4	0.11.2	13.1	11.1	10.7	1.9	0.177

Source: Annual Report of Concern Bank

Cash and Bank Balance to Total Deposit Ratio of NIC and EBL are in fluctuating trend. The highest ratio of NIC is 16.19% in FY 2004/05 and lowest is 5.96% in FY 2006/07. Similarly, the highest ratio of EBL is 113.1% in FY 2006/07 and lowers in 7.8 in 2003/04.

The mean ratio of NIC and EBL are 9.24% and 10.7% respectively. EBL has higher ratio than the NIC, which shows its greater ability to pay depositors money as they want. Similarly, the coefficient of variation of NIC is 0.45 times and EBL is 0.10 times. S.D. of EBL is lower than the NIC this indicate lower risk in EBL.

The above analysis has to conclude that the cash and bank balance position of EBL with respect to NIC is better in order to serve its customer's deposits. It implies the better liquidity position of EBL from the viewpoint of depositor demand. In contrast a high ratio of cash and bank balance may be undesirable which indicates the bank's inability to invest its funds income generating areas.

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

Table No. 4.18
Asset Risk Ratio

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2003/04	2004/05	2005/06	2006/07	2007/08			
NIC	2.75	2.95	1.97	0.96	0.72	1.87	1.01	0.54
EBL	1.09	1.09	0.81	0.53	0.47	0.799	0.297	0.372

Source: Annual Report of Concern Bank

The above table shows the Asset risk ratio of NIC and EBL. The analysis shows that NIC has credit risk ratio is in decreasing trend except in 2004/05 and EBL have the credit risk ratio in continuously decreasing trend over the study period. NIC has highest and lowest ratio of 2.95 and 0.72 in the year 2004/05 and 2007/08 respectively. Similarly EBL has the highest and lowest ratio of 1.09 and 0.47 in the year 2003/04 and 2007/08 respectively. The mean ratio of NIC is higher than that of EBL (i.e. $1.87 > 0.799$). The S.D. and C.V. of NIC is higher than that of EBL ($1.01 > 0.297$ and $0.54 > 0.372$). While

observing mean ratio, EBL has lower credit risk. Both bank have been improving it to minimize credit risk in the succeeding years.

4.1.1.6 Other Ratios

A) Earning Per Share

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

Table No. 4.19
Earning Per Share

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	13.65	22.75	16.10	24.01	25.75	20.45	5.27	0.26
EBL	45.60	54.22	62.77	78.41	91.82	66.56	18.60	0.28

Source: Annual Report of Concern Bank

Above table shows that earning price per share of NIC and EBL. NIC has increasing trend of EPS except in 2005/06 and EBL has continuously increasing trend of EPS. While observing their ratios in overall; EBL is better mobilizing it resources to get more earning per share (EPS) and it seems quite successful by generating higher profit to contribute high EPS in each year and in average too. It is quite satisfying to state that EBL has been able to maximizing shareholder wealth from the view pointy of EPS. The C.V of NIC is higher than EBL; it indicates that there is inconsistent in earning per share of NIC than that of EBL.

B) Dividend per Share including bonus share

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

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

Table No. 4.20
Dividend per Share including bonus share

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	0	30	10.53	21.05	21.05	16.53	12.42	0.70
EBL	20	20	25	40	50	31	22.10	0.433

Source: Annual Report of Concern Bank

The above statistics shows the dividend per share of EBL has higher than that of NIC in each year except in 2004/05. EBL has also higher mean (i.e. $31 > 16.53$), it has higher variability in dividends during the study period. It indicates EBL has higher profit as well as higher earning per share. The C. V. of the EBL is lower than NIC i.e. $0.433 < 0.70$ it depicts that EBL has more consistency in EPS rather than NIC.

C) Market Price per Share

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

Table No. 4.21
Market price per share (in Rs)

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	218	366	496	950	1284	655.60	429.66	0.66
EBL	680	870	1379	2430	3132	1698	1050.7	0.619

Source: Annual Report of Concern Bank

This table shows market price of the share of NIC and EBL. Both banks have increasing trend of Market price. It indicates better performance of company and high expectation by shareholder. Average mean price of EBL is greater than that of NIC (i.e. $1698 > 655.60$). It indicates that shareholder of EBL are getting higher price. The C.V. of EBL is lower it indicates that NIC has inconsistent in its market price.

D) Price Earning Ratio

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

Table No. 4.22
Price Earning Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
NIC	15.97	16.09	30.81	39.56	49.86	30.46	14.80	0.49
EBL	14.91	16.06	21.97	30.99	34.11	23.60	8.66	0.37

Source: Annual Report of Concern Bank

Above table shows that price-earning ratio earning of NIC and EBL are in increasing trend. From the mean point of view, mean ratio of the NIC and EBL are 30.46 and 23.60 times respectively. It indicates that for getting Rs 1 as earning, one should invest Rs 30.46 in NIC and Rs 23.60 in EBL. Looking the mean ratio we conclude that in short run, investor of NIC are getting better profitability because they are selling their shares in high price although EPS of NIC is lower in comparison than that of EBL. But from the long term view and sustainable fair price, investor of EBL will get better profitability and they will be in safe side in comparison with NIC its better to sale share of NIC to get high profit. The S.D and C.V of NIC is high than the EBL it indicate its risk to invest in NIC rather than in the EBL.

4.2 Statistical Analysis

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

4.2.1 Coefficient of Correlation Analysis

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

A) Correlation Coefficient between Deposit & Loan & Advances

Deposit have played vary important role in performance of a commercial banks and similarly loan & advances are very important to mobilize the collected deposits. Co-

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

Table No. 4.23
Correlation between Deposit and Loan & Advances

Name of Banks	Evaluation Criteria			
	r	R ²	P.Er.	6 P.Er.
NIC	0.993	0.986	0.00422	0.0253
EBL	0.998	0.996	0.00121	0.0423

Source: BY SPSS Data Editor

From the above table, it is found that coefficient of correlation between deposits and loan & advances of NIC and EBL is 0.993 and 0.998. It shows that both have the highly positive relationship between these two variables. It refers that deposit and loan & advances of NIC and EBL move together very closely. Moreover, the coefficient of determination of NIC is 0.986. It means 98.6 percent of variation in loan & advances has been explained by deposit. Similarly, value of coefficient of determination of EBL is 0.996. It refers that 99.6 percent variance in loan & advances are affected by total deposit. The correlation coefficient of both banks is significant because the correlation coefficient is greater than the relative value of 6 P.Er. In other words, there is significant relationship between deposits and loan & advances.

B) Coefficient of Correlation between Total Deposits and Total Investment

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

The following Table shows the coefficient correlation between deposits and total investments i.e. r, P. Er., 6 P. Er. and coefficient of determination (R^2) of NIC and EBL during the study period.

Table No. 4.24
Correlation between Deposit and Total Investment

Name of Banks	Evaluation Criteria			
	r	R^2	P.Er.	6 P.Er.
NIC	0.515	0.265	0.222	1.329
EBL	0.897	0.8046	0.0592	0.3552

Source: BY SPSS Data Editor

From the above table, the researcher found that the coefficient of correlation between total deposit and total investment of NIC is 0.515 It shows the moderate degree positive correlation. In addition, coefficient of determination of NIC is 0.265 It means only 26.5 percent of total investment is explained by total deposit. The correlation coefficient is insignificant because the correlation coefficient is less than 6 P.Er. It refers that there is insignificant relationship between total deposit and total investment of NIC.

Similarly, there is high degree correlation positive coefficient between total deposit and total investment of EBL, which is indicator by correlation coefficient of 0.897. The value of coefficient of determination is found 0.8046 this refers that 80.46 percent of the variation in total investment is explained by total deposit. The correlation coefficient is significant because the correlation coefficient is more than 6 P.Er. It refers that there is significant relationship between total deposit and total investment of EBL

From the above analysis, the conclusion can be drawn in the case of EBL; it has high degree positive correlation. It indicates that it has successfully mobilized its deposit to provide investment. Whereas NIC has not mobilized its deposit for investment as increment in its deposit.

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

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

Table No. 4.25
Correlation between Loan and advance and Net profit

Name of Banks	Evaluation Criterions			
	r	R^2	P.Er.	6 P.Er.
NIC	0.935	0.874	0.038	0.228
EBL	0.991	0.982	0.0054	0.033

Source: Through SPSS Data Editor

Above table shows correlation coefficient between, Loan and advance and net profit is 0.935 of NIC. It refers that there is positive correlation between these two variables. Here, 87.4 percent of net profit is contribute by Loan and advance as its coefficient of determination of 0.874 shows. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P.Er. Likewise EBL has also high degree positive correlation i.e. 0.991 between Loan and advance and net profit. The coefficient of determination R^2 is 0.982, which indicates that 98.2 percent variability in net profit is explained by Loan and advance. Moreover, higher correlation coefficient than 6P.Er. Shows that the relationship between Loan and advance and net profit is significant for EBL. In conclusion, EBL has more significant relationship between Loan and advance and net profit than that of NIC.

D) Coefficient of Correlation between Total Investment and Net Profit

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

Table No. 4.26
Correlation between Total Investment and Net Profit

Name of Banks	Evaluation Criterions			
	r	R ²	P.Er.	6 P.Er.
NIC	0.271	0.073	0.280	1.67
EBL	0.85	0.7225	0.084	0.504

Source: Through SPSS Data Editor

Above table shows correlation coefficient between total investment and net profit of NIC is 0.271 which implies there is low degree positive correlation between total investment and net profit. In addition, coefficient of determination of NIC is 0.073. It means only 7.3 percent of Profit is contribute by total investment. Obviously, this correlation is insignificant at all due to coefficient of correlation is less than 6P.Error. On the other hand EBL has higher positive correlation between total investment and net profit i.e. 0.85. The coefficient of determination of EBL is 0.7225. It means 72.25 percent of Profit is contributed by total investment. This relationship is significant as its correlation coefficient is higher than 6 P.Er.

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

E) Coefficient of correlation of Total Deposit between NIC and EBL

Coefficient of correlation of total deposit between NIC and EBL and shows their linear relationship.

Table No. 4.27

Correlation between Total Deposit of NIC and EBL

Evaluation Criteria			
R	R²	P.Er.	6 P.Er.
0.994	0.988	0.0362	0.0217

Source: Through SPSS Data Editor

This table shows how the total deposit of NIC and EBL is positively related. 0.994 of correlation coefficient shows that there is highly positive correlation between these two banks in this regard. This correlation coefficient is also significant because the correlation coefficient is high than 6 P.Er. As the 0.988 of coefficient of determination, this shows the 98.0 percent of the degree of relationship.

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

F) Coefficient of correlation of Total Investment between NIC and EBL

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

Table No. 4.28

Correlation between Total Investment of NIC and EBL

Evaluation Criteria			
R	R²	P.Er.	6 P.Er.
0.484	0.234	0.231	1.386

Source: Through SPSS Data Editor

The above table reveals that there is moderate positive correlation between NIC and EBL in case of total investment. It implies that the total investment of NIC and EBL move in the same direction but proportionately. Here $R < 6 \text{ P.Er.}$ Therefore, correlation coefficient is insignificant. This can be said that both NIC and EBL increase its total investment as same direction but in the form moderate. The coefficient of determination is 0.234, which shows the only 23.4 percent of the degree of relationship.

G) Coefficient of Correlation of Loan & Advances between NIC and EBL The coefficient of correlation of loan & advances between NIC and EBL has been given below.

Table No. 4.29
Correlation between Loan & Advances of NIC and EBL

Evaluation Criteria			
R	R ²	P.Er.	6 P.Er.
0.960	0.922	0.0235	0.1412

Source: Through SPSS Data Editor

Above table shows that there is high degree positive correlation between the loan & advances of NIC and EBL. The correlation coefficient between two banks is 0.96. It means loan & advances of these two banks moves in the same direction in high proportion. This correlation coefficient is significant in order to show the relationship between loan & advances of these two banks because correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.922 which shows the 92.2 percent of the degree of relationship.

H) Coefficient of Correlation of Net Profit between NIC and EBL

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

Table No. 4.30
Correlation between Net Profit of NIC and EBL

Evaluation Criteria			
R	R ²	P.Er.	6 P.Er.
0.960	0.922	0.0235	0.1412

Source: Through SPSS Data Editor

Above statistics shows that there is high degree positive correlation between profits of NIC and EBL, which is indicated by correlation coefficient of 0.960, This relationship is

significant because its correlation coefficient is more than 6 P.Er. The coefficient of determination is 0.922 which shows the 92.2 percent of the degree of relationship.

4.2.2 Trend Analysis

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

A) Trend Analysis of Total Deposit:

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

Where,

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

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

NIC

EBL

$$a = 8661.346$$

$$a = 14825.32$$

$$b = 1970.327$$

$$b = 3991.335$$

Where as

$$Y_c = 8661.346 + 1970.327 X \text{ NIC}$$

$$Y_c = 14825.32 + 3991.335 X \text{ of EBL}$$

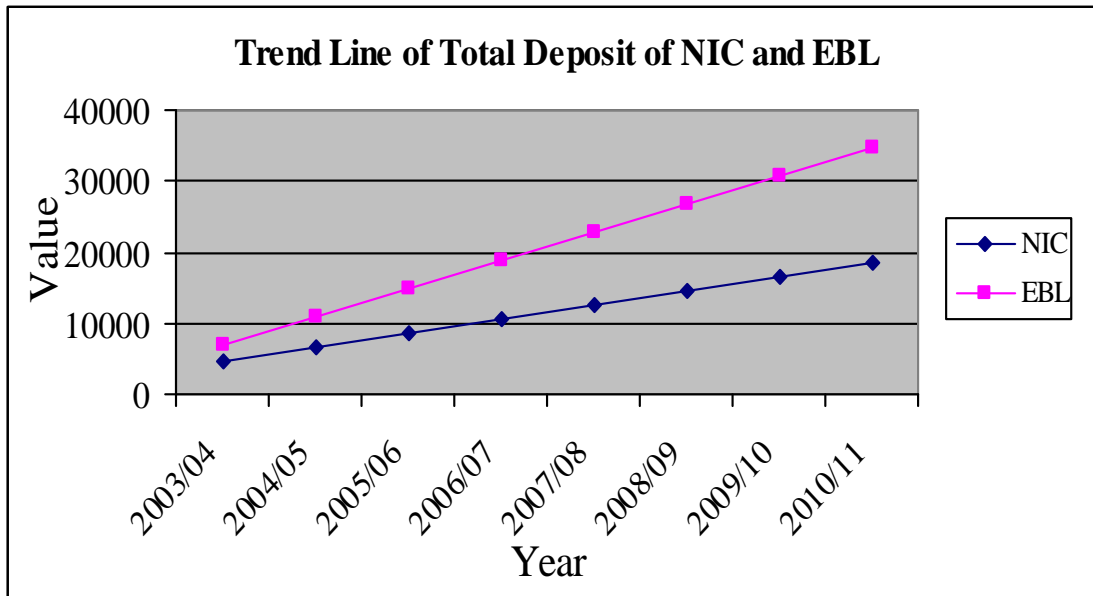
Table No. 4.31

Trend analysis of Total Deposit of NIC and EBL		
Year(x)	NIC	EBL
2003/04	4720.69	6842.65
2004/05	6691.02	10833.99
2005/06	8661.35	14825.32
2006/07	10631.7	18816.66
2007/08	12602	22807.99
2008/09	14572.3	26799.33
2009/10	16542.7	30790.66
2010/11	18513	34782

Source: Annul Report of Concern Bank

Appendix 1

Figure No 4.1



Above table and figure shows that total deposit of EBL and NIC. Both Banks is in increasing trend. The rate of increment of total deposit for EBL seems to be higher than

that of NIC. The increasing trend of total deposit of EBL is more aggressive and high rather than NIC. It indicates EBL has more prospect of collecting Total deposit. The trend analysis has projected deposit amount in fiscal year FY 2008/09 to FY 2010/11. From the above trend analysis, it is clear that EBL has higher position in collecting deposit than NIC.

B) Trend Analysis of Loan & advances

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

$Y = a + bx$

Where,

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

X = deviation from some convenient time periods.

Let trend line be

$Y = a + b x \dots\dots\dots (I)$

Where $x = X - \text{Middle year}$

Here,

$a = \frac{\sum Y}{N}$

$b = \frac{\sum XY}{\sum X^2}$

NIC

EBL

$a = 7026.978$

$a = 11061.46$

$b = 1963.677$

$b = 3095.539$

$Y_c = 7026.978 + 1963.677 X \text{ of NIC}$

$Y_c = 11061.46 + 3095.539 X \text{ of EBL}$

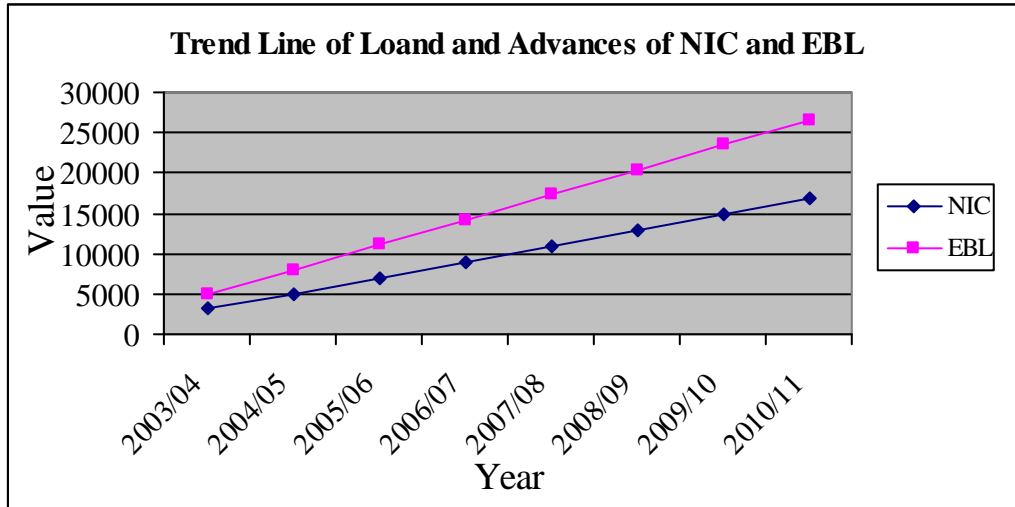
Table No. 4.32

Trend line of Total Loan and Advance of NIC and EBL		
Year(x)	NIC	EBL
2003/04	3099.62	4870.38
2004/05	5063.3	7965.92
2005/06	7026.98	11061.5
2006/07	8990.66	14157
2007/08	10954.3	17252.5
2008/09	12918	20348.1
2009/10	14881.7	23443.6
2010/11	16845.4	26539.2

Source: Annul Report of Concern Bank

Appendix 2

Figure No 4.2



Above table depicts that loan & advances of EBL and NIC. Both Banks has in increasing trend. The increasing trend of EBL is higher than NIC. The trend projected for father eight year FY 2007/08 to FY 2010/11 From the above analysis, it is clear that both EBL and NIC is mobilizing its collected deposits and other funds in the form of loan & advances. Above table and figure shows, the EBL has highly mobilizing loan & advances than the NIC.

C) Trend Analysis of Total Investment

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

$Y = a + bx$

Where,

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

X = deviation from some convenient time periods.

Let trend line be

$Y = a + b x \dots\dots\dots (I)$

Where $x = X - \text{Middle year}$

Here,

$a = \frac{\sum Y}{N}$

$b = \frac{\sum XY}{\sum X^2}$

NIC

EBL

$a = 1944.896$

$a = 3781.802$

$b = 112.808$

$b = 790.328$

$Y_c = 1944.896 + 112.808 X \text{ NIC}$

$Y_c = 3781.802 + 790.328 X \text{ of EBL}$

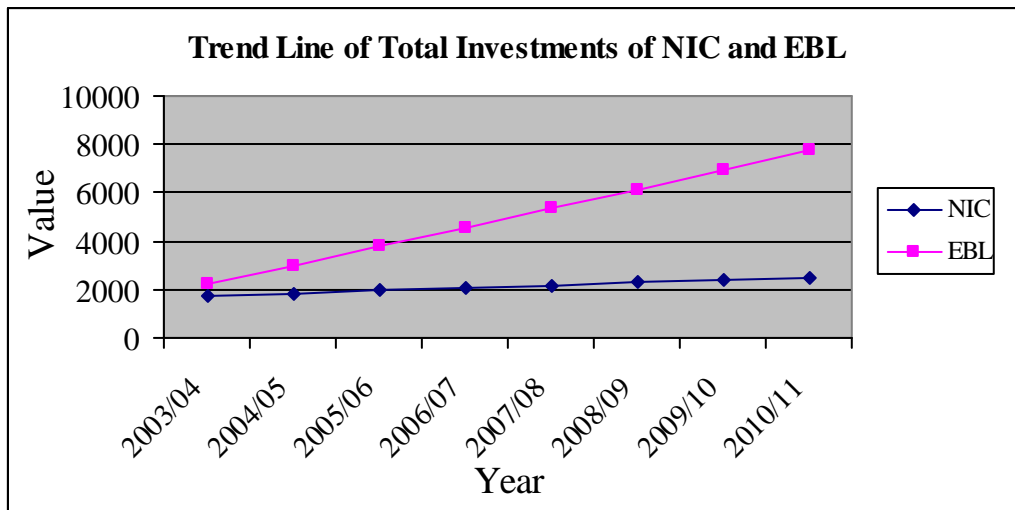
Table No. 4.33

Trend Line of Total Investment Between NIC and EBL		
Year(x)	NIC	EBL
2003/04	1719.28	2201.15
2004/05	1832.09	2991.47
2005/06	1944.9	3781.8
2006/07	2057.7	4572.13
2007/08	2170.51	5362.46
2008/09	2283.32	6152.79
2009/10	2396.13	6943.11
2010/11	2508.94	7733.44

Source: Annul Report of Concern Bank

Appendix 3

Figure No 4.3



Above table shows the Trend of Total Investment between EBL and NIC. Both Bank EBL and NIC have increasing trend in making investment. EBL has high and upward

trend of increasing, but NIC has little increasing trend of total investment. The trend of total investment projected to FY 2010/11. The forecasted trend projected that the EBL has greater increment rate in total investment than the increment rate of NIC. The figure indicates EBL has highly mobilized the total investment rather than NIC.

D) Trend Analysis of Net Profit

Here, the trend values of net profit of NIC and EBL have been calculated for five years FY 2003/04 to FY 2007/08 and forecasting for the next eight year till FY 2010/11.

$Y = a + bx$

Where,

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

X = deviation from some convenient time periods.

Let trend line be

$Y = a + b x \dots \dots \dots (I)$

Where $x = X - \text{Middle year}$

Here,

$a = \frac{\sum Y}{N}$

$b = \frac{\sum XY}{\sum X^2}$

NIC

EBL

$a = 136.03$

$a = 259.874$

$b = 39.432$

$b = 74.069$

$Y_c = 136.03 + 39.432 X \text{ of NIC}$

$Y_c = 259.874 + 74.069 X \text{ of EBL}$

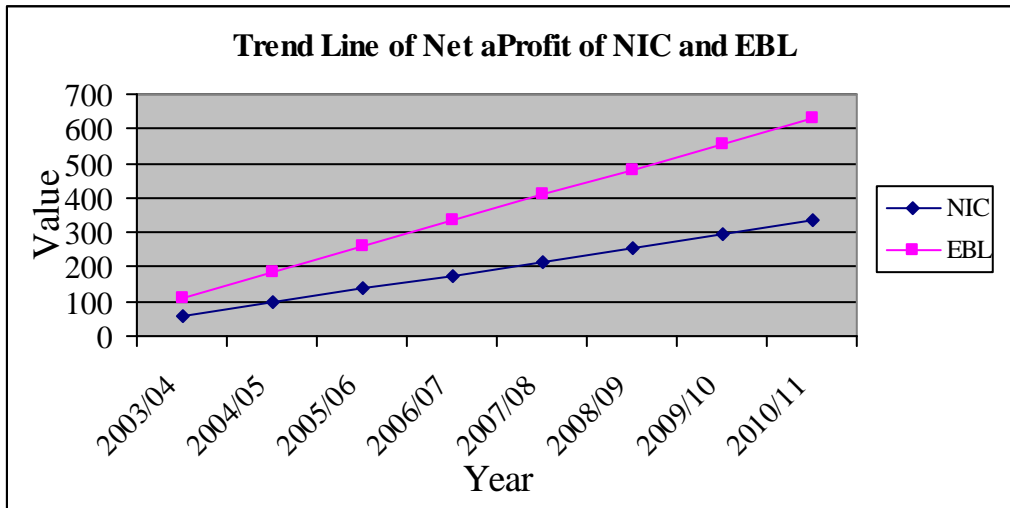
Table No. 4.34

Trend Analysis of Net Profit Between NIC and EBL		
Year(x)	NIC	EBL
2003/04	57.166	111.736
2004/05	96.598	185.805
2005/06	136.03	259.874
2006/07	175.462	333.943
2007/08	214.894	408.012
2008/09	254.326	482.081
2009/10	293.758	556.15
2010/11	333.19	630.219

Source: Annul Report of Concern Bank

Appendix 4

Figure No 4.4



The above table reveals the trend of Net profit of EBL and NIC. Net profit both bank EBL and NIC forecasted in increasing trend. The trend of increasing value of net profit of

EBL is higher and aggressive than NIC. The net profit of EBL and NIC has been increasing every year by Rs.74.069 million and Rs. 39.432 million respectively. The trend of Net profit projected to FY 2010/11 i.e. further three year. Above statistics shows that both the banks have inconsistent net profit throughout the study period. In conclusion, EBL is doing better in order to generate net profit during the projected study period in conclusion the prospect of profit generating capacity of EBL is high than the NIC.

4.3 Major Findings

4.3.1 Financial Analysis

Liquidity Ratio

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

-) Generally banks have to maintain more liquid assets but the current ratios of all banks are below the standard of 2:1. The mean current ratio of NIC is 1.89 and EBL is 1.14 the current ratio of NIC has little higher than EBL. It is indicate better liquidity position of NIC. NIC has met the standard.
-) Cash and bank balance to total deposit ratio of EBL has higher than NIC i.e. 10.7% >9.24% which indicates that the bank has higher liquidity of EBL as compare to NIC. A high ratio of cash and bank balance may be undesirable which indicates EBL inability to invest in more productive sectors like short-term marketable securities insuring enough liquidity which will help the bank to improve its profitability. But liquidity position is good.
-) Cash and bank balance to current assets ratio of NIC is higher than EBL i.e. 9.84%. > 9.3%. Regarding the analysis, it can be said that NIC has a better ability to meet daily cash requirements of their customers but it should be noted that NIC has excess cash due to the low investment opportunities.
-) Investment on government securities to current assets of EBL has higher than NIC i.e. 18.3% > 18.22%. It shows EBL has invested more fund in government securities. NIC has invested little portion in government securities than the EBL..

Above findings shows that liquidity position of NIC is comparatively better than EBL. Lower liquidity position of EBL shows that the current assets have been utilized in some profit generating sectors. Furthermore out of its current assets EBL has invested more funds in risk free assets like government bond and treasury bills..

Asset Management Ratio

A commercial bank must be able to manage its assets very well to earn high profit, so to satisfy it's customers and for own existence. The assets management ratios of NIC and EBL show the following findings.

-) The loan & advances to total deposit ratio of NIC is higher than EBL $79.10\% > 74.2\%$. It indicates the better mobilization of deposit by NIC. So, NIC has more efficiently utilizing the outsiders' funds in extending credit for profit generating sectors.
-) The total investment to total deposit of NIC is lower than EBL i.e. $24.25\% < 26.3\%$. It shows that EBL mobilize its total deposit as investment. It can be said that EBL is more successful in utilizing its total deposit by investing in marketable securities and other investment sectors.
-) The loan & advances to total assets ratio of NIC is greater than EBL i.e. $70.62\% > 63.08\%$. It refers NIC has utilized its total assets more efficiently in the form of loan & advances with more risk because it has greater variability in the ratio.
-) Investment on government securities to total assets ratio of EBL is higher than NIC i.e. $18.1\% > 14.64\%$. This indicates that EBL has invested more portions of total assets on government securities. It means EBL has invested more money in risk free assets than that of NIC.

Above findings reveal that EBL has better utilized its assets in risk free asset like government securities and treasury bills rather than NIC. On the other hand EBL has higher investment of total deposit and NIC has higher loan and advance of total deposit.

Profitability Ratio

The major performance indicator of any firm is profit. Following findings are drawn on the basis of profitability position of NIC and EBL.

-) Return on loan & advances ratio of EBL is higher than that of NIC i.e. $2.35\% > 1.94\%$. It refers that EBL has utilized the loan and advance for the profit generation purpose in proper way.
-) Return on total assets ratio of EBL is slightly higher than NIC i.e. $1.50\% > 1.31\%$. EBL seems successful in managing and utilizing the available assets in order to generate revenue.
-) Return on equity of EBL is higher than NIC i.e. $22.7\% > 15.23\%$ which shows that EBL is more successful to earn high profit through the efficient utilization of its equity capital.
-) Total interest earned to total assets ratio of NIC is relatively higher than that of EBL i.e. $6.02\% > 5.9\%$ and it indicates that NIC has efficiently used its total assets to earn higher interest income in comparison to EBL. EBL seems less conscious about managing its assets in order to earn more interest ratio
-) Total interest earned to total outside assets ratio of NIC is higher than the EBL i.e. $6.84\% > 5.7\%$. NIC seems to have more efficiency in generating total interest through well utilizations of outside assets than that of EBL.
-) Total interest earned to total operating income ratio of NIC is lower than EBL i.e. $168.70\% < 196\%$. It means the greater portion of total operating income is occupied by total interest for EBL. It reveals EBL has successful mobilizing their fund in interest generating assets. Whereas NIC has generated its operating income through other sources like commission and discount, foreign exchange gains.
-) Total interest paid to total assets ratio of EBL is lower than NIC i.e. $2.6\% < 3.26\%$. It indicates that NIC paying higher interest on total asset. It shows that EBL is conscious about borrowing cheaper fund.

Overall findings of profitability ratios show that EBL generating higher profit in loan and advance, deposit and equity. NIC has high interest earn on asset and out side asset but paying higher interest in total asset also.

Risk Ratio

From the above research study, following findings are drawn on the risk position of the sample banks:

-) The credit risk ratio shows the proportion of no-performing loan in total Loan & Advances. Average credit risk ratio of EBL is lower than NIC i.e. $1.25\% < 2.55\%$. EBL has efficient operating of credit management than that of NIC from the mean point of view. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. In the latest years NIC is doing well.
-) The liquidity risk of the bank defines its liquidity need for deposit. The average mean ratio of EBL is greater than that of NIC (i.e. $10.7\% > 9.24\%$). It signifies that EBL has sound liquid fund to make immediate payment to the depositors.
-) Asset Risk Ratio of both banks has decreasing trend. The mean ratio of EBL is lower than that of NIC (i.e. $1.87\% > 0.799\%$). However if we see the latest data credit risk is low in NIC.

Above analysis reveals that EBL has lower in risk position than NIC. Credit, liquidity and asset risk ratio of EBL is lower than NIC. It indicates NIC is riskier than EBL.

Other Ratios

From the above research study, following findings are drawn on the other ratios of the sample banks i.e. NIC and EBL:

-) Average earning per share of EBL is much greater than that of NIC i.e. $\text{Rs.}66.56 > \text{Rs.}20.45$. EBL is better mobilizing its resources to get more earning per share (EPS) and it seems quite successful by generating higher EPS in each year and in average too. The C.V of NIC is higher than EBL; it indicates that there is inconsistent in earning per share.
-) The dividend per share including bonus share of EBL is high than NIC i.e. $31 > 16.53$. It indicates EBL has higher profit as well as higher earning per share. It can

- be concluded EBL has adopted the policy of paying high amount in the form of cash and bonus share where as NIC is less
-) Average market price of the share of EBL is greater than that of NIC i.e. Rs 1698 > Rs.655.60. It indicates that shareholder of EBL are getting higher price It shows EBL has better financial performance than NIC in order to increase market price per share. The C.V. of EBL is lower than NIC it indicates that NIC has little bit inconsistent in its market price.
 -) The mean price-earning ratio of NIC is little higher than that of EBL i.e. 30.46 > 23.60 times. It indicates that for getting Rs 1 as earning, one should invest Rs 30.46 in NIC and Rs 23.60 in EBL. Looking the mean ratio we conclude that in short run, investor of NIC are getting better profitability because they are selling their shares in high price although EPS of NIC is lower in comparison than that of EBL. But in long run investor of EBL will get high profitability. It is suggested that shareholder of NIC to sell their stock to get high income as low ratio is preferable in the case of price earning ratio.

Above analysis reveals that EBL bank has well in other ratios than NIC. EBL seems better than NIC in many aspects.

4.3.2 Statistical Analysis

Coefficient of Correlation

Coefficient of correlation analysis shows the following findings from the research study:

-) Both NIC and EBL have high positive co-relation between total deposit and loan & advances because NIC and EBL have 0.993 and 0.998 of co-relation coefficient between deposit and loan & advances. These relationships are significant. This can be regarded as good indication in financial performance for the banks. The correlation coefficient of both bank is significant
-) There is positive correlation between total deposit and total investment of NIC and EBL. Where as NIC has low degree of positive co-relation i.e. 0.515 than EBL i.e. 0.897. EBL has high degree positive correlation where as NIC has moderate degree positive correlation. NIC has insignificant result and EBL has significant.

-) There is positive correlation between Loan and advance and net profit. Correlation between Loan and advance and net profit of NIC is 0.935 and EBL is 0.991. EBL has high degree of positive co-relation. The relationship between Loan and advance and net profit of NIC and EBL significant.
-) The degree of relationship between total investment and net profit of NIC is poor than EBL i.e. correlation coefficient between total investment and net profit of NIC and EBL is 0.271 and 0.85 respectively. It refers that EBL is comparatively successful to generate net profit through investment due to higher positive correlation. The relationship between investment and net profit of NIC bank is insignificant due to more and less than 6 P.Er whereas EBL has significant result.
-) Correlation coefficient of total deposit between NIC and EBL shows high positive correlation i.e. 0.994. The correlation coefficient shows that It refers that total deposit of both banks move in the same direction in this regard. Correlation coefficient is also significant.
-) The correlation of total investment between NIC and EBL is moderately positive correlation i.e. 0.484. It implies that the total investment of both banks move in the same direction but less proportionately. Correlation coefficient of banks is insignificant.
-) The degree of relationship of loan & advances between the NIC and EBL is high because correlation coefficient between loan & advances of these two banks is 0.960. It means loan & advances of these two banks moves in the same direction in highly relationship. Correlation coefficient is also significant due to more than 6 P.Er
-) The correlation of net profit between NIC and EBL is highly positive i.e. 0.96. It implies that the Net profit of both banks move in the same direction. The relationship between two banks is significant because its correlation coefficient is higher than 6 P.Er.

From the above analysis both bank has positively correlated. In some cases high and some where low but positive correlated.

Time Series Analysis (Trend Analysis)

The research study has revealed following some major findings on the basis of time series analysis.

-) NIC and EBL have increasing trend in collecting deposit the rate of increment of total deposit for EBL seems to be higher than that of NIC Here EBL has better position in collecting deposit than NIC.
-) The trend line of loan & advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan & advances. The trend line of loan and advances for EBL seems high growing than NIC. It refers that EBL is more aggressive in mobilizing its loan and advance.
-) The total investment trend line of NIC and EBL is upward slopping where as NIC has aggressive upward slopping of total investment trend line. It refers that EBL has better increasing trend of total investment than NIC.
-) The trend line of Net profit for NIC and EBL is upward slopping But EBL has aggressively and NIC has smoothly. The position of EBL is better in order to generate profit than NIC.

Above analysis reveals that both the banks have well their ratio. Trend of Both bank has increasing trend. In comparison to both bank every ratio of EBL is higher than the NIC. It indicates better performance of EBL rather than NIC.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The researcher has identified that research problem and set objectives to solve research problems about portfolio management of selected commercial banks as described in introduction chapter. To make this study more effective, related literatures have been reviewed. The review of literature provides the foundation of knowledge in order to under take this research more precisely. This section also includes concept of banking, commercial banks, joint venture banks, investment and investment policy.

Research methodology has been described in third chapter, which is a way to solve the research problems with the help of various tools and techniques. This chapter includes the various financial as well as statistical tools to analyze the data in order to come to the decisions. This chapter includes the research design, population and sample data collection procedure, data period covered and methods of analysis. This study is mainly conducted on the basis of secondary data collected from annual reports, official report, economic journal, financial statement etc. and web site. The five years financial statement has been examined for the purpose of the study.

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

A bank always puts in effort to maximize its profitability. The profit is excess of income over expenses. To maximize profit, income should be reasonably excess over expenses. The major source of income of a bank is interest income from loans, investments and fee based income. As loan and advances dominate the asset side of the balance sheet of any bank; similarly, earnings from such loan and advances occupy a major space in income statement of the bank. However, it is very important to be reminded that most of the bank failures in the world are due to the shrinkage in the value of loan and advances. Hence, loan is known as risky asset and investment operation of commercial banks, is a very risky one. Risk of non-performing loans erodes even existing capital. Considering the importance of lending to the individual banks and also to the society it serves, it is imperative that the bank meticulously plans its credit operations.

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

Commercial banks in the developing countries like Nepal have the greatest responsibility towards the economic development of the country. In modern times, since credit or bank money constitutes bulk is of the economy's aggregate money supply, it mostly changes the volume of the bank money or credit rather than changes in the total supply of the high-powered money issued by the reserves held by the bank against their deposit liabilities that account for the changes in the aggregated money supply. The main goal of the bank as a commercial organization is to maximize the surplus by the efficient use of its funds and resources. In spite of being a commercial institution, it has a responsibility (obligation) to provide social service oriented contribution for the social economic upliftment of the country by providing specially considered loans and advances towards less privileged sectors.

A bank's marketing starts with a proper relationship with customers either to attract savings or for the loan disbursement. Both the depositors and the creditors are customers

of the bank. Banks offer various products for deposit mobilization and disburse the credit products as per the portfolio management. Customers as per their need purchase different types of product offered in the market. Deposit products offered to the customers are categorized into general products and special products, and credit products can be bifurcated into fund based products and non-fund based products. The fund based products in practice are developed from the credit products generally known as overdraft, working capital loan, Term loan, bills purchase or negotiation, export and import bills, import/trust receipt loan, export credit, loan against fixed deposit receipt, loan against shares, loan against securities, and loan against bank guarantee and deprived sector loan. The term loan used in practice generally addresses short term loan medium term loan and long term loan to be advanced in various forms such as housing loan, hire purchase loan and bridge financing. The non-fund based product is composed of letter of credit (LC) and bank guarantees with different forms (bid bonds, performance bonds, etc.)

Among the different banking products available in the market, the product with high demand are consumer credit, export and import credit, term loan, Project loan and syndicate loan. All banks and financial institution on the basis of their capital base and liquidity position offer these credit products but none of them so far have been found to have expertise in any one of them for marketing. Relying on any one of the product by portfolio seems more risky. Banks in foreign countries are known to bring out numerous products. As an example, the bank of America has a vast range of banking business serving individuals and small firms and a big share of the loan syndicate market. It means markets are there for some products and it is created for others. Banks in Nepal are weak in locating the existing market and in creating new markets too.

Loan disbursement is a trade of win-win game lenders and borrowers both get benefited out of it. Customers are the ultimate source of income not products. For the analysis of customers several questions need to be answered. This includes questions such as which customer buys the product and how do they use it? Where do customers buy the product, when do customer buy, how do customers choose, why do they preferred that product,

how do they respond, and will they buy it again. All these data available in the respective files of the customer make the marketing activities quite easier and effective.

Portfolio is the holding of a collection of investment. For some individuals and institutions, it is the entire holdings consisting of both assets and liabilities. An investment held as a part of the portfolio is less risky than the same investment held individually. So, every individuals and institutions should manage the portfolio by which the individuals and institutions get maximum return. The concept of the portfolio comes from "not putting all the eggs in one basket". Portfolio theory evaluates the reduction of non-systematic or diversifiable risks through the selection of securities or other instruments in to a composite holding or efficient portfolio. This efficiency means that a portfolio would offer lower risks or more stable returns for a targeted return level. Instruments that have independent returns lower non-systematic risks. Also, instruments that are inversely related on a return basis reduce the diversifiable risks. The basic theory assumes that returns are independent, investors expectations are homogeneous, and that the normalized probability distributions are stable.

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

Conclusion

On the basis of portfolio management of two sampled commercial banks, using various statistical as well as financial tools following inferences has been drawn:

The current ratio of NIC is higher than EBL. The current ratio of NIC is 1.89 and EBL is 1.14. Cash and bank balance to total deposit ratio of EBL has higher than NIC i.e. 10.7% >9.24% which indicates that the bank has higher liquidity of EBL as compare to NIC. Cash and bank balance to current assets ratio of NIC is higher than EBL i.e. 9.84% > 9.3%. Investment on government securities to current assets of EBL has higher than NIC

i.e. $18.3\% > 18.22\%$. It shows EBL has invested more fund in government securities. NIC has invested little portion in government securities than the EBL. Liquidity position of NIC is comparatively better than EBL. Lower liquidity position of EBL shows that the current assets have been utilized in some profit generating sectors. Furthermore out of its current assets EBL has invested more funds in risk free assets like government bond and treasury bills.

In case of Asset Management Ratio, the loan & advances to total deposit ratio of NIC is higher than similarly The loan & advances to total assets ratio of NIC is greater than EBL i.e. $70.62\% > 63.08\%$. The total investment to total deposit of NIC is lower than EBL i.e. $24.25\% < 26.3\%$. It shows that EBL mobilize its total deposit as investment. Investment on government securities to total assets ratio of EBL is higher than NIC i.e. $18.1\% > 14.64\%$. It means EBL has invested more money in risk free assets than that of NIC. EBL has better utilized its assets in risk free asset like government securities and treasury bills rather than NIC. On the other hand EBL has higher investment of total deposit and NIC has higher loan and advance of total deposit.

In Profitability Ratio, Return on loan & advances ratio of EBL is higher than that of NIC Return on total assets ratio of EBL is slightly higher than NIC i.e. $1.50\% > 1.31\%$. EBL seems successful in managing and utilizing the available assets in order to generate revenue. Similarly, Return on equity of EBL is higher than NIC. Total interest earned to total operating income ratio of NIC is lower than EBL i.e. $168.70\% < 196\%$. It means the greater portion of total operating income is occupied by total interest for EBL. It reveals EBL has successful mobilizing their fund in interest generating assets. Total interest earned to total assets ratio of NIC is relatively higher than that of EBL i.e. $6.02\% > 5.9\%$ and it indicates that NIC has efficiently used its total assets to earn higher interest income in comparison to EBL. Similarly, total interest earned to total outside assets ratio of NIC is higher than the EBL. In the same way total interest paid to total assets ratio of NIC is higher than EBL, It indicates that NIC paying higher interest on total asset. Overall profitability ratios show that EBL generating higher profit in loan and advance, deposit

and equity. NIC has high interest earn on asset and out side asset but paying higher interest in total asset also.

For the perspective of risk and other ratio, the credit risk ratio shows the proportion of no-performing loan in total Loan & Advances. EBL has efficient operating of credit management than that of NIC from the mean point of view. The average mean ratio of EBL is greater than that of NIC i.e. $10.7\% > 9.24\%$. It signifies that EBL has sound liquid fund to make immediate payment to the depositors. The mean ratio of EBL is lower than that of NIC i.e. $1.87\% > 0.799\%$. However if we see the latest data credit risk is low in NIC. Average earning per share of EBL is much greater than that of NIC i.e. $\text{Rs.}66.56 > \text{Rs.}20.45$. EBL is better mobilizing it resources to get more earning per share (EPS) and it seems quite successful by generating higher EPS in each year and in average too. The dividend per share including bonus share of EBL is high than NIC i.e. $31 > 16.53$. It indicates EBL has higher profit as well as higher earning per share. Average market price of the share of EBL is greater than that of NIC. It indicates that shareholder of EBL are getting higher price. The mean price-earning ratio of NIC is little higher than that of . It indicates that for getting Rs 1 as earning, one should invest Rs 30.46 in NIC and Rs 23.60 in EBL. Looking the mean ratio we conclude that in short run, investor of NIC are getting better profitability because they are selling their shares in high price although EPS of NIC is lower in comparison than that of EBL. But in long run investor of EBL will get high profitability. It is suggested that shareholder of NIC to sell their stock to get high income as low ratio is preferable in the case of price earning ratio. The analysis reveals that EBL bank has well in other ratios than NIC.

Coefficient of correlation of both NIC and EBL is positive. NIC and EBL have 0.993 and 0.998 of co-relation coefficient between deposit and loan & advances. These relationships are significant. There is positive correlation between total deposit and total investment of NIC and EBL. EBL has high degree positive correlation where as NIC has moderate degree positive correlation. The correlation between Loan and advance and net profit of NIC is 0.935 and EBL is 0.991. The relationship between Loan and advance and net profit of NIC and EBL are significant. The correlation coefficient between total

investment and net profit of NIC and EBL is 0.271 and 0.85 the relationship between investment and net profit of NIC bank is insignificant.

Correlation coefficient of total deposit between NIC and EBL shows high positive correlation i.e. 0.994. Correlation coefficient is also significant. The correlation of total investment between NIC and EBL is moderately positive correlated. Correlation coefficient of banks is insignificant. The relationship of loan & advances between the NIC and EBL is positive because correlation coefficient between loan & advances of these two banks. Correlation coefficient is also significant due to more than 6 P.Er similarly correlation of net profit between NIC and EBL is highly positive i.e. 0.96. It implies that the Net profit of both banks move in the same direction. The relationship between two banks is significant.

On the basis of time series analysis, NIC and EBL have increasing trend in collecting deposit the rate of increment of total deposit for EBL seems to be higher than that of NIC. The trend line of loan & advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan & advances. The trend line of loan and advances for EBL seems high growing than NIC. The total investment trend line of NIC and EBL is upward slopping where as NIC has aggressive upward slopping of total investment trend line. Similarly, the trend line of Net profit for NIC and EBL is upward slopping. Trend of Both bank has increasing trend. In comparison to both bank every ratio of EBL is higher than the NIC.

5.3 Recommendations

On the basis of entire research study, analysis and finding of the study, the following recommendations can be made as suggestions to portfolio management of NIC bank and EBL bank is presented effective and efficient below.

-) Generally banks have to maintained liquid assets. The current ratio of the two banks, NIC and EBL is near about two. This can be regarded as good liquidity position. The liquidity position affects external and internal factors such as

prevalent investment situations, central bank requirements and so on. Considering the growth position of financial market, the lending policy management capabilities, strategic planning and fund flow situation, bank should maintain enough liquid assets to pay short-term obligations. However it is recommended to maintain sound liquidity position to current ratio 2:1.

-) EBL and SCBNL should minimize their risk by investing in more profitable sectors. Idle assets of theirs in form of excess cash or equivalents should be diverted in various investment opportunities available in the market. Those less risky investment sectors should be identified.
-) NIC and EBL need to bring in newer schemes to mobilize their higher amount of deposits in extending credit.
-) Government securities such as Treasury bills, Development bonds, saving certificates etc. are risk less investment alternatives because they are free of default risk as well as liquidity risk and can be easily sold in the market. In this research study, it has found that NIC has not made significant amount of fund in Government securities. NIC is recommended to invest more funds in Government securities instead of keeping them idle.
-) To get success in competitive banking environment, deposit must be utilized as loan & advances. The largest item of bank assets side is loan & advances. It has been found in the latest years that EBL loan & advances to total deposit ratio is lower than that of NIC. It means EBL has not properly used their existing fund as loan & advances in the succeeding years. So EBL is recommended to follow liberal lending policy and to invest more deposit in loan & advances in the latest years.
-) Non-performing assets are higher in NIC according to the mean ratio. The recovery of loan & advances is most challenging job to the bank. So NIC should diagnosis the root cause of increasing non-performing assets.

-) NIC and EBL should try to increase their profitability by investing in more profitable sectors, and by increasing the quality of their extended credits. They should have to investigate thoroughly the wide range of investment opportunities in the market in order to improve their profitability situation. Especially, As formation of price is a very complex process, some extremely outstanding sectors such as management efficiency, profitability status, future perspective, bank's investment strategy, etc should be improved.
-) EPS and DPS play a vital role to determine the market price of the share and also indicate the financial performance of banks. Higher EPS and DPS indicate the banks. EPS and DPS of NIB are not satisfactory enough in NIC. So it is recommended to diagnosis the cause of lower EPS and DPS.
-) NRB recommended following the NRB directives which will helps to reduce credit risk arising from defaulter, lack of proper credit appraisal, defaulter by blacklisted borrowers and professional defaulter. Government has established credit information bureau, which will provide suggestion to commercial bank. So EBL and SCBNL are suggested to collect as much information about borrowers and only lend to non-risky area and to non-defaulter.
-) For sustain in competitive market create new opportunity for Investing Areas Last political instability directly affected the economic sector such as hotel & tourism, manufacturing and trading sector. Bank loan & advances is decreasing in this sector. So banks should give priority to these sectors as well as banks should create new investing sector to mobilize deposit.
-) According to NRB directives, all the commercial bank should increase the capital up to Rs 2000 million by 2070 B.S NIC and EBL are increasing the paid up capita to meet NRB directive. The increment in capital can be made either by capitalization of profit, declaration of Bonus share or right share issue.

Keeping all these in consideration, the NIC has less performance than that of EBL. Another point is that EBL is joint venture bank. So, NIC should improve its weaknesses by adopting the innovative approach to marketing to meet competition. In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function as it is an effective tool to attract and retain the customers. For the purpose, the bank should develop an innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices.

In this way the entitled thesis comparative study of on portfolio management of NIC bank Everest bank is very use full to every person who concern to those company and research worker as well.

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Appendix - 1

Calculation of NIC Bank limited:

Year(x)	Total deposit(Y)	X= x - 2005/06	X ²	XY
2003/04	5146.48	-2	4	-10292.96
2004/05	6241.39	-1	1	-6241.39
2005/06	8765.95	0	0	0
2006/07	10068.23	1	1	10068.23
2007/08	13084.69	2	4	26169.38
Tot n = 5	Y = 43306.74	X = 0	X ² =10	XY = 19703.26

Source: Annul Report of NIC Bank Limited

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

NIC

$$a = 1753.19$$

$$b = 1970.326$$

Where as

$$Y_c = 1753.19 + 1970.326 X \text{ NIC}$$

Calculation of Everest Bank Ltd.

Year(x)	Total deposit(Y)	X x- 2005/06	X ²	XY
2003/04	8063.9	-2	4	-16127.8
2004/05	10098	-1	1	-10097.7
2005/06	13802	0	0	0
2006/07	18186	1	1	18186.25

2007/08	23976	2	4	47952.6
Tot n= 5	Y= 74126.59	X = 0	X ² =10	Xy=39913.35

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

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots \dots \dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{\sum Y}{N}$$

$$b = \frac{\sum XY}{\sum X^2}$$

$$a = 14825.32$$

$$b = 3991.335$$

Where as

$$Y_c = 14825.32 + 3991.335 X \text{ of EBL}$$

Appendix – 2

Calculation of NIC Bank limited:

Year(x)	Loan and advances(Y)	X= x - 2005/06	X ²	XY
2003/04	3561.14	-2	4	-7122.28
2004/05	4711.71	-1	1	-4711.71
2005/06	6655.96	0	0	0
2006/07	8941.4	1	1	8941.4
2007/08	11264.68	2	4	22529.36
Tot n=	Y =		X ²	XY =
5	35134.89	X = 0	=10	19636.77

Source: Annul Report of NIC Bank Limited

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

NIC

$$a = 7026.978$$

$$b = 1963.677$$

Where as

$$Y_c = 7026.978 + 1963.677 X \text{ of NIC}$$

Calculation of Everest Bank Ltd.

Year(x)	Loan and advances (Y)	X=x-2005/6	X ²	XY
2003/04	5884.1	-2	4	-11768.2

2004/05	7618.7	-1	1	-7618.67
2005/06	9801.3	0	0	0
2006/07	13664	1	1	13664.08
2007/08	18339.1	2	4	36678.22
Tot n= 5	Y= 55307.28	X=0	X ² =10	XY=30955.39

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Y= dependent variable,

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

X = deviation from some convenient time periods.

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{\sum Y}{N}$$

$$b = \frac{SXY}{SX^2}$$

$$a = 11061.46$$

$$b = 3095.539$$

$$Y_c = 11061.46 + 3095.539 X \text{ of EBL}$$

Appendix -3
Calculation of Total Investment of NIC Bank
Limited

Year(x)	Total Investment (Y)	X = x-2005/06	X ²	XY
2003/04	5835.95	-2	4	-11671.9
2004/05	4267.23	-1	1	-4267.23
2005/06	6178.53	0	0	0
2006/07	8945.31	1	1	8945.31
2007/08	9939.77	2	4	19879.54
Tot n= 5	Y =35166.79	X = 0	X ² =10	XY=12885.72

Source: Annul report of NIC Bank Limited

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

NIC

$$a = 7033.358$$

$$b = 1288.572$$

Where as

$$Y_c = 7033.358 + 1288.572 X \text{ of NIC}$$

Calculation of Everest Bank Ltd.

Year(x)	Total investment (Y)	$X=x-2005/6$	X^2	XY
2003/04	2535.7	-2	4	-5071.3
2004/05	2128.9	-1	1	-2128.93
2005/06	4200.5	0	0	0
2006/07	4984.3	1	1	4984.31
2007/08	5059.6	2	4	10119.2
Tot n= 5	Y=18909.01	x=0	X^2 =10	xy =7903.28

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Y= dependent variable,

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

X = deviation from some convenient time periods.

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

EBL

$$a = 3781.802$$

$$b = 790.328$$

$$Y_c = 37281.802 + 790.328 X \text{ of EBL}$$

Appendix - 4

Calculation of NIC Bank Limited

Year(x)	Net profit(Y)	X = x - 2005/06	X ²	XY
2003/04	68.26	-2	4	-136.5
2004/05	113.76	-1	1	-113.7
2005/06	96.59	0	0	0
2006/07	158.48	1	1	158.4

2007/08	243.06	2	4	486.1
Tot n= 5	Y =680.15	X = 0	X ² =10	XY =39

Source: Annul Report of NIC Bank Limited

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{\sum Y}{N}$$

$$b = \frac{\sum XY}{\sum X^2}$$

NIC

$$a = 136.03$$

$$b = 39.432$$

Where as

$$Y_c = 136.03 + 39.432 X \text{ of NIC}$$

Calculation of Everest Bank Ltd.

Year(x)	Net profit	X=x- 2005/06	X ²	XY
2003/04	143.66	-2	4	-287.32
2004/05	170.8	-1	1	-170.8
2005/06	237.3	0	0	0
2006/07	296.41	1	1	296.41
2007/08	451.2	2	4	902.4
Tot n= 5	Y=1299.37	X=0	X ² 10	X =740.69

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Y= dependent variable,

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

X = deviation from some convenient time periods.

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{SY}{N}$$

$$b = \frac{SXY}{SX^2}$$

EBL

$$a = 259.874$$

$$b = 74.069$$

$$Y_c = 259.874 + 74.069 \times \text{EBL}$$