CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Nepal is a small and landlocked country surrounded by India in south, east and west and by China in the north. Nepal is one of the least developed and poorest countries in the international arena. People living in the country have per capita income is $742. Approximately 25.16% of Nepalese people are living below poverty line (www.mof.gov.np).

The development of any country largely depends upon its economic development. In any country, capital formation and its proper utilization play a leading role for rapid economic development. Hence, a key factor in the development of an economy is the mobilization of domestic resources. In this regard, the network of well-organized financial system plays a vital role in both developed and developing countries.

Nepalese financial system can be grouped into banking and non-banking institutions. The banking system comprises all the commercial banks and non-banking comprises all financial institutions other than commercial banks. Similarly, finance companies fall under non-banking financial institutions.

Financial institutions like commercial banks and finance companies are those intermediaries which play a role of bridging the gap between surplus sector and deficit sector. In other words, they help to accumulate small and scattered resources and mobilize it into productive sectors for the maximization of wealth. Lack of access to financial resources is one of the major economic problems experienced by the developing countries. Banks and finance companies play vital role in meeting financial needs of productive units through generating saving from the surplus units of the economy.

Commercial banks are the heart of our financial system. They hold the deposits of million of persons, governments and business units. They make funds available through their lending and investing activities to borrowers-individuals, business firms and governments. In so doing they facilitate both the flow of goods and services from producers and the financial activities of governments. They provide a large portion of our medium of exchanges and they are media through which monetary policy is affected. These facts show that the commercial banking system of the nation is important to the functioning of our economy (Reed, 1976).

A commercial bank is a profit making organization that receives deposits from individuals and corporations in the form of checking and saving accounts and then uses some of these funds to make loans (Nickles, 2002).

Finance companies, licensed under the finance companies act 2042, are the largest group of deposit taking financial institutions in Nepal. Basically, finance companies collect scattered savings of the individuals and mobilize in the various sectors in the form of investment or lending such as hire purchase, purchase of land, housing loan etc. They also perform functions of merchant banking with prior approval of NRB. They have become popular among low-income and medium class people as they make loans available for hire purchase and for the purchase of machinery tools, equipment or other similar movable properties. They are different from the commercial banks and other financial institutions in terms of their orientation for management of risk taking, lending policies and practices, size and potentiality, service delivery mechanism and efficiency.

The primary goal of developing countries like Nepal is to achieve rapid economic growth and development to uplift the welfare of the public and the country. Commercial banks and finance companies are regarded as the catalyst of economic development of a country because they help in capital formation and mobilization of the domestic resources.

Commercial banks and finance companies perform a various financial activities to contribute for the economic development of the country. They collect funds and

utilize it in different sectors as an investment, which is not an easy task for them. Therefore, an investment of fund may be the question of life and death for the bank and finance company. For this, they have to pay due consideration while formulating investment policy. Sound and viable investment policy provides them several inputs through which they can handle their investment operation efficiently ensuring that maximum return with minimum risk, which ultimately leads the banks and finance company to the path of success.

The investment is a commitment of fund to some assets which takes place at present in an expectation to receive some direct benefits from those assets or to increase the value of those assets which takes place in the future. An investment is a commitment of money (both saved and borrowed) that is expected to generate additional money (Manandhar, 2009).

A healthy development of any banks and finance companies depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment. The lending process of both commercial banks and finance companies is guided by different principles such as length of time, safety, their purpose, profitability, marketability, stability etc. These fundamental principles of investment are considered while making investment policy.

Commercial banks and finance companies must mobilize its deposits and other funds to profitable, secured, stable and marketable sector. So, that it can earn good profit as well as it should secure and can be converted into cash whenever needed. Therefore, a bank has to be careful while investing their funds in various sectors i.e. investment portfolio. The success of a bank and finance company depends upon the proper management of it’s invest able funds.

A portfolio is collection of investment securities. Portfolio theory deals with the selection of optimal portfolios, that is, portfolio that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return (Weston, 1992).

Investment portfolio is the combination of the different securities. Therefore, a bank and finance company should not lay all its eggs in the same basket. A bank and finance company must diversify its investment on different sectors to minimize the risk and to earn more profit. The trend of banking and financial institution made difficult to survive each institutions without proper planning. The combination of when to invest, how to invest, how much to invest, falls under planning of investment. Commercial banks and finance companies should make proper planning before doing investment.

Profile of Himalayan Bank Limited (HBL)

Himalayan Bank Limited was established in 1993 in joint venture with Habib Bank Limited of Pakistan. It is the first commercial bank of Nepal with maximum shareholding by the Nepalese private sector. The bank has Board of Directors of nine members as well as seven executive members. Its head office is located in tourist center of city Thamel. The bank at present has nine branches in the Kathmandu valley-Bhaktapur, Banepa, Chabahil, Maharajgunj, New Road, New Baneshwor, Patan, Swoyambhu and Teku. Besides, seventeen branches were established outside Kathmandu respectively in Bhairawa, Birgunj, Biratnagar, Butwal, Baglung, Chitwan, Dang, Dharan, Damak, Hetauda, Itahari, Nepalgunj, Palpa, Parsa, Pokhara, Tandi and Trisuli. The bank is also operating a counter in the premises of the royal palace. Despite the cut-throat competition in the Nepalese Banking Sector, it has been able to maintain a lead in the primary banking activities-Loans and Deposits.

Legacy of Himalayan lives on in an institution that’s known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Accounts, HBL Proprietary Card, and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking (Telephone Banking) were first introduced by HBL. Other financial institutions in the country have been following its lead by introducing similar products and services. The bank has been a pioneer in several banking innovations. “Power to lead” has been the slogan and this has truly been implemented when it came to serving the valued customers keeping in view their comfort, time and effort.

All branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the Bank has made substantial investments. This has helped the Bank provide services like 'Any Branch Banking Facility', Internet Banking and SMS Banking. Living up to the expectations and aspirations of the customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme, Small Business Enterprises Loan, International Travel Quota Credit Card, Consumer Finance through Credit Card and online TOEFL, SAT, IELTS, etc. fee payment facility are some of the products and services. HBL also has a dedicated offsite 'Disaster Recovery Management System'.

Looking at the number of Nepalese workers abroad and their need for formal money transfer channel; HBL has developed exclusive and proprietary online money transfer software-Himal Remit TM. By deputing its own staff with technical tie- ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where customer's needs and wants stand first.

Corporate Social Responsibility (CSR) holds one of the very important aspects of HBL. Being one of the corporate citizens of the country, HBL has always promoted social activities. Many activities that do a common good to the society have been undertaken by HBL in the past and this happens as HBL on an ongoing basis. Significant portion of the sponsorship budget of the Bank is committed towards activities that assist the society as large.

Himalayan Bank Limited holds a vision to become a Leading Bank of the country by providing premium products and services to the customers, thus ensuring attractive and substantial returns to the stakeholders of the Bank.

The Bank's mission is to become preferred provider of quality financial services in the country. There are two components and the mission will be accomplished only by satisfying these two important components with the customer at focus. The Bank always strives positioning itself in the hearts and minds of the customer. (www.hbl.np.com).

Table 1.1

Capital Structure of HBL

1. Share Capital	**Amount**
1.1 Authorized Capital 30,000,000 ordinary shares of Rs. 100 each.	Rs. 3,000,000,000.00
1.2 Issued Capital 16,000,000 ordinary shares of Rs.100 each (Previous year 12,162,150 ordinary shares of Rs. 100 each.)	Rs.1,600,000,000.00
1.3 Paid up Capital 16,000,000 ordinary shares of Rs.100 each (Previous year 12,162,150 ordinary shares of Rs. 100 each fully paid.)	Rs.1,600,000,000.00
1.4 Proposed Bonus Share	Rs.400,000,000.00

(Source: Annual Report of HBL 2009/2010)

Table 1.2

Shareholders Structure of HBL

Structure	**% Holding**
Promoter's Share Holding ➢ Nepalese Promoter 51% ➢ Habib Bank Limited Pakistan 20% ➢ Employees Provident Fund 14%	85%
General Public	15%
Total	**100%**

(Source: Annual Report of HBL 2009/2010)

Profile of Lumbini Finance and Leasing Company Limited (LFLC)

Lumbini Finance and Leasing Company Limited commonly known as LFLC is a public limited Finance and Leasing Company promoted by a group of highly committed and innovative persons. It is managed by a group of well experienced and professional managers having excellent leadership. The company has the right combination of dedicated service-oriented staffs for which one can always trust for an

excellent service. It is registered in the Ministry of Industry and has obtained license from Nepal Rastra Bank under the section 6 (A) of Finance Companies Act 2042. LFLC is operating its business as per the guidelines of Nepal Rastra Bank, provisions of Finance Companies Act 2042, Companies Act 2053 and other related Nepalese law. LFLC has started its operation from12th Ashad 2052 and has shown a very encouraging trend in its nine years of operation. Its logo represents the symbol of continuity and reliability in the market. LFLC's share is listed in Nepal Stock Exchange (NEPSE quote: LFLC) and it is being traded in the market as A-graded share. Company at present has two branches one in Lalitpur Kathmandu and another over new road Pokhara. Company is working out on the possibility of opening a branch in remote area of the country and probably another in the city areas in the near future.

LFLC is probably one of the finance company in the market which has formulated and implemented the employees' service regulation before the starting of its operation. It has been providing almost all the facilities to its employee's right from the first year of its operation. Besides this, it is also providing dividends to its shareholders and contributing substantially to the government in the form of direct and indirect taxes.

LFLC has emerged in the Nepalese economy with a board objective of enhancing the growth rate of industry and commerce for the economic benefit of the general public and upliftment of their living standard. Company's efforts will be focused to reach to unattended savers by advising them to get maximum benefits from financial market and to encourage potential investors and experts to invest into the productive and employment generating sectors by providing support for implementing new business ideas and techniques. In addition to these, LFLC also aims to provide consumer's loan to the people for the upliftment of their living standard by various means. (www.lflc.np.com).

Keeping in view above perspective, the objectives of LFLC are set as follows;

- To mobilize the scattered savings by floating attractive schemes in the forms of different deposits and by issuing other financial instruments.

- To invest in, and/or to give loans and advances to those sectors which strengthen the economic development of the country.
- To provide loans to clients to serve various needs of them like housing need, house hold equipment need etc.
- To conduct hire purchase business to serve the need of the clients.
- To operate other financial functions like Merchant Banking, Investment Banking, Assets Management and others.
- To provide technical and financial advisory services.

Table 1.3

Capital Structure of LFLC

1. Share Capital	**Amount**
1.1 Authorized Capital 6, 500, 000 ordinary shares of Rs.100 each.	Rs. 650,000,000.00
1.2 Issued Capital 4,125,000 ordinary shares of Rs.100 each.	Rs.412,500,000.00
1.3 Paid up Capital 2,062,500 ordinary shares of Rs. 100 each fully paid.	Rs.206,250,000.00
1.4 Proposed Bonus Share	Rs.61,875,000.00

(Source: Annual Report of LFLC 2009/2010)

Table 1.4

Shareholders Structure of LFLC

S.N	**Particulars**	**Amount of Shares (Rs. in '000)**	**Shareholding (%)**
1	Individual Promoters	36000	60
2	Public Shareholders	24000	40
	Total	**60000**	**100**

(Source: Annual Report of LFLC 2009/2010)

1.2 Focus of the Study

Finance mainly consists of three functions they are investment, financing and dividend. Among them investment is considered as most important one. Financial institutions like banks and finance companies always put in efforts to maximize its

profitability. The profit is excess of income over expenses. The major source of income of a bank is interest from loans. For this, loan is an essential aspect of commercial banks and finance companies. First, income from loan contributes substantially in the revenues and profit of the bank. Second, lending money to people in the society strengths the relationship between bank and society. Third, lending money helps in business development and supports a growing economy. Credit being the most important function of both commercial banks and finance companies; 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 the credit; which is derived from various financial institutions, especially commercial banks and financial companies in Nepal.

When the matter arises regarding investment for both commercial banks and finance companies, it is very risky one. For this, both financial institutions have to pay due considerations, while formulating investment policy. A healthy development of any commercial banks and finance companies depend upon its investment policy, which helps to increase the volume and quality of deposit, loan and investment. Sound credit policy has objective like to have performing assets to contribute to economic development to give guidance to lending officials and to establish a standard for control.

The study mainly focuses on the comparative study on investment policy of commercial banks and finance companies listed in the NEPSE index. Among them one commercial bank and one finance company is selected as sample. The focus of the study is given to the comparative study of liquidity position, profitability, investment portfolio, trend analysis etc. The study deals with comparison between commercial bank and finance company in various aspects. While analysis data various tools are used. The main tools are statistical tools, financial tools etc. Both financial institutions are mainly related to resource collection and mobilization.

1.3 Statement of the Problem

Nepalese economy is facing serious problem due to imbalance between resource mobilization and expenditure, saving and investment, import and export and lack of

control over population growth. Various financial institutions have been established to assist the process of economic development of our country. Banks and finance companies are among the most important financial institutions in the economy. They are the principle sources of credit for millions of individuals and for many units of government. Moreover, for small local businesses ranging from grocery stores to automobile dealers, banks and finance companies are often the major source of credit. So bank and finance company play the role of the creation of capital to them.

There are many commercial banks and finance companies in existence within Pokhara valley. They grant more installment loans to consumers than other financial institutions. Credit extended by these financial institutions is directly related to the national interest of the country. A large number of people of Nepal is not qualified enough for the proper utilization of financing of the bank and finance company. So the investment policy of the both financial institutions should be very sound and farsighted.

This study which is only a partial fulfillment of MBS program will not be able to analyze all the facts about the subject matter. However, it has discussed the basic issues on investment policy especially concerned with the Himalayan Bank Limited and Lumbini Finance and Leasing Company.

Thus, this study is mainly focused on the following specific problems of Himalayan Bank Limited and Lumbini Finance and Leasing Company:

- What is the position of HBL on fund mobilization and investment policy in comparison to LFLC?
- What is the liquidity, efficiency of asset management, profitability and non performing loan of HBL in comparison to LFLC?
- What is the relationship between various important variables of HBL i.e. deposits, loan and advances, total investment and net profit in comparison to LFLC?
- What is the trend of deposit collection, its utilization, net profit and its projection?

1.4 Objectives of the Study

The main objective of the study is to find and compare the investment policy of commercial bank and finance company i.e. Himalayan Bank Limited and Lumbini Finance and Leasing Company Limited. The other specific objectives of the study are given below:

- To make a comparative study on fund mobilization and investment policy of HBL in comparison to the LFLC.
- To evaluate the liquidity, efficiency of assets management, profitability and non- performing loan of HBL in comparison to LFLC.
- To find out the empirical relationship between various important variables of HBL i.e. deposits, loan and advances, total investment and net profit in comparison to LFLC.
- To evaluate the trend of deposit collection, its utilization, net profit and its projection.

1.5 Significance of the Study

This study mainly fills a research gap on the study of investment policy of commercial bank in comparison to finance company.

In the context of Nepal, banks and finance companies are growing rapidly. Their major problem is capital formation and proper utilization. Similarly, economic development of any country depends on the effective and smooth mobilization of the available funds. They help to strengthen national economy sectors like industrial, trading etc. A proper development of any financial institutions is depends upon its investment policy. A sound investment policy attracts both lenders and borrowers, which helps to increase the volume and quality of deposit, loan and investment. So, making a sound and effective investment policy is the major work for these financial institutions.

The study will give useful guidelines and feedback to policy makers and decision makers about the investment of the banks and finance companies and also becomes useful reference for other commercial banks and finance companies.

1.6 Delimitation of the Study

Due to the limited time to finish this study all the concerned areas might not have been covered. The study is for partial fulfillment of masters of business study. So the main limitations of the study are:

- Data availability
- The analysis period covers only five years data.
- Only two financial institutions one commercial bank and one finance company are selected for a study.
- It focuses on the investment policy.
- The analysis is based on the secondary data provided by the concerned bank and finance company. So the limitation of secondary data exists.

1.7 Organization of the Study

The whole study will be comprised into five chapters such as introduction, review of literature, research methodology, presentation, and analysis of data and summary and recommendations.

Chapter-One: Introduction

This chapter deals with introduction which includes general background, focus of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study.

Chapter-Two: Review of Literature

The second chapter deals with review of available literature, which includes conceptual or theoretical review and review of related studies.

Chapter -Three: Research Methodology

The third chapter explains the research methodology used in the study, which includes research design, population and sample size, nature and sources of data, data collection techniques, data processing and analyzing, data analysis tools and limitation of the methodology.

Chapter - Four: Presentation and Analysis of Data

This chapter deals with presentation and analysis of data which is mainly concerned with analysis of different financial ratios related to investment policy and fund mobilization. Presentation and analysis of the data and major findings of the study is also included in this chapter.

Chapter - Five: Summary, Conclusion and Recommendation

This chapter discusses with the summary of analysis, conclusion of the study and provides necessary recommendation.

CHAPTER - II

REVIEW OF LITERATURE

Financial institutions have been a subject of growing importance. Many thoughts and ideas have built a theoretical base in the management of financial institutions. So, the review of these is important to know what kind of gap exists in the literature and help to avoid unnecessary duplication of research work. This chapter is basically concerns with the review of literature relevant on "A Comparative Study on Investment Policy between Commercial Bank and Finance Company". The previous studies should not be ignored because they provide the foundation to the present day. The review of related literature is critical aspects of planning of the study. The relevant literature and articles review from international and national publications as well as unpublished reports available from different libraries and institutions provides the guidelines for further study. This chapter is divided into two following parts.

- Conceptual Review
- Review of the related studies

2.1 Conceptual Review

This section of the study consists of the terms and conditions related to the study and which are very helpful for the further study also. It presents the theoretical aspects of the study. It includes the following terms which are use in the study.

- Evolution of financial institutions i.e. commercial banks and financial companies
- Concept of investment
- Concept of investment policies
- Concept of portfolio management
- Features of sound lending and investment policy.

2.1.1 Evolution of Financial Institutions in Nepal

In the context of Nepal, history of banking sector is rather more slow evolution. Even now, the banking system is still the evolutionary phase. Goldsmith, merchants and money lenders were the ancient bankers of Nepal.

The term 'Tanka Dhari' meaning 'Money Lender' was used at the end of the 14th century. They are one of the sixty four castes classified on the basis of occupation. They used to invest money to the needy persons by charging some percentage as interest.

In 1877 A.D. Prime Minister Ranoddip Singh introduced a number of economic and financial reforms. The establishment of the 'Tejarath Adda' fully subscribed by the government in the Kathmandu valley was one of them. The main purpose of this institution was to provide credit facilities to the general public at minimum interest rate of 5 percent especially on the collateral of gold and silver. At the beginning, the service was provided to employees of government, which was settled by deducting from their salary. Later, the service was extended to the normal people as well. Under the Prime Ministership of Chandra Shamsher, Tejarath Adda extended its services by opening its branches outside Kathmandu valley. Hence, the establishment of Tejarath Adda is regarded as the foundation of modern banking in Nepal. However, 'Kaushi Tosh Khana' established during the regime of the King Prithvi Narayan Shah is also regarded as the first step towards initiating banking development in Nepal (Shrestha, 2009).

The history of modern financial system began by the establishment of a semi government bank known as Nepal Bank Limited in the year 1997 A.D., as the first commercial bank and was incorporated under the Nepal Bank Act 1936. It is taken as the milestone of modern banking of the country.

Nepal Rastra Bank was established on 26th April 1956 A.D. under the NRB Act 1955 as a central bank. Establishment of the NRB was another major step in the development of Nepalese financial system. Since then it has been functioning as the government bank and has contributed to the growth of financial sector. Within a

decade of establishment of NRB, many financial institutions such as Industrial Development Corporation (1959A.D.) to provide industrial credit to industrialists and other entrepreneurs, Employees Provident Fund (1962 A.D.) to collect provident fund of government employees, Rastriya Banijya Bank (1966 A.D.) to help in the expansion of commercial banking services throughout the country, Nepal Insurance Corporation (1968 A.D.) to provide insurance services to Nepalese people, Agriculture Development Bank (1974 A.D.) to provide the required agriculture credits and saving mobilization facilities to cooperatives and farmers of the country and Securities Marketing Center (1977 A.D.) to develop capital market in Nepal were established.

The development of banking system in Nepal was emerged after the liberalization policy and free market concept since 1980S. The financial scenario has changed with introduction of joint venture banks in 1984. Until 1984, the Nepalese financial sectors were dominated by the two domestic commercial banks i.e. Nepal Bank Limited and Rastriya Banijya Bank. Commercial banking Act in 1974 was amended in 1984 to increase competition among commercial banks. Hence provision was made to allow private sectors including foreign investment open commercial banks. As a result, Nepal Arab Bank Limited, the first joint venture commercial bank was established in Ashad 29, 2041 B.S. renamed as Nepal Bank Limited since 1st January 2002, with the partnership of Dubai Bank Limited. Similarly, Nepal Indo Suez Bank (converted as Nepal Investment Bank on 30th May 2002) and Nepal Grindlays Bank Limited (changed to Standard Chartered Bank Limited on 31st July 2001) was established in 1986 and 1987 A.D. respectively. Himalayan Bank Limited in 1988 A.D., Nepal Bangladesh Bank Limited in 1994 A.D., Everest Bank Limited in 1995 A.D., Nepal SBI Bank Limited in 1995 A.D., Nepal Bank of Ceylon Limited (converted to Nepal Credit and Commerce Bank Limited in 10th September 2002) in 1996 A.D., Lumbini Bank Limited in 1998 A.D., Kumari Bank Limited in 2001 A.D., Laxmi Bank Limited in 2002 A.D. and so on other private banks started to be established respectively one after another.

There were few insurance companies and Karmachari Sanchaya Kosh working as non banking financial institution before enactment of Finance Company Act 2042 B.S.

The real need for the creation of these finance companies were felt when the commercial banks were unable to serve sectors of economy other than big business houses. The small savings were ignored so were their smaller credit requirements. Need of those institutions serving the deprived sectors were felt and it was that need which gave birth it institutions like finance companies. Though Finance Companies Act was introduced in 2042 B.S. but no finance company was established till 2049 B.S. as the act came into existence only in 2049 B.S., with some amendment.

Nepal Awas Bikas Bitta Company Limited is the first finance company of Nepal which was established just after the amendment of Finance Company Act 2049 B.S. promoted by Rastriya Banijya Bank, Agriculture Development Bank and Nepal Arab Bank Limited. In the same year, Nepal Finance Company Limited was established from the private sector. In short span of the time, the number of finance institutions has drastically grown up. These rapid growths of finance companies have established themselves as an emerging force in mobilization of funds in the financial system of the country. Now there are 79 finance companies in existence which are operating under Nepal Rastra Bank. At present, these companies operate under Bank and Financial Institutions Act 2006 as “C” class financial institutions. High interest rate on deposit, low administration cost, fast service, fast decisions, less liquidity and high demand for consumer credit are the main reasons that the finance companies are successfully running and growing up day by day.

During the last two and half decades the Nepalese financial system has grown significantly. At the beginning of 1980s, there were only two commercial banks and development banks in the country. After the adoption of economic liberalization policy, particularly the financial sector liberalization that paved the way for establishment of new banks and non-bank financial institutions into the country. Consequently, by the end of mid-July 2011, altogether 272 banks and non-bank financial institutions licensed by NRB are in operation. Out of which the number of “A” class commercial banks and “C” class finance companies reached 31 and 79 respectively (http://www.nrb.org.np.com). All the financial institutions are established and operated under the “Company Act 2063”, “Bank and Financial Institution Act 2063”, “Nepal Rastra Bank Act 2058” and other prevailing related Acts of

government. Money Laundering Control and Deposit and Credit Guarantee Acts are expected to be soon materialized, all with the goal of strengthening the financial sector through building on its healthy development and improved stability (http://www.nrb.org.np.com).

2.1.2 Concept of Investment

In general, an investment is a commitment of money that expects to generate additional money. Investment is systematic and scientific way of using excess fund from income to gain expected return bearing lower level of risk. Common definition says that contribution of present value for future is investment or it is search of certainty within uncertainty.

Investment is its simplest form means employing money to generate more money in future. It is sacrifice of current rupees for future rupees. Return is the primary motive of investment, but it always entails some degree of risk. Buying common stocks, bonds of a company, depositing money into bank account, buying a piece of land, gold or silver are examples of investment. All these examples involve sacrifice of current rupees in expectation of future return. The main objective of investment is to maximize the wealth of an investor (Shrestha, 2003).

Investment, in its broadest sense, means the sacrifice of current dollars for future dollars. Two different attributes are generally involved; time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain (William, 2005).

In simple, investment is a commitment of fund today with the hope of deriving future payments. It involves the commitment of resources that have been saved or put away from current consumption for the future. Investment involves the sacrifice of current rupees for future rupees. The sacrifice takes place in the present that is certain. However, the reward is expected in future time period, so it is uncertain. The uncertainty brings the risk. Therefore, every investment entails some degree of risk. Hence, making investment is a risky endeavor.

Simply put, it is a current commitment of rupees for a period of time to derive future payments that will compensate for,

- Uncertainty of future flow of funds,
- The expected rate of inflation and
- The time the funds are committed (Sharpe, Alexander and Bailey, 2005).

Every investment involves uncertainties that make investment return risky. Some sources of uncertainty that contribute to investment risk are interest rate risk, default risk, inflation risk, call ability risk, liquidity risk, convertibility risk, political risk and industry risk.

Investment can be a real investment or a financial investment. Investment in tangible assets like land and building, real state, gold etc. is a real investment. Real investment has productive capacity. Investment in intangible assets or financial assets like common stock, bonds etc. is financial investment. Financial assets itself does not directly posses productive capacity. It can be viewed as claims to the income generated by real assets. So values of financial assets are derived from value of underlying assets.

2.1.3 Concept of Investment Policies

Lending is the essence of commercial banking and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practice are essential in a bank to perform its credit creating function effectively and minimize the risk inherent in any extension of credit. Furthermore, the formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, size of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing, interest rate policy (H.D. Crosse, 1963).

Commercial banks and finance companies must mobilize their deposits and other funds to profitable, secured and marketable sector so that they can earn a generous profit as well as they should be secured and can be converted into cash whenever

needed. Obviously, a firm that is being considered for commercial loan must be analyzed to find out why the firm need money, how much money the firm needs and when and how it will be able to repay the loan. Project or business proposal must be carefully scrutinized. Investment policy provides the bank and company several input through which they can handle their investment operation efficiently ensuring the maximum exposure to risk, which ultimately leads the bank and company to provide secured loans and investments.

A banker seeks optimum combination of earning, liquidity and safety, while formulating investment policy (Chandler, 1973).

The investment policy should specify precisely what is meant by the investment portfolio-that is, what assets compose the investment portfolio. In formulating the investment policy, management of financial institutions must consider the definition and scope of the investment portfolio, the amount of risk it is willing to tolerate, and how aggressive it wishes to be in managing the portfolio. The investment portfolio usually consists of longer term securities however there are periods when the investment portfolio will be comprised principally of short-term, highly liquid securities. For example, when the interest rates are expected to increase, it would be desirable investment strategy for the financial institutions to shift some of its investment from long to short term securities (Peter, 1985).

Management of financial institution must balance the return and risk of the individual security and entire portfolio. Return refers to the total return over the anticipated holding period of the security. The investment policy that stresses high total return must accept relatively high risk. Conversely, an investment policy that will tolerate only a small amount of risk must be willing to accept a relatively low return.

Investment policy fixed responsibilities for the investment disposition of the banks assets in term of allocating funds for investment and loan and establishing responsibility for day to day management of those assets (Bexley, 1987).

Investment policy is the set of guidelines and procedures that direct the long term management of investor's assets (Sharpe, 1999).

The investment policy is the guidelines to satisfy the investment objectives. The setting of the policy begins with the asset allocation decision. That is, a decision must be made as to how the funds to be invested should be distributed among the major classes of assets. The asset allocation decisions are based purely on the understanding of the risk-return characteristics of the various asset classes and expected returns. The asset allocation will take into consideration any investment constraints or restrictions.

In the development of an investment policy, the following factors must be considered;

- Client constraints
- Regulatory constraints
- Tax constraints (Fabozzi, 2002)

2.1.4 Concept of Portfolio Management

In general, portfolio means collection of investment. This is also known as principle of diversification. This principle is based on the proverb "Do not put all the eggs in a single basket". Modern portfolio theory reconfirms it. Spreading the fund across a number of suitable assets will reduce risk, may be or may not be all. Therefore, portfolio should include more than one security. This is because diversification can reduce the risk.

Hence, portfolio is the combination of investments of investments in two or more assets once at a time to maximize return with minimization of the risk.

Portfolio management is the art of handling a pool of funds so that it not only preserves its original worth but also overtime appreciates in values and yields on adequate return consistent with the level of risk assumed (Cohen, 1978).

Portfolio management is concerned with efficient management of investment in financial assets including equity shares, preferences shares and debentures of companies (Shrestha, 2003).

Hence, portfolio management means investing money in a number of securities of different types rather than one and changing over the mix as per the economic environment to gain the maximum return with minimizing risk. The basic idea behind it is do not put all eggs in a single basket.

2.1.5 Features of Sound Lending and Investment Policy

The investment function is the most important function of commercial bank and finance company. It is the long term commitment of bank and finance company in the uncertain and risky environment. So, they have to very careful while investing their funds in various sectors. The success of the bank and finance company heavily depend upon the proper management of its investible funds.

Investment management of a bank and finance company is guided by the investment policy adopted by them. The investment policy of the bank and finance company helps them in the investment function, which makes the investment sound and profitable by minimizing inherent risk. Therefore, they must have effective and sound lending and investment policy for existing in the competitive environment.

There are some guiding principles which should be considered in order to have sound lending and investment policy for the bank and finance company, which are as follows:

a. Safety and Security

This principle is based on the assumptions that the bankers and finance companies should lend their fund in such place where there is least probabilities of default. When lending is made, banker and finance companies must ensure that the advance made is safe and secure. They should develop an appropriate mechanism of credit appraisal system and good credit policy to follow this principle. For the safety and security of loan, banks and finance companies should carefully examines the economic condition and commercial viability of the business, quality of its management (integrity, honesty, willingness to pay, reputation in market etc.) and the past record. Moreover, the bank and finance company demands for collaterals. Securities are one of the most important elements of an investment. Hence, banker and finance company should

invest on such securities which are commercial, durable, marketable and high market prices. In such condition, principle of 'MAST' should be applied for the investment.

M – Marketability

A – Ascertain ability

S – Stability

T – Transferability

b. Liquidity

Generally, liquidity refers to the capacity of bank and finance company to meet the demand on the customer's demand. Banks and finance companies have to maintain liquidity to meet the depositors demand. For this, they have to maintain sufficient fund in liquid assets. The bank and finance company should return back depositors money when demanded and if this is not met, it spoils their image. The confidence of the public or faith of customers will be lost and this leads them towards its downfall. So the bank and finance company keep a certain percentage of their fund on such assets that can be utilized as need arises. Generally, liquidity of a bank and finance company is measured by the ratio of loan to total deposits of the bank and the finance company. The higher is the ratio; the lower is the liquidity and vice versa.

c. Profitability

Commercial banks and finance companies are established with an objective for making profit. Profitability is the capacity to earn profit. It is a very important element, which influences the overall banking and finance activities. It is necessary to meet large administrative expenses, to make payment of interest on deposits, to meet the other expenses like operational expenses, staff expenses, returns to the stakeholders and it is necessary for the banks and finance companies sustainability and growth. Hence, profit is the main factor for the existence of a bank and finance company. Therefore, the banks and finance companies should give more attention to earn profit. The profit of a bank and finance company partially depends upon the volume of investment; the higher the volume of investment, the greater will be profit. According to the principle of profitability, maximum possible return should be considered while lending decision is made. The profit and liquidity are two opposite principles. If a company pays its attention only to profit, the liquidity becomes less

and if it pays attention only to liquidity, it can't be made long term investment and can't get profit. So, equality should be maintained in it i.e. there should be a proper check and balance between risk and return for an investment.

d. Diversification

Another equally important principle of good lending is to spread advances in various sectors. Diversification focuses on better credit risk management through tolerable credit limit in different sector and parties. This principle is based on the proverb "Do not put all eggs in a single basket". So, to minimize risk, diversification on investment over a large number of borrowers, different industries and areas and against different types of securities should be adopted. By investing in more than one sector it becomes successful in keeping balance which helps the banker and company to be competent itself.

e. Suitability\Purpose of Loan

Banks and finance company always need to be careful about purpose of the loan taken by the borrowers. If the disbursed loan from bank and finance company is misutilized there will be less chances of repayment by the borrower. Detailed information about the scheme of project or activities should be examined before lending. Banks and finance companies lending activities should be guided by its own credit policy and should be remained within the legal framework issued by the central bank of the country. Banks and finance companies need to be careful to prevent lending in money laundering, terrorist activities, conducting illegal business activities etc.

2.2 Review of Related Studies

This sector consists of the review of the related past studies. It is found that different studies have been carried out regarding the investment of banks and finance companies. In this process the attempt have been done to grasp the required knowledge from the related studies, available in the libraries and internet.

2.2.1 Review of Journals and Articles

In this subsection, different relevant studies and research articles published in magazine, newspaper and other electro media are presented.

Pradhan (1996) has presented a short scenario on investment in different sectors, its problem and prospects, through his article, “Deposit mobilization, its problem and prospects.” On his article he has expressed that, “Deposit is the life blood of any financial institutions and be it commercial bank, finance company, co-operative or non- government organization.” He also added in consideration of ten commercial banks and nearly three dozens of finance companies, the latest figure does produce a strong feeling that a serious review must be made of problems and prospects of deposits sector. Except few joint venture banks, other organizations rely heavily on the business deposit receiving and credit disbursement.

In the light of this, Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective:

- Due to the lesser office hours of banking system people prefers for holding the cash in the personal possession.
- Unavailability of the institutional services in the rural areas.
- No more mobilization and improvement of the employment of deposits in the loan sectors.
- Due to lack of education most of Nepalese people do not go for saving institutional manner. However, they are very much used of saving, be it in form of cash, or ornaments or kind. Their reluctance to deal with institutional system are governed by their lower level of understanding about financial organizations, process requirements, office hours, withdrawal system, availability of depositing facilities and so on.

Mr. Pradhan mentioned that deposit mobilization carried out effectively is in the interest of depositors, society, financial sector and the nation, lower level of deposit rising allows squeezed level of loan delivery leaving more room to informal sectors. That is why higher priority to deposit mobilization has all the relevance.

Shrestha (1998) has given a short glimpse on the “Portfolio Management of Commercial Banks; theory and practice”. He has stressed in the following issues, incase of investors having lower income, portfolio management may be limited to small saving incomes. But on the other hand, portfolio management means to invest

funds in various schemes of mutual funds like deposits, shares and debentures for the investors with surplus income. Therefore, portfolio management becomes very important for an individuals as well as institutional investors. Large investors would like to select a best mix of investment assets and subject to the following aspects;

- Higher return, which is comparable with alternative opportunities available according to the risk class of investors.
- Good liquidity with adequate safety of investment.
- Economic, efficient and effective investment mix.
- Flexible investment.
- Certain capital gains.

In view of above aspect, following strategies can be adopted.

- Do not hold any single security i.e., try to have a portfolio of different securities.
- Do not put all the eggs in one basket i.e., to have a diversified investment.
- Choose such a portfolio of securities which ensures maximum return with minimum risk or lower return but with added objectives of wealth maximization.

However Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its management.

- To find out the investible assets (generally securities) having scope for better returns depending upon individual characteristics like, age, health, need, disposition, liquidity, tax liability etc.
- To find out the risk of the securities depending upon the attitude of investor toward risk.
- To develop alternative investment strategies for selecting a better portfolio that will ensure a trade off between risk and return, so as to attach the primary objective of wealth maximization at lowest risk.

Shrestha (2001) in her study; “Investment Operation of Commercial Banks of Nepal and its Impact on GDP”, has presented with the objectives to make an analysis of contribution of commercial bank investment to the gross domestic product (GDP) of

Nepal. She has set hypothesis that there have been positive impact of investment of commercial bank to the GDP. In her research methodology she has considered GDP as the dependent variable and various sectors of investment agriculture, individual, commercial service, general and social sector as independent variables. Multiple regression technique has been used to analyze the contribution. This analysis states that all variables except service sector investment have positive impact on GDP. Her hypothesis is there has been positive impact by the investment of commercial bank in various sectors of economy except service sector of investment.

2.2.2 Review of Dissertations

Under this sector various master level dissertations related to this have been reviewed. Before this several thesis works have been conducted by various students regarding the various aspects of commercial banks as well as finance companies such as financial performance, investment portfolio, investment analysis, resource mobilization, portfolio analysis etc. Some of them as supported to relevant for the study are presented below:

Shrestha (2004), has conducted his study on investment policy of finances companies in Nepal. The researcher's main objectives of the study was to analyze the investment policies of the finance companies along with the specific objectives to highlight and examine the overall investment policies to analyze the existing investment policies to suggest and recommend the measures for the improvement of investment scenario. He has taken six finance companies as a sample. The sample finance companies are People's Finance, Shree Investment and Finance Company Limited, Ace Finance, Kathmandu Finance, Universal Finance and Union Finance. In his study, financial ratios were the major tools for the analysis. In addition other simple mathematical and statistical tools were used in the research. Through his research he drawn the conclusion that finance companies have satisfactory performance, they are running by securing good deposits, making timely payment and maintaining good liquidity position, major part of the investment in real state finance and term loan. He has recommended to focus on new schemes and instrument for fund mobilization, to make appropriate investment portfolio, to gain the public confidence, to prepare and follow the specific investment policy to invest and to improve their managerial

capability, make their transaction transparent, improve accounting and auditing practices, improve innovativeness and avoid family domination.

Adhikari (2008) has conducted a study on investment policy of Nepal Bangladesh Bank Limited. He was attempted to evaluate the investment policy of Nepal Bangladesh Bank Limited. The others specific objectives of the study are to find out the bank's investment on priority sector, to analyze deposit utilization and its relationship with local investment and net profit, to suggest measures to improve the investment policy, to find out the non performing assets position and to evaluate the portfolio management of the bank. In his study, financial ratios and statistical tools were used to analyze the collected data. Through his study he concluded that bank has satisfactory liquidity position, bank has stable policy of advising most of the loans to the private sector, bank has very risky portfolio of loan and advances, positive relation of total deposit to total investment, lending is not properly diversified and negative growth rate during the study. He has recommended that bank has to collect a large variety of deposit schemes, to increase the investments in government securities, to give more priority to increase the fee-based Off-Balance-Sheet transactions to generate more income, to adopt the aggressive loan recovery follow-up policy to focus the fixed income generating people and launch new credit product and to adopt innovative approach to marketing.

K.C. (2008), has conducted a study on investment policy of commercial banks comparison between Nabil Bank Limited and Machhapuchhre Bank Limited with the main objective of the study is to find and compare the investment policy of NB with MBL and suggest the ways of improving the same. The other specific objectives of the study are to analyze the non performing assets position, to evaluate the investment and loan and advances portfolio, to analyze deposit mobilization and its relationship with total investment, loan and advances and net profit, to suggest and recommend some measures on the banks of comparative investment policy of both banks for the improvement of financial performance in future. In her study, she has used financial tools and statistical tools to analysis the data. Through her study, she has drawn the conclusion that,

- NB has not good deposit collection but enough good investment in government securities.
- MBL has high credit risk and NB has good loan loss recovery policy.
- NB is better in utilizing its loan and advances to generate profit and earnings. Similarly, the interest earned to total working fund ratio of NB is not better in comparison to MBL.
- NB has not satisfactory high earning power as compare with the MBL in the study periods.
- MBL is in better condition to grant loan and advances for mobilizing the collected deposit.
- The management of NB has tried its good efforts to make the good portfolio in the different risky as well as in the non risky assets but more aggressive in lending.
- NB has more proportion of NPL than that of MBL.

She has further recommended that both banks have to collect a large variety of deposit by exploring new product especially to MBL, to diversify the investment policy of NB from government securities on more yield based funds, to give priority to increase the fee-based outside income to generate more income, to control operating expenses and overhead expenses, both banks should be made the policy in such a way to meet the competition among commercial banks, MBL should give due attention towards the increment of net profit, to manage NPL and NB should mobilize its funds in loan and advances.

Karki (2009), has conducted a study on investment portfolio of Om Finance Limited with the major objective to analyze the investment portfolio of OFL. The other specific objectives were to determine the sources and level of the fund for investment, to analyze the trend of investment portfolio, to analyze the classification of loan and advances, to evaluate the position of profitability, activity, assets management and liquidity and to ascertain the problems faced by OFL in the investment process. Financial tools and statistical tools were used as a data analysis tools in her study. She has concluded that OFL is unable to attract the customer, do not have enough capital funds for investment, unable to expand its all of investment on hire purchase and loan,

lack of specific policies for investment, risky investment portfolio because most of the investment is on loan and advances, unable to mobilize deposits in various securities issued by government and other organization, profitability is not much better, adopting the appropriate policies to manage NPL, has maintained loan loss provision, liquidity position is also not satisfactory and not much better to serve its customer's withdrawal demands. She also concluded that major problems faced by OFL are overvaluation of collateral, lack of proper documentation and fixed income of client and market fluctuation. She further recommended that OFL should increase its deposit, to expand its lending areas and should consider deprive sector loan, should find potential areas and opportunities and determine secure loan investment policy, to increase the investment in government securities, bond, debentures and others company's shares, should makes continues effort in income generating and lost controlling activities, should be more careful in valuation of collateral and documentation of the client to examine time to time portfolio management strategies and to explore new competitive high yielding investment opportunities to optimize return.

Palikhe (2010), has conducted a study on deposit mobilization of commercial banks with major objective to analyze how far the banks have been able to mobilize its deposit and other basic purposes are to analyze the financial factors like liquidity management, efficiency and profitability position in relation to deposit mobilization of Standard Chartered Bank Nepal Limited and Nepal Bank Limited, to identify the formation of deposit liabilities, to observe the trend of deposit and loan investment and to provide suggestions on the bases of major findings. In his study, two commercial banks representing the government sector and private sector, NBL and SCBNL respectively are selected. By using different statistical tools, he concluded that both banks are efficient in mobilization of deposits but SCBNL seemed more efficient, SCBNL is managing its loan and advances well but NBL is shifting from loan and advance to secured investment, most of the loans of NBL became bad debt, liquidity position of SCBNL is good than NBL. He recommended that NBL is better to revise the liquidity management policy, to follow the liberal lending policy, to further advance their retail banking through newer and innovative products, to establish the efficient Research and Development department for new investment

opportunities, to invest in foreign currencies, precious metals and highly liquid safe securities, to make an attractive publicity of the banks, to evaluate the performance of employees for improving the managerial efficiency and to follow decentralization policy in order to extend the modern and computerized banking facilities towards the marginal areas and for assuring the reach of remote area people in modern banking facilities.

Poudel (2010), has conducted her study on problems and prospects of commercial banks in relation to deposit mobilization. The general objective of the study is to find out the problems and prospects of commercial banks in relation to deposit mobilization. The other specific objectives are to analyse the problems of commercial banks in relation to deposit mobilization, to measure the trend of deposit collection over the five year period, to analyze the possibilities in the growth, to access the priority and deprive sector lending and to provide the workable suggestions and possible guidelines to improvement of performance and expected solution of the problems faced by banks. In her study, Himalayan Bank, Everest Bank, Nepal Investment Bank, and Bank of Kathmandu are taken as a sample of the study. By using, financial tools and statistical tools for the analysis of data, she concluded that the position of deposit collection of sample are satisfactory, the deprived sector lending are in increasing trend but the priority sector lending are not satisfactory and should be made better policy for mobilization of saving. She has further recommended that sample banks should try to carryout different schemes for collecting more deposit, to create R and D department for sustainable development and further growth, to mobilize their fund in rural areas, to explore new, competitive and high yielding investment opportunities to optimize their investment portfolio, to make low interest rate on credit and should explore the potentiality of the rural branches by taking local resources.

2.3 Review of Relevant NRB Directives

NRB issues directives/circulars time to time as guidance/regulation with respect to operation of the licensed banks and financial institutions in Nepal. The NRB has formulated regulations/prudential norms in terms of loans/advances classification and provisioning, capital adequacy, investment on priority and deprived sector, single borrower limit, investment in share and securities, interest rate spread, lending to deprived sector etc. We discuss some of those in brief, which are related to investment function of the commercial bank and finance company.

NRB has issued guidelines on provisioning requirement with respect to entire loans and advances extended by licensed banks and financial institutions. Among various directives issued in 2067 directive number two is relating to loan classification and provisioning. Effective from fiscal year July 17, 2010, they have to classified outstanding loan and advances on the basis on expiry of the deadline of repayment of principal and interest of such loans/advances into following four categories:

- Pass Loan: Loans and Advances whose principal amount are not past due and past due for a period of up to 3 months fall in pass loans. The loans in this category are defined as performing loans.
- Sub-standard Loan: All loans and advances which are overdue by a period from three months to a maximum period of six months fall in this category.
- Doubtful: All loans and advances which are overdue by a period from six months to maximum period of one year fall in this category.
- Loss: All loans and advances which are overdue by a period of more than one year fall in this category.

The loans, which fall in the category of substandard, doubtful and loss, are defined as non performing loans.

Loan Loss Provisioning

For the loans and bills purchased classified according to these directives, the following loan loss provision shall be maintained based on the remaining amount of principal

Table 2.1

Loan Loss Provision

Loan Classification	Minimum Provision for loan
Pass	1 percent
Sub-Standard	25 percent
Doubtful	50 percent
Loss loan	100 percent

Provided that in case of the insured loans it would be required to make provisions of only 25% of the provision referred to in sub-clause (1).

Provisions Relating to Capital Adequacy Ratio (Directives no.1/067)

The capital adequacy to be maintained based on its risk weight assets, a licensed institution shall have to maintain the following adequacy ratio:

Table 2.2

Provisions Relating to Capital Adequacy Ratio

Institution	Minimum capital fund to be maintained based on the risk-weight assets (percent)	
	Core Capital	Capital Fund
'A' Class	6.0	10.0
'B' and 'C' Class	5.5	11.0
'D' Class	4.0	8.0

Provisions relating to single obligor and limitation of the sector credit and facilities (Directives no. 3/067)

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

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

Provisions Relating to Investments (Directives no.8/067)

The following Directives have been issued with regard to investment of financial resources of licensed institutions having exercised the powers by Section 79 of the Nepal Rastra Bank Act, 2002.

1. **Implementation of Investment Policy and Procedures upon Approval**

   The licensed institutions shall implement the policies and procedures regarding the investment in government of Nepal securities, Nepal Rastra Bank bonds, and other corporate bodies' share and debentures only upon the approval of investment policy and procedures by the Board of Directors.

2. **Provision for Investment to Government of Nepal Securities and Nepal Rastra Bank Bonds**

   There shall be no restriction as to investment by the licensed institutions in the securities of Government of Nepal and Nepal Rastra Bank Bonds.

3. **Provisions for Investment in Shares and Debenture of Corporate Bodies**

   a. Licensed institutions shall invest only in the shares and debentures of corporate bodies listed in the Nepal Stock Exchange after the public issues of shares.

   b. While carrying out projects such as land development, land purchase and housing construction for residential purpose and sale and management of such houses and land, licensed institution shall not invest more than twenty-five percent of the core capital of immediately preceding month.

   c. While investing in housing construction and land development companies (public companies) by a licensed institution, it may invest an amount not exceeding ten percent of the core capital maintained immediately preceding month. If found to have been invested more than the limit, the core capital shall be maintained having deducted the amount equal to the exceeded investment from the core capital.

   d. Licensed institutions may invest in shares and securities of any one corporate body up to 10 percent of its core capital maintained at immediately preceding trimester and not exceeding the cumulative amount of such investment in all the companies by more than 30 percent of its core capital. Similarly, while

investing in shares and debentures of corporate bodies by a licensed institution, investment shall be made not exceeding 10 percent of the paid up capital of the institution in which the investment is being made and not exceeding 25 percent of the same in case of investment made in class "D" institutions. Any amount of investment made in excess of this limit, for the purpose of calculation of the capital fund, shall be deducted from the core capital fund.

4. **Provision for Review of Investment Portfolios**

   Licensed institutions shall review its investment portfolios on half-yearly basis. With respect to such review, a statement from the Internal Auditor of the licensed institution certifying that the investments are made according to the existing investment policy and according to this directive be obtained and shall also is approved by the management of the institution within one month from the close of the half yearly period.

2.4 Justification of the Study/ Research Gap

Some research studies have been made regarding the investment policy of different commercial banks and finance companies. Some of them are, Shrestha has conducted his study on investment policy of finance companies in Nepal with the main objective to analyze the investment policies of the finance companies. Adhikari on his study "Investment Policy of Nepal Bangladesh Bank Limited" has mentioned the main objective to evaluate the investment policy of Nepal Bangladesh Bank. He has conducted study about sector-wise loan and advances diversification of Nepal Bangladesh Bank. Similarly, K.C. has conducted her study on the topic "Investment Policy of Commercial Banks Comparison between Nabil Bank Limited and Machhapuchhre Bank Limited" with the objective to find and compare the investment policy of Nabil and Machhapuchhre Bank.

No study has yet been made conducted about the comparative study on the investment policy between commercial bank and finance company i.e. Himalayan Bank Limited and Lumbini Finance and Leasing Company Limited. Investment function is the important function for both commercial bank and finance company. This study puts

its efforts to find and compare the proportion of total loans and advances disbursed to different sectors of the economy and diversification of investment. This study covers the more recent financial data, NRB circulars and guidelines than that of studies previously conducted.

HBL is one of the leading joint venture commercial banks in the country having huge market share and similarly LFLC is also one of the reputed and successful finance companies in the country and their investment activities have significant impact on the national economy. Hence, the study fulfills the prevailing research gap about the in depth analysis of the investment policy pursued by these organizations.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

Generally, research methodology refers to the various sequential steps to be adopted by the researchers during the research period. It is the technique to solve the research problem in a systematic manner. It includes all the procedures from theoretical foundation to the collection and analysis of data. As most of the data are quantitative the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect, on the basis of historical data. Research is systematic and organizational effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thoughts out activities gathering, recording and analyzing and interpretation of the data with the purpose of finding answers to the problems.

The topic of the problem has been selected as “comparative study on investment policy between commercial bank and finance company”. The sole objective of this study is to find and compare the investment policy of Himalayan Bank Limited and Lumbini Finance and Leasing Company. In order to reach and accomplish the objectives of the study, different stages are crossed during the study period. For this purpose the chapter aims to present and reflects the methods and techniques those are carried out and followed during the study period. Research methodology includes research design, population and sample, nature and sources of data, data collection, processing and tabulating procedure and methodology, diagrammatic and graphical representation and lastly the limitation of the methodology.

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data that aims to combine relevance to research purpose.

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing hypothesis and their operational implications to the final analysis of data. A structure is the framework, organization or configuration of … the relations among variables of a study. A research design expresses both the plan of investigation used to obtain empirical evidence on relations of the problem (Kerlinger, 1986).

A research design is the strategy for a study and the plan by which the strategy is to be carried out. It specifies the methods and procedures for the collection, measurement and analysis of data (Cooper, 1998).

Research is a systematic search for knowledge. It involves application of scientific method to the study at universe. This study is descriptive in the research design allows the researchers to take an appropriate measure and direction towards the predetermined goals and objectives. Financial and statistical tools have been applied to evaluate on investment policy of commercial and finance company.

3.3 Population and Sample Size

A population is the total collection of elements about which we wish to make some inferences. The basic idea of sampling is that by selecting some of the elements in a population, we may draw conclusions about the entire population (Cooper, 1998).

The total 31 commercial banks and 79 finance companies constitute the population of the study and Himalayan Bank Limited and Lumbini Finance and Leasing Company under study constitutes the sample for the study. HBL and LFLC are selected among according to the convenience and judgment sampling method policy is comparatively analyzed.

3.4 Nature and Sources of Data

There are two sources of the collection of data. They are primary sources and secondary sources. The data presented in this study are of secondary nature. Secondary data are an integral part of this research study. Studies made by others for

their own purposes represent secondary data to us. The annual reports of concerned bank and finance company are the major sources for the study. Besides this, the following sources of data have been used in the course of the study.

- NRB reports and quarterly publications and bulletins.
- Various publications dealing in the subject matter of the study.
- Various articles published in the newspapers.
- The periodic reports submitted by the concerned firm head office to NRB.
- The NEPSE report, SEBON report etc.

On the basis of the study, the collected raw secondary data are compiled, processed and tabulated to fulfill the objectives of the study. Formal and informal talks with the concerned authorities of the bank and finance company were also helpful to obtain the additional information of the related problem.

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

3.5 Data Collection Technique

This study is mainly based on secondary data obtained from various sources mentioned above. The annual reports of the concerned bank and finance company have been obtained from the field visiting of branch offices of HBL and LFLC, Newroad, Pokhara and websites of them. NRB publications such as Quarterly Economic Bulletins, Banking and Financial Statistic, Economic Report, Directives etc have been collected from the websites of NRB. The data on some aspects of the bank and finance company have also been obtained from the publications and websites of Nepal Stock Exchange. And other related data and information are taken from the official websites of HBL and LFLC. Existing literature related to subject matter have been collected from various research papers, articles, books placed in central library, Tribhuvan University, Kirtipur, Western Regional Library PNC, Pokhara, different journals , magazines and other published and unpublished reports documented by the concerned authorities.

3.6 Data Processing and Analysis

In this research work, the collected data are edited and analyzed thoroughly and then presented in appropriate tables, charts, diagrams for further analysis and interpretation. So financial as well as other required mathematical and statistical tools are used to accomplish the objectives of the study in order to make the analysis more convenient, reliable and authentic tool.

3.7 Data Analysis Tools

The various results that obtain with the help of financial, mathematical and statistical tools are tabulated under different heading in systematic manner. Then they are compared with each other to interpret the results. Some graphs, charts and tables are presented to analyze and interpret the findings of the study. Financial tools are the major tools for analysis. In addition to the financial tools, other simple mathematical and statistical tools are also used to achieve the certain goals. The major tools applied in this study are described as follows;

3.7.1 Financial Tools

Financial tools basically are undertaken to assess the financial strengths and weaknesses of a firm. Financial ratios are the powerful tools of financial analysis. They provide a good technique for assessing financial performance of the firm.

Ratio analysis is one of the most commonly used techniques of financial statement analysis. It is a simple but meaningful technique of measuring operating performances and evaluating managerial performance of a firm. The ratio analysis provides basis to examine different accounting parameters which reflect the norms of business operation (Pradhan, 2004).

A ratio is simply one number expressed in term of another and it express the quantitative relationship between any two numbers. Financial ratios are customarily expressed in the form of times, proportion, percentage and as coefficient. They may also be depicted in the form of logarithmic graph and break even charts or graphs. Ratios make the related information comparable.

The relationship between two accounting figures, expressed mathematically, is known as a financial ratio. In financial analysis, a ratio is used as a benchmark for evaluating the financial position and performance of a firm. They help to summarize large quantities of financial data and to make qualitative judgment about the firm's financial performance (Pandey, 2005).

The present ratio can be compared with past and estimated future ratios. When ratios are computed over a period of time, the analyst can determine improvement or deterioration in the firm's financial condition and performance over time (Pradhan, 2004).

Even though there are many ratios to analyze and interpret the financial statement, only those ratios that are related to the investment operation of the bank have been covered in the study. Different types of ratios have been used in this study. They are as below;

3.7.1.1 Liquidity Ratio

Liquidity ratio measures the liquidity position of a firm. It measures the ability of the firm to meet its current obligations (liabilities). The objective of this ratio is to test the solvency position for the payment of short term liabilities. It measures the firm's ability to fulfill short term commitments out of its liquid assets (current assets). If current assets are less than the current liabilities then there may be liquidity problem. A very high degree of liquidity is also bad for a firm because idle assets earn nothing. As a financial analytical tool, following four liquidity ratios have been used to come into the facts and findings of the study.

i. Current Ratio

The current ratio measures the extent to which the claims of short-term liabilities are covered by the short term assets. It shows the relationship between current assets and current liabilities. Current assets have viewed as relatively liquid, which means they can generate cash in relatively short time period. Current assets include cash (Nrs.), cash (foreign currency), balance with other banks and financial institutions, balance held abroad, inter-bank lending, bills purchased\discounted, investment on

government securities, bills receivables, marketable securities and staff loan and advances. Current liabilities are debt that will come due within a year. Current liabilities include current deposits, foreign deposits, expenses payable, bonus payable, income tax payable, outstanding expenses and propose dividend. If the current ratio is too low, the firm may have difficulty in meeting short term commitments as they mature. If the ratio is too high, the firm may have an excessive investment in current assets or be underutilizing short term credit. This ratio is calculated by dividing current assets by current liabilities. This can be presented as,

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100\%$$

Generally, a current ratio of 2:1 is considered satisfactory but standard depends on the circumstances and the nature of business.

ii. Cash and Bank Balance to Total Deposit Ratio

It is extremely essential for a firm to be able to meet its obligation as they become due. Cash and bank balance are the most liquid assets. A liquid asset is one that can be easily converted to cash without significant loss its original value. This ratio measures the percentage of most liquid fund with the bank and finance company to immediate payment to the depositors. This ratio is calculated by dividing cash and bank balance by total deposit, as stated under.

$$\frac{\text{Cash and Bank Balance}}{\text{Total Deposits}} \times 100\%$$

Cash and bank balance includes cash in hand, foreign cash in hand, cheque and other cash items with domestic and foreign banks. The total deposit includes current deposits, saving deposits, fixed deposits, call deposits and other deposits.

iii. Cash and Bank Balance to Current Assets

Current assets are those assets that can be converted into cash within a year. This ratio shows the firm's liquidity capacity on the basis of cash and bank balance that is the most liquid asset. Higher ratio shows the firm's ability to meet its cash requirement by

its depositors. But higher ratio is not preferred as their accounts do not earn enough return to meet the interest on deposit. The ratio is computed by dividing cash and bank balance by current assets, stated as under,

$$\frac{\text{Cash and Bank Bank Balance}}{\text{Current Assets}} \times 100\%$$

iv. Investment on Government Securities to Total Current Assets Ratio

Government securities are that type of securities which have lower return with lower risk. Commercial banks and finance companies want to diversify their investment by investing in the lower risk elements such as government securities. The purpose of this ratio is to find out the percentage of current assets investment in government securities i.e. treasury bills and development bonds. This ratio is calculated by dividing investment on government securities by current assets. This can be presented as,

$$\frac{\text{Investment on Government Securities}}{\text{Current Assets}} \times 100\%$$

3.7.1.2 Assets Management Ratios (Activity Ratios)

Assets management ratio measures how effectively the firm is managing its assets. It evaluates the effectiveness with which a firm is utilizing its assets to generate income. Commercial banks and finance companies must be able to utilize its assets properly to yield high profit, to retain customers and for its own survival. These ratios are used to determine the efficiency, quality and the contribution of loans and advances in the total profitability.

The following are the various ratios relating to asset and liability management, which are used to determine the efficiency of the subjected bank and finance company in managing its assets and efficiency in portfolio management.

i. Loan and Advances to Total Deposit Ratio

This ratio is also called credit-deposit ratio (CD Ratio). This ratio is calculated to find out how the bank and finance company are utilizing their total deposits on credit or loan and advances for profit generating purpose as loans and advances yield high rate

of return. Higher CD ratio indicates the better utilization of total deposits and better earning, however, liquidity requirement also needs due consideration. Therefore, 70% to 80% ratio is considered as appropriate. This ratio is computed by dividing loans and advances by total deposit of the firm. The formula to calculate this ratio is,

$$\frac{\text{Loans and Advances}}{\text{Total Deposit}} \times 100\%$$

ii. Total Investment to Total Deposit Ratio

This ratio measures of the extent to which the banks and finance companies are able to mobilize their deposits on investment and various activities. It shows how much is being invested out of total deposit collected by a bank and finance company. A high ratio indicates that firms are able to mobilize their deposits as an investment on different sectors and vice versa though various aspects such as liquidity requirement, availability of fund, central bank norms etc are to be considered in general. This ratio is calculated by dividing total investments by total deposits as under,

$$\frac{\text{Total Investment}}{\text{Total Deposit}} \times 100\%$$

Total investment includes investment on government securities, investment on shares and debentures, bonds of other companies and other investment.

iii. Loan and Advances to Total Working Fund Ratio

Care should be taken when mobilizing total working capital by commercial banks and finance companies. Total working fund indicates total assets collected by the firm. It includes current assets, fixed assets, miscellaneous assets and investment; loan for development banks or in other words it includes all assets on balance sheet items but excludes off balance items like letter of credit, letter of guarantee etc. This ratio measures the extent to which the banks and finance companies are able to mobilize their assets as loans and advances for the purpose of profit generation. A high ratio reflects the better mobilization of assets as loan and advances and vice-versa. This ratio is calculated by dividing loans and advances by total working fund. This can be presented as,

$$\frac{\text{Loans and Advances}}{\text{Total Working Fund}} \times 100\%$$

iv. Investment on Government Securities to Total Working Fund Ratio

This ratio reflects that firm's investment on government securities in comparison to total working fund. This ratio measures how much of total investment are used in government securities (low risky securities) to maximize its income. The high ratio indicates that the firm is trying to mobilize its fund in the government securities. This ratio is computed by dividing investment on government securities by total working fund as presented under,

$$\frac{\text{Investment of Government Securities}}{\text{Total Working Fund}} \times 100\%$$

v. Investment on Shares and Debentures to Total Working Fund

Commercial banks and finance companies are interested to invest its fund not only in loan and advances but also to government securities, bond and shares and debentures issued by other different types of companies as well. Investment on shares and debentures to total working fund measures how effectively the bank and finance company uses its total assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund. A high ratio indicates more part of fund invested on the shares and debentures and vice-versa. This ratio is calculated by dividing investment on shares and debentures by total working fund, as stated under.

$$\frac{\text{Investment on Shares \& Debentures}}{\text{Total Working Fund}} \times 100\%$$

vi. Loan Loss Ratio

Loan loss provision is the fund, allocated for the purpose of protecting possible losses from different loans. It shows the real picture of asset (loan) quality of the bank and finance company. This ratio reflects the possibility of loan default of a bank and finance company. It indicates how efficiently banks and finance companies manage their loan and advances and make effort for timely recovery of loan. The provision for loan loss reflects the increasing possibility of non-performing loans in the volume of total loans and advances. This ratio is calculated by dividing total loan loss provision by total loans and advances as presented here under.

$$\frac{\text{Total Loan Loss Provision}}{\text{Total Loans \& Advances}} \times 100\%$$

3.7.1.3 Profitability Ratio

Profitability is the capacity to earn profit. It is a very important factor, which influences the overall banking activities. In the context of commercial banks and finance companies, no banks and finance companies can survive without profit. They are established for the sake of making profit by providing different types of banking and financing activities to their customers. Profitability ratios show the combined effects of liquidity, asset management and debt management on operating result. It measures the earning of the company for a certain period. Higher profitability ratios are supposed to be higher efficient and vice-versa. To examine and analyze the profitability of the banking business, following ratios are calculated.

i. Return on Total Working Fund Ratio (ROA)

It is the appropriate basis for assessing the effectiveness of the operating management of the firm. It measures firm's profit earning capacity by utilizing its assets or working capital. This ratio is calculated by dividing net profit by total working fund as under,

$$\frac{\text{Net Profit}}{\text{Total Working Fund}} \times 100\%$$

ii. Earning per Share (EPS)

Earning per share refers to net profit divided by total number of shares outstanding. It measures the earning power under each share of stock. Higher earning per share is preferable and vice-versa. This ratio is calculated by dividing total net profit (loss) by total number of shares. This can be presented as,

$$\frac{\text{Net Profit (loss)}}{\text{Total Number of Share}} \times 100\%$$

iii. Return on Loan and Advances Ratio

This ratio measures how successfully the firm has utilized its resources in the form of loan and advances. Commercial banks and finance companies invest their deposits on different sectors to earn profit. Among them loan and advance is one. Therefore, this ratio measures the earning capacity of commercial bank and finance company on its deposits mobilized on loans and advances. While comparing between two or more firms the higher ratio discloses a high success to mobilize its funds as loans and

advances and vice-versa. It is calculated by dividing the net profit (loss) by loans and advances. This can be expressed as,

$$\frac{\text{Net Profit (loss)}}{\text{Loans and Advances}} \times 100\%$$

iv. Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to determine the percentage of interest earned to total assets i.e. total working fund. While comparing between two or more firms the higher ratio shows that high success to mobilize its assets to earn income as an interest. This ratio is computed by dividing total interest earned by total working fund. This is stated as,

$$\frac{\text{Total Interest Earned}}{\text{Total Working Fund}} \times 100\%$$

v. Total Interest Paid to Total Working Fund Ratio

The purpose of calculating this ratio is to determine the percentage of interest paid on liabilities with respect to total working fund. A higher ratio implies the higher interest expenses on total working fund and vice-versa. This ratio is calculated by dividing total interest paid by total working fund, which can be presented as,

$$\frac{\text{Total Interest Paid}}{\text{Total Working Fund}} \times 100\%$$

vi. Total Employees Expenses to Total Expenses Ratio

This ratio is calculated to find out total employees expenses with respect to total expenses of a firm. While comparing between two or more firms higher ratio implies higher expenses on employees and vice-versa. This ratio is calculated by dividing total employees expenses by total expenses, which can be presented as,

$$\frac{\text{Total Employees Expenses}}{\text{Total Expenses}} \times 100\%$$

3.7.1.4 Non Performing Loan

Loan is called non-performing loan (NPL), where the borrower is neither likely to pay any interest nor repay the principle within the given period of time. In other words, non- performing loan is that type of loan which ceases to generate revenue or gives every indication that is not further going to generate revenue. Non-performing loans

are distressed loans classified as per the regulations of the central bank. Loans which are graded in the category of sub-standard, doubtful and loss are considered as non-performing loans. A non-performing loan for a bank and finance companies is like a developing cancer in a human body, which if not controlled in time, spreads to the fellow bankers and the entire banking system and threatens the existence of the banking system. The internationally accepted range 4% to 5% NPL is considered acceptable but when the NPL begins in two digits then the problem begin to start. So the management team, every staff, stakeholders and concerned authorities of the firm must put their joint effort to lower it to the single digit or figure.

i. Non Performing Loan to Total Loans and Advances Ratio

This ratio is calculated to find out the proportion of non-performing loans in the total loan portfolio. Higher level ratio indicates the bad quality of assets of firms in the form of loans and advances. Lower ratio implies the best management and utilization of loans and advances. Hence, lower non-performing to total credit ratio is preferred. As per international standard only 4% to 5% NPL is allowed also in the context of Nepal 5% NPL is acceptable. This ratio is calculated by dividing the total NPL by total loan and advances, as stated under.

$$\frac{\text{Non Performing Loan}}{\text{Total Loans \& Advances}} \times 100\%$$

3.7.2 Statistical Analysis

Some important statistical tools are used for accomplishing the objective of this study. Statistical tools such as mean, standard deviation, coefficient of variation, coefficient of correlation and trend analysis have been used.

3.7.2.1 Mean

A mean is the average value or the sum of all the observations divided by the number of observations. The mean is calculated to represent the entire values of the other variables by one value and to compare between those values. It is denoted by ($\bar{x}$). It is computed as,

$$\text{Mean } (\bar{x}) = \frac{\phi\varepsilon}{\rho}$$

Where,

$\bar{x}$ = mean of the variables.

$\phi\varepsilon$ = sum of the values of the variables.

N = number of observations.

3.7.2.2 Standard Deviation

Standard deviation (S.D.) is the most popular and the most useful measure of dispersion. It is said that higher the value of standard deviation the higher the variability and vice-versa. It is denoted by the Greek letter σ (read as sigma). It can be calculated as follows,

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}}$

3.7.2.3 Coefficient of Variation (C.V.)

The relative measure of dispersion based on the standard deviation is known as coefficient of variation. It is independent of unit. So, two variables can better be compared with the help of coefficient of variation for their variability. The less is the C.V. then more is the uniformity and consistency and vice-versa. The coefficient of variation is computed by the following formula and this gives the percentage.

Coefficient of Variation (C.V.) = $\frac{6}{\bar{x}} \times 100\%$

3.7.2.4 Coefficient of Correlation Analysis

Correlation refers to the degree of relationship between two variables. Correlation coefficient determines the association between the dependent variable and independent variable. If between two variables, increase or decrease in one causes increase or decrease in another, then such variables are correlated variables. The correlation coefficient between two variables describes the degree of relationship between these two variables. It interprets where two or more variables are correlated positively or negatively. The purpose of calculating these tools are to analyze the relationship these variables of the banks and finance companies and help them to make suitable investment policy regarding deposit collection, fund utilization and profit maximization. There are different techniques of calculating correlation

coefficient. Among various techniques, Karl Pearson's Coefficient of Correlation has been used in this study. It is calculated as follows,

Coefficient of Correlation $((r)\ \mathrm{X}\frac{\phi\varepsilon\ \psi}{\rho\ \pm x\pm y}$

Where,

The Karl Pearson's 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 relation.

If,

r = 0, there is no relationship between the variables.

r < 0, there is negative relationship between the variables.

r > 0, there is positive relationship between the variables.

r = +1, the relationship is perfectly positive.

r = -1, the relationship is perfectly negative.

The reliability and test of significance of the correlation coefficient is measured by the help of probable error (P.E.). It is calculated by the following formula,

$$\text{P.E. (r)} = 0.6745\ \frac{1\,\mathrm{Z}\,r^2}{\sqrt{N}}$$

Where,

r = the value of correlation coefficient.

n = number of pairs of observation.

P.E. is used in interpretation whether the calculated value of r is significant or not.

If, r < P.E., it is insignificant and there is no evidence of correlation.

If, r > 6P.E. it is significant and reliable.

In this section of the study, Karl Pearson's Coefficient of Correlation has been used to find out the relationship between the following variables:

i. Correlation between deposits and loans and advances.

ii. Correlation between deposits and investment.

iii. Correlation between loan and advances and net profit.

iv. Correlation between investment and net profit.

3.7.2.5 Trend Analysis

Trend analysis is also known as the time series analysis. A trend analysis indicates a firm's performance over time and reveals whether its position is improving or deterioration relative to other companies in the industry. It can provide clues as to whether the firm's financial position is likely to improve or deteriote. The least square method has been adopted to measure the trend behaviors of these selected financial institutions. This method is widely used in practices. For the estimation of linear trend the following formula has been used.

$$Y = a + bx$$

Where,

Y = Dependent variable

X = Independent variable

a = Y intercept

b = Slope of the trend line.

By using this method, trend analysis of following analysis is conducted,

i. Trend analysis of total deposit.

ii. Trend analysis of loan and advances.

iii. Trend analysis of investment.

iv. Trend analysis of net profit.

3.7.3 Diagrammatic and Graphical Representation

Diagrams and graphs are visual aids that give a bird eye view of a given set of numerical data. The purpose of presenting diagrams and graphs is to represent the quantitative data in simple and readily compromise form. Therefore, various bar diagrams, pie-charts and graphs have been used for presentation and analysis of data.

3.8 Limitations of the Methodology

As this study is carried out within the framework of descriptive research design, it is bounded by its own methodology. So, it cannot be said it is free from limitation. Only five years data are taken into considerations for the study i.e. F.Y.2005/06 to 2009/10 which may not be able to represent the whole scenario. Different financial and statistical tools are used to analyze the collected data, which are based on certain assumptions. So, the reliability of the analysis depends upon the circumstances on which the tools are based.

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is concerned with evaluating and analyzing the major financial performances, which are mainly related to the investment management and fund mobilization of HBL in comparison to LFLC. Here the data collected from various sources have been analyzed to measure the various dimensions of the problems of study and major findings of the study are presented systematically.

4.1 Analysis of Financial Ratios

Financial tools basically are undertaken to assess the financial strengths and weaknesses of a firm. They provide a good technique for analyzing financial performance of the firm. Under this heading different financial ratios are analyzed by the help of secondary data availed from the published annual report of the firms. Even though there are many ratios to analyze and interpret the financial statement, only those ratios that are related to investment operation of the bank and finance company have been covered in this study.

4.1.1 Liquidity Ratio

Liquidity ratios are basically calculated to analyze the liquidity position of a firm or to measure the ability of a firm to meet its current obligations out of its liquid assets. To satisfy the credit needs of the community, to meet demands for deposits-withdrawals, to pay maturity obligations in time and convert non cash assets into cash to satisfy immediate needs without loss to firm and consequent impact on long run profit, commercial banks and finance companies must keep some satisfactory level of liquidity position. Under this, the following liquidity ratios have been calculated to measure the liquidity position of the firm and a brief analysis of the same has been done.

4.1.1.1 Current Ratio

Current ratio shows the firm's short-term solvency position. It shows the relationship between current assets and current liabilities. The current ratio measures the extent to which the claims of short term liabilities are covered by the short term assets. This ratio is calculated by dividing current assets by current liabilities.

Table 4.1

Current Ratio (Times)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	2.16	1.17	1.19	1.07	0.97	1.31	0.43	32.82
LFLC	0.53	1.25	1.13	1.50	1.61	1.20	0.38	31.67

(Source: Appendix A-I)

From the above comparative table, it is found that both firms i.e. HBL and LFLC have fluctuating ratios. HBL has maintained higher ratio in comparison to LFLC. The mean ratio of HBL is 1.31, standard deviation is 0.43 and C.V. is 32.82% whereas mean ratio of LFLC is 1.20, standard deviation is 0.38 and C.V. is 31.67%. It reveals that current ratios of LFLC are more consistent than that of HBL.

Though the optimal standard of current ratio should be 2:1, the conventional measure of liquidity is not applicable in both banking and non banking business. The ratio maintained by the commercial banks and finance companies at the level of around1:1 can be regarded as good and sufficient to meet the normal contingencies. Therefore, the above current ratio analysis of the firms over the five years period indicates, that HBL and LFLC have satisfactory level of liquidity position.

From the above analysis, it can be concluded that both HBL and LFLC are capable to pay their current obligations. It can be also concluded that HBL's current ratios are in decreasing trend and LFLC's current ratios are in increasing trend during the study period.

4.1.1.2 Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance are assets that constitute the banks and finance companies' first line of defense as cash and bank balance are the most liquid assets. A liquid asset is one that can be easily converted to cash without significant loss in its original value. This ratio measures the percentage of most liquid fund with the commercial banks and finance companies to make immediate payment to their depositors. This ratio is calculated by dividing cash and bank balance by total deposits.

Table 4.2

Cash and Bank Balance to Total Deposit Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**			
HBL	6.48	5.85	4.55	8.79	10.28	7.19	2.07	28.79
LFLC	3.97	7.82	7.59	5.74	3.82	5.79	1.71	29.53

(Source: Appendix A-II)

The above comparative table shows that the cash and bank balance to total deposit ratios of both HBL and LFLC are in fluctuating trend. In case of HBL, its highest ratio is 10.28% in FY 2009/10 and lowest ratio is 4.55% in FY 2007/08. Similarly, in case of LFLC, its highest ratio is 7.82% in FY 2006/07 and lowest ratio is 3.82% in FY 2009/10. The mean ratio of HBL is highest than that of the LFLC i.e. 7.19%>5.79%. Likewise, while comparing coefficient of variance, it is found that LFLC has slightly high percentage of C.V. than that of HBL, which shows that ratios of LFLC are no more consistent than that of HBL i.e. 29.53%>28.79%.

From the above analysis, it can be concluded that the cash and bank balance position of LFLC with respect to total deposit is weaker than the HBL. It indicates that LFLC invest its fund in income generating areas, it has less idle fund. But it should ensure to have enough liquid funds to serve its customers. On the other hand, HBL should invest its fund in more productive sectors like treasury bills, short term marketable securities etc.

4.1.1.3 Cash and Bank Balance to Current Assets

This ratio measures the proportion of most liquid assets i.e. cash and bank balance among the total current assets of the bank and finance companies. Higher ratio shows the firm's ability to meet the daily cash requirement of its depositors and vice-versa. Commercial banks and finance companies have to maintain the cash and bank balance to current assets ratio in such a manner that they should have adequate cash for the customers demand against deposit when required. This ratio is calculated by dividing cash and bank balance to current assets.

Table 4.3

Cash and Bank Balance to Current Assets Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	7.22	6.51	4.92	10.23	12.95	8.37	2.87	34.29
LFLC	9.62	8.44	6.86	4.41	2.90	6.45	2.49	38.61

(Source: Appendix A-III)

The above table 4.3 shows that the cash and bank balance to total current assets ratio of HBL is fluctuating trend whereas LFLC is in decreasing trend. HBL has maintained highest ratio in FY 2009/10 i.e. 12.95% and has lowest ratio in FY 2007/08 i.e. 4.92%. Similarly, LFLC has highest ratio in FY 2005/06 i.e. 9.62% and lowest ratio in FY 2009/10 i.e. 2.90%.

The mean ratio of HBL is slightly higher than that of LFLC i.e. 8.37%>6.45% and coefficient of variation of HBL is lower than that of LFLC i.e. 34.29 %< 38.61%. It means the ratio of HBL is more consistent and less variable than that of LFLC.

On the basis of mean ratio the liquidity position of the HBL is better than that of LFLC. It means that HBL seems to have better position of maintaining the cash and bank balance to total current assets. In the contrast, it can be said that HBL has little more idle fund than that of LFLC.

4.1.1.4 Investment on Government Securities to Total Current Assets Ratio

Investment on government securities to total current assets ratio measures the percentage of current assets invested in government securities i.e. treasury bills and development bonds. Government securities are that type of securities which have lower return with lower risk and can be easily sold in market or they can be converted into cash in other ways. This ratio is calculated by dividing investment on government securities by total current assets.

Table 4.4

Investments on Government Securities to Total Current Assets Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	21.63	23.91	25.37	14.13	14.96	20	4.62	23.10
LFLC	4.45	1.86	1.47	0.98	2.10	2.17	1.20	55.30

(Source: Appendix A-IV)

The above table shows that the investment on government securities to total current assets ratio is not found consistent in all years of study period in the case of LFLC. On the hand, HBL has increasing and fluctuating trend throughout whole study period. During the study period, it has been found that HBL's highest ratio is 25.37% in the FY 2007/08 and lowest ratio is 14.13% in the FY 2008/09. Similarly, in the case of LFLC, the highest ratio is found in the FY 2005/06 i.e. 4.45% and lowest ratio is 0.98% in the FY 2008/09.

The mean ratio of investment on government securities to total current assets of HBL is higher than that of LFLC i.e. 20%>2.17%. It means that HBL has invested higher percentage of its current assets on government securities than that of LFLC. The coefficient of variance of correlation between the above ratios of HBL is lower than that of LFLC i.e. 23.10 %< 55.30%. It shows that the ratios of investment on government securities to total current assets of HBL are less variable and more consistent than that of LFLC during the study period.

From the above analysis, it can be concluded that HBL has invested the more percentage of current assets into the government securities i.e. treasury bills and development bonds than that of LFLC during the study period.

4.1.2 Asset Management Ratio (Activity Ratio)

Assets management ratio measures how effectively the commercial bank and finance company are managing their assets. They must be able to utilize their assets properly to yield high profit, to retain customers and for their survival by maintaining the appropriate level of liquidity.

The following are the various ratios relating to asset and liability management, which are used to determine the efficiency of the HBL and LFLC in managing their assets and efficiency in portfolio management.

4.1.2.1 Loans and Advances to Total Deposit Ratio

This ratio is computed to find out how the bank and finance company are utilizing their total deposit on credit or loan and advances for profit generating purposes as loans and advances yield high rate of return. Higher ratio indicates the better mobilization of collected deposits and vice-versa. But it should be considered that too high ratio might not be better from liquidity point of view. This ratio is computed by dividing total loans and advances by total deposits of the firm.

Table 4.5

Loan and Advances to Total Deposit Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	59.50	59.22	63.37	73.58	77.43	66.62	7.50	11.26
LFLC	88.39	90.36	115.19	106.21	117.20	103.47	12.11	11.70

(Source: Appendix B-I)

The comparative 4.5 listed above shows that HBL's ratio of loans and advances to total deposits is in increasing trend. HBL has achieved highest ratio in the FY 2009/10 and has lowest ratio in the FY 2006/07. Similarly, the ratio of LFLC is also in

increasing trend except in the FY 2008/09. LFLC has achieved highest ratio in the FY 2009/10 which increased to 117.20% which is too risky position. It shows that liquidity position of LFLC is too low. Observing the mean ratios it can be said that HBL has maintained lower ratio i.e. 66.42% than that of the LFLC i.e. 103.47%. On the basis of C.V. it can be said that LFLC's loan and advances ratio is less consistent than that of HBL because of its higher C.V. i.e. 11.70%>11.26%.

From the above analysis, it can be concluded that HBL is found slightly weak in mobilizing its deposits as loans and advances in comparison to LFLC. It should be noted that in the process of loan management of assets, so many factors are to be considered such as diversification, risk analysis, credit policy of firm, social responsibility, NRB's rules and regulation, customer's behaviors etc.

4.1.2.2 Total Investment to Total Deposit Ratio

This ratio measures of the extent to which banks and finance companies are able to mobilize their deposits on investment and various activities. This ratio indicates the proportion of deposits utilized for the purpose of income generation as well as for maintaining liquidity in appropriate level. A high ratio indicates that firms are able to mobilize their deposits as an investment on different sectors and vice versa, though various aspects as liquidity requirement, availability of fund, central bank norms etc. are to be considered in general. This ratio is calculated by dividing total investments by total deposits.

Table 4.6

Total Investments to Total Deposit Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	41.11	39.35	41.89	25.12	22.45	33.98	8.41	24.75
LFLC	3.39	8.34	9.63	2.88	3.59	5.57	2.83	50.81

(Source: Appendix B-II)

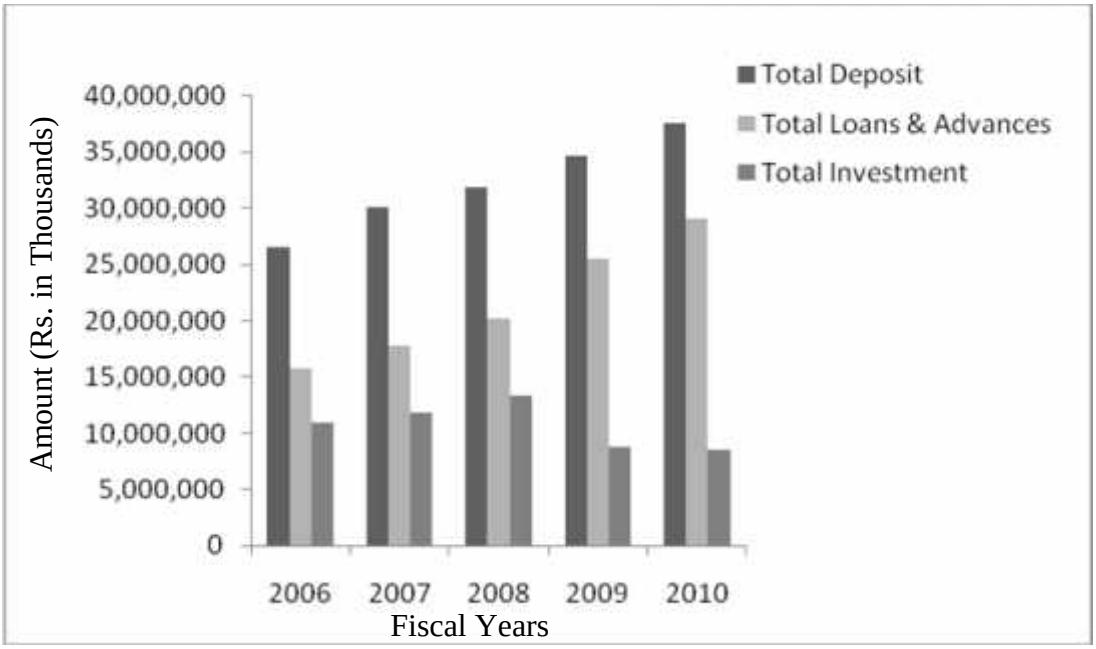
The comparative table 4.6 reveals that the ratios of total investment to total deposits of both HBL and LFLC have found fluctuating trend throughout the study period. During the study period, HBL has lower ratio in the FY 2009/10 i.e.22.45% and

higher ratio in the FY 2007/08 i.e.41.89% whereas LFLC has lower ratio in FY 2008/09 i.e.2.88% and higher ratio in the FY 2007/08 i.e.9.63%. Similarly, while comparing the mean ratio, the ratio of HBL is very higher than that of LFLC i.e. 33.98%>5.57%. On the basis of mean ratio, it can be concluded that HBL's capacity to mobilize its deposits on total investment is very good than LFLC. On the other hand, observing the coefficient of variation of ratios, it can be further concluded that LFLC's ratios during the study period have seen quite more inconsistent than that of HBL because of its higher coefficient of variation i.e.50.81%>24.75%.

The above analysis shows that the average investment policy of HBL is better than that of LFLC. LFLC is not so successful in utilizing its resources on investment than that of HBL.

Fig: 4.1

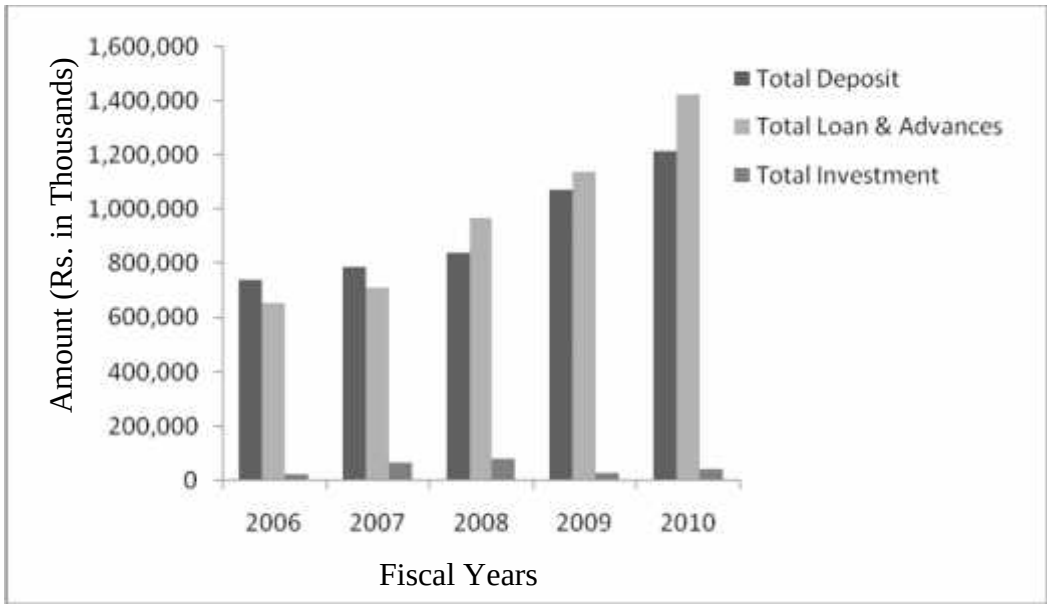
A Glance of Total Deposits, Total Loan and Advances and Total Investment of HBL



(Source: Appendix G-I)

Fig: 4.2

A Glance of Total Deposits, Total Loan and Advances and Total Investment of LFLC



(Source: Appendix G-II)

4.1.2.3 Loan and Advances to Total Working Fund Ratio

Total working fund indicates the total assets collected by the firm. Loan and advances of any commercial banks and finance companies represent the major portion in the volume of total working fund. This ratio measures the extent to which the banks and finance companies are able to mobilize their assets as loans and advances for the purpose of profit generation. A high ratio reflects the better mobilization of assets as loan and advances and vice-versa. However, in its reverse side, the high degree of this ratio is representative of low liquidity ratio either. The low ratio is indicative of low productivity and high degree of safety in liquidity. This ratio is calculated by dividing total loans and advances by total working fund.

Table 4.7

Loan and Advances to Total Working Fund Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	51.54	51.85	54.75	63.72	66.40	57.65	6.21	10.77
LFLC	75.75	74.22	80.46	78.77	85.16	78.87	3.83	4.86

(Source: Appendix B-III)

The above table 4.7 shows that the ratio of loan and advances to total working fund of HBL is in increasing trend whereas ratio of LFLC is in fluctuating trend. In regards of HBL, the ratio is found low in FY 2005/06 i.e.51.54% and high in the FY 2009/10 i.e.66.40%. The same ratio of LFLC is the highest in FY 2009/10 i.e.85.16% and lowest in FY 2006/07 i.e. 74.22%. Moreover, the LFLC has highest mean ratio i.e.78.87% than that of HBL i.e.57.65%. The coefficient of variation of HBL is highest than that of LFLC i.e.10.77%>4.86%.

On the basis of mean ratios, it can be said that LFLC is stronger in mobilizing its total working fund as loan and advances. On the other hand, observing coefficient of variation of ratios, it can be further concluded that ratios of HBL are less consistent than that of LFLC because of higher coefficient of variation.

From the above analysis, it can be concluded that the mobilization of working fund as loan and advances of LFLC is good than that of HBL during the study period.

4.1.2.4 Investment of Government Securities to Total Working Fund Ratio

This ratio measures the investment on government securities out of the total working fund. Commercial banks and finance companies never mobilized their resources only as a loan and advances. Besides, mobilizing their major portion of resources in the form of loans and advances, they mobilize their funds in purchasing different types of government securities. They do so mainly to utilize their fund for income generation without taking risk and to maintain the adequate level of liquidity. Since, the government securities are considered most liquid and safest assets or they can be converted into cash easily than loans and advances. Here an effort is made to examine the position of bank and finance company's total assets that is invested on different

government securities. A high ratio indicates better mobilization of fund as investment on government securities and vice versa. This ratio is computed by dividing investment on government securities by total working fund.

Table 4.8

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

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	16.82	18.81	20.27	10.52	10.18	15.32	4.21	27.48
LFLC	1.57	1.42	1.13	0.94	2.01	1.41	0.37	26.24

(Source: Appendix B-IV)

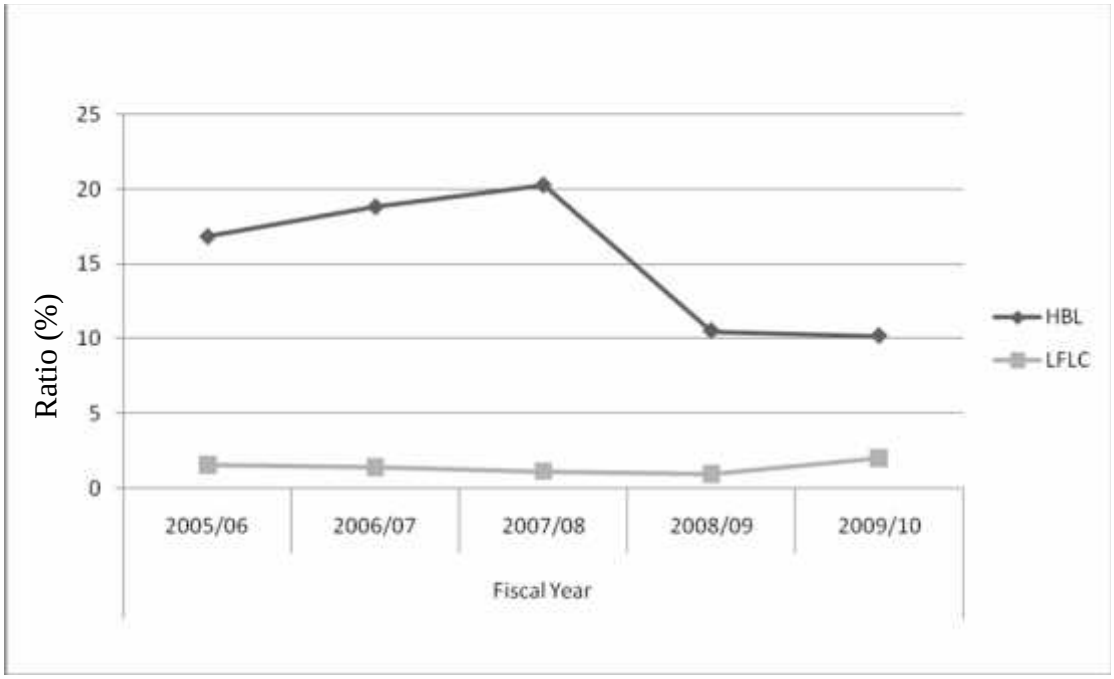
From the above comparative table, it is seen that HBL's investment on government securities to total working fund ratio from FY 2005/06 to FY 2007/08 is in increasing trend and from FY 2008/09, it is in decreasing trend during the study period. It has maintained highest ratio in FY 2007/08 i.e.20.27% and lowest in FY 2009/10 i.e.10.18%. On the other hand, ratio of percentage of investment on government securities to total working fund of LFLC is in decreasing trend and in FY 2009/10, it is increased up to 2.01%.

The comparison of mean ratios of HBL and LFLC reveal that HBL has higher mean ratio than that of LFLC i.e.15.32%>1.41%. Moreover, coefficient of variation of HBL is little higher than that of LFLC i.e.27.48%>26.24%. It means ratios of HBL are less consistent and more variable than the LFLC over the study period.

From the above analysis, it can be concluded that HBL's investment, in terms of government securities with respect to total working fund is more satisfactory than that of LFLC. Though, HBL has invested its more portion of working fund on government securities in compare to LFLC's, both have no certain investment policy towards investment on government securities over the study period.

Fig: 4.3

Investments on Government Securities to Total Working Fund Ratio (%) of HBL and LFLC



4.1.2.5 Investment on Shares and Debentures to Total Working Fund Ratio

Investment on shares and debentures to total working fund ratio measures how effectively the bank and finance company mobilizes their total assets on purchase of shares and debentures of other companies to generate incomes and to utilize their excess fund. A high ratio indicates better mobilization of fund as investment on shares and debentures and vice-versa. This ratio is calculated by dividing total investment on shares on debentures by total working fund.

Table 4.9

Investments on Shares and Debentures to Total Working Fund Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	0.13	0.21	0.24	0.23	0.18	0.20	0.04	20.00
LFLC	0.84	0.75	0.60	0.50	0.60	0.66	0.12	18.18

(Source: Appendix B-V)

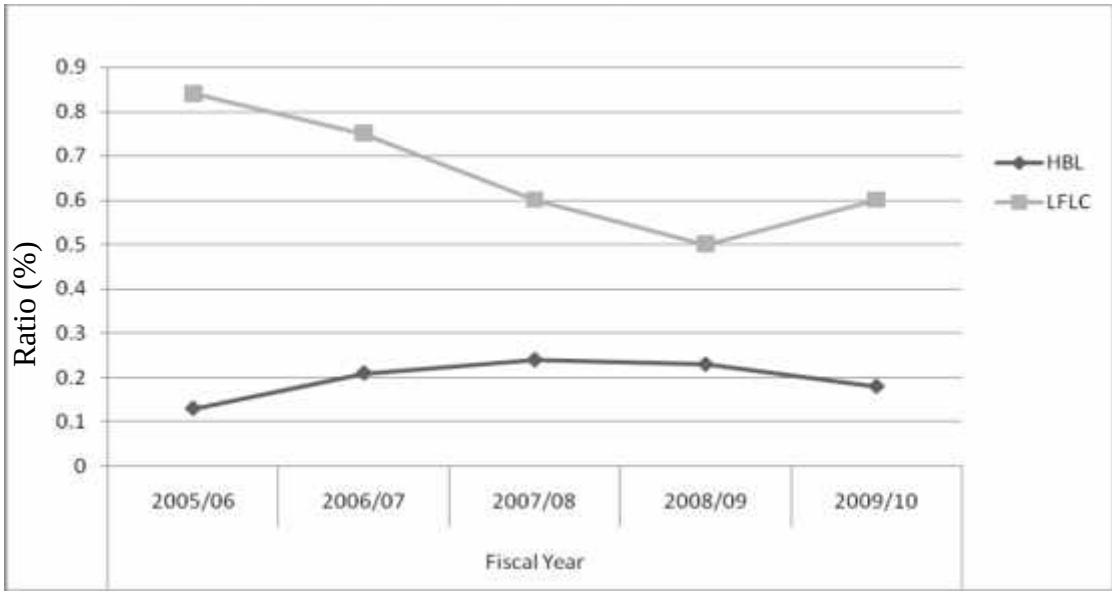
From the above comparative table, it has been found that the ratio of investment of shares and debentures to total working fund in both HBL and LFLC is unstable and fluctuating. Both HBL and LFLC have invested very nominal percentage of total working fund into shares and debentures of other companies. In all cases, the ratio percentage is less than one percentage. In an average, LFLC has maintained higher ratio in shares and debentures in comparison with HBL during the study period. Both HBL and LFLC have fluctuating type of ratios, showing the lack of efficient and uniform investment policy.

On the basis of mean ratios, it can be concluded that LFLC has invested higher amount in shares and debentures in comparison to HBL i.e.0.66%>0.20%. Moreover, coefficient of variation of LFLC is lower than that of HBL i.e.18.18 %< 20.00%. It means investment ratios of LFLC are more consistent than that of HBL.

From the above analysis, it can be stated that LFLC has invested the more fund homogenously through out whole study period in shares and debentures in comparison to HBL.

Fig: 4.4

Investments on Shares and Debentures to Total Working Fund Ratio (%) of HBL and LFLC



4.1.2.6 Loan Loss Ratio

Loss of loan occurs when a borrower fails to repay the loan on time. Loan loss provision signifies the cushion against future contingency created by the default of the borrowers in payment of loans and ensures the continued solvency of the banks and finance companies. This ratio indicates how efficiently banks and finance companies manage their loan and advances and make effort for timely recovery of loan. The provision for loan loss reflects the increasing possibility of non-performing loans in the volume of total loans and advances. Higher ratio indicates higher portion of non-performing loan (NPL) in the total loan portfolio. This ratio is calculated by dividing total loan loss provision by total loans and advances.

Table 4.10
Loan Loss Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	7.10	4.47	3.38	2.85	3.93	4.35	1.48	34.02
LFLC	14.72	13.87	9.50	8.28	6.96	10.67	3.08	28.87

(Source: Appendix B-VI)

The above comparative table shows that HBL has the ratios with fluctuating trend whereas LFLC ratios are in decreasing trend. HBL has highest ratio in FY 2005/06 i.e.7.10% and lowest ratio in FY 2008/09 i.e.2.85%. Similarly, LFLC has highest ratio in FY 2005/06 i.e.14.72% and lowest ratio in FY 2009/10 i.e.6.96%.

On the basis of mean ratio, it is found that LFLC has higher ratio than HBL i.e.10.67%>4.35%. It indicates that the position of HBL is better in the matter of recovery of loan loss. On the other hand, LFLC's coefficient of variation among ratios under study period seems to be more consistent than that of HBL i.e.28.87 %< 34.02%.

From the above analysis, it can be concluded that the quality of assets of HBL in terms of recovery of loan is better in comparison to LFLC.

4.1.3 Profitability Ratio

In this section, profitability ratios are calculated to measure the overall efficiency of firms in terms of profit and financial performance. In the context of commercial banks and finance companies, no banks and finance companies can survive without profit. They are established for the sake of making profit by providing different types of banking and financing activities to their customers. It measures the earning of the firm of a certain period. For this purpose, the relationship of different variables of balance sheet and profit and loss account has been studied. The following ratios are analyzed to measure the overall efficiency of HBL and LFLC.

4.1.3.1 Return on Total Working Fund Ratio (ROA)

Return on total working fund ratio is the measuring rod of the profit earning capacity of invests able resources into different types of assets. If the firm's total working fund i.e. total assets is well managed and efficiently utilized return on such assets can be higher and vice-versa. It reflects the extent to which the firm has been successful to mobilize its available resources. A high ratio indicates higher success to mobilize its total assets and vice-versa. The ratio of return on total working fund can be found by dividing net profit by total working fund. The following table no.4.11 shows the profitability position of HBL and LFLC with respect to total working fund for the study period.

Table 4.11

Return on Total Working Fund Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	1.50	1.43	1.73	1.88	1.16	1.54	0.25	16.23
LFLC	0.38	3.94	5.22	5.06	5.53	4.03	1.90	47.15

(Source: Appendix C-I)

The above comparative table shows the return on total working fund ratios of both HBL and LFLC are fluctuating during the study period. In case of HBL, the ratio ranges between 1.16% in FY 2009/10 to 1.88% in FY 2008/09. The mean ratio is found 1.54% with 16.23% coefficient of variation between them, which indicates that the ratios are less variable and consistent during the study period. Similarly, in the

case of LFLC, the ratio ranges between 0.38% in FY 2005/06 to 5.53% in FY 2009/10. The mean ratio during the study period is found 4.03% with 47.15% coefficient of variation between them, which shows that ratio, are more variable and inconsistent during the study period.

From the above analysis it can be concluded that LFLC's profit earning capacity by utilizing available resources is good in comparison to that of HBL. Moreover, it has higher coefficient of variation, which shows that ratios are more variable than that of HBL during the study period.

4.1.3.2 Earning Per Share (EPS)

Earning per share refers to net profit divided by total number shares outstanding. The amount of earning per share measures the earning power under each share of stock. It measures the profit available to the equity holders on a per share basis. It also indicates that how far an organization is able to use its available resources to generate profit. This ratio is calculated by dividing total net profit (loss) by total number of shares.

Table 4.12

Earning Per Share (in Rs.)

Firms	Fiscal Year					Mean	S.D	C.V
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	59.24	60.66	62.74	61.90	31.80	55.27	11.79	21.33
LFLC	5.44	63.19	69.68	60.94	44.90	48.83	23.18	47.47

(Source: Appendix C-II)

The above table shows that the earning per share of HBL is not much fluctuating throughout the study period whereas LFLC has fluctuating trend. HBL's highest earning per share is Rs.62.74 in FY 2007/08 and lowest ratio is Rs.31.80 in FY 2009/10. Similarly, LFLC's highest earning per share is Rs.69.68 in FY 2007/08 and lowest ratio is Rs. 5.44 in FY 2005/06. Both HBL and LFLC have highest earning per share in FY 2007/08. But LFLC's earning per share is higher than that of HBL in that year.

On the basis of mean ratio, HBL is in good position than that of LFLC as it has higher mean ratio than that of LFLC i.e. 55.27%>48.83%. On the other hand, coefficient of variation of ratios of HBL is also lower than that of LFLC i.e. 21.33 %< 47.47%, which shows that it's earning is less variable and more consistent than that of LFLC over the study period.

From the above explanation, it can be concluded that the HBL has maintained less variable and uniform earning per share than that of LFLC throughout the whole study period.

4.1.3.3 Return on Loan and Advances Ratio

Return on loan and advances ratio measures how successfully commercial bank and finance company have utilized their resources in the form of loan and advances. It also measures the earning capacity of commercial bank and finance company through their mobilized fund in the form of loans and advances. A higher ratio discloses a higher success to mobilize fund as loans and advances and vice-versa. It is calculated by dividing the net profit (loss) by total loans and advances.

Table 4.13

Return on Loan and Advances Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	2.90	2.76	3.15	2.95	1.75	2.70	0.49	18.15
LFLC	0.50	5.31	6.49	6.43	6.49	5.04	2.32	46.03

(Source: Appendix C-III)

The above comparative table reveals that the ratio of return on loan and advances of HBL is found less fluctuating. The highest ratio is found in the FY 2007/08 i.e.3.15% and the lowest ratio is found in the FY 2009/10 i.e.1.75%. Similarly, in the case of LFLC, the ratio is found more fluctuating than the HBL. It has highest ratio in the two fiscal year, they are in FY 2007/08 and FY 2009/10 i.e. 6.49% and has lowest ratio in the FY 2005/06 i.e. 0.50%.

On the basis of mean ratios, HBL seems to be weaker to maintain its high return on loan and advances in comparison to LFLC as it has lower mean ratio than the LFLC i.e.2.70%<5.04%.

It concludes that LFLC is better in mobilizing its resources as loans and advances to generate the profit.

Furthermore, while comparing coefficient of variation, HBL has lower ratio than that of LFLC i.e.18.15 %< 46.03%. It shows that the ratios of HBL are more stable and consistent than that of LFLC during the study period.

4.1.3.4 Total Interest Earned to Total Working Fund Ratio

The ratio of total interest earned to total working fund reflects the extent to which the banks and finance companies are successful to earn income as interest on total assets i.e. total working fund. Thus, this ratio is calculated to determine the percentage of interest earned to total working fund. A high ratio indicates high earning on total assets and vice- versa. This ratio is calculated by dividing total interest by total working fund.

Table 4.14

Total Interests Earned to Total Working Fund Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	5.32	5.17	5.33	5.85	7.18	5.77	0.74	12.83
LFLC	11.22	11.97	11.53	11.84	13.05	11.92	0.62	5.20

(Source: Appendix C-IV)

From the above comparative table the total interest earned to total working fund ratios are not much fluctuating trend throughout the study period in case of both HBL and LFLC. HBL and LFLC both have maintained highest ratio in the same fiscal year i.e. FY 2009/10. But LFLC has maintained highest ratio than the HBL i.e.13.05%>7.18%. LFLC's total interest to total working fund is higher than that of HBL in all the fiscal year of study period. Similarly, HBL's lowest ratio is 5.17% in FY 2006/07 and LFLC's lowest ratio is 11.22% in FY 2005/06. It proves that in the both case, there is

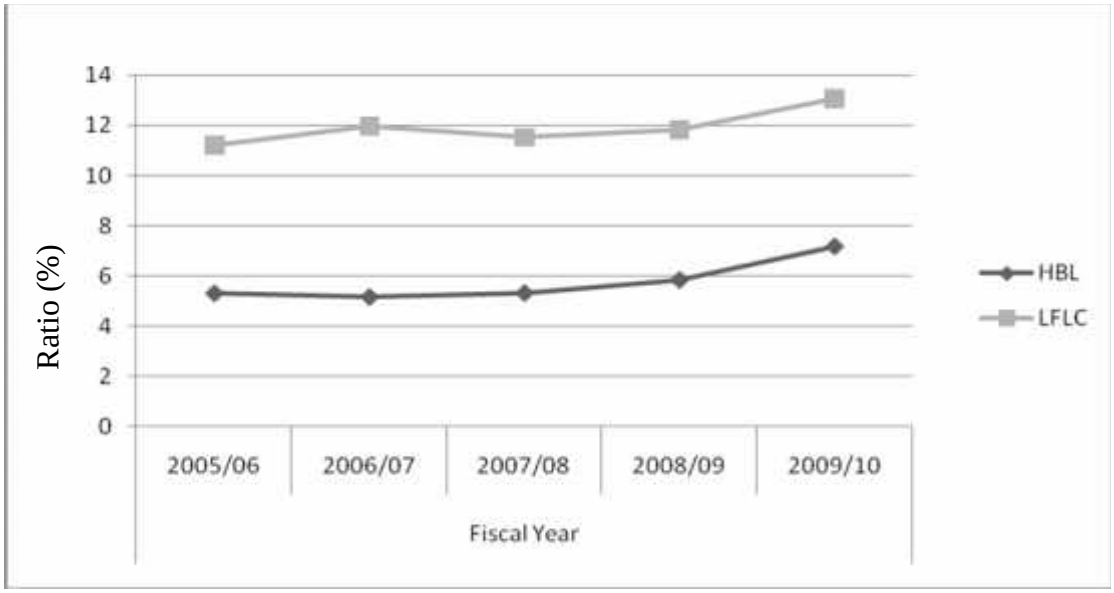
not any disturbance in earning interest from the lending amount throughout the whole study period.

While comparing the mean ratios, LFLC has maintained higher ratio than that of HBL i.e.11.92%>5.77%. It shows that LFLC seems to have earned higher amount of interest on total working fund in comparison to HBL. From the comparison of coefficient of variation of ratios of both, it can be said that LFLC has been able to stable in terms of earning the interest as income on total working fund i.e.5.20%<12.83%.

From the above analysis, it can be concluded that LFLC has efficiently use its fund i.e. total working fund to earn high interest income in comparison to HBL and its ratios are less variable and consistent than that of HBL over the study period.

Fig: 4.5

Total Interests Earned to Total Working Fund Ratio (%) of HBL and LFLC



4.1.3.5 Total Interest Paid to Total Working Fund Ratio

The ratio of total interest paid to total working fund measures the percentage of interest paid on liabilities with respect to total working fund. A higher ratio indicates the higher interest expenses on total working fund and vice-versa. The ratio of total interest paid to total working fund is calculated by dividing total interest paid by total working fund.

Table 4.15

Total Interest Paid to Total Working Fund Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	2.12	2.24	2.24	2.33	3.54	2.49	0.53	21.29
LFLC	5.20	5.27	4.69	4.78	5.71	5.13	0.37	7.21

(Source: Appendix C-V)

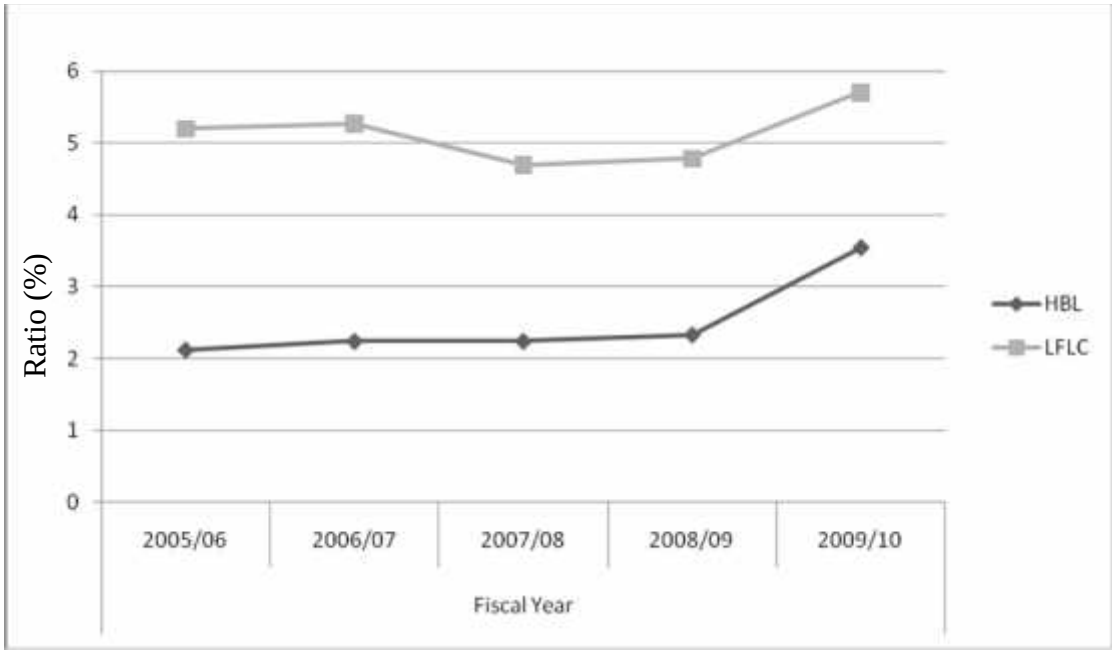
The above comparative table 4.15 shows the ratios of total interest paid to total working fund of HBL and LFLC. In case of HBL, its highest ratio is 3.54% in the FY 2009/10 and lowest ratio is 2.12% in the FY 2005/06. Ratios of HBL are found in increasing trend during the study period. Similarly, in the case of LFLC its highest ratio is 5.71% in FY 2009/10 and lowest ratio is 4.69% in FY 2007/08. Ratios of LFLC are found in nominal fluctuating trend over the study period. Ratios of LFLC are higher in comparison to ratios of HBL during the study period.

As comparing the mean ratios of HBL and LFLC, HBL is found paying lower interest on liabilities than LFLC i.e.2.49 %< 5.13%. From this, it can be concluded that HBL is in better position from the interest expenses payment point of view than that of LFLC. Likewise, while comparing coefficient of variation of HBL and LFLC, HBL has higher coefficient of variation than LFLC i.e.21.29%>7.21%, which indicates that ratios of HBL are more variable and inconsistent than that of LFLC during the study period.

From the above analysis, it can be concluded that HBL seems to be successful to collect its total working fund from less expensive sources in comparison to LFLC. But its interest paid to total working fund ratios is not stable during the study period.

Fig. 4.6

Total Interest Paid to Total Working Fund Ratio (%) of HBL and LFLC



4.1.3.6 Total Employees Expenses to Total Expenses Ratio

The ratio of total employees' expenses to total expenses measures the percentage of total expenditures made on employees with respect to total expenses of a firm. While comparing between two or more firms, higher ratio implies higher expenses on employees and vice-versa. This ratio is computed by dividing total employees expenses by total expenses.

Table 4.16

Total Employees Expenses to Total Expenses Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	32.45	42.82	44.39	39.01	29.34	37.60	5.83	15.51
LFLC	4.58	7.47	7.84	7.22	7.47	6.92	1.19	17.20

(Source: Appendix C-VI)

The above comparative table shows that the ratios of total employees' expenses to total expenses of HBL and LFLC. Ratios are increasing trend from FY 2005/06 to 2007/08 and decreasing trend in case of HBL and in case of LFLC ratios are

fluctuating trend. Both have maintained highest ratio in same fiscal year i.e. 2007/08 but HBL has higher ratio than that of LFLC i.e.44.39%>7.84%. HBL's lowest ratio is 29.34% in FY 2009/10 and LFLC's lowest ratio is 4.58% in FY 2005/06. Ratios of HBL are found higher than that of LFLC in all the fiscal year throughout the study period.

On the basis of mean value, it can be said that HBL has been making more expenditures on employees than that of LFLC, which can be viewed by the higher mean ratio i.e. 37.60%>6.92%. On the other hand, comparing coefficient of variation of ratios, HBL has lower ratio, it shows that ratios of HBL are less variable and more consistent than that of LFLC i.e.15.51 %< 17.20%.

From the above analysis, it can be concluded that HBL seems paying higher facilities to its employees than that of LFLC during the study period.

4.1.4 Non Performing Loan (NPL)

Non performing loan refers to that loan which is not recovered within the given period of time either in the form of interest servicing or principle repayment. Such type of loan ceases to generate revenue or gives every indication that is not further going to generate income. Loans which are graded in the category of sub-standard, doubtful and loss are considered as non-performing loans. Moreover, 5% non performing loan is considered acceptable in Nepal but when the non performing loan begins in two digits then problem begin to start. So the management team, every staff, stakeholders and concerned authorities of the firm must put their joint effort to lower it to the single digits.

4.1.4.1 Non-performing Loan to Total Loans and Advances Ratio

The ratio of non-performing loan to total loans and advances measures the proportion of non-performing loans in the total loans and advances or portfolio. A higher ratio indicates the bad quality of assets in firms in the form of loans and advances. Lower ratio implies the best management and utilization of loans and advances. Therefore, while comparing ratios, lower ratio is preferable. This ratio is calculated by dividing the total non-performing loan by total loans and advances.

Table 4.17

Non- Performing Loan to Total Loans and Advances Ratio (%)

Firms	Fiscal Year					Mean	S.D	C.V(%)
	2005/06	2006/07	2007/08	2008/09	2009/10			
HBL	6.60	3.61	2.37	2.00	3.52	3.62	1.62	44.75
LFLC	13.71	10.70	4.82	4.82	4.17	7.64	3.85	50.39

(Source: Appendix D)

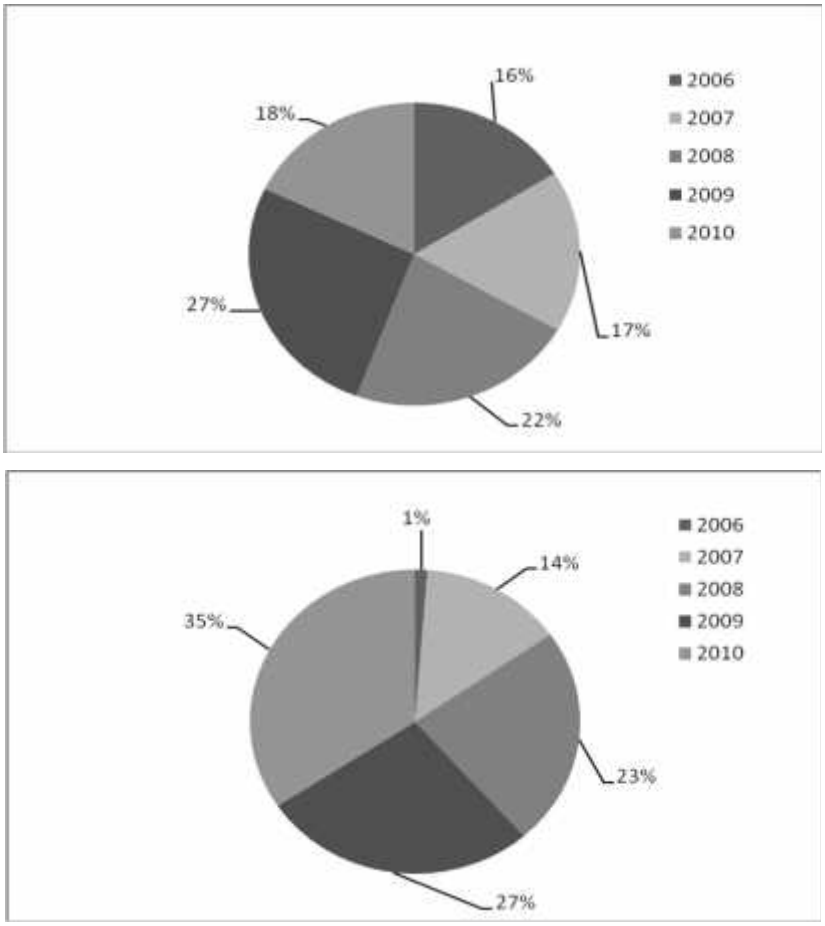
The above comparative table shows that the ratios of non-performing loan to total loans and advances of HBL and LFLC during the five years period. In the case of HBL, it has highest ratio in the FY 2005/06 i.e.6.60% and lowest ratio is found 2.00% in the FY 2008/09. Its ratios are found in decreasing trend except in the FY 2009/10. Similarly, in the case of LFLC, it has highest ratio in FY 2005/06 i.e.13.71% and lowest ratio in FY 2005/06 i.e.4.17%. Its ratios are also found in decreasing trend during the study period.

On the basis of mean ratio, it can be said that LFLC has not been able to manage and utilize loans and advances properly because it has higher mean ratio than that of HBL i.e.7.64%>3.62%. Likewise, HBL has lower coefficient of variation than LFLC i.e.44.75 %< 50.39%, which shows that ratios of HBL are more stable and consistent than that of LFLC during the study period.

From the above analysis, it can be concluded that HBL has seemed the best management and utilization of loans and advance than that of LFLC over the study period.

Fig. 4.7

Comparison of Net Profit of HBL and LFLC



(Source: Appendix H)

The figure 4.7 shows the comparison of net profit of HBL and LFLC. In the case of LFLC, the net profit is found in increasing trend throughout the whole study period. Similarly, in case of HBL, it is also found in increasing trend except in the fifth year i.e. 2009/10.

4.2 Statistical Analysis

In this chapter, some statistical tools such as coefficient of correlation analysis between different variables like deposit and loans and advances, deposits and investment, loans and advances and net profit and investment and net profit and trend analysis of total deposit, loan and advances, investment and net profit are studied to achieve the objectives of the study.

4.2.1 Measuring Correlation between Different Variables

In this section of the study, Karl Pearson's coefficient of correlation has been used to find out the relationship between deposits and loans and advances, deposits and investment, loans and advances and net profit and investment and net profit.

4.2.1.1 Correlation between Deposits and Loans and Advances

The correlation between total deposits and loans and advances describes the degree of relationship between two variables i.e. deposits and loans and advances. How a unit increases in deposit impact in the volume of loans and advances is measured by this correlation. In the analysis made here, the deposit is considered the independent variables (x) and loans and advances are dependent variables (y). The main objective of computing the coefficient of correlation (r) between these two variables is to justify whether deposits are significantly used as loan and advances in proper way or not and whether there is any relationship between these two variables or not.

The following table 4.18 shows the value of correlation coefficient 'r' 'r²', probable error; P.E.r and 6P.E.r between these variables of HBL and LFLC during the study period. While analyzing between these two variables, if the correlation coefficient (r) becomes less than that of probable error (6P.E.r) the value of r is not significant at all i.e. there is no evidence of correlation. Likewise, if the r is found more than that of 6P.E.r the value of r is considered significant i.e. practically the correlation is certain.

Table 4.18

Correlations between Total Deposits and Loans and Advances

Firms	Evaluation Criteria			
	r	**r^2**	**P.E.r**	**6 P.E.r**
HBL	0.9795	0.9594	0.0123	0.0738
LFLC	0.9709	0.9426	0.0173	0.1038

(Source: Appendix E-I)

From the values listed in above table shows that correlation between total deposits (independent variable) and loans and advances (dependent variables) is 0.9795 in case of HBL and 0.9709 in case of LFLC, which reveals that there is positive relationship between total deposits and loans and advances in both HBL and LFLC.

Moreover, while considering the value of coefficient of determination (r^2) of HBL, it is 0.9594, which means that 95.94 percentage of the variation in the dependent variation in the dependent variable (loan and advances) has been explained by the independent variable (deposits). Similarly, considering the value of 'r' i.e.0.9795 and comparing it with 6P.E.r i.e. 0.0738, it is found that r is highly greater than the value of 6P.E.r. It means the value of 'r' is significant. In other words, there is significant relationship between total deposits and loans and advances in case of HBL.

Likewise, while considering the value of coefficient of determination (r^2) of LFLC, it is 0.9426, which reveals that 94.26 percentage of the variation in the dependent variable (loan and advances) has been explained by the independent variables (deposits). Similarly, considering the value of 'r' i.e.0.9709 and comparing it with 6P.E.r i.e.0.1038, it is found highly greater than the value of 6P.E.r, which means the value of 'r' is significant. In other words, there is significant relationship between total deposits and loan and advances in case of LFLC.

From the above analysis, it can be concluded that there is very positive relationship between total deposits and loans and advances in the both firms. Moreover, when the comparative analysis is taken in mind, HBL is slightly more successful to mobilize deposits as loans and advances as the correlation (r) between deposits and loan and advances of HBL seems little higher than that of LFLC. It can be further concluded that the HBL is in better condition in mobilizing collected deposits as loans and advances in comparison to LFLC during the study period.

4.2.1.2 Correlation between Total Deposits and Investment

The correlation between total deposits and total investment describes the degree of relationship between these two variables. This coefficient of correlation measured how a unit increases in total deposits impact in the volume of total investment. Here, a total deposit is considered as the independent variable(x) and investment is dependent variable (y). The main objective of computing the correlation coefficient (r) between these two variables are to justify whether the relationship between total deposits and total investment have any relation or not.

The value listed in the table 4.19 shows the value of correlation coefficient 'r' 'r^2', probable error; P.E.r and 6P.E.r between total deposits and total investment of HBL and LFLC during the study period. While analyzing between these two variables, if the correlation coefficient (r) becomes less than that of 6P.E.r, the value of 'r' is not found significant at all i.e. there is no evidence of correlation. Likewise, if the value of 'r' is found more than that of 6P.E.r, the value of 'r' is considered significant i.e. practically the correlation is certain.

Table 4.19

Correlations between Total Deposit and Investment

Firms	Evaluation Criteria			
	r	**r^2**	**P.E.r**	**6 P.E.r**
HBL	-0.6088	0.3706	0.1899	1.1394
LFLC	-0.2472	0.0611	0.2832	1.6992

(Source: Appendix E-II)

The above table 4.19 shows that coefficient of correlation between total deposits (independent variable) and investments (dependent variable) is -0.6088 in case of HBL and -0.2427 in case of LFLC, which means that there is negative relationship between these two variables in the case of both HBL and LFLC.

Moreover, while considering the value of coefficient of determination (r^2) in case of HBL, it is found 0.3706, which discloses that 37.06 percentage of the variation in the dependent variable (investment) has been explained by the independent variable (total deposit). Likewise, considering the value of 'r' i.e.-0.6088 and comparing it with 6P.E.r i.e.1.1394, it is found that the value of 'r' is lower than that of 6P.E.r. It means that the value of 'r' is insignificant. In other words, there is no relationship between total deposits and investment in case of HBL.

Similarly, while considering the value of coefficient of determination (r^2) of LFLC, it is found 0.0611, which shows that 6.11 percentage of the variation in the dependent variable (investment) has been explained by the independent variable (total deposits). Similarly, when considering the value of 'r' i.e.-0.2472 and compare it with 6P.E.r

i.e.1.6992, it is found that the value of 6P.E.r is higher than that of value of ‘r’. It indicates that the value of ‘r’ is insignificant. In other words, there is no significant relationship between total deposits and investment in case of LFLC.

From the above analysis, it can be concluded that there is negative relationship between total deposits and investment in both HBL and LFLC. Though the variables in the both cases of HBL and LFLC have negative relationship, but it can be said that HBL is quite successful in mobilizing its collected deposits as investment than that of LFLC during the study period.

4.2.1.3 Correlation between Loan and Advances and Net Profit

The correlation between total loans and advances and net profit describes the degree of relationship between these two variables. The correlation coefficient measures whether a percentage change in loans and advances contribute to increase the same percentage of net profit or not. In the analysis made here, the loans and advances is considered the independent variable (x) and net profit is considered the dependent variable (y). The main objective of calculating the correlation between these two variables is to justify whether there is any relationship between these two variables or not.

The following table 4.20 shows the value of correlation coefficient ‘r’ ‘r^2’, probable error; P.E.r and 6P.E.r between these variables of HBL and LFLC during the study period. While analyzing between these two variables, if the correlation coefficient (r) becomes less than that of probable error (6P.E.r) the value of r is not significant at all i.e. there is no evidence of correlation. Likewise, if the ‘r’ is found more than that of 6P.E.r the value of r is considered significant i.e. practically the correlation is certain.

Table 4.20

Correlations between Loans and Advances and Net Profit

Firms	Evaluation Criteria			
	r	**r^2**	**P.E.r**	**6 P.E.r**
HBL	0.4108	0.1688	0.2507	1.5042
LFLC	0.9351	0.8744	0.0379	0.2274

(Source: Appendix E-III)

From the value listed in table 4.20 shows that coefficient of correlation between total loans and advances (independent variable) and net profit (dependent variable) of HBL is 0.4108 and LFLC has 0.9351. It indicates that there is the positive relationship between these two variables in case of both HBL and LFLC.

Moreover, the value of coefficient of determination (r^2) of HBL is found 0.1688, which means that 16.88 percentage of the variation in the dependent variable (net profit) has been explained by the independent variable (loans and advances). Similarly, considering the value of 'r' and comparing it with the value of 6P.E.r i.e.1.5042, it is found that the value of 6P.E.r is greater than that of value of 'r', which means that the value of 'r' is not significant. In other words, there is not significant relationship between loan and advances and net profit of HBL.

Likewise, the value of coefficient of determination (r^2) of LFLC is found 0.8744 and it means that 87.44 percentage of the variation in the dependent variable (net profit) has been explained by the independent variables (loans and advances). On the other hand, while comparing the value of 'r' with the value of 6P.E.r, it is found that the value of 'r' is greater than that of 6P.E.r i.e.0.9351>0.2274 , which shows that the relationship between loans and advances with net profit is significant. In other words, there is very significant relationship between these two variables of LFLC.

From the analysis made above, it can be concluded that there is the positive relationship between loans and advances in case of both HBL and LFLC. Moreover, when comparative analysis is taken in mind, LFLC is quite successful to earn profit from mobilizing loans and advances than that of HBL during the study period.

4.2.1.4 Correlation between Total Investment and Net Profit

The correlation between total investment and net profit describes the degree of relationship between these two variables. The value of coefficient of correlation measures that whether a percentage changes in investment contribute to increase the same percentage of net profit. Here, total investment is considered as independent variable (x) and net profit is considered as dependent variable (y). The main aim of computing this correlation between these variables is to justify whether there is any relationship between these variables or not.

The following table 4.21 shows the value of correlation coefficient 'r' 'r²', probable error; P.E.r and 6P.E.r between these two variables of HBL and LFLC during the study period. While analyzing between these two variables, if it is found that r>6P.E.r, the value of 'r' is significant i.e. the value of 'r' is practically certain. If it is found that r<6P.E.r, the value of 'r' is not significant at all i.e. there is no evidence of correlation.

Table 4.21

Correlations between Total Investment and Net Profit

Firms	Evaluation Criteria			
	r	**r^2**	**P.E.r**	**6 P.E.r**
HBL	-0.1579	0.0249	0.2941	1.7646
LFLC	0.2141	0.0458	0.2878	1.7268

(Source: Appendix E-IV)

From the value listed in table 4.21 shows that coefficient of correlation between total investment (independent variable) and net profit (dependent variable) is -0.1579 in the case of HBL and 0.2141 in the case of LFLC, which means there is negative relationship between these variables of HBL and positive relationship between these variables of LFLC.

Moreover, when considering the value of coefficient of determination (r^2) in the case of HBL, it is 0.0249 and it means that only 2.49 percentage of variation in the dependent variable (net profit) has been explained by the independent variable

(investment). Similarly, when comparing the value of 'r' with value of 6P.E.r, it is found that value of 6P.E.r is higher than the value of 'r' i.e.-0.1579<1.7646, which reveals that the value of 'r' is not significant. In other words, there is not significant relationship between investment and net profit in case of HBL.

Likewise, when considering the value of coefficient of determination (r^2) of LFLC, it is found 0.0458 and it means only 4.58 percentage of variation in the dependent variable (net profit) has been explained by independent variable (investment). Similarly, comparing the value of 'r' with the value of 6P.E.r, it is found that the value of 6P.E.r is greater than the value of 'r' i.e. (0.2141<1.7268), which shows that the value of 'r' is not significant. In other words, there is not significant relationship between total investment and net profit.

From the analysis made above, it can be said that there is negative relationship between investment and net profit of HBL and in case of LFLC there is positive relationship between these variables.

4.2.2 Trend Analysis and Projection for Next Five Years

The objective of this ratio is to analyze the trend of deposit collection, its utilization and net profit of HBL and LFLC. Regarding this topic, trend of deposits, loan and advances, total investment and net profit are forecasted for next five years. The projections are based on the following assumptions;

- The main assumption is that other things will remain unchanged.
- The forecast will be true only when the limitation of least square method is carried out.
- The firms will run in present stage.
- Nepal Rastra Bank will not change its guidelines to commercial banks and finance companies.
- The economy will remain in the present stage.

4.2.2.1 Trend Analysis of Total Deposits

Under this topic, an effort has been made to calculate the trend values of total deposits of HBL and LFLC for five years from fiscal year 2006 to 2010 and forecasts for next five years till 2015.

The following table shows the trend values of ten years from 2006 to 2010 of HBL and LFLC (Detail calculation in Appendix F1).

Table 4.22

Trend Values of Total Deposit of HBL and LFLC (2006-2010)

Amt in NPR' million

Years	Trend Values of HBL	Trend Values of LFLC
2006	26,760.20	685.60
2007	29,447.50	808.70
2008	32,134.80	931.80
2009	34,822.10	1,054.90
2010	37,509.40	1,178.00
2011	40,196.70	1,301.10
2012	42,884.00	1,424.20
2013	45,571.30	1,547.30
2014	48,258.60	1,670.40
2015	50,945.90	1,793.50

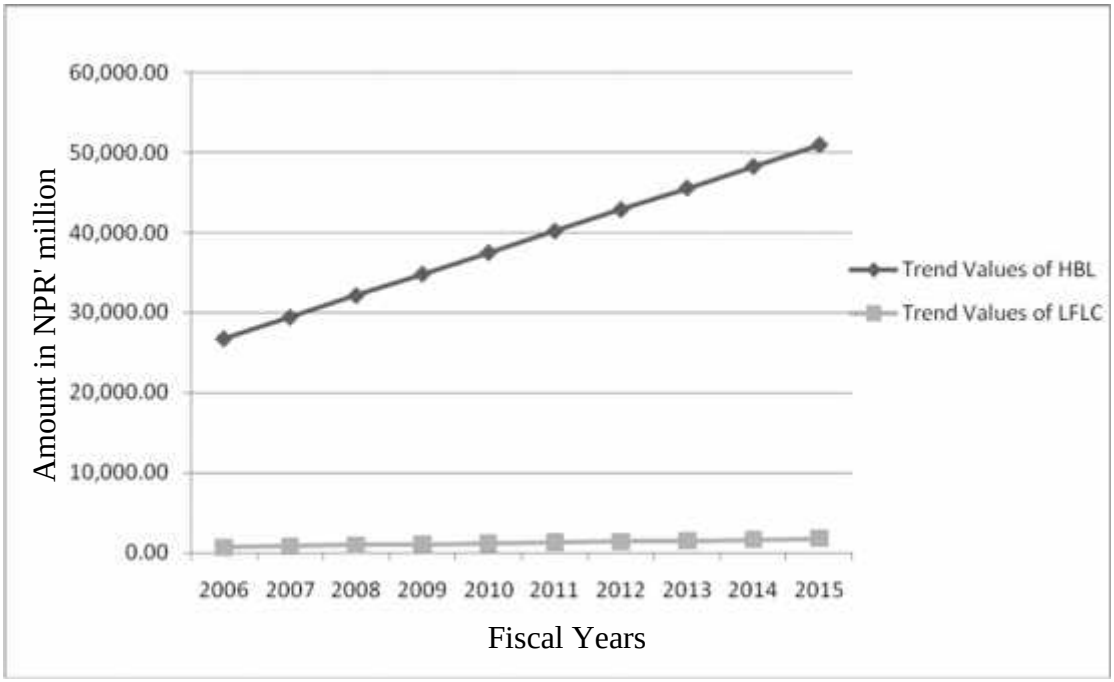
(Source: Appendix F-I)

The above comparative table shows the present trend of total deposit of HBL and LFLC from the year 2006 to 2015. It shows that the total deposit of both HBL and LFLC are in increasing trend. Other things remaining the same, the total deposits of HBL will be Rs.50, 945.90million and that of LFLC will be Rs.1, 793.50million in 2015.

From the above trend analysis it can be said that HBL's deposit collection position in relation to the LFLC is proportionately better than that of the LFLC.

Fig: 4.8

Trend Values of Total Deposit of HBL and LFLC (2006-2010)



4.2.2.2 Trend Analysis of Total Loans and Advances

Here, an effort has been made to analyze the loans and advances of HBL and LFLC for five years from 2006 to 2010 and forecasts the trend for next five years till 2015. The following table shows the trend values of ten years from 2006 to 2015 of HBL and LFLC (Detail calculation in Appendix F2).

Table 4.23

Trend values of Total Loan and Advances of HBL and LFLC (2006 - 2010)

Amt in NPR' million

Years	Trend Values of HBL	Trend Values of LFLC
2006	14,786	587.20
2007	18,231	783.60
2008	21,676	980.00
2009	25,121	1,176.40
2010	28,566	1,372.80
2011	32,011	1,569.20
2012	35,456	1,765.60
2013	38,901	1,962.00
2014	42,346	2,158.40
2015	45,791	2,354.80

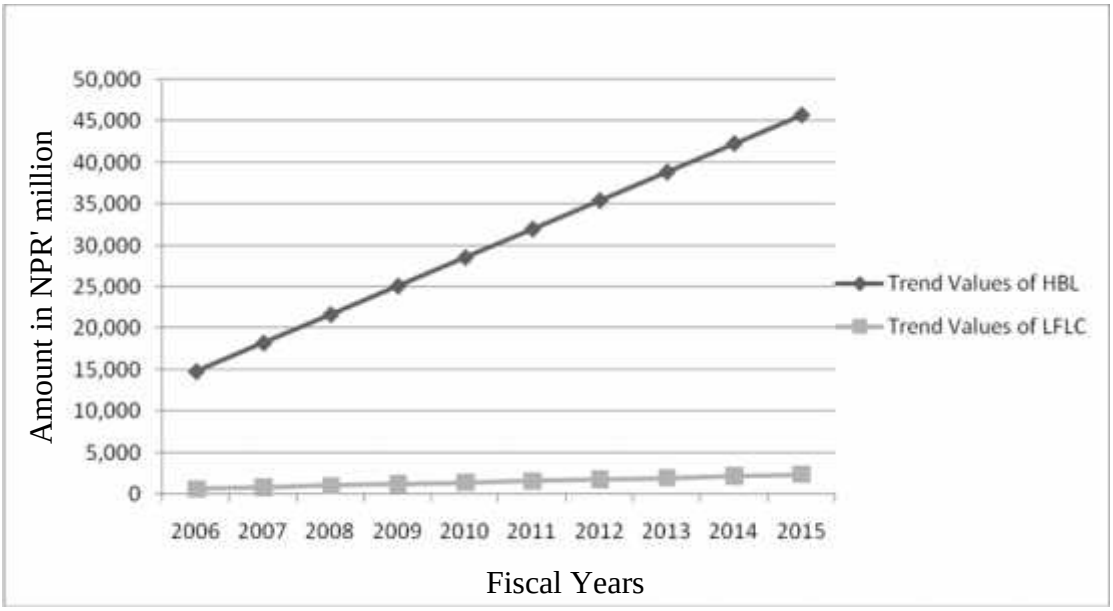
(Source: Appendix F-II)

The above comparative table shows the trend of total loans and advances of HBL and LFLC from the year 2006 to 2015. The trend values of total loans and advances listed in the above table reveals that the loan and advances of both HBL and LFLC is in increasing trend. If other things remained unchanged the loan and advances of HBL will be Rs.45, 791 million and that of LFLC will be Rs.2, 354.80 million in the year 2015.

From the above trend analysis it can be said that the position of utilization of deposit in term of loan and advances of both HBL and LFLC is good. Furthermore, it can be concluded that HBL is comparatively better than that of LFLC.

Fig: 4.9

Trend Values of Total Loan and Advances of HBL and LFLC (2006 - 2010)



4.2.2.3 Trend Analysis of Investment

Under this topic, an attempt has been made to analyze total investment of HBL and LFLC for five years from 2006 to 2010 and forecasts of the same for next five years till 2015.

The following table shows the trend values of total investment of HBL and LFLC for ten years from 2006 to 2015 (Detail calculation in Appendix F3).

Table 4.24

Trend Values of Total Investment of HBL and LFLC (2006-2015)

Amt in NPR' million

Years	Trend Values of HBL	Trend Values of LFLC
2006	12,241.60	48.80
2007	11,441.60	49.10
2008	10,641.60	49.40
2009	9,841.60	49.70
2010	9,041.60	50.00
2011	8,241.60	50.30
2012	7,441.60	50.60
2013	6,641.60	50.90
2014	5,841.60	51.20
2015	5,041.60	51.30

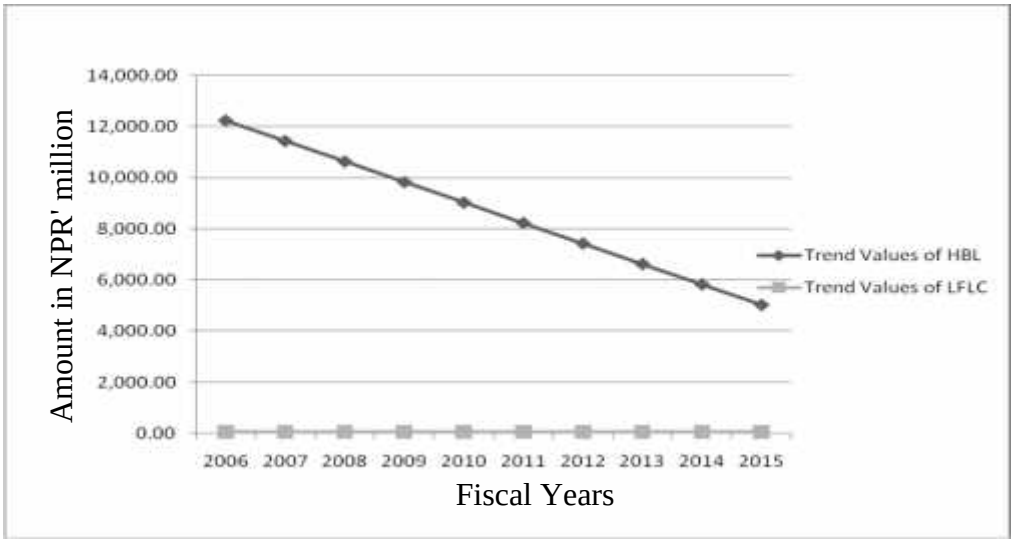
(Source: Appendix F-III)

From the above comparative table of trend values of total investment, it is found that LFLC is in increasing trend whereas HBL is in decreasing trend. Other things remaining the same, the investment of HBL, in 2015 will be Rs.5, 041.60 million and that of LFLC will be Rs.51.50 million.

From above trend analysis, it is clear that LFLC's has followed the policy of maximizing the investment. Furthermore, LFLC's total investment is comparatively better than that of HBL, because its values are in increasing trend.

Fig: 4.10

Trend Values of Total Investment of HBL and LFLC (2006-2015)



4.2.2.4 Trend Analysis of Net Profit

Regarding this topic, an effort has been made to analyze the net profit of HBL and LFLC for five years from 2006 to 2010 and forecasts of the same for next five years till 2015.

The following table shows the trend values of net profit of HBL and LFLC for ten years i.e. 2006 to 2015 (Detail calculation in Appendix F4).

Table 4.25

Trend Values of Net Profit of HBL and LFLC (2006-2015)

Amt in NPR' million

Years	Trend Values of HBL	Trend Values of LFCL
2006	497.00	11.00
2007	533.30	32.50
2008	569.60	54.00
2009	605.90	75.50
2010	642.20	97.00
2011	678.50	118.50
2012	714.80	140.00
2013	751.10	161.50
2014	787.40	183.00
2015	823.70	204.50

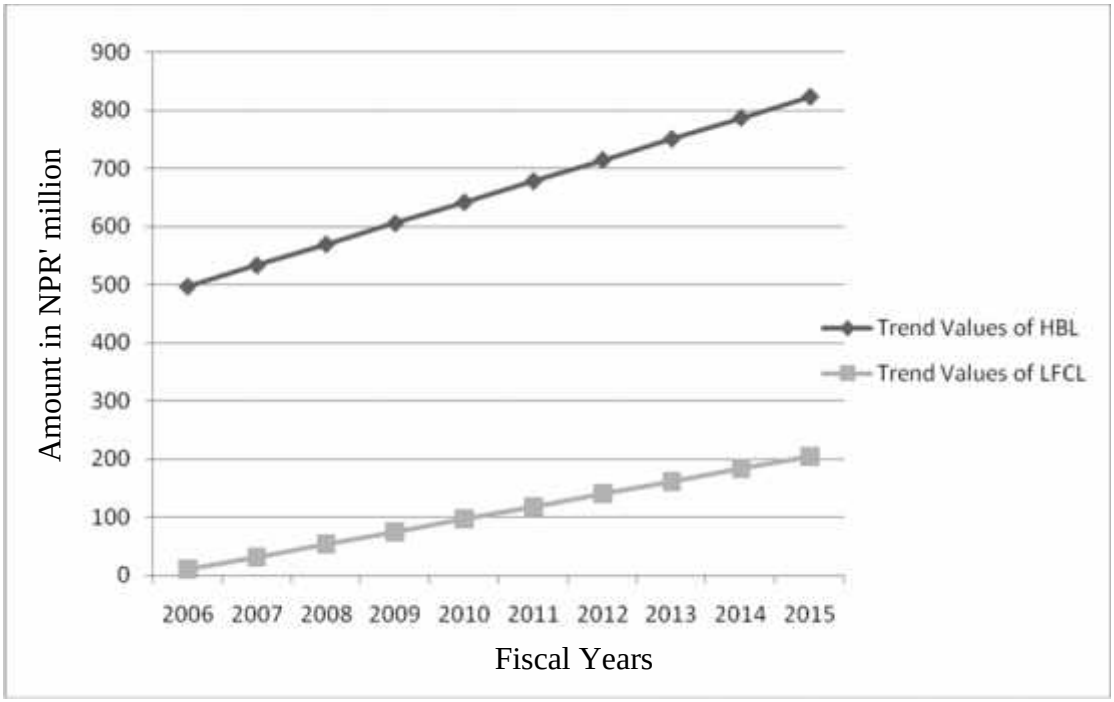
(Source: Appendix F-IV)

From the above comparative table of trend values of net profit, it has been found that the expected amount of both firms is in increasing trend. Other things remaining same, the net profit of HBL will be Rs.823.70 million, which is the highest under the study period. Similarly, the same of the LFLC will be Rs. 204.50 million.

From the above trend analysis, it is clear, that HBL's net profit is comparatively better than that of the LFLC.

Fig: 4.11

Trend Values of Net Profit of HBL and LFLC (2006-2015)



4.3 Major Findings of the Study

The main findings of the study that are derived on the basis of financial data analysis of HBL and LFLC are presented below:

Findings from the Liquidity Ratios Analysis

The liquidity position of HBL and LFLC reveals that;

- The mean ratio of current ratio of LFLC is slightly lower than that of HBL. It means that LFLC has not found maintained that higher liquidity and lower risk in compare to HBL and it further found that the ratios of LFLC are more consistent than that of HBL. It indicates that LFLC has stable liquidity policy.
- The mean ratio of cash and bank balance to total deposit of HBL is comparatively higher than that of LFLC i.e.2.07%>1.71%. Similarly, the variability of ratios of HBL is found lower than that of LFLC i.e. 28.79%>29.53%. It indicates that the liquidity position of HBL is consistent than that of LFLC in this regard.
- The mean ratio of cash and bank balance to current assets of HBL is 8.37% and the coefficient of variation between the ratios is 34.29%. Similarly, the

mean ratio of LFLC is 2.49% and coefficient of variation is 38.61%. This shows that mean ratio of HBL is found higher than that of LFLC and coefficient of variation between ratios is also found less than that of LFLC. It indicates that HBL is in better position in maintaining its cash and bank balance to meet its daily requirement.

- The liquidity position of HBL from the point of view of investment on government securities to total current assets is comparatively higher than that of the LFLC i.e.(20.00%>2.17%). Similarly, the variability of ratios of HBL is less than that of the LFLC (i.e.23.10 %< 55.30%). It indicates that the HBL has maintained higher and more stable liquidity ratio in this regards of investment of government securities to total current assets of LFLC.

Findings from the Asset Management Ratios Analysis

The asset management ratios of HBL and LFLC reveal that;

- The mean ratio of loan and advances to total deposit ratio of LFLC is higher than that of HBL i.e. (103.47%>66.62%). It means that LFLC seems comparatively strong to mobilize its collected fund through deposits as loan and advances. On the other hand, LFLC's variability between ratios is higher than that of HBL i.e. (11.70%>11.26%), which shows that the ratios of LFLC are less consistent than the HBL over the study period.
- The total investment to total deposits ratios of LFLC are more fluctuating trend than that of HBL during the study period. The mean ratio of total investment to total deposits of HBL is higher than that of LFLC i.e. (33.98%>5.57%). Similarly, the variability of the ratios of HBL is also found lower than that of LFLC i.e. (24.75 %< 50.81%). It means it has invested more funds from collected deposits. Furthermore, the ratios of LFLC are less consistent than the ratios of HBL.
- The mean ratio of loan and advances to total working fund of HBL is 57.65% and the coefficient of variation between ratios is 10.77%. Similarly, the mean ratio of LFLC is 78.87% and coefficient of variation between ratios is 4.86%. This shows that mean ratio of HBL is lower than that of LFLC and variability of the ratios of HBL is also found higher than that of LFLC. It means that LFLC has taken optimum risk towards the mobilization of its fund to risky

assets. Similarly, high ratio suggests high risk and eventually high return of the firm.

- The mean ratio of investment on government securities to total working fund of HBL is 15.32% and coefficient of variation between ratios is 27.48%, whereas the mean ratio of LFLC is 1.41% and coefficient of variation between ratios is 26.24%. It shows that mean ratio of investment on government securities to total working fund of HBL is higher than that of LFLC but variability of ratios of HBL is slightly greater than that of LFLC, which means the ratios of HBL is more variable and less consistent over the study period.

  Investment on government securities is the risks free and less productive investment for the commercial banks and finance companies. Analysis shows that LFLC has mobilized less amount of fund on government securities. So LFLC has invested fewer funds into risk free and less productive sector.

- Investment on shares and debentures to total working fund ratios of HBL and LFLC have fluctuating trend during the study period. The mean ratio of HBL is 0.20% and coefficient of variation between ratios is 20.00%. Similarly, the mean ratio of LFLC is 0.66% and coefficient of variation between ratios is 18.18%. It shows that LFLC has higher mean ratio than that of HBL, which means HBL has invested nominal percentage of total working fund into shares and debentures of other companies. On the basis of coefficient of variation, its ratios are more variable and less consistent that that of LFLC during the study period.

- The loan loss provision to total loan and advances ratios for the study period is in overall decreasing trend. The mean ratio of HBL is lower than that of LFLC i.e. (4.35 %< 10.67%), whereas, coefficient of variation of HBL is higher than that of LFLC. i.e. (34.02%>28.87%).

  The provision for loan loss reflects that the increasing possibility of non-performing loans and advances in the volume of total loans and advances. It affects on the profitability of commercial banks and finance companies. The high ratio is the indicative of the low quality of productive assets. The increasing trend of loan provision indicates that the quality of loans becoming degrading year by year i.e. it seems that amount of non-performing loan is increasing and possibility of default is increasing in days to come.

Findings from the Profitability Ratios Analysis

The profitability ratios of HBL and LFLC reveal that;

- Return on total working fund (ROA) ratios of LFLC is in increasing trend whereas ratios of HBL are in fluctuating trend during the study period. The mean ratio of HBL is 1.54% and coefficient of variation between ratios is 16.23% whereas the mean ratio of LFLC is 4.03% and coefficient of variation between ratios is 47.15%. This study indicates that LFLC has good earning capacity by utilizing its assets. But the ratios are more variable and inconsistent during the study period.
- Earning per share (EPS) of HBL and LFLC is fluctuating during the study period with decreasing trend. The mean EPS of HBL during the study period is Rs.55.27 with 21.33% coefficient of variation between ratios whereas the mean EPS of LFLC over the same study period is Rs.48.83 with 47.47% coefficient of variation between ratios. It shows that the earning of LFLC is more variable and in consistent during the study period. The mean EPS of HBL is very good and that the ratios are satisfactorily consistent than that of LFLC. The earning is also in decreasing trend over the study period.
- Return on loan and advances ratio of HBL is found less fluctuating whereas LFLC is found more fluctuating during the study period. The mean ratio of HBL is 2.70% where coefficient of variation between ratios is 18.15%. Similarly, the mean ratio of LFLC is 5.04% and variability of ratios is 46.03%. It indicates that LFLC is better in mobilizing its resources as loans and advances to generate the profit. While comparing the variability of ratios, HBL seems more stable and consistent than that of LFLC in utilizing its resources as loans and advances.
- The mean ratio of total interest earned to total working fund of LFLC is found higher than that of HBL i.e. (11.92%>5.77%). Furthermore, variability of ratios of HBL is greater than LFLC. It shows that LFLC seems to have earned higher and consistent amount of interest on total working fund in comparison to HBL.
- The mean ratio to total interest paid to total working fund of LFLC is found higher than that of HBL i.e. (5.13%>2.49%). It means that LFLC has paid higher interest on liabilities than HBL. On the other hand, variability of ratios

of LFLC is lower than that of HBL i.e. (7.21 %< 21.29%), which shows that ratios of HBL are more variable and less consistent than that of LFLC during the study period.

- The mean ratio of total employees expenses to total expenses of HBL is higher than that of LFLC i.e. (37.60%>6.92%). It means that HBL is paying more benefits and bonuses to their employees in comparison to LFLC. On the other hand, variability of ratios of HBL is less variable and more consistent than that of LFLC i.e. (15.51 %< 17.20%).

Finding from Non-Performing Loan

- The mean ratio of non-performing loan to total loans and advances of LFLC is found higher than that of HBL i.e. (7.64%>3.62%). In the context of Nepal, NPA level should be below 10% or in one digit, otherwise the banks and finance companies will be on serious problem. The mean NPA of both firms is below the standard. It means both are in manageable level. But LFLC has found higher in comparison to HBL. This indicates that the management of LFLC should give due attention towards NPA management. The coefficient of variation between ratios of LFLC is found higher than that of HBL i.e. (50.39%>44.75%).

Findings from the Correlation Analysis

Coefficient of correlation analysis between different variables of HBL and LFLC reveals that;

- The correlation analysis between total deposit and loans and advances shows that the correlation coefficient (r) between total deposit and loans and advances of both HBL and LFLC is greater than 6P.E.r. Since, r >6P.E.r and r is positive and near by 1; so, it is found that there is very strong positive correlation between deposits and loans and advances in both firms. Moreover, when the comparative analysis is taken in mind, HBL is slightly more successful to mobilize their deposits in proper way as loans and advances as the correlation (r) between deposits and loan and advances of HBL seems little higher in comparison to LFLC. The increase and decrease of total deposit of the firms affects the volume of loan and advances.

- The correlation analysis between total deposits and total investment shows that the correlation coefficient (r) between total deposits and total investment of both firms is less than 6P.E.r. Since, r< 6P.E.r, it is insignificant and there is negative relationship or no correlation between total deposits and total investment in both HBL and LFLC during the study period. Though the variables in the both cases of HBL and LFLC have negative relationship, but while comparing the value of r with 6P.E.r, the value is found more in HBL, it means that HBL is more successful in mobilizing its collected deposits as investment than that of LFLC during the study period. The increase or decrease of total deposit does not affect to the firm's investment.
- The correlation analysis between total loan and advances and net profit shows that the correlation coefficient (r) between total loans and advances and net profit of LFLC is found greater than 6P.E.r i.e. (0.9351>0.2274) whereas HBL has less than 6P.E.r i.e. (0.4108<1.5042). But there is positive relationship between these two variables in case of both HBL and LFLC. Since r >6P.E.r and r is positive and near by 1 in case of LFLC. So, it is found that there is very significant relationship between these two variables of LFLC. But in case of HBL, r is less than 6P.E.r. So, it is found that there is not significant relationship between these variables during study period. The increase or decrease of loan and advances is insignificant to the net profit of HBL.
- The correlation analysis between total investment and total net profit shows that the correlation coefficient (r) between total investment and total net profit of HBL is -0.1579 i.e. negative and probable error multiplied by six is found 1.7646. Since r <6P.E.r, it is insignificant and there is no correlation between total investment total investment and total net profit in HBL. Whereas, incase of LFLC, the correlation coefficient (r) between total investments and total net profit is 0.2141 i.e. positive and probable error multiplied by six is found 1.7268. Since r<6P.E.r, it is insignificant and there is no correlation between total investment and total net profit in LFLC. Moreover, when the comparative analysis is taken in mind, LFLC is found more successful in mobilizing its investment to earn profit than that of HBL.

Findings from Trend Analysis

Trend analysis of total deposit, total loan and advances, total investment and total net profit from 2006 to 2010 and projection for next five years till 2015 is conducted in this chapter of study and findings are presented as under;

- The trend analysis of total deposit of HBL and LFLC are found increasing. From the trend analysis, it is forecasted that total deposit of HBL in 2015 will be Rs.50, 945.90 million and total deposit of LFLC will be Rs.1, 793.50 million.
- From the trend analysis of total loan and advances of both HBL and LFLC are in increasing trend. Other things remaining the same, total loan and advances of HBL and LFLC in 2015 will be Rs. 45,791 million and Rs. 2,354.80 million respectively.
- The trend analysis of total investment of LFLC is found increasing whereas, HBL is in decreasing. Other things remaining the same, total investment of HBL will be Rs. 5,041.60 million and LFLC will be Rs. 51.50 million in 2015.
- The trend values of net profit of HBL and LFLC are found increasing. Other things remaining the same, the net profit if HBL will be Rs.823.70 million and net profit of LFLC will be Rs.204.50 million in 2015.

CHAPTER-V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter includes two aspects of the study. First aspect of the study focuses on summarizing the fact-findings of the study and making concluding remarks upon them while the second aspect of the study focuses on making useful suggestions and recommendations based on finding of the study to improve the investment policy of HBL and LFLC.

5.1 Summary

The development of any country largely depends upon its economic development. In any country, capital formation and its proper utilization play a leading role for rapid economic development. Hence, a key role factor in the development of an economy is the mobilization of domestic resources. In this regard, the network of well-organized financial system plays a vital role in both developed and developing countries.

Financial institutions like commercial banks and finance companies are those intermediaries which play a role of bridging the gap between surplus sector and deficit sector. In other words, they help to accumulate small and scattered resources and mobilize it into the productive sectors for the maximization of wealth. Lack of access to financial resources is one of the major economic problems experienced by the developing countries. Commercial banks and finance companies play vital role in meeting financial needs of productive units through generating saving from the surplus units of the country.

Commercial banks and finance companies perform a various financial activities to contribute for the economic development of country. They collect funds and utilize it in different sectors as an investment, which is not an easy task for them. Therefore, an investment of collected fund may be question of life and death for the bank and finance companies. For this, they have to pay due consideration while formulating

investment policy. Sound and viable investment policy provides them several inputs through which they can handle their investment operation efficiently ensuring that maximum return with minimum risk, which ultimately leads the banks and finance companies to the path of success.

A healthy development of any banks and finance companies depend upon its investment policy. A sound and viable investment policy can be effective one for the country to attain the economic objectives directed towards the acceleration of the pace of development. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. The lending process of both commercial banks and finance companies is guided by different principles such as length of time, safety, their purpose, profitability, marketability, stability etc. These fundamental principles of investment are considered while making investment policy. Commercial banks and finance companies also have to consider government and Nepal Rastra Bank's instructions and national and bank's own interest as well.

The main objective of the study is to find and compare the investment policy of Himalayan bank limited and Lumbini finance and leasing company limited. The study has been constrained by various common limitations.

The study is based on secondary data from FY 2005/2006 to 2009/2010. The data have been basically obtained from annual reports and financial statements, official records, periodicals, journals and bulletins, various published reports and relevant unpublished master's thesis. Besides this, personal contacts with the personnel of a bank and finance company have also been made. Financial as well as statistical tools have been deployed in order to analyze and interpret the data and information. Under financial analysis, various financial ratios related to the investment function of commercial banks and finance companies i.e. liquidity ratio, asset management ratio, loan loss ratio and profitability ratio have been analyzed and interpreted. Under statistical analysis, some relevant statistical tools i.e. co-efficient of correlation and trend analysis have been used and interpreted. This analysis gives clear picture of the performance of the bank and finance company with regard to their investment policy.

5.2 Conclusions

Based on the analysis and interpretations made on chapter four, the following conclusions have been drawn which are summarized here under;

Liquidity

- The current ratio of HBL and LFLC over the five years is 1.31 and 1.20 times on an average respectively. Although the current ratio of 2:1 is considered as standard, acceptability of the value depends on the industry. For the commercial banks and finance companies a current ratio of 1:1 or above would be acceptable. Therefore, HBL and LFLC have satisfactory level of liquidity position from the view point of current ratio. But comparatively HBL has good liquidity position in comparison to LFLC.
- The mean ratio of cash and bank balance to total deposit of HBL is higher than that of LFLC. From this, it can be concluded that the cash and bank balance position of LFLC with respect of total deposit is weaker than that of HBL. It indicates that LFLC invest its fund in income generating areas, it has less idle fund.
- Similarly, the mean ratio of cash and bank balance to total current assets of HBL is slightly higher than that of LFLC. On the basis of this ratio, the liquidity position of the HBL is better than that of LFLC. It means that HBL seems to have better position of maintaining the cash and bank balance to total current ratio.
- The mean ratio of investment on government securities to total current assets of HBL is higher than that of LFLC. From the above it can be concluded that HBL has invested the more percentage of current assets into the government securities than that of LFLC during the study period. Hence, the above results show that the liquidity position of both HBL and LFLC is good enough to meet the short term obligations. The maintenance of the liquidity also depends on the past withdrawal trend of the commercial banks and finance companies. The ratios of LFLC are less consistent in comparison to HBL during the study period. The inconsistency of the ratios shows that the lack of specific corporate policy about the maintenance of liquidity.

Asset Management

- The mean ratio of loan and advances to total deposit of HBL is lower than that of LFLC. From this, it can be concluded that HBL is found slightly weak in mobilizing its deposits as loan and advances in comparison to LFLC during the study period.
- The mean ratio of total investment to total deposit of HBL is very higher than that of LFLC. It means that the average investment policy of HBL is better than that of LFLC. LFLC is not so successful in utilizing its resources on investment in comparison to HBL during the study period.
- The loan and advances to total working fund ratio of LFLC is found higher than that of HBL on an average. The ratios of LFLC are also more consistent than that of HBL. From this, it can be concluded that the mobilization of working fund as loan and advances of LFLC is good than that of HBL over the study period.
- The mean ratio of investment of government securities to total working fund of HBL is found higher than that of LFLC. From this, it can be concluded that HBL's investment in terms of government securities with respect to total working fund is more satisfactory than that of LFLC. Though, HBL has invested its more portion of working fund on government securities in compare to LFLC's, both have no certain investment policy towards investment on government securities during the study period.
- The mean ratio of investment on shares and debentures to total working fund of HBL is found lower in comparison to LFLC. From this, it can be concluded that LFLC has invested higher amount on shares and debentures in comparison to HBL. Moreover, investment ratios of LFLC are also more consistent and less viable than that of HBL over the study period.
- The mean ratio of loan loss of HBL is found lower than that of LFLC. It indicates that the position of HBL is better in the matter of recovery of loan loss. From this, it can be said that the quality of assets of HBL in terms of recovery of loan is better in comparison to LFLC. But HBL's ratios seem to be less consistent than that of LFLC.

Hence, the above results show that the asset management efficiency of the HBL and LFLC, which is directly related to the investment policy of both firms.

Profitability Ratio

- The mean ratio of return on total working fund of LFLC is found higher than that of HBL. From it, it can be concluded that LFLC's profit earning capacity by utilizing available resources is good in comparison to that of HBL. Moreover, ratios of LFLC are found more variable. This shows that LFLC has not been able to achieve stable rate of return on its total working fund.
- Earning per share of HBL is found higher in comparison to LFLC during the study period and ratios are also found less variable and more consistent than that of LFLC. From this, it can be concluded that HBL has maintained less variable and uniform earning per share in comparison to LFLC throughout the whole study period. LFLC has not stable policy to get the consistent earning per share in comparison to HBL.
- The mean ratio of return on loan and advance of LFLC is found higher than that of HBL but ratios are found less stable and less consistent than that of HBL during the study period. This shows that LFLC is better in mobilizing its resources as loans and advances to generate the profit. But LFLC has not been able to formulate and adopt the appropriate policy to get consistent return on loan and advances in comparison to HBL during the study period.
- On an average, total interest earned to total working fund ratio of HBL is lower than the LFLC and the ratios are also inconsistent in comparison to LFLC during the study period. It shows that LFLC seems to have earned higher amount of interest on total working fund consistently in comparison to HBL.
- The mean ratio of total interest paid to total working fund of LFLC is found higher in comparison to HBL and ratios are also found more consistent and less variable than that of HBL. This shows that the cost of funds utilizing in the form of different assets to generate income has been consistent during the study period. But when comparative study is taken in mind, it can be concluded that HBL seems to be successful to collect its total working fund from less expensive sources in comparison to LFLC.
- The mean ratio of total employees expenses to total expenses of HBL is very high than that of LFLC and ratios are also consistent in comparison to LFLC during the study period. From this, it can be concluded that HBL seems paying

higher facilities to its employees consistently in comparison to LFLC during the study period. Hence, the above result shows that LFLC is comparatively good in interest earning capacity than the HBL. The return on loan and advances is higher than that of HBL. It shows that LFLC is better in utilizing its resources as loan and advances but ratios are more volatile. This shows that LFLC does not have a specific policy to increase the profitability. Similarly, the profitability ratio like earning per share and total employees expenses of HBL is higher than that of LFLC.

Non Performing Loan

- The mean ratio of non performing loan to total loan and advances of LFLC is found higher than that of HBL. The ratios of LFCL are found decreasing trend but more volatile and less consistent than that of HBL. From this, it can be concluded that HBL has seemed the best management and utilization of loan and advances than that of LFLC over the study period. The decreasing ratio of LFLC has also indicated that LFLC is also given focused for NPL management.

Correlation

- The correlation analysis shows that the correlation coefficient between total deposits and loans and advances of both HBL and LFCL have very positive relationship. The correlation(r) between deposits and loan and advances of HBL is found little higher than that of LFLC. So, it can be concluded that HBL is in better condition in mobilizing collected deposits as loans and advances in comparison to LFLC. And the correlation analysis between total deposit and investment in both HBL and LFLC has found negative relationship. Though, the variables in the both cases of HBL and LFLC have negative relationship, but it can be said that HBL is quite successful in mobilizing its collected deposits as investment than that of LFLC during the study period. Similarly, the correlation coefficient between total loans and advances and net profit of both HBL and LFLC have positive relationship. Moreover, when comparative analysis is taken in mind, LFLC is quite successful to earn profit from mobilizing loans and advances as the correlation (r) between loans and advances and net profit of LFLC is found higher than

that of HBL during the study period. Likewise, the correlation analysis between total investment and net profit of HBL has found negative relationship and in case of LFLC there is positive relationship between these variables.

Trend Analysis

- Through the trend analysis of total deposit, loan and advances, investment and net profit of HBL and LFLC, a conclusion can be drawn that the total deposit, total loan and advances and net profit of both HBL and LFLC are in increasing trend. But the total investment of HBL is in decreasing trend. Whereas, LFLC has in increasing trend. While comprising the overall trend, if other things remained unchanged, HBL's deposit collection, utilization and net profit is good and higher percentage than the LFLC. While in the case of investment the LFLC seems better than that of HBL.

  Hence, HBL is not able to increase the investment though its fund collection is increasing. Bank is not adopting proper policy to increase the investment of the organization.

5.3 Recommendation

After the completion of all the statistical and non statistical studies following recommendation are made for the betterment of both the commercial bank and finance company to overcome the weakness and to strengthen the existing investment policy of both HBL and LFLC.

- Collection of large variety of deposit is very necessary for commercial banks and finance companies to lower the credit-deposit ratio. The fund collection position of the banks and finance companies can be increased by exploring the new deposit product. Banks and finance companies can offer various kinds of deposit schemes to the public in their own way such as prize scheme, gift scheme, child scheme, old age scheme and so on. As the competition increasing, bank and finance companies should follow the innovative approach to marketing their business. Therefore, it is recommended to both firms to explore the new deposit product to attract the deposit from public. During the study period, LFLC has maintained higher credit-deposit ratio in comparison to HBL. LFLC is recommended to increase the deposit to lower credit-deposit ratio.

- The liquidity position of a commercial bank and finance company can be affected by external as well as internal factors. The effecting factors can be interest rates, investment position, central bank directives, the lending policies, capability of management, strategic planning funds flow situations and supply as demand position of loan and advances. As LFLC has maintained the ratios of cash and bank balance to total deposit lower than that of HBL. So, LFLC is recommended to increase cash and bank balance to meet current obligations and loan demand.
- To get success itself and to encourage financial and economic development of the country through industrialization, a commercial bank and finance company must mobilize their funds in different productive sectors such as to purchase share and debentures of other financial and non-financial companies. From the study, out of total working fund, LFLC has invested its higher fund as total investment in comparison to HBL. So HBL is recommended to invest its more funds in purchasing share and debentures of different types of companies of different areas.
- Government securities, such as treasury bills, development bonds, saving certificates etc are safety medium of investment because they are free of risk as well as liquid and can be easily sold in the market. From this study, it has been found that LFLC has just made little portion of total working fund investment in government securities during a study period. So, LFLC is recommended to invest more funds in government securities to maintain liquidity position.
- The largest item of the commercial bank and finance company in asset side is loan and advances. To get success in competitive environment such deposit money must be mobilizes as loans and advances. Negligence in administering this asset could be one of the main reasons of the banks and finance companies failure. From the study, it has been found that LFLC's loan and advances to total deposits is higher in comparison to HBL. It means that HBL has not properly used their existing fund as loan and advances. To overcome this situation HBL is recommended to follow liberal lending policy and invest more percentage of total deposit in loan and advances.
- Recovery of loan has been most challenging tasks in these days. So, LFLC is suggested to implement a sound collection policy including procedures. The policy should ensure rapid identification of delinquent loans, immediate

contact with borrower and continual follow up until a loan is recovered and legal procedure if necessary.

- Managing the non-performing loan is not easy tasks these days. In the context of Nepal, 5% non-performing loan is considered acceptable but when the non-performing loan begins in two digits then problem begin to start. So, LFLC is recommended to manage the non-performing assets and lower it to below five percentages. Therefore, LFLC is suggested to give serious attention towards the recovery and timely follow up of the disbursed loan and management of the firms to form an effective powerful loan recovery committee.
- Both firms should be more careful in increasing profit in a real sense to maintain the confidence of shareholders, depositors and all its customers. They cannot keep their eyes closed from the profit motive. Therefore, it is recommended to increase the profitability ratio for higher profit. Similarly, profit can be measured not only by increasing the income but also by controlling its operating expenses and overhead expenses to increase the profit considerably. It is recommended to HBL because its operating expenses are very high in comparison to LFLC.
- Success of the commercial bank and finance company is largely depending upon the proper mobilization of collected deposits as an investment in different sectors. There must be positive relationship between total deposit and investment to contribute in the increment of profit of banks and finance companies. Thus, banks and finance companies have to maintain sound investment policy for mobilizing of deposit in different productive and priority sectors to earn more income. From the study, it has been found that both of the firms have negative relationship between total deposits and investment. So, both companies are recommended for the proper mobilization of the deposit. Specially, HBL is recommended to give its due attention towards the increment of net profit by increasing investment in different productive and priority sectors.
- In Nepal, there are 31 commercial banks and 79 finance companies during the study period. The situation of competition is growing. To get success in competitive environment, banks and finance companies should have sound investment policy. So, it is recommended to both firms that policy should be made in such a way that helps to meet the competition among those commercial banks and finance companies.

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APPENDIX
Liquidity Ratio

Appendix - A-I

Current Ratio

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Current Assets	Current Liabilities	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	23,785,000	11,033,000	2.16	2.16	0.85	0.7225
2007	26,999,900	23,170,440	1.17	1.17	- 0.14	0.0196
2008	29,449,000	24,696,000	1.19	1.19	- 0.12	0.0144
2009	29,813,000	27,968,000	1.07	1.07	- 0.24	0.0576
2010	29,858,900	30,797,200	0.97	0.97	- 0.34	0.1156
				x = 6.56		(x- $\bar{x}$)² = 0.9297

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{6.56}{5}$ = **1.31**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{0.9297}{5}}$ = **0.43**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.43}{1.31} \times 100\% = 32.82\%$

LFLC

Amt. in NPR' 000

Year	Current Assets	Current Liabilities	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	306,081	580,997	0.53	0.53	- 0.67	0.4489
2007	731,341	586,441	1.25	1.25	0.05	0.0025
2008	928,268	823,416	1.13	1.13	- 0.07	0.0049
2009	1,394,056	930,881	1.50	1.50	0.30	0.0900
2010	1,602,627	994,360	1.61	1.61	0.41	0.1681
				x = 6.02		(x- $\bar{x}$)² = 0.7144

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{6.02}{5}$ = **1.20**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{0.7144}{5}}$ = **0.38**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.38}{1.20} \times 100\%$ = **31.67%**

Appendix - A-II

Cash and bank balance to Total Deposit Ratio

$$\frac{\text{Cash and Bank Blance}}{\text{Total Deposit}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Cash & Bank Balance	Total Deposit	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1,717,352	26,490,852	6.48	6.48	- 0.71	0.5041
2007	1,757,341	30,048,418	5.85	5.85	- 1.34	1.7956
2008	1,448,143	31,842,789	4.55	4.55	-2.64	6.9696
2009	3,048,527	34,681,345	8.79	8.79	1.60	2.5600
2010	3,866,491	37,611,202	10.28	10.28	3.09	9.5481
				x = 35.95		$(x-\bar{x})^2 = 21.3774$

Mean $(\bar{x}) = \frac{x}{N} = \frac{35.95}{5} = \mathbf{7.19}$

Standard Deviation (S.D.) $= \sqrt{\frac{(x\,Z\bar{x})^2}{N}} = \sqrt{\frac{21.3774}{5}} = \mathbf{2.07}$

Coefficient of variation (C.V.) $= \frac{6}{\bar{x}} \times 100\% = \frac{2.07}{7.19} \times 100\% = \mathbf{28.79\%}$

LFLC

Amt. in NPR' 000

Year	Cash & Bank Balance	Total Deposit	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	29,453	741,670	3.97	3.97	- 1.82	3.3124
2007	61,754	789,770	7.82	7.82	2.03	4.1209
2008	63,713	838,977	7.59	7.59	1.80	3.2400
2009	61,459	1,071,291	5.74	5.74	- 0.05	0.0025
2010	46,482	1,216,558	3.82	3.82	- 1.97	3.8809
				x = 28.94		$(x-\bar{x})^2 =$ 14.5567

Mean $(\bar{x}) = \frac{x}{N} = \frac{28.94}{5} = \mathbf{5.79}$

Standard Deviation (S.D.) $= \sqrt{\frac{(x\,Z\bar{x})^2}{N}} = \sqrt{\frac{14.5567}{5}} = \mathbf{1.71}$

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{1.71}{5.79} \times 100\%$ = 29.53%

Appendix - A-III

Cash and Bank Balance to Current Assets Ratio

$$\frac{\text{Cash and Bank Blance}}{\text{Current Assets}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Cash & Bank Balance	Current Assets	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	1,717,352	23,785,000	7.22	7.22	- 1.15	1.3225
2007	1,757,341	26,999,900	6.51	6.51	- 1.86	3.4596
2008	1,448,143	29,449,000	4.92	4.92	- 3.45	11.9025
2009	3,048,527	29,813,000	10.23	10.23	1.86	3.4596
2010	3,866,491	29,858,900	12.95	12.95	4.58	20.9764
				x = 41.83		(x- $\bar{x}$)² = 41.1206

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{41.83}{5}$ = **8.37**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{41.1206}{5}}$ = **2.87**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{2.87}{8.37} \times 100\%$= 34.29%

LFLC

Amt. in NPR' 000

Year	Cash & Bank Balance	Current Assets	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	29,453	306,081	9.62	9.62	3.17	10.0489
2007	61,754	731,341	8.44	8.44	1.99	3.9601
2008	63,713	928,268	6.86	6.86	0.41	0.1681
2009	61,459	1,394,056	4.41	4.41	- 2.04	4.1616
2010	46,482	1,602,627	2.90	2.90	- 3.55	12.6025
				x = 28.94		(x- $\bar{x}$)² = 30.9412

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{32.33}{5}$ = **6.45**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \, \bar{x})^2}{N}}$ = $\sqrt{\frac{30.9412}{5}}$ = **2.49**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{2.49}{6.45} \times 100\%$ = **38.61%**

Appendix – A-IV

Investment on Government Securities to Total Current Assets Ratio

$$\frac{\text{Investment on Government Securities}}{\text{Current Assets}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Investment on Gov. Sec.	Current Assets	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	5,144,313	23,785,000	21.63	21.63	1.63	2.6569
2007	6,454,873	26,999,900	23.91	23.91	3.91	15.2881
2008	7,471,668	29,449,000	25.37	25.37	5.37	28.8369
2009	4,212,300	29,813,000	14.13	14.13	- 5.87	34.4569
2010	4,465,372	29,858,900	14.96	14.96	- 5.04	25.4016
				x = 100		(x- $\bar{x}$)² = 106.6404

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{100}{5}$ = **20.00**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \, \bar{x})^2}{N}}$ = $\sqrt{\frac{106.6404}{5}}$ = **4.62**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{4.62}{20} \times 100\%$ = **23.10%**

LFLC

Amt. in NPR' 000

Year	Investment on Gov. Sec.	Current Assets	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	13,625	306,081	4.45	4.45	2.28	5.1984
2007	13,625	731,341	1.86	1.86	- 0.31	0.0961
2008	13,625	928,268	1.47	1.47	- 0.70	0.4900
2009	13,625	1,394,056	0.98	0.98	- 1.19	1.4161
2010	33,625	1,602,627	2.10	2.10	- 0.07	0.0049
				x = 10.86		(x- $\bar{x}$)² = 7.2055

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{10.86}{5}$ = **2.17**

Standard Deviation (S.D.) = $\sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{7.2055}{5}}$ = **1.20**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{1.20}{2.17} \times 100\%$ = **55.30%**

Appendix - B -I

Asset Management Ratios:

Loans and Advances to Total Deposit Ratio

$$\frac{\text{Loans and Advances}}{\text{Total Deposit}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Loan & Advances	Total Deposit	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	15,761,977	26,490,852	59.50	59.50	- 7.12	50.6944
2007	17,793,724	30,048,418	59.22	59.22	- 7.4	54.76
2008	20,179,613	31,842,789	63.37	63.37	- 3.25	10.5625
2009	25,519,519	34,681,345	73.58	73.58	6.96	48.4416
2010	29,123,755	37,611,202	77.43	77.43	10.18	116.8561
				x = 333.10		**(x- $\bar{x}$)² = 281.3146**

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{333.10}{5}$ = **66.62**

Standard Deviation (S.D.) = $\sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{281.3146}{5}}$ = **7.50**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{7.50}{66.82} \times 100\%$ = **11.26%**

LFLC

Amt. in NPR' 000

Year	Loan & Advances	Total Deposit	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	655,565	741,670	88.39	88.39	- 15.08	227.4064
2007	713,660	789,770	90.36	90.36	- 13.11	171.8721
2008	966,429	838,977	115.19	115.19	1.72	137.3584
2009	1,137,785	1,071,291	106.21	106.21	2.47	7.5076
2010	1,425,857	1,216,558	117.20	117.20	13.73	188.5129
				x =		(x- $\bar{x}$)² =

				517.35		732.6574

Mean ($\bar{x}$) = $\frac{x}{N}$ = $\frac{517.35}{5}$ = **103.47**

Standard Deviation (S.D.) = $\sqrt{\frac{(x - \bar{x})^2}{N}}$ = $\sqrt{\frac{732.6574}{5}}$ = **12.11**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}}$ × 100% = $\frac{12.11}{103.47}$ × 100% = **11.70%**

Appendix - B-II

Total Investment to Total Deposit Ratio

$$\frac{\text{Total Investment}}{\text{Total Deposit}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Total Investment	Total Deposit	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	10,889,031	26,490,852	41.11	41.11	7.13	50.8369
2007	11,822,985	30,048,418	39.35	39.35	5.37	28.8369
2008	13,340,177	31,842,789	41,89	41.89	7.91	62.5681
2009	8,710,691	34,681,345	25.12	25.12	- 8.86	78.4996
2010	8,444,910	37,611,202	22,45	22.45	- 11.53	132.9409
				x = 169.92		(x- $\bar{x}$)² = 353.6824

Mean ($\bar{x}$) = $\frac{x}{N}$ = $\frac{169.92}{5}$ = **33.98**

Standard Deviation (S.D.), = $\sqrt{\frac{(x - \bar{x})^2}{N}}$ = $\sqrt{\frac{353.6824}{5}}$ = **8.41**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}}$ × 100% = $\frac{8.41}{33.98}$ × 100% = **24.75%**

LFLC

Amt. in NPR' 000

Year	Total Investment	Total Deposit	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	25,152	741,670	3.39	3.39	- 2.18	4.7524
2007	65,823	789,770	8.34	8.34	2.77	7.6729
2008	80,823	838,977	9.63	9.63	4.06	16.4836
2009	30,823	1,071,291	2.88	2.88	- 2.69	7.2361
2010	43,697	1,216,558	3.59	3.59	- 1.98	3.9204

				x = 27.83		$(x-\bar{x})^2 = 40.0654$

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{27.83}{5}$ = **5.57**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\,Z\,\bar{x})^2}{N}} = \sqrt{\frac{40.0654}{5}}$ = **2.83**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{2.83}{5.57} \times 100\%$ = **50.81%**

Appendix - B-III

Loan and Advances to Total Working Fund Ratio

$$\frac{\text{Loans and Advances}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	**Loan & Advances**	**Total Working Fund**	**Ratio (%)**	**X**	**$(x-\bar{x})$**	**$(x-\bar{x})^2$**
2006	15,761,977	30,579,808	51.54	51.54	- 6.11	87.3321
2007	17,793,724	34,314,868	51.85	51.85	- 5.8	33.64
2008	20,179,613	36,857,624	54.75	54.75	- 2.9	8.41
2009	25,519,519	40,046,686	63.72	63.72	6.07	36.8449
2010	29,123,755	48,360,251	66.42	66.42	8.75	76.5625
				x = 288.26		**$(x-\bar{x})^2$ =** 192.7895

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{288.26}{5}$ = **57.65**

Standard Deviation (S.D.), = $\sqrt{\frac{(x\,Z\,\bar{x})^2}{N}}$ = $\sqrt{\frac{192.7895}{5}}$ = **6.21**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{6.21}{5} \times 100\%$ = **10.77%**

LFLC

Amt. in NPR' 000

Year	**Loan & Advances**	**Total Working Fund**	**Ratio (%)**	**X**	**$(x-\bar{x})$**	**$(x-\bar{x})^2$**
2006	655,565	865,415	75.75	75.75	- 3.12	9.7344
2007	713,660	961,515	74.22	74.22	- 4.65	21.6225
2008	966,429	1,201,206	80.46	80.46	1.59	2.5281
2009	1,137,785	1,444,520	78.77	78.77	- 0.1	0.01
2010	1,425,857	1,674,313	85.16	85.16	6.29	39.5641
				x = 394.36		$(x-\bar{x})^2 = 73.4531$

Mean ($\bar{x}$) = $\frac{x}{N}$ = $\frac{334.36}{5}$ = **78.87**

Standard Deviation (S.D.) = $\sqrt{\frac{(x - \bar{x})^2}{N}}$ = $\sqrt{\frac{73.4531}{5}}$ = **3.83**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}}$ × 100% = $\frac{3.83}{78.87}$ × 100% = **4.86%**

Appendix - B-IV

Investment on Government Securities to Total Working Fund Ratio

$$\frac{\text{Investment of Government Securities}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Invt. on Gov. Sec.	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	5,144,313	30,579,808	16.82	16.82	1.5	2.25
2007	6,454,873	34,314,868	18.81	18.81	3.49	12.1801
2008	7,471,668	36,857,624	20.27	20.27	4.95	24.5025
2009	4,212,300	40,046,686	10.52	10.52	- 4.8	23.04
2010	4,465,372	43,860,251	10.18	10.18	- 5.14	26.4196
				x = 76.60		**(x- $\bar{x}$)² =** 88.3922

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{76.60}{5}$ = **15.32**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\,Z\,\bar{x})^2}{N}}$ **=** $\sqrt{\frac{88.3922}{5}}$ = **4.21**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{4.21}{15.32} \times 100\%$ = **27.48%**

LFLC

Amt. in NPR' 000

Year	Invt. on Gov. Sec.	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	13,625	865,415	1.57	1.57	0.16	0.0256
2007	13,625	961,515	1.42	1.42	0.01	0.0001
2008	13,625	1,201,206	1.13	1.13	- 0.28	0.0784
2009	13,625	1,444,520	0.94	0.94	- 0.47	0.2209
2010	33,625	1,674,313	2.01	2.01	0.6	0.36
				x = 7.07		(x- $\bar{x}$)² = 0.685

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{7.07}{5}$ = **1.41**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\,Z\,\bar{x})^2}{N}}$ **=** $\sqrt{\frac{0.685}{5}}$ = **0.30**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.37}{1.41} \times 100\%$ = **26.24%**

Appendix - B- V

Investment on Shares & Debentures to Total Working Fund Ratio

$$\frac{\text{Investment on Shares \& Debentures}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Invst. on Shares & Debt.	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	39,909	30,579,808	0.13	0.13	- 0.07	0.0049
2007	73,424	34,314,868	0.21	0.21	0.01	0.0001
2008	89,558	36,857,624	0.24	0.24	0.04	0.0016
2009	93,883	40,046,686	0.23	0.23	0.03	0.0009
2010	78,883	43,860,251	0.18	0.18	- 0.02	0.0004
				x = 0.99		**(x- $\bar{x}$)² = 0.0079**

Mean ($\bar{x}$) **=** $\frac{x}{N} = \frac{0.99}{5}$ = **0.20**

Standard Deviation (S.D.) $= \sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{0.0079}{5}}$ **= 0.04**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.04}{0.20} \times 100\%$ = **20%**

LFLC

Amt. in NPR' 000

Year	Invst. on Shares & Debt.	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	7,233	865,415	0.84	0.84	0.18	0.0324
2007	7,198	961,515	0.75	0.75	0.09	0.0081
2008	7,198	1,201,206	0.60	0.60	- 0.06	0.0036
2009	7,198	1,444,520	0.50	0.50	- 0.16	0.0256
2010	10,072	1,674,313	0.60	0.60	- 0.06	0.0036
				x = 3.29		(x- $\bar{x}$)² = 0.0733

Mean ($\bar{x}$) **=** $\frac{x}{N} = \frac{3.29}{5}$ = **0.66**

Standard Deviation (S.D.) $= \sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{0.0733}{5}}$ **= 0.12**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.12}{0.06} \times 100\%$ = **18.18%**

Appendix - B-VI

Loan Loss Ratio

$$\frac{\text{Total Loan Loss Provision}}{\text{Total Loans \& Advances}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Loan Loss Provision	Loan & Advances	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1,119,417	15,761,977	7.10	7.10	2.75	7.5625
2007	795,727	17,793,724	4.47	4.47	0.12	0.0144
2008	682,093	20,179,613	3.38	3.38	- 0.97	0.9409
2009	726,364	25,519,519	2.85	2.25	- 1.5	2.2500
2010	1,143,126	20,123,755	3.93	3.93	- 0.42	0.1764
				x = 21.73		$(x-\bar{x})^2$ = 10.9442

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{21.73}{5}$ = **4.35**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\ Z\bar{x})^2}{N}} = \sqrt{\frac{10.9442}{5}}$ = **1.48**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{1.48}{4.35} \times 100\%$ = **34.02%**

LFLC

Amt. in NPR' 000

Year	Loan Loss Provision	Loans & Advances	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	96,518	655,564	14.72	14.72	4.05	16.4025
2007	98,950	713,660	13.87	13.87	3.20	10.2400
2008	91,818	966,429	9.50	9.50	- 1.17	1.3689
2009	94,155	1,137,785	8.28	8.28	-2.39	5.7121
2010	99,231	1,425,857	6.96	6.96	- 3.71	13.7641
				x = 58.33		$(x-\bar{x})^2$ = 47.4876

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{53.33}{5}$ = **10.67**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\ Z\bar{x})^2}{N}} = \sqrt{\frac{47.4876}{5}}$ = **3.08**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{3.08}{10.67} \times 100\% =$ **28.87%**

Appendix C -I

Profitability Ratio

Return on Total Working Fund Ratio

$$\frac{\text{Net Profit}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Net Profit	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	457,458	30,579,808	1.50	1.50	- 0.04	0.0016
2007	491,823	34,314,868	1.43	1.49	- 0.11	0.0121
2008	635,869	36,857,624	1.73	1.79	0.19	0.0361
2009	752,835	40,046,686	1.88	1.88	0.34	0.1156
2010	508,798	43,860,251	1.16	1.16	- 0.38	0.1444
				x = 7.7		**(x- $\bar{x}$)² =** 0.3098

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{7.7}{5} =$ **1.54**

Standard Deviation (S.D.) $= \sqrt{\frac{(x\ Z\bar{x})^2}{N}} = \sqrt{\frac{0.3098}{5}} =$ **0.25**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.25}{1.54} \times 100\% =$ **16.23%**

LFLC

Amt. in NPR' 000

Year	Net Profit	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	3,261	865,415	0.38	0.38	- 3.65	13.3225
2007	37,916	961,515	3.94	3.94	- 0.09	0.0081
2008	62,715	1,201,206	5.22	5.22	1.19	1.4161
2009	73,122	1,444,520	5.06	5.06	1.03	1.0609
2010	92,575	1,674,313	5.53	5.53	1.50	2.2500
				x = 20.13		(x- $\bar{x}$)² = 18.0576

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{20.13}{5} =$ **4.03**

Standard Deviation (S.D.) $= \sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{18.0576}{5}} = \mathbf{1.90}$

Coefficient of variation (C.V.) $= \frac{6}{\bar{x}} \times 100\% = \frac{1.90}{4.03} \times 100\% = \mathbf{47.15\%}$

Appendix - C-II

Earning Per Share (EPS)

$$\frac{\text{Net Profit (loss)}}{\text{Total Number of Share}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Net Profit	Total Number of Share	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	457,458	7,722	59.24	59.24	3.97	15.7609
2007	491,823	8,108	60.66	60.66	5.39	29.0521
2008	635,869	10,135	62.74	62.74	7.47	55.8009
2009	752,835	12,162	61.90	61.90	6.63	43.9569
2010	508,798	16,000	31.80	31.80	- 23.47	550.8409
				x = 276.34		**(x- $\bar{x}$)² =** 695.4117

Mean ($\bar{x}$) **=** $\frac{x}{N} = \frac{276.34}{5} = \mathbf{55.27}$

Standard Deviation (S.D.) $= \sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{695.4117}{5}} = \mathbf{11.79}$

Coefficient of variation (C.V.) $= \frac{6}{\bar{x}} \times 100\% = \frac{11.79}{55.27} \times 100\% = \mathbf{21.33\%}$

LFLC

Amt. in NPR' 000

Year	Net Profit	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	3,261	600	5.44	5.44	- 43.39	1882.6921
2007	37,916	600	63.19	63.19	14.36	206.2096
2008	62,715	900	69.68	69.68	20.85	434.7225
2009	73,122	1,200	60.94	60.94	12.11	146.6521
2010	92,575	2,062	44.90	44.90	- 3.93	15.4449
				x = 244.15		(x- $\bar{x}$)² = 2685.7212

Mean ($\bar{x}$) **=** $\frac{x}{N} = \frac{244.15}{5} = \mathbf{48.83}$

Standard Deviation (S.D.) $= \sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{2685.7212}{5}} = \mathbf{23.18}$

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{23.18}{48.83} \times 100\% =$ **47.47%**

Appendix - C- III

Return on Loan and Advances Ratio:

$$= \frac{\text{Net Profit (loss)}}{\text{Loans and Advances}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Net Profit	Loans & Advances	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	457,458	15,761,977	2.90	2.90	- 0.20	0.0400
2007	491,823	17,793,724	2.76	2.76	0.06	0.0036
2008	635,869	20,179,613	3.15	3.15	0.45	0.2025
2009	752,835	25,519,519	2.95	2.95	0.25	0.0625
2010	508,798	29,123,755	1.75	1.75	- 0.95	0.9025
				x = 13.51		**(x- $\bar{x}$)² =** 1.2111

Mean ($\bar{x}$ **) =** $\frac{\text{x}}{\text{N}} = \frac{13.51}{5} =$ **2.70**

Standard Deviation (S.D.) $= \sqrt{\frac{(x\,\text{Z}\,\bar{x})^2}{N}} = \sqrt{\frac{1.2111}{5}} =$ **0.49**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.49}{2.70} \times 100\% =$ **18.15%**

LFLC

Amt. in NPR' 000

Year	Net Profit	Loans & Advances	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	3,261	655,565	0.50	0.50	- 4.54	20.6116
2007	37,916	713,660	5.31	5.31	0.27	0.0729
2008	62,715	966,429	6.49	6.49	1.45	2.1025
2009	73,122	1,137,785	6.43	6.43	1.39	1.9321
2010	92,575	1,425,857	6.49	6.49	1.45	2.1025
				x = 25.22		(x- $\bar{x}$)² = 26.8216

Mean ($\bar{x}$ **) =** $\frac{\text{x}}{\text{N}} = \frac{25.22}{5} =$ **5.04**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}}$ = $\sqrt{\frac{26.8216}{5}}$ = **2.32**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{2.32}{5.04} \times 100\%$ = **46.03%**

Appendix - C-IV

Total Interest Earned to Total Working Fund Ratio:

$$\frac{\text{Total Interest Earned}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Total Interest Earned	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	1,626,474	30,579,808	5.32	5.32	- 0.45	0.2025
2007	1,775,583	34,314,868	5.17	5.17	- 0.60	0.3600
2008	1,963,647	36,857,624	5.33	5.33	- 0.44	0.1936
2009	2,342,198	40,046,686	5.85	5.85	0.08	0.0064
2010	3,148,605	43,860,251	7.18	7.18	1.41	1.9881
				x = 28.85		(x- $\bar{x}$)² = 2.7506

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{28.85}{5}$ = **5.77**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}}$ = $\sqrt{\frac{2.7506}{5}}$ = **0.74**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.74}{5.77} \times 100\%$ = **12.83%**

LFLC

Amt. in NPR' 000

Year	Total Interest Earned	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	97,067	865,415	11.22	11.22	- 0.70	0.4900
2007	115,046	961,515	11.97	11.97	0.05	0.0025
2008	138,519	1,201,206	11.53	11.53	- 0.39	0.1521
2009	170,964	1,444,520	11.84	11.84	- 0.08	0.0064
2010	218,575	1,674,313	13.05	13.05	1.13	1.2769
				x = 59.61		(x- $\bar{x}$)² = 1.9279

Mean ($\bar{x}$) = $\frac{x}{N}$ = $\frac{59.61}{5}$ = **11.92**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\ Z\bar{x})^2}{N}}$ = $\sqrt{\frac{1.9279}{5}}$ = **0.62**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}}$ × 100% = $\frac{0.62}{11.92}$ × 100% = **5.20%**

Appendix - C-V

Total Interest Paid to Total Working Fund Ratio:

$$\frac{\text{Total Interest Paid}}{\text{Total Working Fund}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Total Interest Paid	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	648,842	30,579,808	2.12	2.12	- 0.37	0.1369
2007	767,411	34,314,868	2.24	2.24	- 0.25	0.0625
2008	823,745	36,857,624	2.24	2.24	- 0.25	0.0625
2009	934,778	40,046,686	2.33	2.33	- 0.16	0.0256
2010	1,553,531	43,860,251	3.54	3.54	1.05	1.1025
				x = 12.47		**(x- $\bar{x}$)² =** 1.3900

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{12.47}{5}$ = **2.49**

Standard Deviation (S.D.) $= \sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{1.3900}{5}}$ **= 0.53**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.53}{2.49} \times 100\%$ = **21.29%**

LFLC

Amt. in NPR' 000

Year	Total Interest Paid	Total Working Fund	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	45,022	865,415	5.20	5.20	0.07	0.0049
2007	50,634	961,515	5.27	5.27	0.14	0.0196
2008	56,319	1,201,206	4.69	4.69	- 0.44	0.1936
2009	68,959	1,444,520	4.78	4.78	- 0.35	0.1225
2010	95,618	1,674,313	5.71	5.71	0.58	0.3364
				x = 25.65		(x- $\bar{x}$)² = 0.6770

Mean ($\bar{x}$ **) =** $\frac{x}{N} = \frac{25.65}{5}$ = **5.13**

Standard Deviation (S.D.) $= \sqrt{\frac{(x - \bar{x})^2}{N}} = \sqrt{\frac{0.6770}{5}}$ = **0.37**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{0.37}{5.13} \times 100\%$ = **7.21%**

Appendix - C-VI

Total Employees Expenses to Total Expenses Ratio:

$$\frac{\text{Total Employees Expenses}}{\text{Total Expenses}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Total Employees Expenses	Total Expenses	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	234,589	723,023	32.45	32.45	- 5.15	26.5225
2007	290,921	679,452	42.82	42.82	5.22	27.2484
2008	292,213	658,357	44.39	44.39	6.79	46.1041
2009	360,981	925,252	39.01	39.01	1.41	1.9881
2010	414,984	1,414,614	29.34	29.34	- 8.26	68.2276
				x = 188.01		$(x-\bar{x})^2$ = 170.0907

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{188.01}{5}$ = **37.60**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\ Z\bar{x})^2}{N}} = \sqrt{\frac{170.0907}{5}}$ = **5.83**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{5.83}{37.60} \times 100\%$ = **15.51%**

LFLC

Amt. in NPR' 000

Year	Total Employees Expenses	Total Expenses	Ratio (%)	X	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	4,263	93,171	4.58	4.58	- 2.34	5.4756
2007	5,008	67,012	7.47	7.47	0.55	0.3025
2008	5,556	70,889	7.84	7.84	0.92	0.8464
2009	5,990	82,984	7.22	7.22	0.30	0.0900
2010	8,877	118,763	7.47	7.47	0.55	0.3025
				x = 34.58		$(x-\bar{x})^2$ = 7.017

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{34.58}{5}$ = **6.92**

Standard Deviation (S.D.) = $\sqrt{\frac{(x\ Z\bar{x})^2}{N}} = \sqrt{\frac{7.017}{5}}$ = **1.19**

Coefficient of Variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{1.19}{6.92} \times 100\% =$ **17.20%**

Appendix D

Non Performing Loan

Non Performing Loan to Total Loans & Advances Ratio:

$$\frac{\text{Non Performing Loan}}{\text{Total Loans \& Advances}} \times 100\%$$

HBL

Amt. in NPR' 000

Year	Non Performing Loan	Total Loans & Advances	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	1,040,758	15,761,977	6.60	6.60	2.98	8.8804
2007	641,615	17,793,724	3.61	3.61	- 0.01	0.0001
2008	477,229	20,179,613	2.37	2.37	- 1.25	1.5625
2009	511,310	25,519,519	2.00	2.00	- 1.62	2.6244
2010	1,024,832	29,123,755	8.52	3.52	- 0.1	0.0100
				x = 18.10		(x- $\bar{x}$)² = 13.0774

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{18.10}{5} =$ **3.62**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{13.0774}{5}} =$ **1.62**

Coefficient of variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{1.62}{3.62} \times 100\% =$ **44.75%**

LFLC

Amt. in NPR' 000

Year	Non Performing Loan	Total Loans & Advances	Ratio (%)	X	(x- $\bar{x}$)	(x- $\bar{x}$)²
2006	89,896	655,565	13.71	13.71	6.07	36.8449
2007	76,337	713,660	10.70	10.70	3.06	9.3636
2008	46,607	966,429	4.82	4.82	- 2.82	7.6524
2009	54,866	1,137,785	4.82	4.82	- 2.82	7.6524
2010	59,397	1,425,857	4.17	4.17	- 3.47	12.0409
				x = 38.22		(x- $\bar{x}$)² = 74.1542

Mean ($\bar{x}$) = $\frac{x}{N} = \frac{38.22}{5} =$ **7.64**

Standard Deviation (S.D.) = $\sqrt{\frac{(x \, Z \bar{x})^2}{N}} = \sqrt{\frac{74.1542}{5}} =$ **3.85**

Coefficient of Variation (C.V.) = $\frac{6}{\bar{x}} \times 100\% = \frac{3.85}{7.64} \times 100\% =$ **50.39%**

Appendix E -I

Co-efficient of Correlation Analysis

Correlation between total deposits and Loan & advances of HBL

Amt. in NRP' million

Year	Deposits (x)	x-32000 (U)	U²	Loan & Advances (y)	Y-22000=V	V²	UV
2006	26,491	- 5509	30,349,081	15,752	-6238	38,912,644	34,365,142
2007	30,048	- 1952	3,810,34	17,794	-4206	17,690,436	8,210,112
2008	31,843	-157	24,649	20,180	-1820	3,312,400	285,740
2009	34,681	2681	7,187,761	25,520	3520	12,390,400	9,437,120
2010	37,611	5611	31,483,321	29,124	7124	50,751,376	39,972,764
		U=674	U²=72,855,116		V=1620	V²=123,057,256	UV=92,270,878

Now we have,

N = 5 V = -1620

U = 674 V² = 123,057,256

U² = 72,855,116 UV = 92,270,878

Correlation Coefficient can be calculated by using following formula,

$$r = \frac{N \sum UV - \sum U . \sum V}{\sqrt{N \sum U^2 - (\sum U)^2} \sqrt{N \sum V^2 - (\sum V)^2}}$$

$$= \frac{5 \times 92,270,878 - 679 \times (-1620)}{\sqrt{5 \times 72,855,116 - (674)^2} . \sqrt{5 \times 123,057,256 - (-1620)^2}}$$

$$= \frac{462,446,270}{19074.10035 \times 2475.0076} = \frac{462,446,270}{472,122,276.70} = 0.9795$$

$\therefore r^2 =$ **0.9594**

Calculation of probable errors of the correlation coefficient.

$$P.E.\ (r) = 0.6745 \frac{1 - r^2}{\sqrt{N}} = 0.6745 \frac{1 - 0.9594}{\sqrt{5}} = 0.6745 \times 0.0182 =$$ **0.0123**

$$6\ P.E.\ (r) = 6 \times 0.0123 =$$ **0.0738**

Correlation between total deposits and Loan & advances of LFLC

Amt. in NRP' million

Year	Deposits (x)	x-32000 (U)	U²	Loan & Advances (y)	Y-22000=V	V²	UV
2006	742	- 158	24,964	656	- 344	1,18,336	54,352
2007	790	- 110	12,100	714	- 286	81,796	31,460
2008	839	- 61	3,721	966	- 34	1,156	2,074

2009	1,071	171	29,241	1,138	138	19,044	23,598
2010	1,217	317	1,00,489	1,426	426	181,476	135,042
		U=159	U²=1,70,515		V=100	V²=401,808	UV=246,526

Now we have,

N = 5 V = -100

U = 159 V² = 401,808

U² = 170,515 UV = 246,526

Correlation Co-efficient can be calculated by using following formula,

$$r = \frac{N \quad UV \, Z \quad U. \quad V}{\sqrt{N \quad U^2 \, Z(\quad U)^2}\ \sqrt{N \quad V^2 \, Z(\quad V)^2}}$$

$$= \frac{5 \mid 246{,}526 \, Z159 \mid (Z100)}{\sqrt{5 \mid 170515 \, Z(159)^2}\ .\ \sqrt{5 \mid 401{,}808 \, Z(Z100)^2}} = \frac{1{,}232{,}630 \, \Gamma 15{,}900}{909.557035 \mid 1413.87411}$$

$$= \frac{1{,}248{,}530}{1{,}285{,}999.143} \qquad = 0.9709 \qquad \ldots r^2 = \mathbf{0.9426}$$

Calculation of probable errors of the correlation coefficient

$$\text{P.E. (r)} = 0.6745\ \frac{1 \, Z \, r^2}{\sqrt{N}} = 0.6745\ \frac{1 \, Z 0.9426}{\sqrt{5}} = 0.6745 \times 0.0257 = \mathbf{0.0173}$$

6 P.E. (r) = 6×0.0173 = **0.1038**

Appendix E-II

Correlation between total deposits and investment of HBL

Amt. in NRP' million

Year	Deposits (x)	x-32000 (U)	U²	Investment (y)	Y-22000=V	V²	UV
2006	26,491	- 5509	30,349,081	10,889	- 111	12,321	611,499
2007	30,048	- 1952	3,810,304	11,823	823	677,329	- 1,606,496
2008	31,843	- 157	24,649	13,340	2340	5,475,600	- 367,380
2009	34,681	2681	7,187,761	8,711	- 2289	5,239,521	- 6,136,809
2010	37,611	5611	31,483,321	8,445	- 2555	6,528,025	- 14,336,105
		U=674	U²=72,855,116		V=1792	V²=17,932,796	UV=-21,835,291

Now we have,

N = 5 V = -1792

U = 674 V² = 17,932,796

U² = 72,855,116 UV = 21,835,291

Correlation Coefficient can be calculated by using following formula,

$$r = \frac{N \quad UV \; Z \quad U. \quad V}{\sqrt{N \quad U^2 \; Z(\quad U)^2} \; \sqrt{N \quad V^2 \; Z(\quad V)^2}}$$

$$= \frac{5 \mid (Z21{,}835{,}291) \; Z674 \mid (Z1792)}{\sqrt{5 \mid 72{,}855{,}116 \; Z(674)^2} \; . \sqrt{5 \mid 17{,}932{,}796 \; Z(Z1792)^2}}$$

$$= \frac{Z109{,}176{,}455 \; \Gamma 1{,}207{,}808}{19074.10035 \mid 9297.995268} = \frac{Z107{,}968{,}647}{177{,}350{,}894.80} \quad = 0.6088\ldots \; r^2 = \mathbf{0.3706}$$

Calculation of probable errors of the correlation coefficient.

$$\text{P.E. (r)} = 0.6745 \; \frac{1 \; Z \; r^2}{\sqrt{N}} = 0.6745 \; \frac{1 \; Z \; 0.3706}{\sqrt{5}} = 0.6745 \times 0.2815 \qquad = \mathbf{0.1899}$$

6 P.E. (r) $= 6 \times 0.1899$ $= \mathbf{1.1394}$

Correlation between total deposits and investment of LFLC

Amt. in NRP' million

Year	Deposits (x)	x-32000 (U)	U^2	Investment (y)	Y-22000=V	V^2	UV
2006	742	- 158	24,964	25	- 24	576	3,792
2007	790	- 110	12,100	66	17	289	- 1,870
2008	839	- 61	3,721	81	32	1,024	- 1,952
2009	1,071	171	29,241	31	- 18	324	- 3,078
2010	1,217	317	1,00,489	44	- 5	25	- 1,585
		U=159	U^2=1,70,515		V=2	V^2=2238	UV=-4693

Now we have,

N = 5 V = 2

U = 159 V^2 = 2,238

U^2 = 170,515 UV = -4693

Correlation Co-efficient can be calculated by using following formula,

$$r = \frac{N \quad UV \; Z \quad U. \quad V}{\sqrt{N \quad U^2 \; Z(\quad U)^2} \; \sqrt{N \quad V^2 \; Z(\quad V)^2}}$$

$$= \frac{5 \mid (Z4693) \; Z159 \mid 2}{\sqrt{5 \mid 170515 \; Z(159)^2} \; . \sqrt{5 \mid 2238 \; Z2^2}} = \frac{Z23465 \; Z318}{909.557035 \mid 105.763888}$$

$$= \frac{Z23{,}783}{96{,}198.28839} \qquad =- 0.2472 \qquad \ldots r^2 = \mathbf{0.0611}$$

Calculation of probable errors of the correlation coefficient.

P.E. (r) = 0.6745 $\frac{1 - r^2}{\sqrt{N}}$ = 0.6745 $\frac{1 - 0.611}{\sqrt{5}}$ = 0.6745×0.4199= **0.2832**

6 P.E. (r) = 6×0.2832 = **1.6992**

Appendix E-III

Correlation between loan and advances and net profit of HBL

Amt. in NRP' million

Year	Loans & Advances (x)	x-32000 (U)	U^2	Net Profit (y)	Y-22000= V	V^2	UV
2006	15,762	- 6238	38,912,644	458	- 142	20,164	885,796
2007	17,794	- 4206	17,690,436	492	- 108	11,664	454,248
2008	20,180	- 1820	3,312,400	636	36	1,296	- 65,520
2009	25,520	3520	12,390,400	753	153	23,409	538,560
2010	29,124	7124	50,751,376	509	- 91	8,281	- 648,284
		U=1620	U^2=123,057,256		V=-152	V^2=64,814	UV=1,164,800

Now we have,

N = 5 V = -152

U = -1620 V^2 = 64,814

U^2 = 123,057,256 UV = 1,164,800

Correlation Coefficient can be calculated by using following formula,

$$r = \frac{N \quad UV - U. \quad V}{\sqrt{N \quad U^2 - (U)^2}\ \sqrt{N \quad V^2 - (V)^2}}$$

$$= \frac{5 \mid 1{,}164{,}800 - (-1620) \mid (-152)}{\sqrt{5 \mid 123{,}057{,}256 - (-1620)^2}\ .\ \sqrt{5 \mid 64{,}814 - (-152)^2}}$$

$$= \frac{5{,}824{,}000 - 246{,}240}{24752.0076 \mid 548.6036821} = \frac{-5{,}577{,}760}{13{,}579{,}042.51} = 0.4108$$

… r^2 = **0.1688**

Calculation of probable errors of the correlation coefficient.

P.E. (r) = 0.6745 $\frac{1 - r^2}{\sqrt{N}}$ = 0.6745 $\frac{1 - 0.1688}{\sqrt{5}}$ = 0.6745×0.3717= **0.2507**

6 P.E. (r) = 6×0.2507 = **1.5042**

Correlation between loan and advances and net profit of LFLC

Amt. in NRP' million

Year	Loans & Advances (x)	x-32000 (U)	U^2	Net Profit (y)	Y-22000=V	V^2	UV
2006	656	- 344	118,336	3	- 47	2209	16168
2007	714	- 286	81,796	38	- 12	144	3432
2008	966	- 34	1,156	63	13	169	- 442
2009	1,138	138	19,044	73	23	529	3174
2010	1,426	426	181,476	93	43	1849	18318
		U=-100	U^2=401808		V=20	V^2=4900	UV=46050

Now we have,

N = 5 V = 20

U = -100 V^2 = 4900

U^2 = 401,808 UV = 40,650

Correlation Co-efficient can be calculated by using following formula,

$$r = \frac{N \sum UV - \sum U . \sum V}{\sqrt{N \sum U^2 - (\sum U)^2}\ \sqrt{N \sum V^2 - (\sum V)^2}}$$

$$= \frac{5 \times 40650 - (-100) \times 20}{\sqrt{5 \times 401808 - (-100)^2}\ .\ \sqrt{5 \times 4900 - (20)^2}} = \frac{203250 + 2000}{1413.87411 \times 155.241747}$$

$$= \frac{205250}{219{,}492.2868} = 0.9351 \quad \ldots r^2 = \mathbf{0.8744}$$

Calculation of probable errors of the correlation coefficient.

$$\text{P.E. } (r) = 0.6745 \frac{1 - r^2}{\sqrt{N}} = 0.6745 \frac{1 - 0.8744}{\sqrt{5}} = 0.6745 \times 0.0562 = \mathbf{0.0379}$$

6 P.E. (r) = 6×0.0379 = **0.2274**

Appendix E-IV

Correlation between total investment and net profit of HBL

Amt. in NRP' million

Year	Investment (x)	x-32000 (U)	U^2	Net Profit (y)	Y-22000= V	V^2	UV
2006	10,889	- 111	12,321	458	- 142	20,164	15,762
2007	11,823	523	677,329	492	- 108	11,664	- 88,884
2008	13,340	2340	5,475,600	636	36	1,296	84,240
2009	8,711	- 2289	5,239,521	753	153	23,409	- 350,217
2010	8,445	- 2555	6,528,025	509	- 91	8,281	232,505
		U= -1792	U^2=17,932,796		V=-152	V^2=64,814	UV=- 106,594

Now we have,

N = 5 V = -152

U = -1792 V^2 = 64,814

U^2 = 17,932,796 UV = - 106,594

Correlation Coefficient can be calculated by using following formula,

$$r = \frac{N \quad UV \; Z \quad U. \quad V}{\sqrt{N \quad U^2 \; Z(\quad U)^2}\ \sqrt{N \quad V^2 \; Z(\quad V)^2}}$$

$$= \frac{5 \mid (Z106{,}594)\, Z(Z1792) \mid (Z152)}{\sqrt{5 \mid 17{,}932{,}796\, Z(Z1792)^2}\ .\ \sqrt{5 \mid 64{,}814\, Z(Z152)^2}} = \frac{Z532{,}970\ Z272{,}384}{9297.995268 \mid 548.6036821}$$

$$= \frac{Z805{,}354}{5{,}100{,}914.44} \qquad = -0.1579 \qquad \ldots r^2 = \mathbf{0.0249}$$

Calculation of probable errors of the correlation coefficient.

$$\text{P.E. (r)} = 0.6745\ \frac{1 Z r^2}{\sqrt{N}} = 0.6745\ \frac{1 Z 0.0249}{\sqrt{5}} = 0.6745 \times 0.4361 = \mathbf{0.2941}$$

6 P.E. (r) = 6×0.2941 = **1.7646**

Correlation between total investment and net profit of LFLC

Amt. in NRP' million

Year	**Investment (x)**	**x-32000 (U)**	**U^2**	**Net Profit (y)**	**Y-22000=V**	**V^2**	**UV**
2006	25	- 24	576	3	- 47	2209	1128
2007	66	17	289	38	- 12	144	- 204
2008	81	32	1024	63	13	169	416
2009	31	18	324	73	23	529	- 414
2010	44	- 5	25	93	43	1849	- 215
		U=2	U^2=2238		V=20	V^2=4900	UV=711

Now we have,

N = 5 V = 20

U = 2 V^2 = 4900

U^2 = 2238 UV = 711

Correlation Co-efficient can be calculated by using following formula,

$$r = \frac{N \quad UV \,\mathrm{Z}\, U. \quad V}{\sqrt{N \quad U^2 \,\mathrm{Z}(\quad U)^2}\ \sqrt{N \quad V^2 \,\mathrm{Z}(\quad V)^2}} = \frac{5 \mid 711 \mathrm{Z} 2 \mid 20}{\sqrt{5 \mid 2238 \,\mathrm{Z}(2)^2}\ .\ \sqrt{5 \mid 4900 \,\mathrm{Z}(20)^2}}$$

$$= \frac{3515}{105.763888 \mid 155.241747} = \frac{3515}{16418.97074} = 0.2141 \qquad \ldots r^2 = \mathbf{0.0458}$$

Calculation of probable errors of the correlation coefficient.

$$\text{P.E. (r)} = 0.6745\ \frac{1 \mathrm{Z} r^2}{\sqrt{N}} = 0.6745\ \frac{1 \mathrm{Z} 0.0458}{\sqrt{5}} = 0.6745 \times 0.4267 = \mathbf{0.2878}$$

6 P.E. (r) = 6×0.2878 = **1.7268**

Appendix F-I

Trend Analysis

Calculation of Total Deposit Trend

Trend values of total deposit of HBL

Let the linear trend equation between y and x be given by

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

Computation of Linear Trend

Year (t)	Total Deposit (y)	t-2008 (x)	x^2	xy	Trend Values y=a+bx
2006	26,491	- 2	4	- 52,982	26760.20
2007	30,048	- 1	1	- 30,048	29447.50
2008	31,843	0	0	0	32134.80
2009	34,681	1	1	34,681	34822.10
2010	37,611	2	4	75,222	87509.40
	y=160674	x = 0	x^2=10	xy=26873	

Since, x = 0

$$a = \frac{x}{N} = \frac{26873}{10} = 32134.80 \qquad b = \frac{xy}{x^2} = \frac{26873}{10} = 2687.30$$

Substituting the values of 'a' and 'b' in equation (i), the least square total deposit trend line is given by,

$y = 32134.80 + 2687.30x$..... (ii)

Trend values of total deposit

Year	X	Trend Values
2011	3	40196.70
2012	4	42884.00
2013	5	45571.30
2014	6	48258.60
2015	7	50945.90

Trend values of total deposit of LFLC

Let the linear trend equation between y & x be given by.

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

Computation of Linear Trend

Year (t)	Total Deposit (y)	t-2008 (x)	x^2	xy	Trend Values y=a+bx
2006	742	- 2	4	- 1484	685.60
2007	790	- 1	1	- 790	808.70
2008	839	0	0	0	931.80
2009	1,071	1	1	1071	1054.90
2010	1,217	2	4	2434	1178.00
	y=4659	x = 0	x^2=10	xy=1231	

Since, x = 0

$$a = \frac{x}{N} = \frac{4659}{5} = 931.80 \qquad b = \frac{xy}{x^2} = \frac{1231}{10} = 123.10$$

Substituting the values of 'a' and 'b' in equation (i), the least square total deposit trend line is given by,

$y = 931.80 + 123.10x$..... (ii)

Trend values of total deposit

Year	X	Trend Values
2011	3	1301.10
2012	4	1424.20
2013	5	1547.30
2014	6	1670.40
2015	7	1793.50

Appendix - F-II

Calculation of Loans & Advances Trend

Trend values of loans and advances of HBL

Let the linear trend equation between y and x be given by

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

Computation of Linear Trend

Year (t)	Loans & Advances (y)	t-2008 (x)	x^2	xy	Trend Values y=a+bx
2006	15,762	- 2	4	- 31,524	14,786
2007	17,794	- 1	1	-17,794	18,231
2008	20,180	0	0	0	21,676
2009	25,520	1	1	25,520	25,121
2010	29,124	2	4	58,248	28,566
	y=108380	x = 0	x^2=10	xy=34,450	

Since, x = 0

$$a = \frac{x}{N} = \frac{108380}{5} = 21,676$$

$$b = \frac{xy}{x^2} = \frac{34450}{10} = 3445$$

Substituting the values of 'a' and 'b' in equation (i), the least square total loans & advances line is given by,

$y = 21,676 + 3445x$..... (ii)

Trend values of loans & advances

Year	X	Trend Values
2011	3	32,011
2012	4	35,456
2013	5	38,901
2014	6	42,346
2015	7	45,791

Trend values of loans and advances of LFLC

Let the linear trend equation between y & x be given by.

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

Computation of Linear Trend

Year (t)	Loans & Advances (y)	t-2008 (x)	x^2	xy	Trend Values y=a+bx
2006	656	- 2	4	- 1312	587.20
2007	714	- 1	1	- 714	783.60
2008	966	0	0	0	980.00
2009	1,138	1	1	1138	1176.40
2010	1,426	2	4	2852	1372.80
	y=4,900	x = 0	x^2=10	xy=1964	

Since, x = 0

$$a = \frac{x}{N} = \frac{4900}{5} = 980$$

$$b = \frac{xy}{x^2} = \frac{1964}{10} = 196.40$$

Substituting the values of 'a' and 'b' in equation (i), the least square total loans & advances line is given by,

y = 980 + 196.40x..... (ii)

Trend values loans and advances

Year	X	Trend Values
2011	3	1569.20
2012	4	1765.60
2013	5	1962.00
2014	6	2158.40
2015	7	2354.80

Appendix - F-III

Calculation of Investment Trend

Trend values of investment of HBL

Let the linear trend equation between y and x be given by

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

Computation of Linear Trend

Year (t)	Investment (y)	t-2008 (x)	x^2	xy	Trend Values (y=a+bx)
2006	10,889	- 2	4	- 21,778	12,241.60
2007	11,823	- 1	1	- 11,823	11,441.60
2008	13,340	0	0	0	10641.60
2009	8,711	1	1	8,711	9841.60
2010	8,445	2	4	16,890	9041.60
	y=53,208	x = 0	x^2=10	xy=-8000	

Since, $x = 0$

$$a = \frac{x}{N} = \frac{53208}{5} = 10{,}641.60 \qquad b = \frac{xy}{x^2} = \frac{8000}{10} = -800$$

Substituting the values of 'a' and 'b' in equation (i), the least square investment trend line is given by,

$y = 10641.60 + (-800)$

Trend values of investment

Year	X	Trend Values
2011	3	8241.60
2012	4	7441.60
2013	5	6641.60
2014	6	5841.60
2015	7	5041.60

Trend values of investment of LFLC

Let the linear trend equation between y & x be given by.

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

Computation of Linear Trend

Year (t)	Investment (y)	t-2008 (x)	x^2	xy	Trend Values (y=a+bx)
2006	25	- 2	4	- 50	48.80
2007	66	- 1	1	- 66	49.10
2008	81	0	0	0	49.40
2009	31	1	1	31	49.70
2010	44	2	4	88	50.00
	y=247	x = 0	x^2=10	xy=3	

Since, x = 0

$$a = \frac{x}{N} = \frac{247}{5} = 49.40$$

$$b = \frac{xy}{x^2} = \frac{3}{10} = 0.30$$

Substituting the values of 'a' and 'b' in the equation, the least square investment trend line is given by,

$y = 49.40 + 0.30x$..... (ii)

Trend values of investment

Year	X	Trend Values
2011	3	50.30
2012	4	50.60
2013	5	50.90
2014	6	51.20
2015	7	51.50

Appendix - F-IV

Calculation of Net Profit Trend

Trend values of net profit of HBL

Let the linear trend equation between y and x be given by

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

Computation of Linear Trend

Year (t)	Net Profit (y)	t-2008 (x)	x^2	xy	Trend Values (y=a+bx)
2006	458	- 2	4	- 916	497.00
2007	492	- 1	1	- 492	533.30
2008	636	0	0	0	569.60
2009	753	1	1	753	505.90
2010	509	2	4	1018	642.20
	y=2848	x = 0	x^2=10	xy=363	

Since, $x = 0$

$$a = \frac{x}{N} = \frac{2848}{5} = 569.60$$

$$b = \frac{xy}{x^2} = \frac{363}{10} = 36.30$$

Substituting the values of 'a' and 'b' in equation the least square net profit line is given by,

$y = 569.60 + 36.30x$..... (ii)

Trend values of net profit

Year	X	Trend Values
2011	3	678.50
2012	4	714.80
2013	5	751.10
2014	6	787.40
2015	7	823.70

Trend values of net profit of LFLC

Let the linear trend equation between y & x be given by.

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

Computation of Linear Trend

Year (t)	Net Profit (y)	t-2008 (x)	x^2	xy	Trend Values (y=a+bx)
2006	3	- 2	4	- 6	11.00
2007	38	- 1	1	- 38	32.50
2008	63	0	0	0	54.00
2009	73	1	1	73	75.50
2010	93	2	4	186	97.00
	y=270	x = 0	x^2=10	xy=215	

Since, x = 0

$$a = \frac{x}{N} = \frac{270}{5} = 54$$

$$b = \frac{xy}{x^2} = \frac{215}{10} = 21.50$$

Substituting the values of 'a' and 'b' in the equation (i) the least square net profit line is given by, $y = 54 + 21.50x$..... (ii)

Trend values of net profit

Year	X	Trend Values
2011	3	118.50
2012	4	140.00
2013	5	161.50
2014	6	183.00
2015	7	204.50

Appendix – G-I

A glance of total deposits, total loans and advances and total investment of HBL

Amt. in NPR' 000

Year	Total Deposits	Total Loans and Advances	Total Investment
2006	26,490,852	15,761,977	10,889,031
2007	30,048,418	17,793,724	11,822,985
2008	31,842,789	20,179,613	13,340,177
2009	34,681,345	25,519,519	8,710,691
2010	37,611,202	29,123,755	8,444,910

Appendix – G-II

A glance of total deposits, total loans and advances and total investment of LFLC

Amt. in NPR' 000

Year	Total Deposits	Total Loans and Advances	Total Investment
2006	741,670	655,565	25,152
2007	789,770	713,660	65,823
2008	838,977	966,429	80,823
2009	1,071,291	1,137,785	30,823
2010	1,216,558	1,425,857	43,697

Appendix – H

Comparison of net profit between HBL and LFLC

Amt. in NPR' 000

Year	Net profit of HBL	Net profit of LFLC
2006	457,458	3,261
2007	491,823	37,916
2008	635,896	62,715
2009	752,835	73,122
2010	508,798	92,575