CHAPTER- I

INTRODUCTION

1.1 Background of the Study

Nepal is a least developed and land locked country situated between the two biggest and highly populated countries India and China. Therefore, Nepal is known as a buffer state. Economically, Nepal is dominated by these countries financial and investing activities. Nepal is one of the very few countries in the world in terms of rich and unique cultural heritage, manifested in its architecture, temples, sculptures, monuments etc. Aside from this, it is also richly gifted with natural resources like vast forests, many perennial rivers and minerals.

Despite of the above natural resources and attributes, Nepal is still a developing country characterized by high population growth rate, low per capita income and low rate of capital formation. Nepal remained in self-imposed isolation for more than a century until it saw the dawn of democracy in 1951. The Nepalese economy relies heavily on short-term domestic debt and highly concession foreign aid loans of long maturity. Many reasons are there for the slow pace of development such as landlocked position, misuse of resources, absence of economic infrastructure, political instability, poor economic policy and institutional weaknesses. For this to overcome, the process of capital accumulation among other perquisites should be enhanced.

As most of the labor forces are unemployed, it is necessary to transform the huge labor force in to industrial sector. Only few percentage of total population is involved in industrial sector and service sector. The economic development of nation is on initial stage. Nepal has adopted mixed and liberal economic policy with the implicit objective to help the state and the private sector. For the economic growth and development, government has now initiated various economic policies such as industrial policy, foreign investment policy, privatization policy and trade and transit policy.

Due to difficulties and lack of infrastructure development of financial sector, the growths of financial sector are badly affected. Domestic crisis create huge problem in development of financial sector in Nepal. Besides that the concept of borderless country took rapid motion in these days. Liberalization, globalization as well as privatization are most common and essential part of investment and other activities in financial sector of Nepal. Prior to the restoration of democracy, when the government has not liberalized its economic policy, there are only few numbers of industries in Nepal. Especially after restoration of the democracy, the concept of the liberalization policies has been incorporated as directive principal and state policies. The open market concept creates several opportunities and threats. Rapid development in information-technology sector is also milestone for increasing investment activities. Thus, competitive environment was formed in national market as well as international market. The liberalization policy attracts foreign investor as well as national investor to invest financial sector and commercial sector, which help to raise the life standard of people.

Capital accumulation plays an important role in accelerating the economic growth of a nation, which in turn is determined among other, by saving and investment propensities. However, the capacity to save in developing countries is quite low with a relative higher marginal propensity of consumption. As a result, such countries are badly entrapped into the vicious circle of poverty. Therefore, the basic problem for the developing countries is in raising the level of saving and thus investments.

The banking sector is largely responsible for collecting household saving in terms of different types of deposit and regulating them in the society by lending different sectors of economy. The different sector has now reached to the most remote areas of the country and has experienced a good deal in the growth of the economy. By lending their resources in the small-scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy.

Banking concept existed even in the ancient period when goldsmiths and the rich people used to issue the common people against the promised of safekeeping of their valuable items on the presentation of the receipt; the depositors would get bank their gold and valuables of the paying a small amount for safekeeping and saving.

Banking institutions are inevitable for the recourse mobilization and all round development of the country. It is necessary for economic development; it maintains economic confident of various segment and extend credit to the people. Bank and banking activities have prominent role in the development of our country. The pace of development of the country grew as bank and its activities gradually developed. The Nepalese financial sector is composed of banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) commercial banks development banks, micro credit development banks, finance companies. Other financial institutions comprise of the insurance companies, employees provident fund, citizens investment trust, co-cooperative financial institutions, non governmental organizations (NGOs) performing the limited banking activities postal saving offices and Nepal stock exchange (NEPSE). Nepal bank Limited and Rastriya Banijya Bank were the only commercial banks operating over the last three decades in Nepal before the opening of foreign joint venture banks. Today there are altogether 26 commercial banks operating in the Nepali financial market. Still many other commercial banks are in the process of opening in the market. Similarly, 58 Development Banks, 78 Finance Companies, 12 Micro Credit Development Banks are functioning in the country. There has been a tremendous growth in banking traction in terms of their length and breadth due to these commercial joint venture banks.

1.2 Lending Portfolio

Lending is regarded as the one of income generating sources in commercials banks. Lending is the credit provided by financial institutions to their client. Further, lending is regarded as the heart of the commercial banks in the sense that; it occupies large volume of transactions; it covers the main part of investment; the most of the investment activities based on lending; it is the main factor of the creating profitability; it is the main sources of creating profitability; it determines the profitability. It affects the overall economy of the country. It also affects on national economy to some extent. Since, it provides loan to corporation and industry, government. It is proved from very beginning that lending is the shareholder's wealth maximization derivative. Thus, effective lending portfolio management should seriously be considered by commercial banks.

The lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. With respect to performance, banks now use various measures to assess bank efficiency and related functions in the bank lending process. Traditionally, banks determined operating efficiency by using measures of bank profitability, such as return on equity, return on assets, and return on investment; also, banks used operational ratios, such as monetary output per staff member, and total operating expenses per unit of output.

Lending portfolio management is the system, which helps to manage lending effectively. In other words, lending management refers management of credit exposures arising from loans, corporate bonds, and credit derivatives. Lending exposures are the main source of investment in commercial banks and return on such investment is supposed to be main source of income.

1.3 Introduction of Selected Banks

1.3.1 Himalayan Bank Limited (HBL)

Himalayan Bank Limited (HBL) is the largest private sector commercial bank of Nepal in terms of deposit base, loan portfolio and capital base. In July 2003 and again in July 2005 the Bankers Almanac ranked HBL as country's no. 1 bank. For the year 2005, it was ranked at 2368 in the worldwide ratings, which are fifty positions ahead of its nearest competitor in the country (www.himalayanbank.com).

Himalayan Bank Limited was incorporated in 1992 by a few distinguished business personalities of Nepal in partnership with employees Provident Fund and Habib Bank Limited, one of the largest commercial bank of Pakistan. Banking operation commenced from January 1993. It is the first commercial banking services; the bank also offers industrial and merchant banking services.

Himalayan Bank has always been committed to providing quality service to its valued customers with a personal touch. All customers are treated with utmost courtesy as valued clients. The bank, wherever possible, offers tailor made facilities to its clients, based on the unique needs and requirements of different clients. To further extend the reliable and efficient series to its valued customers, Himalayan bank has adopted the latest banking technology. This has not only helped the bank to improve its service level but also has prepared the bank for future adaptation to new technology. The bank already offers unique services such as SMS banking and internet banking to customers and will be introducing more services like these in the near future.

Himalayan Bank has access to the worldwide correspondent network of Habib Bank for fund transfer. Letter of credit or any banks services.

Share Capital of Himalayan Bank Limited as at July 15, 2008.

Authorized Capital	Rs 2,000,000,000
Issued Capital	Rs. 1,013,512,500
Paid-Up Capital	Rs. 1,013,512,500

1.3.2 Nabil Bank Limited (NABIL)

Authorized Nabil Bank Limited, the first joint venture bank of Nepal, started operations in July 1984 as the name of Nepal Arab Bank ltd under the company act. Dubai Bank Ltd was the initial foreign joint venture partner of this bank with 50% equity investment. The shares owned by DBL were transferred to Emirates Bank International ltd (EBIL), Dubai. Later EBIL sold its entire holding go National Bank ltd, Bangladesh (NBLB). Hence 50% of equity shares of Nabil Bank ltd are held by NBLB and out of remaining, financial institutions have taken 20% and 30% were issued to general public of Nepal. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 28 points of representation across the nation and over 170 reputed correspondent banks across the globe.

Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Highly qualified and experienced management team manages operations of the bank, including day-to-day operations and risk management. Bank is fully equipped with modern technology, which includes ATM's, credit cards, state-of-art world-renowned software from Infosys Technologies System, Bangalore, India, and Internet banking system and Tele-banking system.

Share Capital of Nabil Bank as at 15 July 2008.

Authorized Capital	Rs. 1,600,000,000
Issued Capital	Rs. 689,216,000
Paid-Up Capital	Rs. 689,216,000

1.4 Focus of the Study

Financial institutions are currently viewed as catalyst in the process of economic growth of country. A key factor in the development of an economy is the mobilization of the domestic resources. As intermediaries, the financial institution helps the process of resources mobilization. The importance of financial institutions in the economy has of late growth to an enormous extent. The government in turn is required to regulate their activities so that the financial policies are implemented as per the requirement of the country. Policy such as lending to priority and deprived sectors, lending to the educated unemployed people, lending for creation of entrepreneurs in the society are certain examples which the government in developing economy try to implement with the help of financial institutions.

With the growing activities of bank after the NBL and RBB, new banking policy was introduced for establishment of international investment banks and joint venture banks in foreign investment with Nepalese co-operation. Its objective was to create healthy competitive banking system and provide cheap banking facilities to people.

Commercial banks are the heart of financial system. They hold the deposits on many persons, government institutions and business units. They make funds available through their lending and investing activities to borrowing; individuals, business firm and government establishments. In doing so, they assist both the flow of goods and services form the products to consumers and the financial activities of the government. These facts show the commercial banking system of nation is important to the functioning of the economy.

Bank creates funds form its client to saving and lends the some to needing person or business institutions in terms of loan, advances and investment. So, proper financial decision making is more important in banking transaction for its efficiency and profitability. Most of the financial decision making are concerned with lending policy and lending management. It plays the vital role in the business succession, so efficient lending management is needed. This study deals with the lending position, non-performing loan, lending portfolio management and relation of lending in profitability of the selected bank.

1.5 Statement of the Problems

Capital resource is the prime source of the economic development of the country. Economic development of a country succeeds only when the development of the capital formation mechanism exists. The major cause of this chronic problem is the lack of economic development or the slow rate of the national economic growth. With the increased sophistication and liberalization of financial markets, this has made the problem of debt management one of the most important issues in economic policy. More than 60% of the domestic debt have maturities of one year or shorter and less than 9% of domestic debt has maturities of 10 years or longer.

Banking, especially the commercial banking sectors can flourish the capital resources in the country. Commercial banks collect or deposit necessary capital from the people in the different parts of the country. They powerfully help in the creation of the capital resources for the national investment. Effective utilization of capital is depends up on creditability position of the bank.

Commercial banks suffered from various types of problem such non-performing loan. They do not mobilize their deposit properly in terms of development of the nation. It is no debate that high profitable institutions can easily get their goals and can serve the society. To improve the profitability situation of the bank, it is necessary to establish the higher creditability position of the bank. Credit is the most effective area in commercial bank. While granting the loan, banks which do not analyze the documents submitted by the borrowers, are resulting increasing non-performing loan. Thus lending management is considered as the main issues is Nepalese banking sector. Commercial bank's investment has been found to be have lower productive due to the lack of supervision regarding whether there is a proper utilization of their investment or not.

Lending management concept has appeared as a major research gap in Nepalese commercial banks. There is lack of scientific research that could identify the issues of Lending management in commercial banks. In this regard, the performance of the commercial banks is to be analyzed in terms of lending. Some research questions regarding to the credit practices, liquidity position, economic and industrial environment, management quality are considered as a clear evident in present situation.

1. Is the lending practices adopted by sampled commercial banks in good position?
2. What is the lending efficiency of the sampled Nepalese commercial banks?
3. Is credit position of bank influences the profitability?
4. Does internal performance caused for increase in non-performing loan?
5. How does the commercial bank manage lending portfolio?

1.6 Objectives of the Study

This research study entitled "Lending Portfolio Analysis of Commercial Banks" covers following objectives.

- To analyze the lending portfolio of selected banks
- To examine efficiency of lending of selected banks
- To examine the impact of deposit, loan and non-performing loan on profit of selected banks

1.7 Limitations of the Study

The main limitations of this study are presented below.

1. The findings of this study depend upon the data and information of a Seven Years time horizon.
2. This study concentrates only on the portfolio of lending, impact of deposit, loan and non performing loan in profit. Also, data and information of the sampled commercial banks only are used by the researcher.
3. The research study based upon the secondary data and information mostly. Hence, the validity of results depends upon the accuracy of data supplied.

1.8 Organization of the Study

The present study is organized in such a way that the stated objectives can easily be fulfilled. The structure of the study will try to analyze the study in a systematic way. The study report is designed in five chapters which are as follows.

Chapter-I: Introduction

This chapter includes the basic concept and background of the study. It has served orientation for readers to know about the basic information of research area, various problem of the study, objectives of the study, significance of the study and limitation of the study.

Chapter-II: Review of the Literature

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

Chapter-III: Research Methodology

Research methodology refers to the various steps to adopt by researcher in studying a problem with certain objectives in view. It incorporates various source of data related with the study and various tools techniques such as statistical and financial employed for presenting the data.

Chapter-IV: Presentation and Analysis of Data

This chapter is the main part of the research. This chapter analyses the data related with study and presents the finding of the study and also comments briefly on them.

Chapter-V: Summary, Conclusion and Recommendation

This chapter deals with the summary and conclusion. It also recommend to the concerned organization for the better improvement.

CHAPTER-II
REVIEW OF LITERATURE

Several research works have been conducted in various aspect of commercial banks for instance financial performance, investment policy, resource mobilization compliance of Nepal Rastra Bank directives by banks, risk and return analysis etc. This chapter focuses on reviewing prior researches, books and journals so that the theoretical framework can be built.

2.1 Conceptual Review

2.1.1 Meaning and Function of the Commercial Banks

Commercial banks are those banks that pool together the saving of the community and arrange for their productive use. They supply the financial needs of modern business by various means. They accept deposits from the public on condition that they are repayable on demand or on short notice. In other words, a bank is a financial intermediary, a dealer in loans and in debts. It borrows from one set of people and lends to hiring money and hiring out again. Some banks draw their capital mainly from their shareholders, other's mainly from depositors. Some lend mainly to industry, others mainly to government, central and local. Some deal in short loans, borrowings and lending for short periods, others deal in long periods. However the business of individual bank may differ, their essential function is to gather saving together and lend out what they collect. A bank is a business organization that receives and holds deposits of funds others and makes loans or extends credits and transfer funds by written order of depositors. A commercial banker is a dealer in money and a substitute for money, such as cheque or bill of exchange .He also provides a variety of financial services.

The primary economic function of the commercial bank is to hold demand deposits and to honor cheques drawn upon them. In short, to provide us, the economies, with the most important component of the money supply.

Commercial bank plays an important role in directing affairs of the economy in various ways. The operations of commercial banks record the economic pulse of the economy. The size and composition of their transaction mirror the economic happenings in the country. For instance, the mass failure of commercial banks during 1980 has reflected the phenomenon of several global depressions around the world. Commercial banks have played a vital role in giving direction financing the requirements of trade and industry in the country. In a planned economy, bank make the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector, joint sector or in the private sector or combination of the organization or another. They endeavor to promote enterprise development by investing loans and sometimes thorough the investment in shares and debentures. Therefore, they support the country's overall economic development process by financing in various ways.

In the Nepalese context, the Nepal Commercial Bank Act 2031 B.S**.** defines a commercial bank as one, which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions.

As an outcome of, the economic liberalization policy, government of Nepal (GON) has put its face in the international arena so many investment opportunities are evolved within the nation that foster integrated and speedily development of the nation is possible, only when competitive banking services reach the nook sand corners of the nation. Commercial banks occupy an important place in the framework of every economy by providing required capital for the development of industry trade and business out of the saving collected as deposits, besides, commercial in view of facilitating the economic & social life. Banks are the essential part of the business activities, which are established to safeguard people's money and utilizing the money in making loans and investments. With respect to Nepal, there are several commercial banks operating in various regions especially in the kingdom with foreign collaboration or joint investment.

The American Institute of Banking has laid down the four major functions of the commercial banks such as receiving and handling deposit, handling payments for its clients, making loans and investments and creating money by extension of credit. Nepal Commercial Bank Act 2031 BS has emphasized the major functions of commercial bank which are mentioned below.

- They accept custody of funds with or without interest and open fixed accounts and saving accounts in the name depositors.
- They make available credit in the form of loan, overdraft and co-financing to the industry, commerce, agriculture, expert and service.
- They help to issue shares and debentures of any company or any other corporate body, guarantee or underwrite such shares or debentures and undertake any agency business but do not become a managing agent.
- Conduct transactions in bonds, provisionary notes or bills of exchange, foreign exchange relating to commerce or corporation.
- Collection, sale and purchase of bills, collection and dissemination of trade information, provide service of opening and making payment of letter of credit, help industry and business by providing bank guarantee.
- They issue letter of credit, draft and traveler's cheque. They remit or transit find to different place within or outside the nation. They purchase, sell or accept the securities of government. (Nepal Commercial Bank Act 2031 B.S)

2.1.2 Meaning and Definition of Lending

Commercial bank as of its primary function makes lending activity. It is apparent that loan is defined as a thing is lent, esp. a sum of money. Likewise, debt means a sum of money owed to somebody. However in financial terms loan or debt means principal or interest availed to the borrowers against the security. Debt means money that owes or will lend to individual or person (Ghimire, 2005:113).

Further the term loan is defined as a lending. Delivery by one party and receipt by another party, a sum of money upon agreement expressed or implied, to repay it with or with out interest. Any thing furnished for temporary use to a person at his request, on that condition it shall be returned or its use. Therefore, loan includes-

- The creation of debt by lender's payment of or agreement to pay money to the debtor or to a third party for him account of the debtor
- The creation of debt by a credit to an account with the lender upon which the debtor is entitled to draw immediately
- The creation of debt pursuant to a lender credit card or similar arrangement
- The forbearance of debt arising from a loan: Uniform consumer credit code: 3-106.

With respect to alternative view, debt means 'principal and interest' provided to debtor by banks or financial institutions, with the pledge of immovable or movable property or other securities or guarantee or without guarantee and the word also means over dues of the transaction beyond balance or fees, commission and interest incurred in that relation.

The supreme court of India has defined the debt during the decision of the case United Bank of India vs. DRT (1999 ISJ Banking). Sudhir Gupta stated that in the case of his hand, there cannot be any dispute that the expression 'debt' has to be given the widest amplitude to mean any ability which is alleged as dues from any person by bank during the course of any business activities undertaken by bank either in cash of otherwise, whether secured or unsecured, whether payable under a degree of order of any court or otherwise and legally recoverable on the application (Gupta, 2002:2).

2.1.3 Loan Disbursement and Classification

One of the main functions of commercial bank is to create credit from its borrowed fund. Loan and advances are the assets coming from such activities. Loans and advances dominate the asset side of the balance sheet of any bank and also constitute the primary sources of income to the banks. They are also the least liquid of the bank's entire asset. Loans and advances may take different form and are allowed against various types of securities. Loans, overdrafts, discounting of bills of exchange etc are some of the forms of the bank lending. Granting loans and advances always carry a certain degree of risk. This loan and advances are also regarded as risky assets of banks.

Loan classification refers to categories or grade based on the perceived risk and other relevant characteristics of loan and as per guideline of central bank. The process of continual review and classification of loans enables banks monitor the quality of their loan portfolios and when necessary to take remedial actions to counter deterioration in the credit quality in this portfolios. In most of the countries, a number of days a past due payments represents a minimum condition for loan classification purposes. However some criteria which exhibit forward looking features also considered. In the context of Nepal, as per guidelines of NRB loans are classified into four categories namely pass, substandard, doubtful and loss.

Pass Category: All loans and advances the principal of which are not past due or past due for a period up to three months. Only loans under pass category are termed as performing loan.

Substandard Category: All loans and advances the principal of which are past due for a period of more than three months and up to six months.

Doubtful Category: All loans and advances the principal of which are past due for a period more than six months and up to one year.

Loss Category: All loans and advances the principal of which are past due for a period of more than one year.

Performing loans are these loans that repay principal and interest timely to the bank from the cash flow it generates. In the context of Nepal, the loans classified as a pass category is termed as performing loan.

These are the loans that do not repay principal and interest timely to the bank. Non-performing loan (NPL) has many different meanings which vary from the country to country. In some countries non- performing loan means the loan impaired. In some countries it means that the payments are past due, but there are significant differences among countries how many days a payment period should be in arrears before past due status is triggered. Nevertheless, a rather common feature of non-performing loan appears to be that a payment of more than 90 days past due. In Nepal also, if the loan is past due for over 3 months it is non-performing loan. Hence the loans falling under substandard, doubtful and loss categories are regarded as non-performing loan (Unified NEB directives 2062).

2.1.4 Loan Loss Provision

Loan loss provision is the accumulated amount or fund that is proved as a safeguard to cover possible losses upon classification of risk inherited by individual loans. There is risk inherent in every loan. Hence, provision is made as cushion against possible losses and to reflect the true picture of the bank's asset. There is practice of showing net loan (total loans- loan loss provision) in financial statements. The amount required for provisioning depends upon the level of non-performing asset and their quality. High amount of provision is an indication of the bank's credit portfolio needs serious attention. One percent provision of total credit is an ideal position as it is the minimum requirement for all good loans. In Nepal 1%, 25%, 50% and 100% provision are made for pass, substandard, doubtful loan and losses respectively (Unified NEB directives 2062).

2.1.5 Lending Process

Commercial bank follows several steps to disburse loan to the borrowers. The lending policies might be different form one bank to another. In general, these steps can be pointed out of follows.

Application: the needy are required to submit an application to the bank along with required documents. The documents required for credit proposal appraisal and processing by banks are as follows:

- Loan application
- Citizenship certificate of applicant
- Firm/ company registration certificate (if self employed)
- Income tax registration certificate (if self employed)

- Authenticated partnership deed in case of partnership firm, and memorandum and article of association in case of company
- Attested copy of board resolution in case of company resolved to avail loan and banking facilities form bank against the pledge, hypothecation, and mortgage of fixed property owned by company or property of third party named.
- Letter of authority authorizing to sign loan deed and other relevant document paper which are deemed necessary while dealing with bank on behalf of firm/company.
- Feasibility report/scheme (for new project)

Lending Appraisal and Possessing

Basically, appraisal of loan proposal is processing for the analysis of the variability of the scheme proposed. It also helps to assets the actual financial assistance needed to operate the scheme.

Commercial bank carries out loan appraisal on the basis of past performance, future forecast and information available form the documents submitted by aspirant borrowers.

The bank tries to ascertain the following during loan processing:

- The cost of estimate us examined so that the appropriate estimate can be accepted. Under and over estimates are rejected. Similarly, the specification of machinery should be proper.
- Working capital projection has to be reasonable as compared to past performance and on the basis of target for future expansion.
- The return rates should be adequate like return on investment (ROI), internal rate of return (IRR) and debt service coverage ratio (DSCR).
- The capacity, competency, integrity and commitment of romoters/ partners/ proprietors/ directors/personnel should be intact.
- SWOT (strength, weakness, opportunity and threat) analysis of the proposed project must give reasonable assurance.

2.1.6 Portfolio Analysis

In financial leverage, portfolio could be defined as the composite mixed of ownership to financial assets/investments in which a particular investor wishes to invest. Thus, portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. It helps an investor to make optimal investment decision minimizing overall risk and maximizing overall return. Portfolio theory was first developed by Markowitz in connection with the investment in stock market securities. The ground theory was that, if the correlation between the assets return is not perfectively positive, investing in two assets can minimize risk.

Portfolio Management

In general, portfolio management is the process of selecting a combination of investment alternatives that provide the investor a maximum attainable return for a given level of risk or a minimum risk for a given level of return. Portfolio management can also be taken as the management of risk and return. It aims to determine an appropriate mix of investments that attains optimum level of risk and return depending upon the attitude of investor.

"A portfolio simply represents the practice among investors of having their funds in more than one asset. The combination of investment assets is called a portfolio" Weston and Brigham, 1983:274).

"Portfolio construction involves identifying those specific assets in which to invest as well as determining the proportions of the investors wealth to put in to each one" (Sharpe, Alexander and Bailey, 2000:86).

The term 'portfolio' simply means collection of investments. For an investor through the stock exchange the portfolio will be a collection of shareholders in different companies. For a property investor, portfolio will be a collection of buildings. To a financial manager within an individual company, portfolio will be a collection of real capital projects. It will be apparent that the actual nature of the components of a portfolio depends on the population of opportunities from which the selection has been made. Portfolio management of banks' loan investments basically are the allocation of funds to different types of consumption and investment loans having different degrees of risk and varying rates of return in such a way that balances the conflicting goal of maximizing return and minimizing risk. The process of managing banks’ loan investments considers a number of relevant and influencing factors such as the availability of funds, liquidity required, central bank’s rules and regulations that abide banks, risk associated with the respective industries, and the expected rate of return on respective loan sanctioned sectors. In addition, the banks should carefully examine the macro economic indicators such as interest rates, inflation, aggregate expected money multiplier, national income; saving ratio etc. effective management of banks’ loan investments can lead the banks into the success as loan investments constitute the major portion of a traditional bank’s total assets.

Lending is the essence of commercial banking; consequently the formulation and implementation of sound lending policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit. Before formulating a lending policy, many factors have to be taken into consideration because banks are not the real owners of deposits but rather the custodians of money.

Crosse has further pointed out the various factors to be considered before planning for sound lending policy. The factors include community’s need of money, determining the size of the loan portfolio and the character of loan payment, purpose and protection. Other factors for consideration for sound lending policy include credit worthiness, assets pledged to secure borrowing, interest rate policy etc. Crosse strictly points out that the lending policy must be well spread. It should be of short-term character, repayable on demand, profitable and it should be with adequate securities (Crosse, 1963:10-25).

Loans are the most important asset held by banks and bank lending provides the bulk of bank income lending is not important to the banks only, it is equally important to the community the banks serve. That's why loan policies must be worked out carefully after considering many factors (Reed, Cotter, Gill and Smith,1980:75).

The Committee prepared this report in1975; however, these recommendations still hold a great significance in this sector of credit appraisal and lending. Breaking away from the traditional methods of credit appraisal, the system proposed by the Committee enjoined upon the bank to assess the need based credit of the borrower on a rational basis. To ensure proper end-use of bank credit by keeping a close watch on the borrower's business, to improve the financial discipline of the borrower and to develop healthy banker-borrower relationship.

The Committee examined the existing system of the lending and recommended the credit needs of the borrowers to be assessed on the basis of their business plans. It further recommended that the bank credit should only be supplementary to the borrowers' resources and not in replacement of them without having the bank finance one hundred percentage of the borrowers' requirements. The borrowers are requires to hold inventory and receivable according to the norms prescribed by the central bank from time to time and credits are to be made available in different components only, depending upon the nature of various current assets (Bhattacharya, 1998: 15).

It is such vehicle into which funds can be placed with the expectation that will preserve or inverse in a value and generates positives results. A banker seeks optimum combination of earning, liquidity and safety while formulating investment policy (Gitman & Jochnk, 1972:1).

The investment (credit) policies of banks are conditioned to great extant by the national policy framework. Every banker has to apply his own judgment for arriving at a credit decision, keeping his banker's credit policy also in mind (Singh and Singh, 1983:57).

The need to borrow is greater today than ever before, partly because of the dependence of people upon complex money and credit economy that is subject to many uncertainties and partly as a result of desire for a constantly rising standard of living.

He has also expressed his view on loan collection. “The weaker the credit granting function is, the greater the task on the collection end of business”, writes Beckman. He says that collection functions arise only because credit has been used. The credit granting and collection functions are not only interdependent but also interwoven. The more lenient the deliberate policy of risk selection, the more formidable is the collection task and the stricter the granting of credit, the less the burden on the collection function (Beckman, 1962:32).

Chaplin & Ehasset (1963) describe collection as the final leg of the credit journey. In their book “Credit and Collection Principles and Practice” describes that an effective system will embody prompt action and follow up at regular intervals. A good collection will permit the assistants in the collection department to do much of the routine work without consulting the collection manager. System in the collection department will includes some methods of following up accounts, sending collection notices, and typing letters converting the early stages of collection. Results will be obtained more or less automatically, leaving the collection manager free to direct the action to be taken upon cases that are more difficult.

An ideal advance as one which is granted to a reliable customer for an approves purpose in which the customer has adequate experience, safe in the knowledge that the money will be used to advantage. Repayment will make within a reasonable period from trading receipt or known maturities due on or about given dates (Mather, 1984:114).

2.2 Review of Global Literature

The article of Patrick F. Reidy (2005) provides an overview of the credit portfolio management function, structural alternatives, the skill necessary for its effective implementation, and a final word on training and compensation. The focus is on corporate credit portfolios, as these often present the largest concentration challenges though they can be easily modified.

Modern portfolio management of bank assets has fundamentally changed the requirements for individuals using this technique: their backgrounds, their training, and their skills on using available resources. While traditional credit training remains necessary, today's portfolio manager augments this background with knowledge of early-warning systems, alternative structures to better set risk/return parameters, and more.

Traditional training focused on the individual loan. Traditional credit training focused on the analysis of a firm's management, operations and financial structure as the basis for determining a borrower's creditworthiness; now training programs incorporate not only these techniques, but also that elusive element called a bank's credit future.

In essence a bank's credit culture was a serious of written and unwritten rule about which types of customers, industries and credit profiles were acceptable. This culture ultimately dictated the structure and composition the bank's total portfolio.

Protection measures against portfolio losses focused on loan loss reserves based on moving-average formulas. Concentration risk was to be avoided, but there were always those special customers for whom exceptions could be made. If the formulas were correct, then overall expected losses in the portfolio would be covered by reserves. But those formulas and expectations were not always so accommodative. As a result, certain concentrations would invariably lead to extraordinary, or incorrect, losses that were charged income in the previous year of their income.

Portfolio management looks at the impact of loans individually, collectively, and comparatively. Modern portfolio management techniques have supplemented these unwritten rules with portfolio analysis and policies that establish limits on exposure by country, by obligor, by industry, and so on. These limits are derived form a specific focus on the technical aspects of this asset class segmentation of credit product and an analysis of the effect of combining credits onto portfolios. Credit portfolios can now be evaluated on the basis of fundamental as well as quantitative portfolio analysis. (This is now being further institutionalized in terms of capital as defined in the updated in the updated Basel Capital Accords).

Functionally, credit is now segmented into four parts.

- Origination and determination of the required level of customer commitment: The sales/relationship function in credit portfolio management is often separate from the analysis/underwriting function. This allows for an efficient use of resources for client development as well as analytical discipline and consistency. The relationship manager determines the commitment level that will maximize relationship income.

- Fundamental analysis of the individual credit: the underwriting function in credit portfolio management is charged with the more traditional responsibility of individual credit analysis and monitoring. But this function is being driven more and more toward a specialization based on industry, so that the full benefits of analyzing alternative borrowers within an industry can be achieved. The more specialized structure enables credit portfolio management (CPM) to provide key value-added analysis to relationship and product managers in complex customer support for example, merger and acquisition analysis. It also provides for a centralized, efficient use of analytical resources.

- Portfolio monitoring: Many more tools and information resources exist today than available in the past for portfolio monitoring. For examples, institutions now set various portfolio limits to shape the structure of the desired portfolio. Early-warning processes to portfolio deterioration have become an integral part of credit risk management. For large corporate portfolios, Merton based models relate information inherent in the equity markets to a firm’s debt level. Bind spreads and credit derivative premiums provide a forward-looking credit view form the market that can be compared with a bank’s own credit view.

- The role of credit authorities: The credit approval function determines the desired exposure level for the institution's books within the context of pre-established limits by obligor and industry. As a result, credit approval manages expected loss and allocates capital to desirable transactions. CPM, as separate form credit approval, optimizes the use capital through alterations to the portfolio's profile. (Reidy, 2005:8)

In the article by Paul Van Mass (2002) head of the credit products Europe, Bank of America, title *"Active loan Portfolio Management Through the use if Credit Derivatives"* has to give the reader a brief overview of common derivatives the size and scope of their markets and their role on structured credit products. This case study uses as a reference a current deal that Bank of America has structured using credit derivatives. In his study researcher shows that credit derivatives market has grown and it continuing to grow at far greater rate.

Applying Credit Derivatives in Loan Portfolio Management

Improved risk measurement systems have enabled banks to isolate specific components of portfolio risks. The credit derivative market has developed tools to effectively manage these specific risks. Loan portfolio management has driven a convergence among credit derivative and asset securitization market activity. This convergence has led to an array of solutions of loan portfolio management.

Researcher concluded that credit derivatives markets are still relatively new and the market is set to continue to grow rapidly in the next few years. An increased focus and better credit derivative valuation models will continue to exacerbate this growth. The existence of credit derivatives and their increasing use in loan portfolio management is exciting. Moreover, structure will seek to find new applications for credit derivatives, which help loan providers, dissect and identify the credit exposure they desire and transfer unwanted exposure to another party. The prospects for the further use of credit derivatives and the increase in structures in which they will feature deserve a watchful eye (Paul Van Mass, 2002:47).

Barbara and Sotiris (2001) in the article title *"Service Failures and Service Recovery in Retail Banking the Customers' Perspective"*, they focus on an empirical investigation of service failures and service recovery in retail banking. Different types of failures and recovery strategies used by Greek banks to them were identified using the critical incident technique.

The importance and benefits of providing service quality are well documented in the academic literature, and business participations strive to design and implements programs to ensure that the customer is satisfied with his/her encounters with a service firm and, in turn, with various dimensions of service quality. However, quality discrepancies and shortfalls are likely to occur, especially when human input is largely responsible for the "Production" and delivery of the offering. The problem that arises for organizations are what happens when a service shortfall occurs; how can they recover form service failure?

In the article, Lin Peter Wei-Shong, Mei Albert Kuo-Chung (2006) *"The Internal Performance Measures of Bank Lending: A Value-Added Approach"* define the lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. Banks are learning to review their risk portfolios using the criteria laid down by Basel II. Greenspan has indicated that Basel's goal is to induce bankers to improve their risk management capability, including how the institutions price products, reserve for loss, and control their operations. This research is in line with the purpose of Basel II, i.e. to reduce a bank's operational risk during the lending process through a better monitoring of the employees in the lending department.

According to them, with respect to performance, banks now use various measures to assess bank efficiency and related functions in the bank lending process. Traditionally, banks determined operating efficiency by using measures of bank profitability, such as return on equity, return on assets, and return on investment; also, banks used operational ratios, such as monetary output per staff member, and total operating expenses per unit of output.

Banks adopted data envelopment analysis (DEA) in the 1990s as the principal method for assessing bank efficiency. DEA is a linear-programming method initially developed by Charnes et al. (1978) to measure the comparative performance of homogeneous organizations. The objective of DEA was to build an efficiency frontier of inputs and outputs, where production is maximized under fixed costs or costs are minimized under restricted production.

In this article they found that using final measures as the primary tools to evaluate lending performance, however, may result in the following problems:

- Final measures used to evaluate final outputs of the lending process cannot predict in advance whether a lending operation may become a problem loan. That is, the final measures cannot reduce the operational risk of lending in advance.
- In general, the period of lending will be long term – a minimum of three or five years. Performance measures of the lending should concentrate on the quality rather than the quantity of the loan. Therefore, when using final measures as indicators of evaluating loan performance, quarterly or yearly measures are not incompatible with regular performance measures.
- A borrower may pay in accordance with the bank's requirements for one period, but in the next period, he or she can violate or breach the agreement. The regular loan performance measure emphasizes cash flow in, but neglects the quality of each lending process, leading to a possibly biased performance measure.

To resolve the problems that can occur when using final measures as performance indicators, we should choose internal performance measures of bank lending activities as the main analytical core for our study for various reasons. First, the internal measures used can evaluate internal outputs of the lending process. Therefore, these measures can prevent problems loans from occurring in the future. Second, the internal measures can be compatible with a bank's regular performance quarterly or yearly measures. Third, the internal measures are based on quality not quantity, and a quality-based measure can prevent a possible bias in measuring banking loan performance.

Analytical Structure and Value-Added Analysis

This research indicates the importance of using internal measures to evaluate lending performance and resolve any problems derived from using final measures. The main purpose is to monitor and access the lending performance accurately and reduce probability of overdue loans and bad loans.

Before constructing appropriate internal measures, we utilize the concept of a value-added approach to analyze the process of lending activities, which are as follows.

1. Analyzing process of lending activities
2. Finding outputs of process of lending activities
3. Finding internal measures of output of lending activities
4. Finding internal sub-measures to improve the correctness of Capacity and Condition
5. Improving performance of banking loan

Then we find proper outputs of each lending activity and construct internal measures of outputs for those lending activities. Among these internal measures, the analysis of a borrower's capacity and condition is the key factor to estimate the probability of the borrower's ability to repay the loan and interest in the future. To improve loan performance, this research builds on internal sub-measures to monitor employees in the lending department.

The major benefit of using an internal measure to monitor the output quality of the employees in a lending department is a reduction in the likelihood of employee moral hazard behaviors. This reduction in turn would ease the lending operational risk, one of the main purposes of Basel II. To cope with employee fraud, a monitoring system of double checks from upper level managers about the rightness of any loan is a must. However, the asymmetric information between senior manager and the employee in a lending department about the employee’s wrong doing always will exist. To effectively use local knowledge about possible fraud from a particular employee, assigning loan decision rights to teams might effectively prevent individual fraud. The final decision for a loan should be made through consensus or some type of voting mechanism among any team members who have participated in the evaluation process for the loan. Further study regarding team decision as well as the separation of decision management and control of lending inside a bank organization might be two of the directions future research can take regarding the prevention of employee fraud (Lin Peter Wei-Shong, Mei Albert Kuo-Chung, 2006:2).

2.3 Review of National Literature

Nepal Rastra Bank (NRB) has issued directives to all commercial banks and financial institutions ensuring transparency during loan disbursement. As per provision, all commercial banks as well as financial institutions are now required to disclose the name of loan defaulters in every six months. Until now there was no such legal system of disclosing the loan defaulter’s name. The new directives have also barred the financial institutions from lending any amount to the blacklisted defaulter and his family members. The Credit Information Bureau (CIB) can blacklist the firm, company or clear the debt within the stipulated period. As per the set criteria for blacklisting, the CIB would monitor those individuals and companies that have the principle loans of above Rs. 1 million. If the creditor fails to clear the amount within time, or is found mission the loans among others, the creditor can be blacklisted (Central bank tightens blacklisting procedures).

Due to slowdown in the world economy and deteriorating law and order situation of the country, many sectors if the economy is already sick. When any sector of economy catches cold, bank start sneezing. Form this perspective, the banking industry as a whole is not trust. Incase of investors having lower income, portfolio management may be limited to small saving income. But the other hand, portfolio management means to invest funds in various schemes of mutual funds like deposits, shares and debentures for the investors with surplus income. Therefore, portfolio management becomes very important for both an individuals as well as institutional investors. Large investors would like to select the best mix of investment assets (Shrestha, 2003:15).

The investor or whether banks, financial institutions, individuals, private or government sector, must not took the proposal by making decision without having adequate judgment because sometimes they perform out of norms, related studies, policies and techniques. A project appraisal will best viable only if it has accessed through conscious analysis as well as through investment decisions to make its macro and micro level viability effective (Lamichhane "Forty-Six Years of NRB).

In the article by **Chhetri**, title *"Non Performing Assets: A need for Rationalization"* the writer has attempted to provide connation of the term NPA and its potential sources, implication of NPA in financial sector in the South East Asian Region. He had also given possible measures to contain NPA. Loans and advances of financial institutions are meant to be serviced either part of principal of the interest of the amount borrowed on stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loan becomes non-performing asset. The book of the account with lending institution should be effectively operated by means of real transaction effected on the part of the debtor in order to remain loan performing.

As stated by the writer, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been arrear for at least 6 months. Similarly, it is after three months, in India. Loans thus defaulted are classified into different categories having their differing implication on the asset management of financial institution. He also stated that NPA are classified according to international practice into three categories namely substandard, doubtful and loss depending up on the temporal position of loan default. Thus the degree of NPA assets depends solely on the length of time the asset has been in the form of none obliged by the loaner. The more time it has elapsed the worse condition of the asset is being perceived and such assets are treated accordingly. As per Chhetri's view, failure of business for which loan was used, defective and below standard credit appraisal system credit program sponsored by government, slowdown in economy recession, diversion of fund is some of the factors leading to accumulation of NPAs.

He said that there is serious implication of NPAs, on financial institution. He further added that the liability of credit institution dies not limit to the amount declared as NPA but extend to extra amount that required for provisioning depends upon the level of NPAs and their quality. As per his view, rising level of NPA create a psyche of worse environment especially in the financial sector. He mentioned that by reviewing the activities of the financial institution like waving interest, rescheduling the loan, writing off the loan, appointing private recovery agent, taking help of tribunals and law of land etc NPA can be reduced.

Finally he concluded that financial institutions are beset with the burden of mounting level of NPAs in developing countries. Such assets debar income flow of the financial institution while claiming additional resources in the form of provisioning thereby hindering gainful investment. Rising level of NPAs cannot be taken as stimulus but the vigilance demanded to solve the problem like this, eventually will generate vigor to gear up the banking and financial activities in more active way contributing to energizing growth.

Shrestha (2055), has given a short foretaste on the *“Portfolio Management in Commercial Bank, Theory and Practice”*. Shrestha has highlighted the following issues in his article.

The portfolio management becomes very important for both individuals as well as institutional investors. Investors would like to select a best mix of investment assets 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.

- Certain capital gain.
- Maximum tax concession.
- Flexible investment.
- Economic, efficient and effective investment mix.

In view of above aspects, following strategies are 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 (making investment in different sectors).
- Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower of return but added objectives of wealth maximization.

However, Shrestha also presented the following approaches to be adopted for designing a good portfolio and its investment:

- To find out the invisible 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 securities depending upon the attitude of investor toward risk.
- To develop alternative investment strategies for selecting a better portfolio this will ensure a trade off between risk and return to attach the primary objective of wealth maximization at lowest risk.
- To identify securities for investment to refuse volatility of return and risk.

In this study, Shrestha has presented two types of investment analysis techniques i.e. fundamental analysis and technical analysis to consider any securities such as equity, debentures bond and other money and capital market instruments. He has further suggested that the banks having been international net work can also offer assess to global financial market. He has also point out the required skilled work force research and analysis and proper management information system in any type of commercial banks to get success in portfolio management and customer's confidence.

Shrestha, (2057), in his article *"Commercial Banks Comparative Performance Evaluation"* concluded that the Joint Venture Banks are new operationally more efficient, having superior performance while comparing with local banks that are operating in Nepal. Better performance of joint venture banks is due to their sophisticated technology, modern banking method and skill. Their better performance is also due to the government's branching policy in rural areas. Local banks are efficient and expertise in rural sectors but having number of deficiencies. Thus, local banks are facing growing constraints of socio-economic, political system on one hand spectrum and that of the issues and challenge of joint venture banks commanding significant banking business on other spectrum**.**

Neupane (2062), in his article titled *"Bad Loans of Banking Sector- Challenges and Efforts to resolve it"* has thrown some views regarding bad loans of banking sector. As mentioned by him there was various types of risk inherent in the credit. One, who manages risk, earns profit. He further added that the recent financial crisis in banking sector is due to weak accounting procedures, defect in loan classification, lack of transparency, loss control measures etc.

Like the other writers has also stated that NPL is the indicator of financial crisis and the factors leading to NPL is economic slowdown, recession, bad intention of borrower, lack of credit policy, increase in interest rate etc. NPL increases resource mobilization cost and reduce profit-earning capacity of the bank. He has also mentioned that the international standard of acceptable NPA is 4% but there us about 16% NPL in Nepalese banking sector which is due to high level of NPL of two nationalized banks, as stated by the writer, the major implications of NPL are banks can not return depositors money on demand and it limits lending capacity of the bank. The writer has suggested internal measures for reducing NPL and its effect. Internal measure comprises classification of loans and advances and providing provisions for probable loss and external measures comprises of help from Credit Information Bureau (CIB), appointment of Asset Management Company (AMC) and Debt Recovery Tribunal (DRT).

Writer concludes, “Banks must give priority for reducing NPA. He has also mentioned that many countries are adopting various measures for reducing loan loss. Recently the president of Philippines has announced tax rebate system for reducing NPA. Cow it is high time to improve bad debts of banking sector with firm determination”.

2.4 Lending in the Context of Nepal

Nepal Rastra Bank has issued unified directives to banks and financial institutions for implementation effective Shrawan 1 2062 (16 July 2005). This also contains the new directive concern in loan portfolios and provisioning. Except a few important changes, this directive has retained most of the previous provisions.

Classification of Loan and Advance

The classification criteria are as follows:

Pass Category: All loans and advances the principal of which are not past due or past due for a period up to three months. Only loans under pass category are termed as performing loan.

Substandard Category: All loans and advances the principal of which are past due for a period of more than three months and up to six months.

Doubtful Category: All loans and advances the principal of which are past due for a period more than six months and up to one year.

Loss Category: All loans and advances the principal of which are past due for a period of more than one year.

Lending institutions are not restricted from classifying the loan and advance from low risk category to high-risk category. For instances, loans falling under sub standard may be classified into doubtful or loss and loans falling under doubtful may be classified into loss category.

Additional Arrangement in Respect of 'Pass Loan'

All loans and advances extended against gold and silver, fixed deposit receipts, credit card and against security of government securities and NRB bonds shall be included under pass category. In other words, loan against these collateral shall be eligible for placing under pass category irrespective of the past due period. However, where collateral of fixed deposit receipt or government securities or NRB bonds is placed as additional security against loan for other purposes, such loans have to be classified as required for other loans. As per the classification issued by Nepal Rastra Bank earlier, loan against fixed deposit receipts of other banks shall also quality for inclusion under pass loan. However, this is not clarified in the Unified Directives.

Renewal of working capital loan having one year maturity period only may be classified as pass loan. Loans of working capital nature on which the service of interest is not regular shall be classified on the bases of total amount due period. Means, where the interest on working capital loan is not serviced regularly, such loans will be considered as 'overdue' and quality for classification on the basis of the overdue period. Accordingly, working capital loan will simple become pass loan on renewal of the facility provided interest is serviced regularly. The directive has not prohibited renewal of working capital facility with extended amount and outstanding interest amount is assumed collected by accommodating the same within that extended facility.

Additional Arrangement in Respect of 'Loss' Loan

Irrespective of whether the loan is past due or not, loans having any of the following discrepancies shall be classified as loan loss.

a) Loan with inadequate securities

This is very subjective and may lead to a difference in opinion between the lending institutions and auditors/NRB inspectors.

b) The borrower has been declared bankrupt

The bankruptcy law is yet to be enacted in the absence of the same; definition of bankrupt person may be imported form the 'Civil Code'.

c) The borrower is absconding or cannot he found

d) Purchased of discounted bills not realized within 90 days from the due data and non-fund base facilities like letters of credit and guarantee converted into fund base credit not realized within 90 days from the conversion data.

e) Misuse of credit

For this purpose, term ‘misuse’ means the credit has not been used for the purposed originally intended, non-operation of project, income earned form the project/ business are not used in repaying loan and advances but used for a other purposes, certified misuse if credit and facilities by the supervisions and auditors in course of the supervision or audit. As per the clarification provided by NRB earlier, even partial diversification of the credit is of allowed.

h) Project/ Business are not condition to operate or not in condition to operate. Accordingly, loan to entities not in operation but condition exists as to their operation may not qualify for loss categorization under this clause. Once restructuring process is considered, classification into loss category may not be necessary for temporarily closed down business.

i) Credit and loan is not written-off within 90 days from the due date.

Additional Arrangement in respect of Term Loan

In respect of loans (having the maturity period of more than one year period), the classification shall be made against the entire outstanding loan on the basis of the past sue period of overdue installment of principal/interest.

As a matter of fact, this provision is seen as the most discouraging factor on the part of banks and financial institutions to lend to the projects. Even in the event of non-payment of a small installment within the stipulated period, the entire project loan, which may be excessively large, shall require classification. This may have huge negative effect in the profitability of the financial institution. Accordingly, with a view to facilitate project lending particularly in this hour of insecurity feeling some relent in the rule is suggested.

Prohibition to recover principal and interest by exceeding overdraft limit.
Principal and interest on loans and advances shall not be recovered by overdrawing the borrower's current account exceeding the limit of overdraft facility.

However, this arrangement shall not be considered as prohibitive for recovering the principal and interest by debating the costumers' account. Where as the system of recovery of principal and interest by debating the costumers' account exists and recovery is made as such resulting in overdraft, which is not settled within one month, then such overdrawn principal amount shall also be liable to be included under the outstanding loan. Such loans shall be downgraded by one step from its current classification. In respect of recognition of interest, the same shall be as per the clause relating to income recognition mentioned in directives no 4.

Income recognition directives require that all interest accruals on loans shall be recognized on cash collection basis only. The above directive allowing the settlement of overdrawn account within one-month period has led to believe that such accrued interest may be recognized if paid within a month's time.

Under this clause, banks and financial institutions may debit the borrower's current account, irrespective of the balance available, for recovery of interest and principal. By doing so, it may buy a month's time for collecting the same. This may save the lending institutions from requiring classifying the loan to a higher category. However, in respect of the interest, the cushion is not available since the directive has expressively mentioned that the recognition of interest shall be on cash basis only (directive no 4 and 15).

Loan Rescheduling and Restructuring

Loans may be rescheduled or restructured only upon submission of a written plan on action by the borrower, which is restructuring on the Following grounds.

- Evidence of existence of adequate loan documentation and securities.

- The lending institution is assured as to the possibility of recovery of restructured or rescheduled loan. The term reschedule means process of extending repayment period/time of credit taken by the borrower. And, restructuring means process of changing the nature or conditions of loan/facility, adding or deleting of conditions and change in time limit.

In addition to submission of the written plan of action for rescheduling or restructuring of loan as above, at least 25% of accrued interest outstanding on data of restructuring or rescheduling should have been collected. Renewal of loan by collecting all interest can be classified as pass loan.

In case of restructuring or rescheduling of loan of an industry which is recommended by the sick industry preliminary enquiry and recommendation committee formed under the ministry of industry of Nepal, commerce and supply after recovery of 12% accrued interest and completion of all necessary procedure, provision for loan loss at a minimum of 25% will be required. However, where the loan is restructured or rescheduled by collecting less than 12% interest, such loan shall require loan loss provisioning on past due period basis as is applicable to all.

The term of rescheduling and restructuring may be as per the understanding between the loan provider and borrower. This is true even in the case of recommended sick industries. At least 25% of total accrued interest up to the date of rescheduling of restructuring should have been collected. In such a case, the classification of the loan will remain in the current position. However, where rescheduling or restructuring is done against collection of all interest meaning all outstanding interest, the loan (principal) will be eligible for classification under pass category. However, it is not dear as to the requisite treatment where portion of interest is waived and balance is collected in full. Where the lending institutions agree to waived interest accruals, the same have to be accounted first to facilitate calculation of 25% interest on reduced outstanding balance.

In the case of sick industries recommended by the committee, rescheduling or restructuring is allowed with collection of less than 12% interest with the condition that loan shall be classified and normal provision is made. In other cases, collection of at least 25% is mandatory for restructuring and rescheduling.

Loan Loss Provisioning

The loan loss provisioning on the outstanding loans and advances and bills purchases shall be done on the basis of classification, as follows:

Loan Loss Provisioning

Classification of Loan	Loan Loss Provision
Pass	1 percent
Substandard	25 percent
Doubtful	50 percent
Loss	100 percent

(Source: NRB unified directives 26 July 2005)

Provisions on restructured or rescheduled loans made as follows:

a) A minimum of 12.5% provision shall be made on restrict or restructured loans.

b) In interest of restructuring or rescheduling of deprived sector loan and guaranteed or insured priority sector loan, the requisite provisioning shall be only 25% of the rates stated above.

c) Where the installment of principal and interest if restructured or rescheduled loan is serviced regularly for two consecutive years, such loan can be converted into pass loan.

Rescheduling/restructuring of loan resulting in improvement of classification to lowest risk category (pass) is not prohibited. However, such rescheduled loan shall require provisioning of at least 12.5%. The upper limit of such provisioning requirement is not specified even if a loss loan is reclassified and categorized as pass loan. However, adjustments to loan loss provisioning is allowed only on satisfactory service of the loan up to 2 consecutive years.

Loan loss provisioning on rescheduled/restructured sick industries recommended by sick industry preliminary enquiry and recommendation committee, upon recovery12% outstanding interest is fixed at minimum 25%. Meaning, restructured loss loan can be provided provisioning at 25% (upper limit is not prohibited though). The only concession provided in this case is rescheduling is made possible against collection of 12%. At the same time, the provisioning is required at minimum 25% (in other cases it is 12.5%).

Full provisioning shall be made against the uninsured priority, deprived sector loans and small and medium scale industrial loans. Provisioning against Priority Sector Lending Full provisioning as per normal loan loss provisioning shall be made against the uninsured priority and deprived sector loans. However in respect of insured loans the requisite provisioning shall be 25% of the percentage normal loan loss provisioning. The required provisioning in the case of insured priority/deprived sector credit is as follows;

Pass	0.25%
Substandard	5%
Doubtful	12.5%
Loss	25%

2.5 Review of Related Studies

Tuladhar (2000), conducted a study on *"A Study on the investment Policy of Standard Chartered Bank Nepal Limited (SCBNL) in comparison to other Joint Venture Banks of Nepal"*. The main objectives of the study were:

- To study the fund mobilization and investment policy with respect to fee-based off-balance sheet transaction and fund-based on-balance sheet.
- To evaluate the liquidity, efficiency of assets management and profitability position.
- To evaluate the growth ratios of loan and advances and total investment with respect to growth rate of total deposit and net profit of sample banks.
- To evaluate trends of deposit utilization toward total investment and loan and advances and its projection for five years.

- To perform empirical study on the customers' view and ideas regarding the existing services and adopted investment policy of the joint venture banks and to provide suggestions and recommendation on the basis of the study.

The research findings of the study are as follows:

- The measurement of liquidity has revealed that the mean current ratio of all the three banks under study is not widely varied. All of them are capable in discharging their current liability by current assets.
- The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan Bank Limited (HBL) has high volume of saving and fixed deposits as compared to current deposits resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.
- SCBNL’s tendency to invest in government securities has resulted with the lowest ratio of loan and advances to total assets whereas Nabil Bank Limited has the highest due to steady and high volume of loan and advances throughout the study period.
- The ratio of investment to the investment on loan and advances has measured the total portion of investment in total of investment and advances. The mean ratio among the banks havenot deviated significantly.
- The loan and advances and investment to deposits ratio has shown that Nabil Bank Limited has deployed the highest proportion of its total deposits in earning activities. This is the indication of fund mobilizing activities Nabil Bank Limited is significantly better.
- The lending in commercial purpose is the highest in case of Nabil Bank Limited and least in case of SCBNL. SCBNL has contribution in service sector lending. It has contributed 24.47% of its total credit in general use and social purpose.
- The total income to total assets ratio measures the earning power of each rupee employed by the bank. Nabil’s ratio in this case is the best. The ratio of total

income to total expense reflects the earning capacity of a rupee or expense. The productivity of expenses in SCBNL is the best.

- The performance of SCBNL is significantly better than other two banks under study in case of profitability. EPS is the highest in case of SCBNL.

Thapa (2002), conducted a study on *"A Comparative Study on Investment Policy of Nepal Bangladesh Bank Limited and Other Joint Venture Banks"*. The major objectives of the study were as follows:

- To evaluate the liquidity, assets management efficiency, profitability and risk position of NB Bank in comparison to NABIL and NGBL.
- To analyze the relationship between loans and advances total investment with other financial variables of sample banks.
- To examine the fund mobilization and investment policy of NB Bank through off-balance sheet and on-balance sheet activities in comparison to the other two banks.
- To study the various risk in investment and to analyze the deposit utilization trend and its projection for improving the investment policy of NB bank on the basis of the findings of the analysis.

The major research findings of the study are as follows:

- The liquidity position of NB Bank is comparatively better than that of NABIL and NGBL.
- NB Bank has the highest cash and bank balance to total deposit, cash and bank balance to current assets ratios.
- It has good deposit collections, has made enough loans and advances but it has made the negligible amount of investment in government securities.
- The NB bank is not in better position regarding its on-balance as well as off-balance sheet activities as compared to NABIL and NGBL. It does not seem to follow any definite policy regarding the management of its assets.

- The profitability position of NB Bank is comparatively worse than that of NABIL and NGBL. The bank must maintain its high profit margin for the well being in future.
- NB bank has maintained a high growth rate in comparison to other banks through it is not successful to make enough investment. One can say that the bank is successful in increasing its sources of funds and its mobilization.
- There is significant relationship between deposit and loans and advances and outside asset and net profit of NB bank, NABIL and NGBL. But there is not significant relationship between deposit and investment of NB bank only.
- The position of NB bank in regards to utilization of the fund to earn profit is not better in comparison to NABIL and NGBL.
- NB bank has not provided credit card facility, any branch banking system (ABBS) facilities and web site etc. but these facilities are being provided by the NABIL and NGBL.

NB bank is not in better position regarding the proportion of fee-based activities to loans and advances as compared to other two banks during the study period. NB bank in terms of recovery of loan is worse in comparison to NABIL and NGBL

Ojha (2002), in his dissertation about "*Lending Practices*" has found that the high volume of liquidity reveals that a degree of lending strength has been prevailing in all of the commercial banks. The lack of reliable lending opportunities and fear of losing the principal in rural sector has been keeping these banks less oriented towards the lending function. Hence, the government should take appropriate action to initiate these banks to attract to flow credit in rural economy. Posing the compulsions by directives does not create long-term healthy lending practices unless the commercial banks are not self-motivated to flow credit in this sector.

He has found out that following the normal guidance of Nepal Rastra Bank and acting upon reduces many on the credit risk arising from borrower's defaulter, lack of proper credit appraisal, defaulter by blacklisted borrowers, and professional defaulter. The over confidence of commercial banks regarding credit appraisal efficiency and negligence taking information from Credit Information Bureau has caused many of the bad debts in these banks. He thinks that these banks have to follow the directives of NRB strictly and be more cautious and realistic while granting loans and advances.

Ojha has written that the commercial banks have to expand their credit in the area if rural economy so as to compromise between the liquidity and credit need such economy. This helps in minimizing the idle find in business and at the same time contribute to the national economy. The banks should also increase the volume of credit in the sector of agriculture as the ratio of contribution made by the banks in this priority sector is decreasing.

Khadka (2002) has carried out research on *"A Comparative Study on Investment Policy of Commercial Banks NBL, NABIL, SCBNL and NIBL"* The major objectives of the study are as follows:

- To evaluate the liquidity, assets management efficiency and profitability positions related to fund mobilization of NABIL in comparison to other JVBs.
- To discuss fund mobilization and investment policy of NABIL in respect to its fee-based off-balance sheet transaction and to evaluate the growth ratios of loan and advances and total investment with respective growth rate of the total deposits, and net profit of sample banks.
- To find out the relationship between deposit and total investment, deposit and loans and advances, and net profit and outside assets of sample banks.
- To evaluate the trend of deposit utilization and its projection for next five years in case of NABIL comparing it with that of other JVBs and to suggest and recommend some measures on the banks of comparative fund mobilization and investment policy of NABIL and other JVBs for the improvement of financial performance of NABIL in future.

The research findings of the study are as follows:

- The liquidity position of Nabil Bank Limited is comparatively worse than that of other joint venture banks. Nabil Bank has more portions of current assets as loan and advances but less portion as investment on government securities.

- It is also comparatively less successful in on-balance sheet utilization as well as off-balance sheet operation than that of other JVBs.
- In the case of profitability ratio it is found that the profitability position of NABIL is comparatively not better than that of other JVBs. NABIL is more successful in deposit mobilization but failure to maintain high growth rate of profit in compared to other JVBs.
- There is significant relationship between deposit and loan and advances as well as outside assets and net profit but not between total deposits and total investment in case of both Nabil Bank Limited and other JVBs.

As the bank, experience many difficulties in recovering the loans and advances and their large amount is being blocked as non-performing assets. She suggested that there are urgent needs to workout a suitable mechanism through which the overdue loan can be mobilized.

Shrestha (2004) conducted a thesis *"A Study on non-performing loans and loan loss provisioning of commercial banks"* reveled that SCBNL had risk averse attitude on the management or they have policy of investing low in the risky assets i.e. loans and advances as compared to NBL and Nabil because the loans and advance to total asset ratio of NBL, Nabil and SCBNL during the study period was appeared to be 52.3%, 47% and 29.24% respectively.

SCBNL has the higher consistent and variability on ratio during the study period where as the NBL has the lower consistent and variability as comparison to other two banks. Nabil has the moderate level of consistent and variability. In the same way, the proportion of non-performing loan with to loans of NBL was to found higher than other two banks. Not only has the public sectored bank, even private sector bank as Nabil has higher proportion of non-performing loan (i.e, 10.67%). However, in recent time Nabil has shown significant decrement in non-performing asset, which are the result of effective credit management and its efforts of recovering bad loans through the recovery of establishment of recovery cell.

Basnet (2002), Thesis entitled "*Portfolio Management of Joint Venture Banks in Nepal*" is based on study of four joint venture banks. They are: Nepal Bangladesh Bank Ltd., Standard Chartered Bank Ltd., Himalayan Bank Ltd. and Everest Bank Ltd. The general objective of this study is to identify the situation of portfolio management of joint venture banks in Nepal.

The major findings of this study are given below:

- Among the selected bank on ratios of Everest Bank Ltd. Are more consistent among the four joint venture banks.
- SCBNL is not investing its fund on NRB bond after 1997 and no government securities after 1998.

  HBL is not investing its fund in NRB bond after 1997 and investing very high amount of fund on government securities.

  NBBL is investing very high amount of its fund in government securities.

  EBL is not investing its fund on NRB bond after 1997 but is investing high amount of fund on government securities.
- SCBNL is providing very high amount of its loans & advances to the private sector. It has also given the second priority to foreign bills purchase and discount.

  HBL is providing very high amount of its loans & advances to the private sector in increasing trends. It has also given the second priority to foreign bills purchase and discount.

  NBBL is providing very high amount of its loans & advances to the private sector. It has also given the second priority to government securities. But providing very low amount of loans to the foreign bills purchase and discount.

  EBL is providing very high amount of its loans & advances to the private sector and has given the second priority to the foreign bills purchase and discount. It is not providing amount of loans & advances to government enterprises.

Khaniya , (2003), in her thesis entitled *"Investment Portfolio Analysis of Joint Venture Banks"* has been done in 2003. The study based on five joint venture banks and they are:

NABIL, SCBNL, HBL, NBBL & EBL. The general study of the present study is to identify the current situation of investment portfolio of joint venture banks in Nepal.

The major findings of her study are below:

- SCBNL and HBL have better position. NBBL and NABIL have a low position in the industry. But Everest Bank has a very low position in the industry because of having lowest mean return on shareholders' fund resulting from the negative returns in the fiscal years 1995/96 and 1996/97.
- SCBNL has the highest mean return and EBL has the lowest return. Expect EBL, all other four banks i.e.; NABIL, SCBNL, HBL and NBBL have good performance.
- Among other joint venture banks, SCBNL has the highest return and EBL has mean return than industry average. SCBNL and EBL mobilizes the funds in investment title is higher than the standard ratio.
- NABIL, SCBNL & HBL are investing low amount of deposits on loans and advances which is lower than industry average and NBBL & EBL have invested a high amount of deposits to loans and advances title which is higher than industry average.
- SCBNL has the highest EPS and EBL has the lowest EPS. Similarly, HBL also has above mean EPS than industry average and that of NBBL is lower than industry average.
- Himalayan Bank has the lowest beta coefficient among the five joint venture banks which means that the systematic risk of Himalayan bank is the lowest among the JVBs. The portfolio return of NBBL is 94%. This return is the average capital gain yield and dividend yield.
- The coefficient of correlation between loans and advances in private sector and portfolio return of joint venture banks come out to rxy = -0.6. Therefore, it indicates that there is negative correlation between loans and advances in private sector and portfolio return of five JVBs in Nepal.

Gurung (2006), explored in his research *"Lending Policy and Recovery Management of Standard Chartered Bank Nepal ltd and Nabil bank ltd"* has found out that the deposit collection by the banks shows that increasing but in a fluctuating trend. The trend analysis of deposit collection the increase in deposit collection in the forthcoming years will continue. Out of different types of deposit collection account, higher account has been collected in saving deposit account. Out of the total deposit collection, SCBNL has disbursed 36% of average as a loan and Nabil has disbursed 52% of its deposit collection as a loan disbursement to deposit collection ratio of commercial banks, it is around 60%. Thus this ratio is quite low incasing of sample bank especially of SCBNL. It is further proved by the calculation of correlation coefficient, which is 0.75 and 0.23 of SCBNL and Nabil respectively.

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

2.6 Research Gap

Previous researchers analyzed the lending policy in term of credit practices, credit management or lending practices. The past researches in measuring the performance of bank lending have focused on the final measures that are incapable of solving the problems of overdue loans and bad debts. Actually speaking, lending management is determined by various factors. Researchers are not properly analyzed about portfolio of lending and its impact on the profitability in Nepalese context. In this study portfolio of lending is measuring by lending practices, trend analysis and various statistical tool as well as financial tools are used for analyzing survey data. Bank's internal performance for its lending is crucial and it has great value in lending management. Other factors such banking environment, quality of management in terms of lending may be the strong determinant for lending management in banks. Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts. This study tries to define lending management by applying lending portfolio management, priority sector lending, non-performing loan analysis and financial condition analysis. Probably this will be the new research in the area of lending management.

CHAPTER - III

RESEARCH METHODOLOGY

Research methodology is away to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. Research is the process of a systematic in –depth study or search of any particular topic, subject or area of investigation backed by the collection, complication, presentation and interpretation of relevant details or data. Methodology refers to the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind it. So that research methodology is a systematic way of conducting the research in an effective and practical so that it can explain how the research is done.

This chapter describes the employed in this study. Research methodology is a way to systematically solve the research problem. In other words, research methodology describes the methods processes applied in the entire aspect of the study. This chapter describes research design, population and sample procedure, and sources of data and analysis of data.

3.1 Research Design

This study follows the descriptive as well as analytical method of the analysis to meet the stated objectives of the study. Descriptive studies are primarily concerned to find out 'what is'. The secondary data were analyzed as the part of the analytical study. Few financial statements of selected commercial banks were tabulated using spreadsheet.

3.2 Sources of Data

The research is based on secondary source of data. Published financial statements of commercial basks were collected. Similarly, financial statement of selected banks and NRB related information were collected and tabulated in spreadsheet. Such secondary information was gathered form the concerning department of the concerned banks.

3.3 Population and Sample Survey Design

A small portion chosen form the population for studying its properties is called sample and the number of units in the sample is known as the sample size. The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection on part of the population on the basis of which a judgment or inference about the universe is made.

In this research only two banks are taken out of 26 commercial banks. First private sector joint-venture bank and other joint bank are taken for study. The selected banks are as follows:

- Himalayan Bank Limited
- Nabil Bank Limited

3.4 Methods of Data Collection

The required data i.e. relevant reposts and statements for analysis are directly collected from the credit administration department, account department of HBL annual report, annual report of Nabil collected form website of the bank, statistical bulletin published by NRB and other publication from NRB, magazine, newspaper and other relevant materials and information were collected from the Central Library, Shanker Dev Campus library and NRB library and other related website.

3.5 Data Processing Technique

First of all raw information have been received. After collection of raw information the processing has been done. Then after, all collected data have been grouped accordingly to their nature in their tabular and chart y selecting relevant data. The collected data are presented and refined for the purpose of the study. This processing procedure is required for sequential analysis of data to meet the objective of this research.

3.6 Tools and Techniques Employed

To make the study more specific and reliable, the following types of tools were used for analysis of data

a. Financial tools
b. Statistical tools

To meet the objectives of the study data were analyzed by using financial tools such as ratio analysis, percentage etc. Graph chart and table were used to support analysis. Similarly some data were analyzed through software package for social studies (SPSS) version. Statistical tools such as mean, correlation coefficient ANOVA and probable error are also used for data analysis.

3.7 Tools Used

Financial Tools Used

The financial tools are used to examine the financial strengths and weaknesses of the bank. The tools used in this study are as follows:

i. Loan and advances to deposit ratio

$$= \frac{\text{Loan and advance}}{\text{Total deposit}}$$

ii. Non-performing loan to loan and advance ratio

$$= \frac{\text{Non - performing loan}}{\text{Total Loan and advance}}$$

iii. Investment to deposit ratio

$$= \frac{\text{Investment}}{\text{Total deposit}}$$

iv. Total profit to loan and advance ratio

$$= \frac{\text{Total profit}}{\text{Total Loan and advance}}$$

Statistical Tools Used

The statistical tools are used in this study is follows

1. Coefficient of correlation analysis (r): Correlation coefficient is used to define the relationship between deposit, NPL and LLP with loan and advance.

$$\text{Correlation (r)} = \frac{N\sum XY - \sum X \times \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

2. Coefficient of determination (r^2)

3. Probable Error (P.E) = $0.6745 \times \frac{1 - r^2}{\sqrt{n}}$

4. Regression and SPSS 12 analysis: Regression analysis is used as a tool of determining the strength relationship between profit, deposit loan and advance and NPL.

   i. ANOVA
   ii. F and t statistics
   iii. Beta

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

Presentation and analysis of data is very important stage of research. Its main purpose is to change the unprocessed data into understandable form. It is the process of organizing the data by tabulating and then placing that data in presentable form by using carious table, figures and sources.

Lending management is one of the most important factors that have developed to facilitate effective performance of bank management. Lending management is the formal expression of the commercial banks' goals and objectives sated in financial term for specific future period. Credit is the very basic indicator for determining profit. This chapter deals with the various aspects of lending management such as financial analysis, portfolio of lending, priority sector lending, non-performing loan correlation and trend analysis.

4.1 Financial Analysis of Himalayan Bank Limited and Nabil Bank limited

Financial analysis assists in identifying the major strengths and weaknesses of any institutions. It indicates whether a company has enough cash to meet its obligations and ability utilize properly their available resources. Financial analysis can also be used to assess the company's liability as and ongoing and determine whether a satisfactory return is being earned for the risks return. Thus, financial condition of the banks in terms of lending portfolio management is necessary to find out the comparative credit practices between the competitors. The financial conditions are normally examined by comparing various types of financial tools such loan deposit ratio, profitability to loan ratio, profit to total assts etc between two more forms. Below are the comparative analysis of the HBL and NABIL.

i) Total Loan and Advance to Total Deposit Ratio

The main sources of bank's lending depend on its deposit. The profitability of banks is more depend upon the deposit utilization and collection. This ratio is calculated to find out how successfully the banks are utilizing their deposits on loan and advances for profit generating activities greater ratio indicates the better utilization of total deposits. The ratios are presented in the following table.

Table 4.1

Total Loan and Advances to Total Deposit Ratio

Year / Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
HBL	0.5163	0.5676	0.5417	0.5958	0.5950	0.6362	0.7293
Nabil	0.6038	0.6063	0.7572	0.6863	0.6813	0.6821	0.7448

Source: Annex1

Table 4.1 shows total deposit, total loan and lending deposit ratio of HBL and NABIL. The ratio of HBL is in increasing with fluctuating trend; ratio of Nabil is in increasing trend up to 2004/05, and then has declined. It seems that Nabil takes more risk and it has utilized the most of its collected funds in the year 2004/05.

Further Nabil has higher loan and advances to total deposit ratio than HBL. It indicates that Nabil seems to be efficient in mobilizing its total deposit in the form of loan and advances. The table indicates there are high difference in loan to total deposit ratio form 2004/05 between HBL and Nabil. From the analysis Nabil seems better performer in utilizing its collected fund in the form of loan and advances. In compare HBL less utilizing its collected deposit as loan and advance rather than Nabil. There are many reasons like the political crisis and instability for the lesser ratio of total loan and advance and deposit. Borrower intention of not paying interest and principal in time is another reason for less utilizing collected funds of HBL.

ii) Non-performing Loans to Total Loan and Advance Ratio

Non-performing loan is the financial burden for the financial institution. In Nepal, NRB has classified nonperforming loan as substandard, doubtful and loss. NRB has directed all commercial banks to create loan loss provision against the different types of nonperforming loan in different ratio. The following table represents the non-performing loan to total loan ratio.

Table 4.2

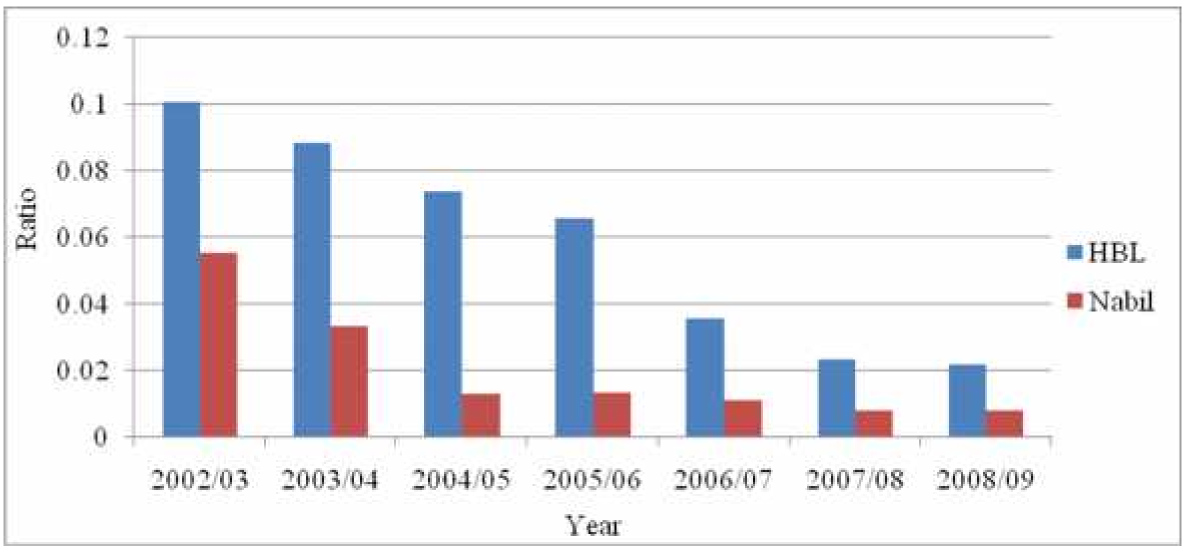
Non-performing Loan to Total Loan and Advances Ratio

Year / Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
HBL	0.1008	0.0883	0.0739	0.0656	0.0357	0.0236	0.0218
Nabil	0.0554	0.0333	0.0132	0.0136	0.0112	0.0078	0.0079

Source: Annex 2

Figure 4.1

Non-performing Loan to Total Loan and Advances Ratio



The table 4.2 indicates the ratio of nonperforming loan of Himalayan bank ltd and Nabil bank ltd. In comparison HBL has more percentage of NPL than Nabil. Non-performing loan of both banks seem decreasing in trend. The above figure and table shows HBL was able to manage its lending during this study period. However, NPL of Nabil bank in the 2007/08 and 2008/09 was lesser than 1%. This mean it has more pass loan. The international norms of NPL is 3% i.e. 0.03. Even Nabil bank had crossed international standard before 2003/04.

The result showed banking sector is seriously affected by the non-performing loan. The higher volume of non-performing loan results increased in loan loss provision amount and then it eventually reduces the profit.

iii) Total Investment to Total Deposit Ratio

This ratio measures the percentage of total deposit in the form of investment. Investment means here the amount invested on government securities and other institutions securities. Investment is the risky income for banking institutions. The proper utilization of deposit as loan, advance and investment by preparing optimal portfolio banks are able to reduce its non-performing loan and which leads to increase profitability. The following table represents the ratio of total investment to total deposit.

Table 4.3

Total Investment to Total Deposit Ratio

Year / Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
HBL	0.1911	0.1237	0.2219	0.4116	0.3953	0.4009	0.2460
Nabil	0.2744	0.2622	0.3011	0.3191	0.3835	0.3123	0.2912

Source: Annex 3

The investment ratio of Nabil bank is in increasing trend except the year 2007/08 and 2008/09. This mean Nabil bank highly utilized its deposit as investment. The investment ratio of HBL is also increasing but in fluctuating trend. This means it also utilized its deposit as investment. Investment in government securities is the highly secures investment. Investment made in lower risk securities helps to reduce overall riskiness of the bank.

iv) Total Profit to Total Loan and Advance Ratio

This ratio measures the percentage of total income against loan and advances. The high ratio indicates the more earnings. The following table represents ratio of total profit over total loan and advance.

Table 4.4

Total Profit to Loan and Advance Ratio

Year / Bank	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
HBL	0.196	0.0202	0.0228	0.0288	0.0273	0.0314	0.0298
Nabil	0.0513	0.0570	0.0474	0.0478	0.0424	0.0343	0.0372

Source: Annex 4

The profit to loan and advance ratio of HBL is in increasing trend except the years 2006/07 and 2008/09. The profitability ratio of HBL is lesser than Nabil in each year. Nabil's profitability ratio is in decreasing trend trough 2003/04. It indicates that there is lower deviation between lending rate and deposit rate. Nabil has same trend of profit ratio during the period. Profit trend of Nabil is more fluctuated than the HBL. This table shows that the in the recent year of the study period there is lower different between the lending and deposit rate.

4.2 Lending Portfolio Analysis

Portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. Commercial banks lending portfolio covers auto loan, bills purchase, hire purchase, constructions, productions, consumer loan, deprived sector loan, priority sector loan, margin lending, industrial overdraft, term loan etc. In this portfolio of lending means different types of loan granted by commercial banks. According to the NRB schedule there are twelve heading of portfolio of lending (sector wise lending). This include agriculture, consumable loan, service industries, wholesaler and retailer, productions, constructions, finance insurance and fixed assets, transportation communication and public services, mining, metal production machinery and electrical tools, transportation equipment production and fitting and others.

The following table represents the portfolio of lending and mean and standard deviation:

Table 4.5

Percentage of Portfolio of Lending of HBL and NABIL

Year	2004/05		2005/06		2006/07		2007/08		2008/09	
Portfolio of lending	HBL	Nabil	HBL	Nabil	HBL	Nabil	HBL	Nabil	HBL	Nabil
	%	%	%	%	%	%	%	%	%	%
Agriculture	3.81	0.47	3.19	0.38	3.67	0.34	3.15	0.53	2.65	0.69
Consumable loan	1.66	0.71	1.15	0.65	1.79	0.53	1.30	0.54	2.11	0.41
Service industries	10.45	12.67	9.33	7.64	8.76	7.93	8.92	7.14	8.28	7.07
Wholesaler and retailers	14.87	18.18	12.10	15.58	14.42	15.46	13.70	16.47	14.62	18.20
Productions	41.53	39.97	49.15	38.46	44.93	35.85	43.41	30.50	41.08	27.96
Constructions	1.53	6.08	2.15	10.38	2.57	12.09	3.77	13.71	7.04	14.34
Finance, insurance & fixed assets	7.38	3.05	5.28	3.62	5.35	5.16	6.80	5.77	5.59	7.01
Transportation, communication & public services	9.7	2.64	8.53	5.07	7.98	5.77	5.17	8.20	3.32	4.69
Mining	0.35	0.26	0.04	0.16	0.10	0.09	0.04	0.08	0.035	0.055
Metal production machinery & electrical tools	0.82	1.29	1.49	0.75	1.07	1.03	2.61	1.08	3.18	1.04
Transportation equipment production & fitting	1.66	9.17	0.29	9.86	0.40	9.23	0.29	8.23	0.34	8.92
Others	6.18	5.51	7.23	7.43	8.91	6.52	10.76	7.75	11.74	9.6
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Annex 5 and 6

Table 4.6

Mean and Standard Deviation of Portfolio of Lending of HBL and NABIL

Year	Mean	S.D.	Mean	S.D.
Agriculture	3.294	0.41326	0.482	0.123515
Consumable loan	1.602	0.344174	0.568	0.104
Services industries	9.148	0.732705	8.49	2.114114
Wholesaler and retailers	13.942	1.000088	16.778	1.204565
Productions	44.02	2.910698	34.548	4.608364
Constructions	3.412	1.956225	11.32	2.958601
Finance, insurance & fixed assets	6.08	0.851046	4.922	1.437712
Transportation, communication & public services	6.94	2.343698	5.274	1.796002
Mining	0.113	0.120897	0.129	0.074189
Metal production machinery & electrical tools	1.834	0.910398	1.038	0.172209
Transportation equipment production & fitting	0.596	0.533539	9.082	0.526703
Others	8.964	2.082888	7.362	1.364015

Source: Annex 5.1 and 6.1

Table 4.6 shows the percentage of portfolio of lending of Himalayan bank ltd and Nabil bank ltd. In agriculture sector investment HBL dominated Nabil. HBL invest more percentage in agriculture where Nabil invest less than one percent in each year. HBL's investment in consumable loan is decreasing each year except mid July 2007. It seems that NBL invest more amounts in consumable loan than Nabil. Loan disbursement of HBL to service industry was higher than Nabil from 2006/07. Both banks investment in service industries was in decreasing and fluctuating trend. Nabil dominated HBL in wholesaler and retailers loan. Nabil's investment in wholesale and retail is in decreasing trend. Both bank invested more percentage in this sector. In production lending it seems that HBL dominated Nabil except 2003/04. Both banks invest more than 30% in this sector. Investment made in productions sector by both banks is in decreasing trend. Both bank's investment was in constructions sector is increasing in trend year by year. Nabil invest more percentage in constructions sector than HBL. Lending granted by HBL in finances insurance and fixed assets is higher ratio than Nabil. Both banks investment trend in this sector was increasing and fluctuating. In first year HBL was dominating Nabil in transportation, communication and public sectors. Nabil invested more percentage in this sector than the HBL in this research period. HBL and Nabil invested less than 1% in mining sector. Nabil was not investing in mining in the year 2003/04. HBL dominated Nabil in metal production machinery and electronic tools. Both banks granted lower volume of lending in this sector. Investment made by HBL in transportation equipment production and fitting was lower than the Nabil. It seems that Nabil’s increases its loan highly in this sector.

Table 4.6 shows the mean and standard deviation of portfolio of lending of HBL and Nabil. The mean ratio of agriculture sector disbursement of HBL has higher. This represents the HBL invest more fund in this sector in compare Nabil. The standard deviation of agricultural investment is higher of HBL this mean it represents higher fluctuations in investment in this sector. Mean of wholesaler and retailer is higher of Nabil than the HBL which indicates Nabil invest more fund in this sector. In comparison of production mean HBL has higher and the S.D. is lower the Nabil which mean the investment ratio in this sector of Nabil has higher variation. Others sector investments ratio's mean and standard deviation both is higher than the Nabil. In overall comparison standard deviation of Nabil is lower than the HBL which mean the lending ratio of Nabil is stable.

Both banks made portfolio through investing all twelve sectors. But productions sector is the dominant sector because it covered more percent of loan out of total loan granted by both banks. Both bank invested more than 33% in this sector during the study period. Both banks have given second priority for wholesaler and retailer. It seems that HBL gives more priority than Nabil in agricultural investment. Agriculture being the back bond of the economy, it seems Nabil contribute less for the growth of agricultural sector. Nabil invested less than one percent in consumable loan than the HBL. Both banks gave priority to the service industries but investment made in this sector was in decreasing trend. Furthermore, both banks made optimal portfolio for getting more return by minimizing the risk.

Above analysis shows the both banks making optimal portfolio of lending which helps to reduce NPL and increase profitability. Both banks give less priority to agricultural sector. Agricultural sector is not properly developed without investment some fund by the commercial banks. Most of the private sector commercial banks give attention toward to develop agricultural.

4.3 Non-Performing Loan Analysis of HBL and NABIL

Non-performing loan is one of the growing problems for the loan granting institution in Nepal as well. Due to unfair intension of borrower and the economic and political crisis in Nepal NPL has become major problem since last 10 year. In Nepal, NRB has classified nonperforming loan as substandard, doubtful and loss. NRB has directed all commercial banks create loan loss provision against the types of nonperforming loan in different ratio as 25%, 50% and 100% respectively for the substandard, doubtful and bad loan.

The following table represents the NPL of HBL

Table 4.7

NPL of HBL Rs in million

Year	NPL	Substandard	Doubtful	Bad
2002/03	1092.84	224.32	375.02	493.50
2003/04	1147.46	423.16	54.47	669.82
2004/05	1001.34	69.55	242.12	689.68
2005/06	1040.76	107.23	228.50	705.03
2006/07	641.61	72.08	194.98	374.56
2007/08	477.23	53.92	214.47	208.83
2008/09	551.21	58.32	235.57	257.32

Source: Annual Report

Figure 4.2

NPL of HBL

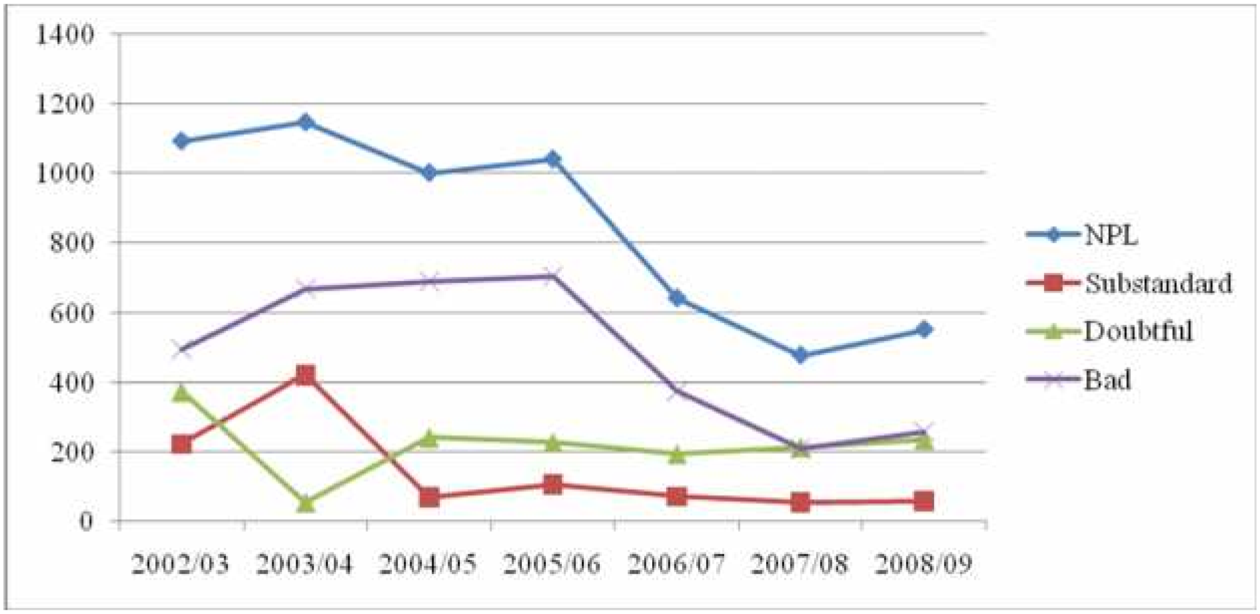


Table and figure 4.2 shows the total NPL, substandard, doubtful and bad loan. Out of total NPL, HBL has high volume of bad loan than others. It shows Himalayan bank ltd has higher volume of loan loss provision. Higher loan loss provision reduced the total profit because it requires 100% loan loss provision. Doubtful loan is also more than substandard in every year of the study period. Above figure shows that total NPL of HBL is decreasing highly in year by year except 2005/06.

Following table represents the NPL of Nabil bank ltd

Table 4.8

NPL of Nabil (Rs in million)

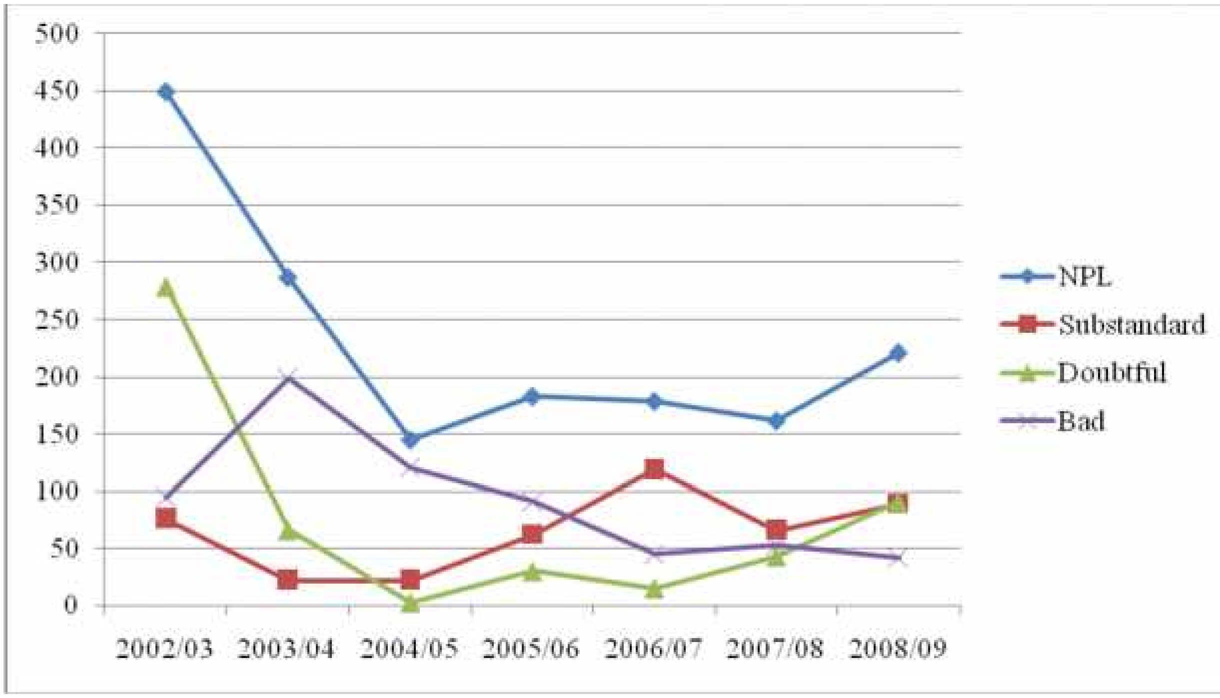
Year	NPL	Substandard	Doubtful	Bad
2002/03	449.6	76.3	279.1	94.2
2003/04	286.7	22.1	65.6	199
2004/05	144.5	22.1	1.93	120.5
2005/06	182.6	62.7	29.5	90.4
2006/07	178.3	119.7	14.5	44.1
2007/08	161.09	66.22	42.58	52.29

2008/09	220.79	89.25	90.32	41.22

Source: Annual Report

Figure 4.3

Non Performing Loan of Nabil



Above table and figure shows the total nonperforming loan and substandard, doubtful and bad loan. Nabil has higher bad loan in the year 2003/04 to 2005/06. In first two of the study period Nabil has high volume of doubtful loan. In the last year of the study period it has higher substandard loan.

Form the table 4.8 and 4.3 figure analysis HBL has higher volume nonperforming loan and it has higher bad loan than others. Higher bad loan indicates that the poor performance and ineffective credit policy of the bank. In sum NPL, HBL has also more volume doubtful loan. Higher the bad and doubtful loan higher volume of loan loss provision (100% and 50% respectively). In comparison Nabil perform better while making credit policy. From the analysis, it is shows that Nabil has effective recovery system than the HBL.

4.4 Correlation analysis

Correlation coefficient is used to define the relationship between two or more variable. In this study it is used to see the close consistency between two banks.

4.4.1 Correlation coefficient between deposit and loan and advances of HBL

The correlation and coefficient of partial determination of HBL is presented in the table 4.9.

Table 4.9

Correlation coefficient between deposit and loan and advances of HBL

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.9814	0.9631	0.0094	0.0564

Source: Annex-7

The above table shows that the correlation coefficient between deposit and loan and advances is 0.9814. There is highly positive correlation between loan and advances and deposit collection. The coefficient of determination is 0.9631 which depicts that 96.31% of loan has been explained by the deposit collection. It shows that increase in deposit lead to increase loan and advances. In accordance to increase in deposit HBL's loan and advances is increasing in trend.

Probable error (P.E.) is calculated to be 0.0094 and 6 P.E. is 0.0564. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is greater than 6 P.E. then there is evidence of significant correlation between loan and deposit. That further reveals there is significant relationship between loan and advances and deposit.

4.4.2 Correlation coefficient between deposit and loan and advances of Nabil

The correlation and coefficient of determination of Nabil is presented in the table 4.10

Table 4.10

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.9923	0.9846	0.0039	0.0326

Source: Annex-8

The table shows the correlation coefficient deposit and loan and advances are 0.9923. There is highly positive correlation between loan and advances and deposit collection. It means there is significant relationship between deposit and loan granted. The coefficient of determination is 0.9846 which depicts 98.46% of loan has been explained by the deposit collection. It shows that increase in deposit leads to increase loan and advances. In accordance to increase in deposit Nabil's loan and advances is increasing trend.

The correlation is statistically significant. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is greater than 6 P.E. (0.9923>0.0326)) then there is evidence of significant correlation between loan and deposit. That reveals there is significant relationship between loan and advances and deposit. It indicates that credit manager of the bank consider deposit collection to determine the lending.

4.4.3 Correlation coefficient between non-performing loan and loan and advances of HBL

The table 4.11 shows represents the correlation coefficient between NPL and loan and advances

Table 4.11

Correlation coefficient between Non-Performing Loan and Loan and Advances of HBL

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
-0.8726	0.7614	0.0902	0.5411

Source: Annex-9

Table 4.11 shows that correlation coefficient between the non-performing and loan is -0.8726. There is highly negative correlation between NPL and loan. That indicates the NPL decreasing and loan amount is increasing. The coefficient of determination is 0.7614 which depicts 76.14% of NPL has explained by the loan. Here "r" is lesser than 6 times value P.E., meaning that the correlation coefficient is statistically insignificant.

4.4.4 Correlation coefficient between Non-Performing Loan and Loan and Advance of Nabil

The correlation and coefficient of determination of NPL and loan of Nabil is presented in table 4.12

Table 4.12

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
-0.4365	0.1905	0.2064	1.2382

Source: Annex-10

The table 4.12 explains the relationship between non-performing loan and loan and advances of Nabil. The correlation coefficient of Nabil is highly negative (i.e. -0.4365). It shows that there is negative relation between loan and NPL. Here correlation coefficient is lesser than 6 times value, it is not statistically significant. Coefficient of determination is 0.1905 which mean 19.05% total NPL is explained by loan and advances. This indicates that NPL of Nabil has lower volume and decreasing in trend.

4.5 Regression Analysis

Regression analysis is used as a tool of determining the strength relationship between two or more variables. Thus it is a statistical device that helps predicting the value of one variable when the values of other variables are known.

4.5.1 Impact of Loan and Advance and Non-Performing Loan on Net Profit

Total loan and non-performing loan have high implication for determining net profit. Effective performing loan and non-performing loan directly affects the net affects of the firm. The net profit of the firm depends on total loan and non-performing loan of the organization. Thus, it is more significance to know the impact of total loan and non-performing loan in net profit.

To find out the impact of the total loan and nonperforming loan on profit, multiple regression analysis was used. The following table represents the regression analysis of the independent variables total loan and advance and non-performing loans on dependent variable net profit of HBL.

Model Summary

Table 4.13

Impact of loan and advance and non-performing loan on net profit of HBL

R	R Square	Adjusted R Square	Std. Error of the Estimate
.993(a)	.986	.972	24.99863

a. Predictors: (Constant), NPL, Loan

ANOVA (b)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	88390.481	2	44195.240	70.720	.014(a)
Residual	1249.863	2	624.932		
Total	89640.344	4			

a. Predictors: (Constant), NPL, Loan

b. Dependent Variable: Profit

Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-810.130	310.336		-2.610	.121
Loan	.066	.012	1.345	5.326	.033
NPL	.199	.132	.382	1.512	.270

a. Dependent Variable: Profit

Source: Annex-11

The calculated R was found 0.993 indicates that there is high positive relationship dependent variable profit on two independent variables total loan and advance and non-performing loan. After considering the error term, the adjusted R square value was found .972 which indicates that of total variation in the dependent variable profit has been explained by the two independent variables.

Similarly, ANOVA table shows that the result presented above was significant at 0.10 levels. The result of net profit volume and volume of loan and advance results relatively higher level of F statistics. The higher level of statistic resulted relatively higher level of significance. Although, it seems that the result of loan and advance and non-performing loans was significant with regard to profit of HBL. Coefficients table indicates that the loan was significant and NPL was not significant at 0.10 levels. It indicates that the loan is affects on the profitability and NPL. Other factors such as investments and foreign exchange gain other income leads to increase in profit.

The table 4.13 represents the regression analysis of dependent variable profit and independent variables loan and advance and NPL of Nabil.

Model Summary

Table 4.14

Impact of Loan and Advance and Non-Performing Loan on Net Profit of Nabil

R	R Square	Adjusted R Square	Std. Error of the Estimate
.960(a)	.922	.845	42.48931

a. Predictors: (Constant), NPL, Loan

ANOVA (b)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	42901.197	2	21450.599	11.882	.078(a)
Residual	3610.682	2	1805.341		
Total	46511.880	4			

a. Predictors: (Constant), NPL, Loan

b. Dependent Variable: Profit

Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	328.451	134.950		2.434	.135
Loan	.020	.005	.958	4.222	.052
NPL	-.010	.448	-.005	-.023	.984

a. Dependent Variable: Profit

Source: Annex-12

The R was found to be 0.960 indicates that there is high positive relationship between dependent and independent variables. The adjusted R square was found to be 0.845 considering independent variables outstanding loan and advance, non-performing loan and dependent variable profit. It means that 84.5% of total variation in dependent variable profit has been explained by independents variables loan and advance and NPL. Thus loan and NPL high influence on profit volume. Loan and nonperforming loan can be described as strong determinant for determining of profit.

Similarly, ANOVA table show that the result presented above was significant at 0.10 levels. The result of profit, loan and advance and non-performing loan resulted relatively higher level of F statistic resulted relatively higher level of significance. Although coefficients table shows, it was significantly at overall evaluation, t statistics indicates that the result of loan and advance was significant and NPL was not significant with regard of profit Nabil at 0.10 levels of significance. It can be concluded that loan and advances leads to increased in the profit.

4.5.2 Impact of Total Loan and Advance and Deposit on Net Profit of HBL and NABIL

Total deposit and loan and advance are the strong determinants of profit. Amount deposit and loan and advance directly affect on the profitability of the firm. In the form of loan and advance, efficient mobilization of deposit results to increased profitability of the firm. Therefore, profit of firm depends upon deposit and loan. The table 4.15 represents the regression analysis between dependent variable profit and independent variables deposit and loan and advances of HBL.

Table 4.15

Model Summary

Impact of Total Loan and Advance and Deposit on Net Profit of HBL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986(a)	.973	.946	34.87498

a. Predictors: (Constant), Deposit, Loan

ANOVA (b)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	87207.816	2	43603.908	35.851	.027(a)
Residual	2432.528	2	1216.264		
Total	89640.344	4			

a. Predictors: (Constant), Deposit, Loan

b. Dependent Variable: Profit

Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-252.650	240.390		-1.051	.404
Loan	.064	.034	1.293	1.859	.204
Deposit	-.013	.028	-.313	-.450	.697

a. Dependent Variable: Profit

Source: Annex-13

The R 0.986 indicates that there was high degree of positive relationship between the dependent variable profit and independent variables deposit and total loan and advance. The adjusted R square was found to be 0.946 considering independent variables deposit and loan and advance and dependent variable profit. It means that the variation on profit has been explained by loan and advance and deposit. It can be concluded that deposit and loan and advance highly influenced on profit volume and deposit and loan and advance are strong determinant for determining of profit.

Similarly, ANOVA table shows there was significant difference in profit due to deposit and loan and advance. F statistic was higher level and it seems that there was higher level of significance. Coefficients table indicates that the results of loan and deposit were not significant at 0.10 levels of significance. This mean there is sufficient evidence that the profit has caused form the two independent variables. So, deposit and loan and advance were significance with regard of the profit.

The following table represents the regression analysis between dependent variable profit and independent variables deposit and loan and advances of Nabil.

Table 4.16

Model Summary

Impact of Total Loan and Advance and Deposit on Net Profit of Nabil

R	R Square	Adjusted R Square	Std. Error of the Estimate
.961(a)	.924	.848	42.09457

a. Predictors: (Constant), Deposit, Loan

ANOVA (b)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	42967.974	2	21483.987	12.124	.076(a)
Residual	3543.906	2	1771.953		
Total	46511.880	4			

a. Predictors: (Constant), Deposit, Loan

b. Dependent Variable: Profit

Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	323.579	62.249		5.198	.035
Loan	.015	.029	.700	.519	.656
Deposit	.004	.020	.264	.196	.863

a. Dependent Variable: Profit

Source: Annex-14

The R .961 indicates that there was high degree of positive relationship between the dependent variable profit and independent variables deposit and total loan and advance.

The adjusted R square was found to be 0.848 considering independent variables deposit and loan and advance and dependent variable profit. It means that 84.8% the variation on profit has been explained by loan and advance and deposit. Therefore, deposit and loan and advance has highly influenced on profit volume. Deposit and loan and advance are strong determinant for determining of profit.

The result of ANOVA shows there was significance difference in profit due to the deposit and loan and advances at 0.1 levels. The higher level of F statistic means relatively higher level of significance. This mean profit is highly depend on the deposit collection and loan and advances. T statistic shows deposit and loan and advance were not significance difference with regard to profit in 0.10 levels of significance. This mean there was no sufficient evidence that the profit has caused form the two independent variables.

4.6 Major findings

The major findings of the study are as follows:

- The deposit collected of both banks during the five year period is in increasing but fluctuating trend. The lending deposit ratio of HBL and Nabil is in increasing trend. It seems that both banks have utilized the most of its collected funds.
- Nabil seems to be efficient in mobilizing its total deposit in the form of loan and advances. Nabil seems to be the best performer in utilizing its collected fund in the form of loan and advances efficiently where as HBL has less utilizing its collected funds than Nabil in terms of loan and advance.
- The ratio of nonperforming loan to loan and advances of Himalayan bank ltd is higher than that of Nabil bank ltd. Non-performing loan of both banks seem decreasing in trend. HBL was able to decrease the ratio of NPL during this period. The result showed banking sector is s affected by the non-performing loan.
- The investment ratio of Nabil bank is in increasing trend except the year 2007/08. This mean Nabil bank highly utilized its deposit as investment. The investment ratio of HBL is also increasing but in fluctuating trend.

- While analyzing of total profit to loan and advance ratio, HBL's profitability ratio is in increasing trend. Nabil had same trend of profit ratio in the research period. Nbail has the best profit earning ration in the study period.
- In lending portfolio analysis, both bank invested in different sector. Productions sector is the dominant sector because it covered more percent of loan out of total loan granted by both banks. Both banks invested more than 33% in this sector every year of the research period. Production represents industry and more investment in industrial sector helps to economic development of the nation. Both banks give second priority for wholesaler and retailer. It seems that HBL gives more priority than Nabil in agricultural investment. Agriculture is the back bond of the economy; Nabil invested less than one percent in consumable loan in this study period. Both banks give priority to the service industries but investment made in this sector is in decreasing trend. Furthermore, both banks made optimal portfolio for getting more return from then by minimizing the risk.
- The analysis of non-performing loan in categorized HBL has high volume of bad loan in every year of the study period and Nabil has higher bad loan in the year 2003/04 to 2005/06. Higher bad loan indicates that the poor performance and ineffective credit policy of the bank. Doubtful loan is also more than substandard in every year of the study period. Higher the bad and doubtful loan higher volume of loan loss provision (100% and 50% respectively). In comparison Nbail perform good while making credit policy. From that analysis, it is shows that Nabil has effective recovery system than the NBL.
- The correlation coefficient deposit and loan and advances of HBL and Nabil are 0.9909856 and 0.98824579 respectively. There is highly positive correlation between loan and advances and deposit collection of HBL. Nabil has high positive correlation between loan and advances and deposit collection. After the correlation analysis, both banks show that increase in deposit lead to increase loan and advances.
- The correlation coefficient between the non-performing and loan of HBL -0.908197 and Nabil -0.614376 respectively. The correlation coefficient of HBL and Nabil highly negative. This mean NPL of HBL is in decreasing trend.

- The value of adjusted R square value was found to be 0.972 and 0.845 of HBL and Nabil considering independent variables loan and advance and non-performing loan and dependent variable profit. It was found to be total variation in the dependent variable profit has been explained by the two independent variables. In the analysis of variance shows that the result of HBL and Nabil was found significant at 0.1 level of significance. In compare in coefficients, loan was found significant at 0.1 levels of both banks. This means, there was evidence that loan has significantly changed the profitability of the firm.
- The adjusted R square was found to be 0.946 and 0.848 of HBL and Nabil respectively considering independent variables deposit and loan and advance and dependent variable profit. It means that the variation on profit of HBL and Nabil have been explained by loan and advance and deposit. ANOVA table shows there was significant difference in profit due to deposit and loan and advance. Although, t statistic shows there was significance difference in profit due the deposit and loan and advance.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Banks & financial institutions are the backbone of the economic development of a country. They have promoted industrialization & economic development by channeling the public deposit into industrial as well as agricultural sector. Commercial banks play an important role in the economic development of the country as they provide capital for the development of industry, trade as well as agriculture by disbursing the saving collected as deposits from the people. Commercial banks investment strongly support for the economic condition of the country. Loan granted to small sector and agricultural sector support to increment of per capita income of the rural people. Banks loans help the growth of trade and commerce, energy sector as well as agriculture and empower the economic activities of the country.

The research is about the lending portfolio of commercial banks with reference to HBL and Nabil. The first chapter of the study deals about basic assumption. Basically it highlighted the concept, problems, significance, objectives of the study. Second chapter help the researcher to provide the knowledge about the conceptual review and national and international researches review. Third chapter deals with various methodology used for the study such as sources of data, population and sample of data, data collection technique and procedure and tools used.

Fourth chapter deals with data presentation and analysis. In this chapter financial condition, nonperforming loan, portfolio of lending, correlation and regression are analyzed. The analysis is conducted with the data collected form various sectors. The cursory looking for the two banks in terms of lending deposit ratio Nabil seems dominant. Out of total deposit collection Nabil has disbursed more than 66% as loan where as HBL has disbursed around 50% to 60% of its deposit collection as a loan. It seems that Nabil is the best performer while utilizing its collected fund. HBL is able to decrease its non-performing loan. In comparison Nabil has lower ratio of NPL and Nabil meet international standard after the year 2003/04. Political crisis of the nation, political leader famousness to the borrower, borrower intention, trade deficit, owner worker worse relationship for industry failure are the main causes for the increment of the NPL.

Both banks made optimal portfolio for getting more return from then by minimizing the risk. It seems that both banks invest more than 33% as production loan out of total. For the development of nation banks must be investment their fund in the rural area. But in the analysis of the portfolio of lending both banks invest lower percentage in agriculture which represents rural investments. Private sector banks are not interested to open their branch in the rural area.

The correlation coefficient deposit and loan and advances of HBL are 0.9909856. There is highly positive correlation between loan and advances and deposit collection. The correlation coefficient deposit and loan and advances of Nabil are 0.9671. The correlation coefficient between the non-performing and loan is -0.908197 of HBL. The correlation coefficient between deposit loan and advance of Nabil is 0.98824579.

The value of adjusted R square value was found to be 0.972 and 0.845 of NBL and Nabil considering independent variables loan and advance and non-performing loan and dependent variable profit. It was found to be total variation in the dependent variable profit has been explained by the two independent variables. In the analysis of variance both banks result was not seems to be significant at 0.1 levels. The adjusted R square was found to be 0.946 and 0.848 of HBL and Nabil respectively considering independent variables deposit and loan and advance and dependent variable profit. ANOVA shows HBL and Nabil were significance difference in profit due to the deposit and loan and advance at 0.1 levels. Although, t statistic shows there was significance difference in profit due the deposit and loan and advance of Nabil at 0.1 levels.

An overall analysis both bank manages its lending effectively and efficiently and it recovers its bad loan taking necessary action in time. Nabil seems good in managing deposit and earning more profit.

5.2 Conclusion

Banks & financial institutions in Nepal will have to benchmark themselves against some of the best in the world, for a strong and resilient banking and financial system. Therefore, banks need to go beyond peripheral issues and tackle significant issues like improvements in profitability, efficiency and technology, while achieving economies of scale through available cost effective solutions. These are some of the major issues that need to be addressed by banks in recent scenario, for their success and not just survival, in the changing milieu.

Lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. Non-performing loan is seems to be major problems for Nepalese commercial banks. Banks are learning to review their risk portfolios. Lending is the most income-generating sources for Nepalese commercial bank but there is risk inherent in bank's lending portfolio. In order to cover the risk inherent in the lending portfolio, banks have to make loan loss provision by categorizing the loans into different category as per the NRB directives.

It has been found that HBL has high portion of non-performing loan than Nabil which need higher provision results lower profit. Out of total NPL, HBL has more volume of loss loan. Analysis of variance indicated that all indicators are found significant difference at 0.1 levels of significance of both banks. Form these indicators it can be said that to preserve its position as a successful and dominant commercial bank both bank have to give attention on its lending and recovery device.

5.3 Recommendation

1. The high portion of non-performing loan accompanied by higher provision of these banks which reduced the profitably and competency of the bank in this competitive environment. NPL of HBL is higher in the ratio and recommended to take remedial

actions for recovering bad loans. To reduce the NPL they are also recommended take following action while granting the loan.

- The bank analyzes the borrower's strategies and organizational architecture to be the most important determinants of firm profitability and the firm's ability to repay the banking loan. So, banks have constructed a comprehensive analytical framework that will improve the accuracy of analyzing a borrower's capacity and condition.
- The bank should provide more training programs in business strategy and organizational management to the employees in the lending department. Training is the most important for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management.
- The efficient employees properly evaluate proposal of borrower and monitor his or capacity and condition. So it is recommended for the banks to evaluate the job performance of employees of lending department.
    1. Following the directives of NRB is also reduces many of credit risks. Hence both banks are recommended to adhere to the directives and they are also suggested to come up with a stronger internal audit department to ensure that the directives are properly implemented.
    2. Portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. It helps an investor to make optimal investment decision minimizing overall risk and maximizing overall return. So, both banks make optimal lending portfolio to reduce its bad loan risk, maximizing profit and development of economy of the nation.
    3. Entire economy is largely dependent upon the proper execution of lending function by commercial banks. Low level of lending means, low level of investment resulting to low level of productivity, which may ultimately affect negatively on the national economy. Loan and advance on one hand is the highest income generating asset and on the other hand it also helps to upgrade the economic position of the country. Hence both banks increase lending in productive sector.

4. Both banks concentrating its operation in urban areas. Most of the people who live in rural areas are not benefited form it. To making investment in agricultural sector which is need to development for the economic growth of the nation Nabil and HBL strengthen its branches in rural areas. Financial support form the bank helps to improve the financial condition of the rural people. To meet the poverty alleviation objectives of the government the banks helps by expanding their branches in rural areas.
5. The government has to encourage the coming up new entrepreneurs, encourage the small-scale industries, give priority to export business, encourage foreign investors. The bank in turn should extend support form their side in every possible way.

Recommendation for Future Study

The Limitations of this thesis might be the recommendation for the future study.

1. This study is only for the Six years time horizon so the future researcher can use more years data.
2. This study concentrates only on the portfolio of lending, impact of deposit, loan and non performing loan in profit. Also, data and information of the sampled commercial banks only are used by the researcher. For the future researcher can use more sample commercial banks.
3. The research study based upon the secondary data and information mostly. Hence, the researcher can use primary data to calculate management efficiency ratio to make it more practical.

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ANNEXURE

Financial ratios

Annex: 1

Total loan and advances to total deposit ratio Rs. in million

Year	Total loan and advance		Total deposit		Ratio	
	HBL	Nabil	HBL	Nabil	HBL	Nabil
2002/03	10844.6	8113.8	21002.8	13437.7	0.5163	0.6038
2003/04	13002.1	8616.7	22760.9	14098.0	0.5712	0.6112
2004/05	13539.6	10978.6	24831.1	14456.8	0.5453	0.7594
2005/06	15872.5	13278.8	26456.2	19348.4	0.5999	0.6863
2006/07	17987.3	15903.0	29905.8	23342.4	0.6015	0.6813
2007/08	20233.9	21769.8	31805.3	31915.0	0.6362	0.6821
2008/09	25292.1	27816.6	34681	37348.3	0.7293	0.7448

Source: Annual Report and Banking and financial statistics of NRB

Annex: 2

Total nonperforming loan (NPL) to total loan and advances ratio Rs in million

Year	Total NPL		Total Loan and advance		Ratio	
	HBL	Nabil	HBL	Nabil	HBL	Nabil
2002/03	1092.84	449.63	10844.6	8113.8	0.1008	0.0554
2003/04	1147.46	286.68	13002.1	8616.7	0.0883	0.0333
2004/05	1001.35	144.51	13539.6	10978.6	0.0739	0.0132
2005/06	1040.75	182.62	15872.5	13278.8	0.0656	0.0136
2006/07	641.60	178.29	17987.3	15903.0	0.0357	0.0112
2007/08	477.23	171.4	20233.9	21769.8	0.0236	0.0078
2008/09	551.21	220.72	25292.1	27816.6	0.0218	0.0079

Source: Annual Report and concerning department of respective banks

Annex: 3

Investment to total deposit ratio Rs in million

Year	Investment		Total deposit		Ratio	
	HBL	Nabil	HBL	Nabil	HBL	Nabil
2002/03	4014.3	3687.8	21002.8	13437.7	0.1911	0.2744
2003/04	2815.3	3697.1	22760.9	14098.0	0.1237	0.2622
2004/05	5509.6	4353.3	24831.1	14456.8	0.2219	0.3011
2005/06	10890.5	6174.8	26456.2	19348.4	0.4116	0.3191
2006/07	11821.6	8952.3	29905.8	23342.4	0.3953	0.3835
2007/08	12751.7	9966.6	31805.3	31915.0	0.4009	0.3123
2008/09	8531.5	10875	34681	37348.3	0.2460	0.2912

Source: Annual report and banking and financial statistics of NRB

Annex: 4

Total profit to total loan and advances ratio Rs in millions

Year	Total Profit/Loss	Total Loan and advance	Ratio (R)

	HBL	Nabil	HBL	Nabil	HBL	Nabil
2002/03	212.13	416.24	10844.6	8113.8	0.0196	0.0513
2003/04	263.05	487.07	13002.1	8616.7	0.0202	0.0565
2004/05	308.27	520.11	13539.6	10978.6	0.0228	0.0474
2005/06	457.46	635.26	15872.5	13278.8	0.0288	0.0478
2006/07	491.82	673.96	17987.3	15903.0	0.0273	0.0424
2007/08	635.87	746.47	20233.9	21769.8	0.0314	0.0343
2008/09	752.8	1033.8	25292.1	27816.6	0.0298	0.0372

Source: Annual report and banking and financial statistics of NRB

Annex: 5

Portfolio of lending

Portfolio/sector wise of lending of Himalayan Bank Ltd

Rs in million

Year / **Portfolio of lending**	**2004/05**		**2005/06**		**2006/07**		**2007/08**		**2008/09**	
	Rs	%	Rs	%	Rs	%	Rs	%	Rs	%
Agriculture	516.7	3.81	507.6	3.19	660.2	3.67	639.2	3.15	677	2.65
Consumable loan	225.5	1.66	184.1	1.15	322.7	1.79	265.0	1.30	541	2.11
Services industries	1415.8	10.45	1481.2	9.33	1575.8	8.76	1805.6	8.92	2117.6	8.28
Wholesaler and retailers	2013.9	14.87	1921.0	12.10	2595.0	14.42	2774.0	13.70	3740.2	14.62
Productions	5623.8	41.53	7803.0	49.15	8083.2	44.93	8783.6	43.41	10507.9	41.08
Constructions	208.0	1.53	342.2	2.15	462.4	2.57	764.6	3.77	1799.4	7.04
Finance, insurance & fixed assets	999.3	7.38	838.6	5.28	963.0	5.35	1377.0	6.80	1429.8	5.59
Transportation, communication & public services	1313.6	9.7	1355.4	8.53	1436.5	7.98	1048.0	5.17	849.4	3.32
Mining	48.2	0.35	7.0	0.04	19.6	0.10	9.9	0.04	8.9	0.035
Metal production machinery & electrical tools	111.6	0.82	237.9	1.49	192.9	1.07	528.4	2.61	814.6	3.18
Transportation equipment production & fitting	226.1	1.66	46.6	0.29	72.3	0.40	60.7	0.29	88.9	0.34
Others	837.1	6.18	1178.1	7.23	1603.7	8.91	2177.9	10.76	3002.7	11.74
Total	**13539.6**	**100**	**15872.7**	**100**	**17987.3**	**100**	**20233.9**	**100**	**25577.4**	**100**

Source: Annual report and banking and financial statistics of NRB

Annex-5.1

Mean and Standard Deviation of portfolio (S.D.) of lending of HBL

Year	2004/05	2005/06	2006/07	2007/08	2008/09	Total	Mean	S.D.
Agriculture	3.81	3.19	3.67	3.15	2.65	16.47	3.294	0.41326
Consumable loan	1.66	1.15	1.79	1.3	2.11	8.01	1.602	0.344174
Services industries	10.45	9.33	8.76	8.92	8.28	45.74	9.148	0.732705
Wholesaler and retailers	14.87	12.1	14.42	13.7	14.62	69.71	13.942	1.000088
Productions	41.53	49.15	44.93	43.41	41.08	220.1	44.02	2.910698
Constructions	1.53	2.15	2.57	3.77	7.04	17.06	3.412	1.956225
Finance, insurance & fixed assets	7.38	5.28	5.35	6.8	5.59	30.4	6.08	0.851046
Transportation, communication & public services	9.7	8.53	7.98	5.17	3.32	34.7	6.94	2.343698
Mining	0.35	0.04	0.1	0.04	0.035	0.565	0.113	0.120897
Metal production machinery & electrical tools	0.82	1.49	1.07	2.61	3.18	9.17	1.834	0.910398
Transportation equipment production & fitting	1.66	0.29	0.4	0.29	0.34	2.98	0.596	0.533539
Others	6.18	7.23	8.91	10.76	11.74	44.82	8.964	2.082888

$$S.D. = \sqrt{\frac{\Sigma(X - \bar{X})^2}{N}}$$

Annex: 6

Portfolio/sector wise of lending of Nabil Bank Ltd Rs in million

Year **Portfolio of lending**	**2004/05**		**2005/06**		**2006/07**		**2007/08**		**2008/09**	
	Rs	%	Rs	%	Rs	%	Rs	%	Rs	%
Agriculture	51.9	0.47	51.1	0.38	54.5	0.34	115.9	0.53	192.91	0.69
Consumable loan	77.2	0.71	86.7	0.65	84.6	0.53	116.8	0.54	116.2	0.41
Services industries	1387.3	12.67	1014.3	7.64	1260.7	7.93	1553.5	7.14	1979.4	7.07
Wholesaler and retailers	1990.1	18.18	2068.5	15.58	2458.5	15.46	3586.5	16.47	5094.6	18.20
Productions	4375.8	39.97	5107.1	38.46	5701.5	35.85	6640.7	30.50	7829.5	27.96
Constructions	665.2	6.08	1378.8	10.38	1923.3	12.09	2985.0	13.71	4014.5	14.34
Finance, insurance & fixed assets	333.5	3.05	480.2	3.62	821.1	5.16	1255.6	5.77	1964	7.01
Transportation, communication & public services	289.3	2.64	673.7	5.07	917.7	5.77	1785.3	8.20	1313.2	4.69
Mining	28.9	0.26	21.9	0.16	13.9	0.09	18.5	0.08	15.4	0.055
Metal production machinery & electrical tools	140.9	1.29	100	0.75	163.2	1.03	234.9	1.08	291.1	1.04
Transportation equipment production & fitting	1003.7	9.17	1309.6	9.86	1467.9	9.23	1791.0	8.23	2498.4	8.92
Others	602.9	5.51	986.8	7.43	1036.1	6.52	1686.1	7.75	2688	9.6
Total	**10946.7**	**100**	**13278.7**	**100**	**15903**	**100**	**21769.8**	**100**	**27997.1**	**100**

Source: Annual report and banking and financial statistics of NRB

Annex-6.1

Mean and Standard Deviation of portfolio (S.D.) of lending of Nabil

Year	**2004/05**	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**Total**	**Mean**	**S.D.**
Agriculture	0.47	0.38	0.34	0.53	0.69	2.41	0.482	0.123515
Consumable loan	0.71	0.65	0.53	0.54	0.41	2.84	0.568	0.104

Services industries	12.67	7.64	7.93	7.14	7.07	42.45	8.49	2.114114
Wholesaler and retailers	18.18	15.58	15.46	16.47	18.2	83.89	16.778	1.204565
Productions	39.97	38.46	35.85	30.5	27.96	172.74	34.548	4.608364
Constructions	6.08	10.38	12.09	13.71	14.34	56.6	11.32	2.958601
Finance, insurance & fixed assets	3.05	3.62	5.16	5.77	7.01	24.61	4.922	1.437712
Transportation, communication & public services	2.64	5.07	5.77	8.2	4.69	26.37	5.274	1.796002
Mining	0.26	0.16	0.09	0.08	0.055	0.645	0.129	0.074189
Metal production machinery & electrical tools	1.29	0.75	1.03	1.08	1.04	5.19	1.038	0.172209
Transportation equipment production & fitting	9.17	9.86	9.23	8.23	8.92	45.41	9.082	0.526703
Others	5.51	7.43	6.52	7.75	9.6	36.81	7.362	1.364015

Correlation

Correlation coefficient between deposit and loan and advances of Himalayan Bank Ltd

Annex: 7

Rs in million

Year	Deposit (X)	Loan (Y)	X^2	Y^2	XY
2002/03	21002.8	10844.6	441117607.8	117605349.2	227766964.9
2003/04	22760.9	13002.1	518058568.8	169054604.4	295939497.9
2004/05	24831.1	13539.6	616583527.2	183320768.2	336203161.6
2005/06	26456.2	15872.5	699930518.4	251936256.3	419926034.5

2006/07	29905.8	17987.3	894356873.6	323542961.3	537924596.3
2007/08	31805.3	20233.9	1011577108	409410709.2	643545259.7
2008/09	34681	25292.1	1202771761	639690322	877155320
Total	**1911443**	**116772**	**5384395965**	**2094560971**	**3338460835**

Correlation (r) = $\dfrac{N\sum XY - \sum X \times \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\sqrt{N\sum Y^2 - (\sum Y)^2}}$

= $\dfrac{6 \times 2461305515 - 156762.1 \times 91480}{\sqrt{6 \times 4181624204 - (156762.1)^2}\sqrt{6 \times 1454870648 - (91480)^2}}$

= 0.9814

Coefficient of determination (r^2) = $(0.9814)^2$ = 0.9631

Probable Error (P.E) = 0.6745 $\times \dfrac{1 - r^2}{\sqrt{n}}$ = 0.0094

6 P.E. = 6×0.0094 = 0.0564

Annex: 8

Correlation coefficient between deposit and loan and advances of Nabil

Year	Deposit (X)	Loan (Y)	X^2	Y^2	XY
2002/03	13437.7	8113.8	180571781.3	65833750.44	109030810.3
2003/04	14098	8616.7	198753604	74247518.89	121478236.6
2004/05	14456.8	10978.6	208999066.2	120529658	158715424.5
2005/06	19348.4	13278.8	374360582.6	176326529.4	256923533.9
2006/07	23342.4	15903	544867637.8	252905409	371214187.2
2007/08	31915	21769.8	1018567225	473924192	694783167
2008/09	37348.3	27816.6	1394895513	773763236	1038902722
Total	**153946.6**	**106477.3**	**3921015410**	**1937530293**	**2751048081**

Correlation= 0.9923

Coefficient of determination (r^2) = 0.9846

Probable Error (P.E) = 0.6745 $\times \dfrac{1 - r^2}{\sqrt{n}}$ = 0.0039

6 P.E. = 6×0.0039 = 0.0326

Annex: 9

Correlation coefficient between loan and advances and NPL of HBL

Year	Loan (X)	NPL (Y)	X^2	Y^2	XY
2002/03	10844.6	1092.84	117605349.2	1194299.266	11851412.66
2003/04	13002.1	1147.46	169054604.4	1316664.452	14919389.67
2004/05	13539.6	1001.35	183320768.2	1002701.823	13557878.46
2005/06	15872.5	1040.75	251936256.3	1083160.563	16519304.38
2006/07	17987.3	641.6	323542961.3	411650.56	11540651.68
2007/08	20233.9	475.8	409410709.2	226385.64	9627289.62
2008/09	25292.1	551.21	639690322	303832.464	13941258.4
Total	**116772**	**5951.01**	**2094560971**	**5538694.77**	**91957184.9**

Correlation= -0.8726

Coefficient of determination (r^2) = 0.7614

Probable Error (P.E) = $0.6745 \times \frac{1-r^2}{\sqrt{n}}$ = 0.0902

6 P.E. = 6×0.0902 = 0.5411

Annex: 10

Correlation between loan and advance and NPL of Nabil

Year	Loan (X)	NPL (Y)	X^2	Y^2	XY
2002/03	8113.8	449.63	65833750.44	202167.1369	3648207.894
2003/04	8616.7	286.68	74247518.89	82185.4224	2470235.556
2004/05	10978.6	144.51	120529658	20883.1401	1586517.486
2005/06	13278.8	182.62	176326529.4	33350.0644	2424974.456
2006/07	15903	178.29	252905409	31787.3241	2835345.87
2007/08	21769.8	171.4	473924192	29377.96	3731343.72
2008/09	27816.6	220.72	773763236	48717.3184	6139679.95
Total	**106477**	**1633.85**	**1937530293**	**448468.366**	**22836304.9**

Correlation = -0.4365

Coefficient of determination (r^2) = 0.1905

Probable Error (P.E) = $0.6745 \times \frac{1-r^2}{\sqrt{n}}$ = 0.2064

6 P.E. = $6 \times 0.2064 = 1.2382$

Annex11

Regression and SPSS 12 analysis

Multiple regression analysis between loan NPL and Profit of HBL

Year	Loan	NPL	Profit
2004/05	13539.6	1001.35	308.27
2005/06	15872.5	1040.75	457.46
2006/07	17987.3	641.6	491.82
2007/08	20233.9	475.8	635.87
2008/09	25292.1	551.21	752.8
Total	**92925.4**	**3710.71**	**2646.22**

Regression

Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	NPL, Loan(a)	.	Enter

a. All requested variables entered.

b. Dependent Variable: Profit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993(a)	.986	.972	24.99863

a. Predictors: (Constant), NPL, Loan

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88390.481	2	44195.240	70.720	.014(a)
	Residual	1249.863	2	624.932		
	Total	89640.344	4			

a. Predictors: (Constant), NPL, Loan
b. Dependent Variable: Profit

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-810.130	310.336		-2.610	.121
	Loan	.066	.012	1.345	5.326	.033
	NPL	.199	.132	.382	1.512	.270

a. Dependent Variable: Profit

Annex: 12

Multiple regression analysis between Loan, NPL and Profit of Nabil

Year	Loan	NPL	Profit
2004/05	10946.7	144.5	520.11
2005/06	13278.8	182.6	635.26
2006/07	15903	178.3	673.96
2007/08	21769.8	171.4	746.47

2008/09	27816.6	220.72	133.8
Total	**89714.9**	**897.52**	**2709.6**

Regression

Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	NPL, Loan(a)	.	Enter

a. All requested variables entered.
b. Dependent Variable: Profit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960(a)	.922	.845	42.48931

a. Predictors: (Constant), NPL, Loan

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42901.197	2	21450.599	11.882	.078(a)
	Residual	3610.682	2	1805.341		
	Total	46511.880	4			

a. Predictors: (Constant), NPL, Loan
b. Dependent Variable: Profit

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	328.451	134.950		2.434	.135
	Loan	.020	.005	.958	4.222	.052
	NPL	-.010	.448	-.005	-.023	.984

a. Dependent Variable: Profit

Annex: 13

Multiple regression line between Deposit, loan and advance and profit of HBL

Year	Deposit	Loan	Profit
2004/05	24831.1	13539.6	308.27
2005/06	26456.2	15872.5	457.46
2006/07	29905.8	17987.3	491.82
2007/08	31805.3	20233.9	635.87
2008/09	34681	25292.1	752.8
Total	**147679.4**	**92925.4**	**2646.22**

Regression

Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	Deposit, Loan(a)	.	Enter

a. All requested variables entered.

b. Dependent Variable: Profit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986(a)	.973	.946	34.87498

a. Predictors: (Constant), Deposit, Loan

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87207.816	2	43603.908	35.851	.027(a)
	Residual	2432.528	2	1216.264		
	Total	89640.344	4			

a. Predictors: (Constant), Deposit, Loan

b. Dependent Variable: Profit

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-252.650	240.390		-1.051	.404
	Loan	.064	.034	1.293	1.859	.204
	Deposit	-.013	.028	-.313	-.450	.697

a. Dependent Variable: Profit

Annex: 14

Multiple regression line between Deposit, loan and advance and profit of Nabil

Year	Deposit	Loan	Profit
2004/05	14586.61	10946.74	520.11
2005/06	19347.4	13278.78	635.26
2006/07	23342.28	15903.02	673.96
2007/08	31915	21769.8	746.47
2008/09	37348.3	27816.6	1033.8
Total	**126539.6**	**89714.94**	**2609.6**

Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	Deposit, Loan(a)	.	Enter

a. All requested variables entered.
b. Dependent Variable: Profit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.961(a)	.924	.848	42.09457

a. Predictors: (Constant), Deposit, Loan

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42967.974	2	21483.987	12.124	.076(a)
	Residual	3543.906	2	1771.953		
	Total	46511.880	4			

a. Predictors: (Constant), Deposit, Loan
b. Dependent Variable: Profit

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	323.579	62.249		5.198	.035
	Loan	.015	.029	.700	.519	.656
	Deposit	.004	.020	.264	.196	.863

a. Dependent Variable: Profit