CHAPTER-I

INTRODUCTION

1.1 Background of the Study:

Nepal has been facing the problem of accelerating the pace of economic development. Economic development of a country depends upon the upliftment of the rural people through increasing their productivity thereby raising their incomes, which ultimately help them to cross the poverty line. The commercial banking system in Nepal is still in its infant stage as compared to other developed countries. However, their important role in the economic development of the country has been fully realized and these banks are being oriented in their activities best suited for the overall economic development of a country.

For the upliftment of the rural people and economic development of a country as a whole, the government has initiated different priority sector lending programs focusing for poverty alleviation. The priority sector lending programs were area based or target/ group oriented, need based and complementary, timely and consistent with the national goals and suited to the specific needs of Nepal's rural economy. Banks play a significant role in the development of a country. Bank is a financial institution, which maintains the self-confidence of various segments of society and extends credit to the people. The financial institution is an indispensable part for the upliftment of a country. The financial institution is a vast field comprising of banks, financial companies, insurance companies, co-operatives, stock exchange and foreign exchange markets, mutual fund, etc. These institutions collect idle and scattered money from the general public and finally invest in different enterprises that consequently help in reducing poverty, increase in life style of people, increase employment opportunities, and thereby developing society and the country as a whole. Thus, today the financial institutions have become the base for measuring the level of economic development of a country.

1.1.1 Origin of Bank in Nepal:

The concept of the banking has been developed from the ancient history with the effort of ancient goldsmiths who developed the practice of storing people's gold and valuable treasures under such arrangement the depositors would leave their gold for safekeeping and given a receipt by the goldsmith. Whenever, the receipt was presented the depositors would get back their gold and valuable treasures after paying a small amount as fee for safekeeping and saving.

The Banking system in Nepal was developed gradually from the past. The history states that King Gunakamadev had received loans from the public in the 8th century to renovate "Kathmandu City". The foundation of banking system in Nepal was established by a businessperson named Shankhadhar Shakha in 10th century. He had paid back all the loans taken from the public and since then Nepal Sambat had stated in our country. This tells us that the system of lending money and paying back started long time back in our country. Later on in the 14th century, King Jayasthiti Malla divided the people into 64 castes according to their occupation, amongst them 'TANKADHARI' one is that dealt with the lending of money to the public. Main objective of the 'TANKADHARI' was to earn profit by providing money as a loan to people and taking certain interest rate. Prime Minister Ranadeep Singh established 'TEJARATH ADDA' in the 1933th B.S In order to protect people from higher interest rate, The 'TEJARATH ADDA' was responsible for providing loans to the people working in the government offices based on the security and the public based on the collateral they deposited in the 'TEJARATH ADDA' was not to earn profit, it charged its creditors with a low interest rate of 5% per annum. It was only subjected to lend but did not accept deposits, hence it cloud not be counted as a bank. However, it can be said that 'TEJARATH ADDA' was the main financial institution that led to the development of modern banking system into the country.

The words BANK was initiate form Latin words Bancus, French words Banque and Italian words Banca, which means refer that a Bench where sitting over there invest, exchange and keep record of money and cash. History tells us that initiation of bank in eastern side of world was mentioned in economics of Kautilya and Manusmirti. Likely in west banking system was started from ‘Bank of Venice, 1157 Bank of Barcelona. Actually banking system was inaugurated after established of Bank of England.

The actual banking system of Nepal starts from the establishment of Nepal Bank Limited (NBL) as the first modern bank in our country Nepal in B.S. 1994 Kartik 30th according to the Nepal Bank Act 1993. NBL was the first bank to be established in Nepal and prior to this, there was no such organized banking system in the country. Therefore year B.S. 1994 is said to be the Golden year for modern banking system in Nepal.

After two decade Nepal Rastra Bank established in 14th Baisakh, 2013 BS as a being central bank of Nepal under “Nepal Rastra Bank Act 2012” to perform the function of the central banking in Nepal. It established to promote, control, direct, supervision and manages banking activities and to in the country under the provision of Brussels International monetary conference (IMC). Main objective of Nepal Rastra Bank was to make economic assistance, issue and exchange of Nepalese note and currency, good govern of banking system etc. and use of own Nepalese note in whole country Nepal.

Nepal Industrial Development Corporation (NIDC) was established In 2016 BS under NIDC act 2016.it established for promote industrialization in Nepal. Main objective of NIDC was to provide technical and financial assistant for industry and commerce. Subsequently another fully state owned commercial bank “Rastriya Banijya Bank” was established on 10th Magh, 2022 BS under Rastriya Banijya Bank act 2021 which was the second commercial bank of Nepal. With the establishment of RBB, a noticeable progress could be seen in banking industry of Nepal. It brought a revolution in the banking industry. People could easily make business transactions with other countries. Both the banks have majority of shares owned by the government of Nepal. Rastriya Banijya Bank is fully owned by the government. In 2024 magh 7th BS Agriculture Development Bank (ADB) was established under Agricultural Development Bank act 2024. ADB was established combined merge of cooperative bank and bhumisudhar Bachat Corporation.

Nepal adopted the free economic policy privatization, liberalization and globalization. Liberal free economic policy allowed establishing Joint venture bank under collaboration with foreign bank as well as on private sector. In 2041 Ashad 29 Nepal Arab Bank limited was first joint venture bank established in Nepal which is known as NABIL Bank in today. After that investment bank (Nepal Indoswis bank), standard charter bank (Greenland bank), Himalayan bank, SBI bank etc instigate accordingly. As the time passed, a need for the more commercial banks arose. At the present time various commercial bank established and some are in process for operation. Today there are altogether 25 commercial banks, 36 Development Banks, 72 Finance Companies, 11 Micro Credit Development Banks and various cooperative firm are functioning in the our country in Nepal. Still many other commercial banks are in the process of opening in the market. Today Nepal can take legitimate pride in remarkable growth and progress in the banking industry. In this way we know origin and development of commercial bank in Nepal.

1.1.2. Introduction of Sample Bank:

A Nepal Investment Bank Limited (NIB)

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

With the decision of credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen has acquired on April 2002 the 50% shareholding of credit Agricole Indosuez in Nepal Indosuez Bank Ltd. The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank’s Annual General Meeting, Nepal Rastra Bank and Company Registrar’s office with the following shareholding structure. Rastriya Banijya Bank holds 15%, Rastriya Beema Sansthan holds 15%, General Public holds 20%, and the Nepalese promoters hold 50%.

We believe that NIB, ‘which is managed by a team of experienced bankers and professionals having proven track record, can offer you what you’re looking for. Besides commercial banking services, the bank also offers industrial and merchant banking services. The bank has six branches in Kathmandu Valley at the following locations: Putalisadak, New Road, Pulchowk (Lalitpur), Thamel, Kalimati, and Seepadol (Bhaktapur). In addition, the bank also has eleven other branches outside Kathmandu Valley in Banepa, Narayangarh, Birgunj, Janakpur, Jeetpur, Bhairawa, Biratnagar, Pokhara, Nepaljung, Butwal and Birtamod. Bank will be aggressively opening new branches at different parts of the Kingdom to serve its customers better. Recently bank has opened its new branch outside the valley in the Birtamod. Investment Bank Limited has always been committed to providing a quality service to its valued customers, being truly a Nepali Bank. 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 services to its valued customers, Investment Bank Limited has adopted the latest banking technology. This has not only helped the bank to constantly improve its service level but has also prepared the bank for future adaptation to new technology. The Bank already offers unique services such as the pre-paid mobile recharging system through its ATM, SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future. Recently it has brought a new scheme that every one can open its own saving Account in Re. 1.00.

B. Introduction of Nabil Bank Limited:

Nepal Arab Bank Limited Nabil Bank, the 1st foreign joint venture Bank set up in the nation with an objective to introduce modern banking services, commenced its operations on 12th of July 1984 or 2041 Ashad 29 B.S. with Rs. 28 million capital. Dubai Bank Limited, Dubai was the foreign joint venture partner who extended Nabil a technical service agreement in the initial period. The Bank, through its quality customer service and innovative products, has today attained a distinguished recognition in the banking industry of Nepal. The first Joint Venture Bank in Nepal with a 24 Year old journey of History.

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 team of NABIL bank manages day-to-day operations and risk management. Bank is fully equipped with modern technology, which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Banglore, India, Internet banking system and Tele-banking system. Nepal Arab Bank Limited is providing full-fledged commercial banking services to its clients.

From its inception period in 1984 as the first joint venture bank, to commence operations in the Kingdom of Nepal, the bank have been a leader in terms of bringing the very best international standard banking practices, products and services to the kingdom. Today, mission of the bank is to be the Bank of 1st Choice to all of its stakeholders and customers. Customers to think of Nabil Bank first to meet any financial need of theirs. Nabil Bank would like investors to choose the Bank's share as a blue-chip stock whenever they are in search of an investment opportunity. For the customers, it want to be the first choice in meeting all of the financial requirements, for shareholders, it want to be the investment of choice, for regulators, it want to be an example of a model bank, It wants to be an example for the regulators in terms of professionalism and transparency. Nabil wants to be an actively participating 'good corporate citizen' in all the Communities that the Bank works. It want to be the first choice as an employer with whom to build a career and finally the entire Nabil Team embraces a set of Values that acronym is referred to as 'C.R.I.S.P.' representing the fact that we consistently strive to be Customer Focused, Result Oriented, Innovative, Synergistic and Professional. By living these values, individually as professionals and collectively as a Team, Nabil Bank is committed to Surge Ahead to be the Bank of 1st Choice in Nepal.

NABIL bank is a full services bank providing an entire range of products and services, starting with deposit accounts in local and foreign currency, Visa and Master-Card denominated in rupees and dollars, Visa Electron Debit Cards, Personal Lending Products for Auto, Home and Personal loans, Trade Finance Products, Treasury Services and Corporate Financing. Main aim is to be able to meet customer's entire gamut of financial requirements that is why it prides us in being 'Your Bank at Your Service'.

Nabil Bank Limited was the first joint venture bank established in 1984 with 50% invest by Dubai Bank Limited of UAE and of remaining 50% by Nepalese financial institutions comprise 30% and 20% by general public. 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.

1.2 Focus of the Study:

Although joint venture banks have managed credit than other local commercial banks within short span of time, they have been facing a neck –to-neck competition against one another. Among this joint venture banks, this research is based on mainly joint venture banks, namely Everest Bank Limited Joint venture commercial banks play a tremendous role in a developed or developing nation also helps to improve the economic sector of the country. Typically, commercial banks main motive is to make profit by providing quality services to the customers. In Nepal, there exist 25 commercial banks realizing their services. The study focus on evaluating the deposits utilization of the bank in terms of loans and advances and investments and its Commercial banks are the heart of financial system. They hold the deposit of money persons, government establishment and business. The study focuses on evaluating the deposits utilization of the bank in terms of loans and advances and investments and its contribution in the profitability of the bank. It also focuses on the contribution in the profitability of the bank. Commercial banks are the heart of financial system. They hold the deposit of many persons, government establishment and business units. They make fund available through their lending and investing activities to borrowing individual’s business firms and government establishment. In doing so, they assist both the flow of goods and services from the producers to consumers and the financial activities of the government. They provide a large portion of medium of exchange and they are the media through which monetary policy is affected. These facts show that commercial banking system of nation is important to the functioning of the economy.

Financial institution is 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 and intermediaries, the financial institution helps the process of resources mobilization. The importance of financial institutions in the economy has of late grown to an enormous extent. The government in turn is required to regulate their activities. So, the financial policies are implemented as per the requirement of the country.

Therefore, this researcher has focused this resource mainly to highlight and examine the credit management of the selected bank ignoring other aspects of bank transaction. To highlight the credit management of the bank, the research is based on the certain statistical tools i.e. mean with a view to find out the true picture of the bank. The main objective of this research is to analyze the credit management through the use of appropriate financial tool.

1.3 Statement of the Problem:

Commercial banks in Nepal have been facing various challenges and problems. Some of them arising due to the economic condition of the country, some of them arising due to confused policy of government and many of them arising due of default borrowers. After liberalization of economy, banking sector has various opportunities. Lending in industries and production sectors are very risky projects. Banks are investing in house loan, hire purchase loan, for safety purpose. Lack of lending opportunities, banks are facing problem of over liquidity. Nowadays banks have increasing number of deposits in fixed and saving accounts but have decreasing trend in lending behaviors. So, this has caused major problems in commercial banks. Nowadays due to competition among banks, the interest rate change for loan is in decreasing trend. Non-performing assets have become a large problem in the commercial banks. Liquidity is maximum with the financial institutions. Hence, the banks and financial institutions are competing among themselves to advance credit to limited opportunity sectors. Lack of good lending opportunities, banks is facing problems of over liquidity. Due to unhealthy competition among the banks, the recovery of the banks credit is going towards negative trends. Non-performing Credits of the banks are increasing year by year. To control such type of state, the regulatory body of the banks and financial institutions, NRB has renewed its directives of the credit loss provision. In order to analyze the Credit Management of commercial bank following research problems are formulated.

- Is the bank mobilizations and credit Management effective and efficient?
- Is credit efficiency of NIB and NABIL influences the profitability?
- What is the impact of deposit and loan advance in liquidity?
- What is the proportion of Non-performing Asset on total loans and advances of the bank?
- Is NIB maintaining lending efficiency?
- What is the situation of total loans and advances with total deposit and its net profit?

1.4 Objective of the Study:

Undoubtedly, the role of commercial bank in mobilizing and utilizing scattered resources of nation is praiseworthy one-.The basis objectives of the study are to have true insight into the credit management aspects of NIBL and NABIL. This aims to examine its efficient in effectiveness, systematization and sincerity in disbursing and recovery loan as well within the directives of NRB, Financial institution act and its own policy.

The main objective of this study is to evaluate the credit management of Commercial Bank Limited. Besides, there may be other objectives as well.

- To examine the impact of deposit in liquidity.

- To examine and evaluate the various stages occurred in loan management procedure.
- To analyze the lending efficiency of the NIBL and NABIL.
- To examine the assets management efficiency and portfolio ratios of NIBL and NABIL.

1.5 Significance of the Study:

The needs of the study are:

- The study will give a clear picture of financial position of the company under study.
- This study will provide information to those who are planning to invest in NIB and NABIL Bank Limited.
- With the help of the report of this study, the management may apply corrective measures for the improvement of the banks performance.
- The policy formulates of the bank may gain something with the help of the result of this study.
- The study will help general public to know about the overall financial position of the NIB and NABIL Bank Limited.
- After the completion, this report will be kept in the library, which plays the role of reference to the students making the similar study in future.

1.6. Limitation of the Study:

The time was the major limitation of the study. As a partial fulfillment for the degree of Masters of Business Studies.

- The scope of the study is limited within the framework of ratio analysis only. The study doesn't cover other financial performance analysis techniques.
- Reference of Journals and Articles could not be presented due to unavailability of suitable materials.

- Since the study is fully based on the secondary data collected from various sources, their relevancy will depend upon the authenticity of the publishers.
- The study is about only six fiscal year 2006/07 to 2011/012.

1.7 Organization of the Study:

The present study is organized in such 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 has presented the systematic presentation and finding of the study. The study report is designed in five chapters which are as follows:

Chapter-I: Introduction:

This chapter describes the basic concept and background of the study. It has served orientation for readers to know about the basic information of the research area, various problems of the study, objectives of the study and need or significance of the study. It is oriented for readers for reporting giving them the perspective they need to understand the detailed information about coming chapter.

Chapter-II: Review of Literature:

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

Chapter-III: Research Methodology:

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

Chapter-IV: Presentation and Analysis of Data:

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

Chapter-V: Summary, Conclusion and Recommendation:

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

CHAPTER- II

REVIEW OF LITERATURE

Review of literature means reviewing research studies or other relevant proposition in the related area of the study so that all the past and previous studies, their conclusion and perspective of deficiency may be known and further researcher can be conducted or done. In other words it's just like fact are finding based on sound theoretical framework oriented towards discovery of relationship guided by experience, resonating and empirical investigation. The primary purpose of literature is to learn and it helps researcher to find out what research studies have been conducted in one's chosen field of study, and what remains to be done. For review study, the researcher uses different books and journal, reviews and abstracts, indexes, reports, and dissertation or research studies published by various institutions, encyclopedia etc.

We study the review of literature in dividing two headings:

Conceptual Review

Review of related Studies

2.1 Theoretical /Conceptual Review:

2.1.1 Concept of Commercial Bank

commercial bank is a corporate business venture which have certain paid up capital and provide loan, accept deposit, exchange money and other consultancy, agency, guarantee etc services are perform. Commerce is the financial transactions related to selling and buying activities of goods and services. Therefore commercial banks are those banks, which work from commercial viewpoint. They perform all kinds of banking functions as accepting deposits, advancing credits, credit creation and agency functions. They provide short-term credit, medium term credits and long terms credit as well as issuing guarantee, bonds, letter of credit, etc to trade and industry.

"A commercial bank is the bank which exchanges money, accepts deposit transfers loans and performs banking functions " (Commercial Bank Act, 2031 B.S.).

"Principally commercial bank accepts deposits and provides loans, primarily to business firms there by facilitating the transfer of fund in economy" (Rose, 1989: 9).

"The commercial bank has its own role and contribution in the economic development. It is a resource for the economic development, it maintain economic confluence of various segments and extends credit to people" (Ronald, 1999: 87)

2.1.2 Concept of Credit:

Credit is the sum amount of money lent by the creditor (Bank) to the borrower (Customers) either on the basis of security or without security. Sum of the money lent by a bank, is known as credit (Oxford Advanced Learners Dictionary, 1992)[3]. Credit and advances is an important item on the asset side of the balance sheet of a commercial bank. Bank earns interest on credits and advances, which is one of the major sources of income for banks. Bank prepares credit portfolio, otherwise it will not only add bad debts but also affect profitability adversely (Varshney and Swaroop, 1994: 42).

Credit is financial assets resulting from the delivery of cash or other assets by a lender to a borrower in return for an obligation of repay on specified on demand. Banks generally grants credit on four ways (Chhabra and Taneja, 1991).

Overdraft

Cash Credit

Direct Credit

Discounting of Bills

2.1.3 Types of Credit

Overdrafts:

It denotes the excess amount withdrawn over their deposits. In other words bank provide sum limit of money to their value customer according to their believe ness and level of transaction.

Cash Credit:

The credit is not given directly in cash but deposit account is being opened on the name of credit taker and the amount credited to that account. In this way, every credit creates deposit.

Term Credit:

It refers to money lent in lump sum to the borrowers. It is principle form of medium term debt financing having maturities of 1 to 8 years.

Barely and Myers urge that bank credits with maturities exceeding 1 years are called term credits. The firm agrees to pay interest based on the bank's prime rate and to repay principle in the regular installments. Special patterns of principle payments over time can be negotiated to meet the firm's special needs (Richard, 1996:89).

Working Capital Credit:

Working capital denotes the difference between current liabilities. It is granted to the customers to meet their working capital gap for supporting production process. A natural process develops in funds moving through the cycle are generated to repay a working capital credit.

Priority or Deprived Sector Credit:

Commercial banks are required to extend advances to the priority and deprived sector 12% of the total Credit must be toward priority sector including deprived sector. Rs.2 million for agriculture cum service sector and Rs.2.5 million for single borrowers are limit sanctioned to priority sector. Institutional support to 'Agriculture Development bank' and 'Rural Development Bank' are also considered under this category. Deprived sector lending includes:

Advances to poor/downtrodden/weak/deprived people up to Rs 30,000 for generating income or employment.

Institutional Credit to Rural Development Bank.

Credits to NGOs those are permitted to carryout banking transactions for lending up to Rs.30,000.

Hire Purchase Financing (Installment Credit):

Hire-Purchase credits are characterized by periodic repayment of principle and interest over the maturity of the credit. Hirer agrees to take the goods on hire at a stated rental including their repayment of principle as well as interest with an option to purchase.

A recent survey of commercial banks indicates those banks are planning to offer installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credit.

Housing Credit (Real Estate Credit):

Financial institutions also extend credit to their customers. It is different types, such as residential building, commercial complex, construction of warehouse etc. It is given to those who have regular income or can earn revenue from housing project itself.

Project Credit:

Project credit is granted to the customers as per project viability. The borrowers have to invest certain proportion to the project from their equity and the rest will be financed as project credit. Construction credit is short-term credits made to developers for the purpose of completing proposed projects. Maturities on developers for completing proposed projects. Maturities on construction credits range from 12 months to as long as 4 to 5 years, depending on the construction credits range from 12 months to as long as 4 to 5 years, depending on the size of the specific project . The basic guideline principle involved in disbursement policy is to advance funds corresponding to the completion policy is to advance funds corresponding to the completion stage of the project. Term of credit needed for project fall under it (Johnson, 1940:83).

Consortium Credit:

No single financial institution grant credit to the project due to single borrower limit or other reason and two or more such institutions may consent to grant credit facility to the project of which is baptized as consortium credit. It reduces the risk of project among them. Financials bank equal (or likely) charge on the project's assets.

Credit Cards and Revolving Lines of Credit:

Banks are increasingly utilizing cards and revolving lines of credit to make unsecured consumer credit. Revolving credit line lowers the cost of making credit since operating and processing cost are reduced. Due to standardization, centralized department processes revolving credits resulting reduction on administration cost. Continued borrowing arrangement enhances cost advantages. Once the credit line is established, the customer can borrow and repay according to his needs and the bank can provide the fund to the customer at lower cost.

Off-Balance Sheet Transaction:

In fact, bank guarantee and letter of credit refer to off balance sheet transactions of financial institution. It is also known as contingent liability. Contingent liability pinpoints the liability, which may or may not arise during the happening of certain event. Footnotes are kept as references to them instead of recording in the books of accounts.

It is non-funded based remunerative facilities but more risky than the funded until adequate collateral are not taken. Lets its two varieties be described separately.

Bank Guarantee:

It used for the sake of the customers in favor of the other party (beneficiary) up to the approved limit. Generally, a certain percent amount is taken as margin from the customer and the customer's margin account is credited.

Letter of Credit (L/C):

It is issued on behalf of the customer (buyer/importer) in favor of the exporter (seller) for the import of goods and services stating to pay certain sum of money on the submission of certain documents complying the stipulated terms and conditions as per the agreement of L/C. It is also known as importers letter of credit since the bank of importer do not open separate L/C for the trade of same commodities (Jhonson, 1940:85).

2.1.4 Objectives of the Sound Credit Policy

The purposes of a written credit policy are:

To assure compliance by lending personnel with the bank's polices and objectives regarding the portfolio of credits

To provide personnel with a framework of standards within which they can operate.

2.1.5 Lending Criteria:

While screening a credit application, 5-cs to be first considered supported by documents.

i). Character

Character is the analysis of the applicant as to his ability to meet the obligations put forth by the lending institution. For this analysis, generally the following documents are needed.

Memorandum and Article of Association

Registration certification

Tax registration certificate (Renewed)

Resolution to borrow

Authorization-person authorizing to deal with the bank.

Reference of other lenders with whom the applicant has dealt in the past of bank A/C statement of the customer.

ii). Capacity

It's describes the customer's ability to pay. It is measured by applicants past performance records and followed by physical observation. For this, an interview with applicant's customers/suppliers/ will further clarify the situation. Documents relating to this area were:

Certified balance sheet and profit and loss account for at least past 3 years.

References or other lenders with whom the applicant has dealt in the past or bank A/C.

iii). Capital

This indicates applicant's capacity to inject his own money. By capacity analysis, it can be concluded that whether borrower is truing to play with lender's money only or is also injecting his own fund to the project. For capital analysis, financial statements, like certified balance sheet, profit and loss account is the only tools.

iv). Collateral

Collateral is the security proposed by the borrower. Collateral may be of either nature moveable or immovable. Moveable collateral comprises right from stock, inventories to playing vehicles. In case of immovable it may be land with or without building or fixture, plant machineries attached to it.

v). Conditions

Once the funding company is satisfied with the character, capacity, capital and collateral then a credit agreement (sanction letter) is issued in favor of the borrower stating conditions of the credit to which borrower's acceptance is accepted.

2.1.6 Features of Sound lending Policy:

The income and profit of the commercial banks depend upon its lending procedure. The greater the credit created by bank, the higher wills the profitability. A sound lending policy is not only pre-requisite for commercial banks profitability, but also crucially significant for the promotion of commercial saving of backward country like Nepal. Some features of Sound lending policy are considered as under:

A) Safety:

Safety is the most important principle of good lending. When a banker lends, he must feel certain that the advance is safe; that is, the money will definitely come back. For example, if borrower invests the money in an unproductive or speculative venture, or if the borrower himself is dishonest, the advance would be in jeopardy. Similarly, if the borrower suffers losses in his business due to his incompetence, the recovery of the money may become difficult. The banker ensure that the money advanced by him goes to the right type of borrower and is utilized in such a way that it will not only be safe at the time of lending but will remain so throughout, and after serving a useful purpose in the trade or industries where it is employed, is repaid with interest.

B) Liquidity:

It is not enough that the money will come back: it is also necessary that it must come back on demand or in accordance with agreed terms of repayment. The borrower must be in a position to repay within a reasonable time after a demand for repayment is made. This can be possible only if the money is employed by borrower for short-term requirements and not locked up in acquiring fixed assets or in schemes, which take a long time to pay their way. The source of repayment must also be definite. The reason why bankers attach as much importance to “liquidity” as to “safety” of their funds is that a bulk of their deposits is repayable on demand or at short notice.

C) Purpose:

The purpose should be productive so that the money not only remains safe but also provide a definite source of repayment. The banker must closely scrutinize the purpose for which the money is required, and ensure, as far as he can, that the borrower applies the money borrowed for a particular purpose accordingly.

D) Profitability:

Equally important is the principle of ‘profitability’ in bank advances. Like other commercial institutions, banks must make profit. They have to pay interest on deposits received by them. They have to incur expenses on establishment, rent, stationery, salary and other operating expenses so on. They have to make provision for depreciation of their fixed assets, and also for possible bad or doubtful debts. After meeting all these items of expenditure which enter the running cost of banks, a reasonable profit must be made;

otherwise, it will not be possible to carry anything to the reserve of pay dividend to shareholders. It is after considering all factors that a bank decides upon its lending rate.

E) Collateral/Security:

It has been the practice of banks not to lend as far as possible except against security. Security can be considered as insurance. Security may be generally classified as personal and tangible, as well as primary and collateral. The banker carefully scrutinizes all the different aspects of an advance before granting it. At the same time, he provides for an unexpected change in circumstance, which may affect the safety or liquidity of advance.

F) Legality:

Illegal securities will bring out many problems for the investor. Commercial banks must follow the rules and regulation as well as different directions issued by Nepal Rastra Bank, Ministry of Finance and other while mobilizing its funds.

G) Spread:

Another important principle of good lending is the diversification of advances. An element of risk is always present in every advance, however secure it might appear to be. In fact, the entire banking business is one of taking calculated risks and successful banker is an expert in assessing such risks. He is keen on spreading the risks involved in lending, over a large number of borrowers, over a large number of industries and areas, and over different type of securities.

H) National Interest:

Even when an advance satisfies al the aforesaid principles, it may still no be suitable. The advance may run counter to national interest. It in the changing concept of banking factors such as purpose of the advance, viability of the proposal and national interest are assuming greater importance than security, small borrowers and export-oriented industries

2.1.7 Principle of Credit Policy:

Good credit policy is essential to carry out the business of lending more effectively. Some policies are as follows:

i) Principle of Safety Fund

Banks should look the fact that is there any unproductive or speculative venture or dishonest behavior of the borrower.

ii) Principle of Liquidity

Liquidity refers to pay on hands on cash when it needed without having to sell long-term assets at loss in unfavorable market. A banker has to ensure that money will come in as on demand or as per agreed terms of repayment.

iii) Principle of Security

It acts as cushion to grant advances and credits. Adequate values of collaterals ensure the recovery of credit correctly at the right time. Accepted security should be readily marketable, handy and free from encumbrances.

iv) Principle of Purpose of Credit

Generally, credit request would be accepted for productive sector only. Bank should be rejected credit request for speculation, social functions, pleasures trips, ceremonies and repayment of prior credit as they are unproductive.

v) Principle of Profitability

Profitability denotes the value created by the use of resource is more than the total of the input resources. Bank should provide to such project that can provide optimum amount of return. For such purpose, bank should take a little bit risk by providing to venturous project.

vi) Principle of Spread

Portfolio of credit advances is to be spread not only among many borrowers of same industry. It across the industries in order to minimize the risk of lending by keeping "Do not put your all eggs in the same basket" in mind.

vii) Principle of National Interest

In lending and granting advances, interest of nation should not be distorted (if undermined). Priority and deprived sector of economy and other alarming sector should be given proper emphasis while extending advances.

Every Bank should always follow the rule "Do not put your all eggs in the same basket". So every bank makes appropriate portfolio in their investment the credit management would be excellent.

2.1.8 Lending / Credit 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 promoters/partners/proprietors/directors/personnel should be intact.
- SWOT (strength, weakness, opportunity and threat) analysis of the proposed project must give reasonable assurance.

2.1.9 Right of Commercial Banks against Breach of Lending Agreement:

A commercial bank reaches a decision as to whether it should provide loan and advances or not. After many discussions between the person or the businessmen who comes with a proposal of loan to the commercial bank and bank while carrying out any banking transaction, the bank and customer should follow the law, policy and instructions. The concerning law means, the Nepal Rastra Bank Act 2058 (2002) Commercial Bank Act 2031(1974) so on. Under section 47.A of the Commercial Bank Act 2031 (1974) the bank has been following rights and power to recover the loan: -

- The bank may write to the appropriate office for registration or transfer, in accordance with prevailing law, of the assets auctioned by it pursuant to this section in the name of the person whose bid has been approved.
- The concerned office shall do the registration or transfer if it receives such written request from any commercial bank for registration or transfer of assets pursuant to sub-section (5) of section 47 A. of the Commercial Bank Act 2031(1974).
- In case no one offers a bid in an auction held by a bank pursuant to this action, the bank may take over the ownership of such assets, and in such situation, government offices must register or transfer those assets in their records as notified by the bank.
- If any person, institution or industry fails to comply with the terms of agreement or any terms regarding loans and advances, with the bank, or fails to repay loans to the commercial bank within the time limit stipulated in the documents, or incase the bank finds through investigation that any person, institution or industries concerned has not invested the amount of the loan and advance for the concerned purpose, or has misappropriated in the documents or notwithstanding anything mentioned in prevailing law the bank may auction or otherwise dispose of any property pledged to it, or the security deposited with it, and thus recover the principal and interest.
- If the borrowing person, institution, or industry concern relinquishes in any manner title to the property pledge to the commercial bank as collateral, or in case the value of such collateral declines due to any other reason, the commercial bank may, not with outstanding anything mentioned in prevailing law, ask the concern to furnish additional collateral within a period specified by it. In case the concerned person, institution or industry concern fails to furnish additional collateral within the specified time limit, the commercial bank may recover its principal and interest by auctioning or otherwise disposing of the collateral pledged to it.
- If principal and interest can’t be recovered through the auction sale of the collateral pledge to the bank pursuant to subsection (1) and (2) section 47.A of the Commercial Bank Act 2031(1974), the bank may recover the balance by

auctioning the other assets of the concerned person, institution or industries concern.

- The amount of principal and interest, and expenses incurred in auction, or in other kind of disposal shall be deducted from the amount raised through the auction or disposal otherwise of assets pursuant to this section and the balance shall be refunded to the concerned person, institution, or industry concern.
- In case a complaint is field to the effect that the person who is required to relinquish the assets after their transfer under sub-section (6) and (7) of section 47.A of the Commercial Bank Act 2031 (1974) of the has created any obstacle or used force while the concerned person or the commercial Bank Act 2031 (1974) bank itself seeks to utilized such assets, action shall be taken according to prevailing law to have possession in the assets.

2.1.10 Project Appraisal:

Before providing credit to the customer, bank makes analysis of project from various aspects and angles. It will help the bank to see whether project is really suitable to invest. The purpose of project appraisal is to achieve the guarantee of reasonable return from the project. Project appraisal answers the following questions:

- Is the project technically sound?
- Will the project provide a reasonable return?
- Is the project in line with the overall economic objectives of the country?

Generally, the project appraisal involves the investigation from the following aspects (Gautam, 2004).

- Financial aspect
- Economic aspect
- Management /organizational aspect
- Legal aspect

Directives issued by NRB for the commercial Bank: (related to credit aspect only):

1. Credit classification and provisioning

Classification	Provision
1. Pass Credit	1%
2. Sub Standard Credit	25%
3. Doubtful Credit	50%
4. Bad Credit	100%

Those credits that have not crossed the time schedule of repayment and are within three months delay of maturity date fall under the classification topic ‘pass credit’. It is also known as performing credit.

Sub standard credit are those credit which are already crossed the repayment time schedule and are within 3-6 months delay of maturity date. Likewise, within 6-12 months from the time to be recovered are classified as doubtful credit. Those credits, which are not recovered yet after 1 year from maturity date, are known as bad credit. All the above 3 types of credits are classified as non-performing credit also. The credit loss provision for performing credit is termed as general credit loss provision whereas the credit loss provision for non- performing credit is termed as specific credit loss provision.

Auditor has to correctly rate the credit and ensure that accurate credit loss provision has been made. The auditor should examine whether the bank has obtained complete documentation so that banks interest is secured. In addition, audit is made to inspect compliance of terms and conditions laid down. Credit audit is required to check whether credit given is within authority, drawing power, etc. Credit audit helps the bank to know quality of its credit, its weakness and strengths. This, in turn, helps the bank to adopt corrective measures where weaknesses have been pointed out and to focus further on strengths. General guidelines whether to reject or renew the credit can be established with the help of credit audit.

2. Limit of Credit and Advances in a Particular Sector.

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

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

Group of related customer:

- If a company takes 25% or more share of another company.
- Member of board of directors of company shareholders of private limited company and such members and shareholders with others in a single house, even if husband, wife, son, daughter, daughter in law, unmarried daughter, adopted son, adopted unmarried daughter, father, mother, stepmother, brothers and sisters whom be should look after. And the above members personally or combined take 25% or more share of another company.
- Firm, company and members as a related group.
- Members of board of directors, shareholders and other relatives as stated in serial number ‘b’ takes less than 25% of board of directors of the company solely or combined but have control on the other company by the following ways:
- Being president of board of directors of the company.
- Being executive directors of the company.
- Nominating more than 25% of members of board of directors of the company.
- If cross guarantee is given by one company to another company.

2.2 Review of Related Studies

2.2.1 Review of Credit Risk Related Unified NRB Directives 2010

2.2.1.1 Credit Risk

Credit risk is the major risk that banks are exposed to during the normal course of lending and credit underwriting. Within Basel II, there are two approaches for credit risk measurement: the standardized approach and the internal ratings based (IRB) approach.

Due to various inherent constraints of the Nepalese banking system, the standardized approach in its simplified form, Simplified Standardized Approach (SSA), has been prescribed in the initial phase.

2.2.1.2 Simplified Standardized Approach (SSA):

In comparison to Basel I, SSA aligns regulatory capital requirements more closely with the key elements of banking risk by introducing a wider differentiation of risk weights and a wider recognition of credit risk mitigation techniques. The advantage of implementing this approach is twofold. This approach allows transitional advantage for countries like us by avoiding excessive complexities associated with the advanced approaches of Basel II while at the same time it will produce capital ratios more in line with the actual economic risks that banks are facing, compared to the present Accord.

Under this approach commercial banks are required to assign a risk weight to their balance sheet and off-balance sheet exposures. These risk weights are based on a fixed weight that is broadly aligned with the likelihood of a counterparty default. As a general rule, the claims that have already been deducted from the core capital shall be exempt from risk weights for the measurement of credit risk.

Claims on foreign government, their central banks as well as foreign corporates shall be generally risk-weighed on the basis of the consensus country risk scores of export credit agencies (ECA). Wherever there are claims relating to unrated countries, they shall generally be risk weighed at 100 percent. However, these claims shall be subject to supervisory review and higher risk weight shall be assigned where the review process deems appropriate.

All kinds of claims including loans & advances as well as investments shall be risk weighed net of specific provisions. Generally provision related to any receivable or investment is not defined as general or specific. In such situation, the total provision against any claim/exposure (other than the loans and advances) shall be considered as specific provision. However, provisions eligible for the supplementary capital shall not be allowed for netting while calculating risk weighted exposures. In case of loans, advances and bills purchased the provisions created in lieu of Pass loans only are classified as General loan loss provision. All other provisions are components of specific loan loss provision. Hence, general loan loss provision doesn't comprise provisions created in respect of rescheduled/restructured and non performing loans. It also doesn't include additional provisions created for personal guarantee loans or lending in excess of Single Obligor Limits. However, provisions created in excess of the regulatory requirements and not attributable to identifiable losses in any specific loans shall be allowed to be included in the General Loan Loss Provision.

In order to be consistent with the Basel-II framework, the credit risk for the regulatory capital purpose shall be computed by segregating the exposure in the following 11 categories.

a) Claims on government & central bank

b) Claims on other official entities

c) Claims on banks

d) Claims on corporate & securities firms

e) Claims on regulatory retail portfolio

f) Claims secured by residential properties

g) Claims secured by commercial real state

h) Past due claims

i) High risk claims

j) Other assets

k) Off balance sheet items

2.2.1.3 Risk Measurement and Risk Weights:

a. Claims on government & central bank

1. All claims on Government of Nepal and NRB shall be risk weighed at 0 %.

2. Claims on foreign government and their central banks shall be risk-weighted on the basis of the consensus country risk scores as follows:

ECA risk scores	0-1	2	3	4 to 6	7
Risk weights	0%	20%	50%	100%	150%

b. Claims on other official entities

3. Claims on the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community will receive a 0% risk weight.

4. Following Multilateral Development Banks (MDBs) will be eligible for a 0% risk weight

- World Bank Group, comprised of the International Bank for Reconstruction and
- Development (IBRD) and the International Finance Corporation (IFC),
- Asian Development Bank (ADB),
- African Development Bank (AFDB),
- European Bank for Reconstruction and Development (EBRD),
- Inter-American Development Bank (IADB),
- European Investment Bank (EIB),
- European Investment Fund (EIF),
- Nordic Investment Bank (NIB),
- Caribbean Development Bank (CDB),
- Islamic Development Bank (IDB), and
- Council of Europe Development Bank (CEDB).

5. The standard risk weight for claims on other Multilateral Development Banks will be 100%.

6. Claims on public sector entities (PSEs) will be risk-weighed as per the ECA country risk scores.

ECA risk scores	0-1	2	3 to 6	7
Risk weights	20%	50%	100%	150%

c. Claims on banks

7. All claims, irrespective of currency, excluding investment in equity shares and other instruments eligible for capital funds, on domestic banks/financial institutions that fulfill Capital Adequacy Requirements will be risk weighed at 20% while for the rest, it will be 100%.

Banks should make use of the publicly available information of the immediately preceding quarter of the respective banks to gauge their status on capital adequacy.

8. Claims on a foreign bank excluding investment in equity shares and other instruments eligible for capital funds shall be risk weighed as per the ECA Country risk score subject to the floor of 20%. The primary basis for applying the ECA Country Risk score shall be the country of incorporation of the bank. Where the bank is a branch office, the ECA score of the country where the corporate office is located shall be used while in the case of a subsidiary the basis shall be the country where the subsidiary is incorporated.

ECA risk scores	0-1	2	3 to 6	7
Risk weights	20%	50%	100%	150%

However, the claims on foreign banks incorporated in the SAARC region and which operate with a buffer of 1% above their respective regulatory minimum capital requirements may be risk weighed at 20%. The banks shall be responsible to submit the latest capital adequacy position of such banks and demonstrate that they fulfill the eligibility requirements. Such capital adequacy position submitted by the banks should not be prior to more than one financial year. Moreover, such claims shall be subject to a supervisory review and supervisors may require the bank to risk weigh the claims on ECA country risk scores where the review process deems necessary.

d. Claims on corporate & securities firms:

9. The risk weight for claims on domestic corporates, including claims on insurance companies and securities firm will be 100%. The domestic corporates includes all firms and companies incorporated in Nepal as per prevailing Acts and regulations.

10. The claims on foreign corporate shall be risk weighed as per the ECA Country risk score subject to the floor of 20% as follows:

ECA risk scores	0-1	2	3	4 to 6	7
Risk weights	0%	20%	50%	100%	150%

e. Claims on regulatory retail portfolio:

11. Claims5 that qualify all criteria listed below may be considered as regulatory retail portfolio and risk weighed at 75%, except for past due loans. Such claims however, have to be in strict compliance with the Product paper developed by the bank and approved by their respective board of directors

Criteria:

- *Orientation criteria:* - exposure is to an individual person or persons or to a small business. Bank should obtain written declaration from the borrower to the effect that their indebtedness is within the threshold across all banks and FIs..
- *Product criteria:* - The exposure takes the form of any of the following:
  Revolving credits and lines of credit, (including overdraft, hypothecation etc.)

Term loans and leases (e.g. hire purchase, auto loans and leases, student and educational loans)

Small business facilities and commitments,

Deprived sector loans up to a threshold of Rs.10 million (Ten Million only)

- *Granularity criteria:* - NRB must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. No aggregate exposure7 to one counterpart can exceed 0.5 % of the overall regulatory retail portfolio.
- *Low value individual criteria:* - The total aggregated exposure to one counterpart8 cannot exceed an absolute threshold of Rs.10 million (Nepalese Rupees Ten Million only)

12. Banks which have claims that fulfill all criterion except for granularity may risk weigh those claims at 100%

f. Claims secured by Residential Properties:

13. Lending to individuals meant for acquiring or developing residential property which are fully secured by mortgages on residential property, that is or will be occupied by the borrower or that is rented, will be risk-weighed at 60%. However, banks should ensure the existence of adequate margin of security over the amount of loan based on strict valuation rules. Banks have to develop product paper and get it approved from the board

of directors to regulate this kind of lending. The claims in order to be eligible for this category have to be in strict compliance with this product paper

14. Where the loan is not fully secured, such claims have to risk weighed at 150%

15. When claims secured by residential properties are or have been past due at any point of time during the last two years, they shall be risk-weighed at 100%, net of specific provisions.

g. Claims Secured by Commercial Real Estate:

16. Claims secured by mortgages on commercial real estate, except past due, shall be risk weighed at 100%. Commercial real estate hereby refers to mortgage of Office buildings, retail space, multi-purpose commercial premises, multi-family residential buildings, multitenanted commercial premises, industrial or warehouse space, hotels, land acquisition, development and construction etc.

H. Past Due Claims:

17. Any loan, except for claim secured by residential property, which is or has been past due at any point of time during the last two years, will be risk-weighed at 150% net of specific provision.

I. High Risk Claims:

18. 150% risk weight shall be applied for venture capital and private equity investments.

19. Exposures on Personal loan in excess of the threshold of regulatory retail portfolio and lending against securities (bonds and shares) shall attract a risk weight of 150%. Similarly, exposures on credit card shall also warrant a risk weight of 150%.

20. Investments in the equity and other capital instruments of institutions, which are not listed in the stock exchange and have not been deducted from Tier 1 capital, shall be risk weighed at 150% net of provisions.

21. Investments in the equity and other capital instruments of institutions, which are listed in the stock exchange and have not been deducted from Tier 1 capital, shall be risk weighed at 100% net of provisions.

22. The claims which are not fully secured or are only backed up by personal guarantee shall attract 150% risk weight.
23. Where loan cannot be segregated/or identified as regulatory retail portfolio or qualifying residential mortgage loan or under other categories, it shall be risk weighed at 150%.

J. Other Assets:

- 23. With regard to other assets, following provisions have been made;Interest receivable/claim on government securities will be risk-weighed at 0%.
- Investments in equity or regulatory capital instruments issued by securities firms will be risk-weighed at 100%.
- Cash in transit and other cash items in the process of collection will be risk-weighed at 20%. For this purpose, cash items shall include Cheque, Draft, and Travelers Cheques.
- Fictitious assets that have not been deducted from Tier 1 capital shall be risk weighed at 100%.
- All other assets will be risk-weighed at 100% net of specific provision.

K. Off Balance Sheet Items:

24. Off-balance sheet items under the simplified standardized approach will be converted into equivalent risk weight exposure using risk weight as follows:

2.2.1.4 Credit Risk Mitigation:

Banks may use a number of techniques to mitigate the risks to which they are exposed. The prime objective of this provision is to encourage the banks to manage credit risk in a prudent and effective manner. As such, credit risks exposures may be collateralized11 in whole or in part with cash or securities, or a loan exposure may be guaranteed by a third party. Where these various techniques meet the minimum conditions mentioned below, banks which take eligible financial collateral are allowed to reduce their credit exposure to counterparty when calculating their capital requirements to take account of the risk mitigating effect of the collateral. However, credit risk mitigation is allowed only on an account by account basis, even within regulatory retail portfolio. As a general rule, no secured claim should receive a higher capital requirement than an otherwise identical claim on which there is no collateral. Similarly, the effects of the CRM shall not be double counted and capital requirement will be applied to banks on either side of the collateralized transaction: for example, both repos and reverse repos will be subject to capital requirements. Those portions of claims collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. The remainder of the claim should be assigned the risk weight appropriate to the counter party. Where the same security has been pledged for both the funded and non funded facilities, banks should clearly demarcate the value of security held for funded and non funded facility. In cases where the bank has obtained same security for various forms of facilities; banks are eligible to claim the CRM benefit across all such exposures upto the eligible value of CRM.

a. Minimum Conditions for Eligibility:

In order to obtain capital relief towards credit risk mitigation, there are certain basic condition that needs to be fulfilled. Supervisors will monitor the extent to which banks satisfy these conditions, both at the outset of a collateralized transaction and on an on-going basis.

1. *Legal certainty:* - Collateral is effective only if the legal mechanism by which collateral is given is robust and ensures that the lender has clear rights over the collateral to liquidate or retain it in the event of default. Thus, banks must take all necessary steps to fulfill local contractual requirements in respect of the enforceability of security interest. The collateral arrangements must be properly documented, with a clear and robust procedure for the timely liquidation of collateral. A bank's procedures should ensure that any legal conditions required for declaring the default of the customer and liquidating the collateral are observed. Where the collateral is held by a custodian, the bank must seek to ensure that the custodian ensures adequate segregation of the collateral instruments and the custodian's own assets. Besides that, banks must obtain legal

opinions confirming the enforceability of the collateral arrangements in all relevant jurisdictions.

2. Low correlation with exposure: - In order for collateral to provide protection, the credit quality of the obligor and the value of the collateral must not have a material positive correlation. For example, securities issued by the collateral provider - or by any related group entity - would provide little protection and so would be ineligible.

3. *Maturity Mismatch:* - The maturity of the underlying exposure and the maturity of the hedge should both be defined conservatively. The effective maturity of the underlying should be gauged as the longest possible remaining time before the obligor is scheduled to fulfill its obligation. The collateral must be pledged for at least the life of the exposure. In case of mismatches in the maturity of the underlying exposure and the collateral, it shall not be eligible for CRM benefits.

4. *Currency Mismatch:* - Ideally the currency of the underlying exposure and the collateral should be the same. Where the credit exposure is denominated in a currency that differs from that in which the underlying exposure is denominated, there is a currency mismatch. Where mismatches occur, it shall be subject to supervisory haircut of 10%.

5. Risk Management: - While CRM reduces credit risk, it simultaneously may increase other risks to which a bank is exposed, such as legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its effect with the bank's overall credit profile. In case where these requirements are not fulfilled, NRB may not recognize the benefit of CRM techniques.

b. Eligible Collaterals:

1. Cash deposit (as well as certificates of deposit or fixed deposits or other deposits) with the bank. The banks may only claim these as CRM only if it has specific authority to recover the amount from this source in case of default.
2. Fixed Deposit Receipts/Certificates of deposits/other deposits of other Banks and FIs, who fulfill the capital adequacy requirements, subject to a 20% supervisory haircut.
3. Gold.
4. Securities issued by the Government of Nepal and Nepal Rastra Bank.
5. Guarantee of the Government of Nepal
6. Financial guarantee/counter guarantee of domestic banks and FIs who meet the minimum capital adequacy requirements subject to a haircut of 20%.
7. Securities/Financial guarantee/Counter guarantee issued by sovereigns.
8. Securities/Financial guarantee/Counter guarantee issued by MDBs in the list specified in 3.3 b (3 & 4)
9. Securities/Financial guarantee/Counter guarantee issued by banks with ECA rating 2 or better. The supervisory haircut shall be 20% and 50% for the banks with ECA rating of 0-and 2 respectively.

c. Methodology for Using CRM:

Step 1: Identify the accounts eligible for capital relief under credit risk mitigation.

Step 2: Assess the value of the exposure and the eligible collateral. The value of the eligible collateral is the lower of the face value of the instrument or the outstanding amount of exposure

Step 3: Adjust the value of the eligible collateral in respect of the supervisory haircut in terms of currency mismatch and other eligibility requirements.

Step 4: Compare the adjusted value of the collateral with the outstanding exposure.

Step 5: The value of the eligible CRM is the lower of the adjusted value of the collateral and the outstanding exposure.

Step 6: Plot the eligible CRM in the appropriate category of credit risk.

The sum total of net amount of eligible CRM as per “Form No.4 Exhibit of claims with eligible credit risk mitigants” shall be consistent with the “Form No.3 Eligible Credit Risk Mitigants” prescribed in this framework.

2.2.2 Classification of Loan and Advances

From the effective Fiscal year 2058/59, banks should classify outstanding amount of Loans and Advances on the basis of aging. Loan and advantages should be classified into the following four categories:

1. Pass Loans

Loans and advance whose principle amount not due and past due for a period up to 3 month shall be included in this category. These are classified as Performing Loans.

2. Sub-Standard Loans

All loans and advances that are past due for a period of 3 month to 6 month shall be included in this category.

3. Doubtful Loans

All loans and advances, which are past due for a period of 6 month to one year, shall be included in this category.

4. Loss Loans

All loans and advances which are past due for a period of more than one year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be include in this category.

Provision for good loan

Loan and advances fully secured by gold, silver, fixed deposits receipts and Nepal Government securities should be included under “pass” category. Where collateral of fixed deposit receipt or Nepal Government securities or NRB bonds is placed as securities against loan for other purposes, such loan is classified on the basis of aging.

Additional Arrangement for "Loss" Loan Provision

Even if the loan is not due, loans having any or all of the following discrepancies shall be classified as "Loss"

- The borrower has been declared bankrupt
- The credit has not been used for the purpose originally intend.
- The borrower is absconding or cannot be found
- Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation.
- Loans provided to the borrowers included in the blacklist and where the credit information bureau blacklists the borrower
- Non-security at all or security that is not in accordance with the borrower's agreement with the bank
- Purchased or discounted bills are not realized within 90 days from the due date

Additional Arrangement In Respect of Term Loan

In respect of term loans, the classification shall be made against the entire outstanding loan on the basis of the past due period of overdue installment.

Loan Loss Provision Policy

NRB has issued the directives which commercial banks should make provision against the loan disbursed them. The loan loss provision on the basis of the outstanding loans and advances classified as per NRB Directives should be provides as follows:

Additional Provisioning for Personal Guarantee Loans

Where the loan is extended only against personal guarantee, a statement of the assets, equivalent to the personal guarantee amount not claimable by any other shall be obtained. Such loans shall be classified as per above and where the loans fall under the category of Pass, Substandard and Doubtful in addition to the normal loan loss provision applicable for the category, an additional provision by 20 % point shall be provided. Classification of such loans and advances shall be prepared separately. Hence the loan loss provision required against the personal guarantee loan will be 21%, 45% and 70% for Pass, Standard and Doubtful category respectively.

Rescheduling and Restructuring of Loan

In respect of loans and advances falling under the category of Substandard, Doubtful or Loss, banks may reschedule or restructure such loans only receipt of a written plan of action from the borrower citing the following reasons:

- Evidence of existing of adequate loan documentation
- The internal and external cause contribution to deterioration of the quality of loan.
- The reduced or risk inherent to borrower/enterprise determined by analyzing its balance sheet and profit and loss account in order to estimate recent cash flows and to project future ones, in addition to assessing market conditions.
- An evaluation of the borrower/enterprise's management with particular emphasis on efficiency, commitment and high standards of business ethics

Loan Loss Provision in Respect of Rescheduled, Restructured or Swapped Loan

- Expect for priority sector, in respect of all types of rescheduling or restructured or swapped loan, if such credit falls under Pass category according to Nepal Rastra Bank directives, loan loss provision shall be provided at minimum 12.50%
- In case of rescheduling or restructuring or swapping or insured of insured or guaranteed priority sector credit, the loan loss provisioning shall be provided at one fourth of the percentage.
- In respect of swapped loans, the bank accepting the loans in swapping has to provide loan loss provision classifying the loan is swapping shall obtain certification from the concerned bank of financial institution as to the existing classification.

2.3 Review of Articles and Journals

Ghimire, (2004), in his article titled "*Credit Sector Reform and NRB*" has tried to highlight the effects of change or amendment in NRB directives regarding loan classification and loan loss provisioning. "Although the circumstances leading to financial problem or crisis in many Nepali banks differ in many respects, what is common among most of the banks is the increased size of nonperforming assets (NPAs), to resolve the problem of the losses or likely losses of this nature facing the industry. NRB, as the central bank, has amended several old directives and issued many new circulars in the recent years.

According to him opinion since majority of the loans of most of the commercial banks of the country at present fall under substandard, doubtful and even loss categories, loan loss provisioning now compared to previous arrangement would be dramatically higher. The new classification and provisioning norms are much lent able as they help to strengthen banks financially. He added that we also must remember that the old system remained in force from 1991 to 2001, which was probably the most volatile decade of the business operation of the country. He has indicated that loan loss provisioning as a percentage of total credit of April 12, 2001 is 5.2% but as April 13, 2003, it has jumped to 18.39. If only private banks are considered, it is 2.12% of April 2001 where as it is 6.30% as of April 13, 2003. The total increment in LLP is Rs 11,328.11, million and the total increment in credit is only Rs 7976.70. He has also stated that tightening provisioning requirements on NPL is to ensure that banks remain liquid even during economic downturns.

In the conclusion he has mentioned that in the recent years NRB has worked for management and reform of the credit of the financial institution more seriously and NRB has adopted reforms aimed not just at dealing with problems but also at strengthening banking supervision to reduce the likelihood of future crisis, "All prudential directives of NRB in connection of credit sector reform have been made revised after April 2001. To adapt to such changes there can be some difficulties and for a better and harmonized reform NRB should continue to be supportive, proactive and also participative to take opinions of bankers for a change in regulation/policy taking place in the future."

The article published in Annual Bank supervision Report NRB (2007/08), Bank supervision Department; conclude that the loan and advances extended by banking industry. The loans and advances of the public banks (excluding ADB) have remained more or less the same for the last three years, while the private banks have enhanced their portfolio by more them Rs 20.50 billion resulting in the dilution of the concentration of public banks. However, the three public banks are still the three largest individual banks in Nepal, in respect of the size of their loans portfolio.

The Nepalese banking system is riddled with a significant amount of non-performing assets (NPA). It is clearly evident from the following picture that the volume of non-performing assets is on the decline while total loans are continuously increasing thus resulting in a favorable proportion of Non-performing assets. The NPA ratio, however is still a long way from being at satisfactory level with regard to quality of the loan portfolio of the individual banks, RBB was the worst closely followed by Nepal Bangladesh Bank, Lumbini Bank and NCC Bank Ltd. Along the private banks, it was Nepal Bangladesh bank, Lumbini Bank and NCC who had the largest proportion of NPA in their portfolio, while the lowest and the best NPA ratio belonged to Machha Puchhre Bank Ltd. RBB has 60% of Bad debts and according to FY 2063/064 NPA of RBB has 26%. In FY 2063/064 Bad debt principle is Rs 40 million. The large volume NPA has traditionally been a problem in public banks and three private banks. After a reform program was initiated in the public banks, the volume of NPA, both gross as well as net has come down, significantly. The fact is also reflected in the following chart, where a wide gap between NPA and provision can be observed.

N. Crosby, N. French and M. Oughton (2007), in their article “Banking lending valuations on commercial property” elaborates that the banking community are trying to identify the value on which they can apply a loan value ratio and thus protect their loan in the future should the borrower default. A simplistic understanding the value therefore suggest that figure provided should be the figure which has a life for the length of the loan. However the very concept is economically impossible in any market with volatility. Values can only be snapshots in time. They do not have a shelf life.

For this reason EMLV is conceptually and practically redundant in real estate markets. It appears on the surface to be a solution to the banks' requirement for the reduced risk property lending. In reality, it may indeed transfer that risk by demanding a level of protection to the bank that the valuation cannot give. But if values agree to it, it could open the way to successful negligence claims in the aftermath of poor lending decisions. This is because the concepts appears the determinants of the virtually certain level of value below which the value will not fall for an indeterminate time into the future. Values are vulnerable to claims that their valuation was too high, should values fall below that level at any time during the loan. Sustainable value is predicated on having a shelf life but the application believes this fundamental requirement. Values must have a time point. The concept is redundant, the target unidentifiable and the definition ambiguous. It is little wonder that the application appears mechanistic. Market value is an obtainable and useful piece of information to the lender. Worth in the market sets this in context and gives the lender a view of whether market prices are at current sustainable levels. In obtaining worth, the value is obliged to carry out both quantitative and qualitative investigation into the future and this generates other analyses at different time points during the course of the loan.

EMLV appears to be another blind alley which will divert the appraisal profession from its more important task of improving pricing estimates, and thereby influencing market prices, and providing all clients, whatever the valuation purpose, with the information in reports which puts the limitations of valuation figure into perspective.

Sujit Mundul, (2008), Understanding of credit derivative Business Age September" emphases Credit derivative enable financial institution and companies to transfer credit risk to a third parity and thymus reduce their exposure to the risk of an obligor's default. Credit enhancement technique, which helps reduce the credit risk of an obligation, play a key role in encouraging loans and investment in debts. In legal term credit derivative are privately negotiated bilateral contract to transfer credit risk from one party to another. Some credit enhancement methodologies have existed for the in debts. Some credit enhancement methodologies have existed for a longtime with the support of guarantee, letter of credit or insurance product. However such mechanism works best during economic upturns. As an alternative to commercial risk mechanism, various financial mechanisms have been developed over the past few decades. Such credit risks instruments are normally refer to as credit derivatives. Credit derivative helps to transfer credit risk away from the lender to some other party. Now credit derivative grew popular both as tools for hedging credit risk exposure as well as method of investing in certain types of credit risk.

Credit derivative not only helps corporation and financial institution to manage to their credit risk but also enabled a new set of individual retail client to invest in bonds and stocks previously unaffordable. Through credit derivative individual investor ca invest indirectly in foreign bonds at a lower price. Credit derivative helps investor isolated credit, and transfer it to other investor who are better suited to managing it or who finds the investment opportunity more interesting. There are many credit instruments in the market they are

- Total return swap (TRS)
- Credit default swaps (CDS)
- Credit linked notes (CLN)
- Credit spread option (CSO)

According to the behavior of the asset or deal above credit instrument can be used and minimizing the risk. In this way credit derivative provide protection against credit peril and risk.

2.4 Review of Thesis

This dissertation has been written after studying various books journals article website and previous thesis. I here comprise the some previous thesis review, which are mainly concerned about financial performance and fund mobilization policy, lending practices and investment policy, credit management and loan management of commercial bank.

Paudel, P. (2005) in his Thesis “A study on lending practices of joint venture commercial banks with reference to Nepal Bangladesh Bank Ltd (NBBL) and Himalayan Bank Ltd. (HBL)” has made comparative study of these two banks in different lending aspects and strategies.In his findings, the liquidity position of NBBL is comparatively better than HBL. The liquidity ratio of HBL is more stable and consistent than NBBL that indicates the stable policy of HBL. NBBL is found slightly better to be maintaining between assets and liabilities. NBBL has high loan and advances to total assets ratio, loan and advances to total deposit ratio, but HBL has high investment to total loans and advances and investment and total investment to total deposit ratio. He has concluded that NBBL is able to manage its assets to complete in this competitive banking business than HBL. As per his findings the liquidity position of NBBL is better and hence HBL is recommended to increase its liquidity position. He has suggested both banks to strictly follow the NRB directives, which will help them to reduce credit risk arising from borrower’s defaulter, lake of proper credit appraisal, defaulter by blacklisted borrowers and professional defaulter. Loan loss provision of both banks is in fluctuating trend. So both banks are suggested to adopt sound credit collection policy which wills helps to decrease loan loss provision.

The main objective of his Thesis lending practices of joint venture commercial banks with reference to NBBL and HBL is investment criteria and sector, loan distribution and advance practice of joint venture bank. The limitation of the thesis was base on secondary data given by responded, five year’s data and non ending years data.

Ojha, L. P. (2006) in his dissertation about “Lending Practices” 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.

Researcher 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.

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.

Joshi, S. (2007) In "A Comparative Study on Financial Performance of Standard Chartered Bank Nepal Limited and Everest Bank Ltd" states that the mean current ratio of EBL is slightly higher than that of the SCBNL and the variability of ratio of EBL is more consistence than SCBNL in comparison. The mean ratio of cash and bank balance to total deposit of SCBNL is lower in comparison to EBL. SCBNL has better liquidity position than EBL because of the high volume of liquidity indicated the inability of the bank to mobilize its current assets. Moreover SCBNL's ratios are homogeneous than EBL. The mean ratio of cash and bank balance to current assets of SCBNL is lower in comparison to EBL. Similarly, SCBNL's ratios of the study period are more consistent than EBL. The mean ratio of loan and advances to total deposit of EBL is higher than SCBNL. It can be said that EBL used to provide grater loan and advance in comparison to its total deposit than SCBNL. Likewise, SCBNL's ratio seems to be variable them EBL. The mean ratio of investment on government securities to total working fund of SCBNL is higher than EBL. Consequently, it has consistency in maintaining the ratio than EBL. The mean ratio of return on loan and advances of SCBNL has found to be significantly grater than EBL with more consistency than that of EBL. The mean ratio of credit risk of SCBNL is lower than that of EBL's ratios are more consistent than that of SCBNL. Growth ratios of deposit are more consistent than that of SCBNL is lower i.e. 19.28% in comparison to EBL i.e. 76.46%.

The main statement of the problem of his research is the investment decision is the major tool of financial institution. There are many finance companies and commercial banks operating in Nepal. The fast growth of such organizations has made pro-rata increment of in collecting deposits and their investment. They collected adequate amount from the mass, however they could not find or locate new investment sectors required to mobilizes their fund on the changing context of Nepal. Many banks or companies succumbed to liquidation although they had sustainable investment capacity. The increasing rate of liquidity has caused a downward trend in investment sectors. It has ensured bad impact on interest rate to the depositors, lower market value of shares etc. for the assessment of such adverse impact, this study has shown to contrast and analyses the investment policy of joint venture banks. Joint venture banks viz. standard chartered bank Nepal Ltd and Everest bank limited. The main objectives are compare investment policy of concern banks, find out the empirical relationship among total investment, deposit, deposit utilization loan and advance, net profit and outside asset and compare of SCBNL and EBL.

Regmi, P. (2008) in the study Entitled "Credit Management of Commercial Banks with Reference to Nepal Bangladesh Bank and Bank of Kathmandu" states that commercial banks are those banks, which works from commercial view point. They perform all kinds of banking functions such as, accepting deposits, advancing credits, credit creation and management of credit and advances. Portfolio management helps to minimize or manage the credit risks and spreading over the risks to various portfolios. Banks earn interest on credit and advances which is one of the major source of income for banks. On average 5 years of research period, cash and bank balance to total deposits of ratio of NB bank and BOK is 12.75% and 14.12% respectively. Likewise NB bank and cash and bank balance 1.584 times of current deposits and BOK has cash and bank balance 1.14 times of current

assets. NB bank: most of the credit and advances almost 70% is provided an assets guarantee. The assets guarantee credit is increasing period by period. After assets guarantee bank has provided credit based on bills guarantee credit is 3421.3millions (76.1% of total credit) and in the last period it is 3347.99millions (58.2%of total credit).
The main statement of the problem of his research is the Nepal is a small country with small market. Economic condition of the country is degrading. Nepal being an agriculture country needs more investment in this sector. Nevertheless, commercial banks are rather concerned in industrial and foreign projects. As a result, the credit extended to this sector is unsatisfactory. Besides, they are not even fulfilling the NRB's, regulation of 12% investment of their total loans to priority sectors like agriculture, cottage and small industries and services. Similarly, the banks are not following the diversification principle i.e. they are not considering the investment portfolio position. A good portfolio theory indicates diversification of invest able funds to reduce risks. Hence, the principle "do not put all the eggs in basket" really does not apply in context of Nepalese commercial banks. As a result, many banks today could not recover their loan because, in the past, a major portion of their investment were made in garment, carpets and hotel sectors that now come to the brick of extinction. The objectives of this research are To analyze the functions, objectives, activities, credits and advances procedure and recovery status of the NB bank and BOK.

Shrestha, S. (2009) in his dissertation "Credit management with special reference to Nepal SBI Bank ltd" illustrates that lending is one of the most important parts of function of a commercial bank and composition of loan and advances directly affects the performance and profitability of the bank. There is intense competition in banking business with limited market and less investment opportunities available. Every bank is facing the problem of default loan and there is always possibility of a certain portion of the loan and advances, profitability deposits position of Nepal SBI Bank Limited is analyzed and its contribution in total profitability has been measured.

The main statement of the problem of his study is the credit management is the essence of commercial banking. Consequently, the formulation and implementation of sound Credit policies are among the most important responsibilities of bank directors and management. Well-conceived credit policies and credit careful credit practice are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit-credit management effects on the company's profitability and liquidity so it is one of the crucial decisions for the commercial banks. Measuring the credit performance in quality, efficiency and contribution of profitability, liquidity position and its effect on credit performance and measure the growth rate and propensity of growth based on trend analysis are the main objective of his dissertation.

Gurung, A. K. (2010) explored in his research "Lending policy and recovery management of Standard Chartered Bank Nepal ltd and NABIL Bank Limited" 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.

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

Misra, S. (2011) entitled her Thesis “Credit management of Everest Bank Limited” illustrate that liquidity position; cash reserve ratio shows the more liquidity position. Cash and bank balance to interest sensitive ratio shows the bank is able to maintain good financial condition. Cash and bank balance to current assets ratio shows that the bank’s sound ability to meet the daily cash requirement of their customers deposit. That is why liquidity position of the bank is the better.

In the aspect of profitability position, interest income to interest expenses ratio shows the more profitable salivation. In addition, total income to total expenses ratio shows the overall predominance of the bank is satisfactory operating income. Return on loan advances are showing position that is more profitable on of the EBL. Analysis of the assets management ratio, loan advances to total assets ratio shows the better performance but loan and advances to total deposit position in minimum than the averages. Whereas investment in loan and advances is safely and not taking more risk. That’s why assets management position of the bank shows better performance in the latest year.

After analyzing the lending efficiency of the bank, the loan loss provision to loan advances indicator shows the better performance in the latest year. The interest expenses to total deposit ratios shows the improving efficiency of the bank. EBL bank has sufficient liquidity. It shows that bank has not got investment sectors to utilize their liquid money.

This is to recommend that Cash and bank balance of EBL bank is high. Banks efficiency should be increased to satisfy the demand of depositor at low level of cash and bank balance does not provide return to the bank. Therefore some percentage of the cash and bank balance should be invested in profitable sectors. Bank should open their branches in the remote area with the objective to provide the banking services and minimum deposit amounts should be reduced. The main objective of this study is to evaluate the credit management of Everest Bank Limited. Besides, there may be other objectives as well like to examine the impact of deposit in liquidity, loan management procedure, asset management and lending efficiency of the Everest Bank Limited.

Shrestha, Sumnima. (2010) "Credit risk management of Nabil Bank Limited and Nepal Investment Bank Limited in Nepal" The main objective of the study is to evaluate the credit risk management. In order to achieve this, the specific objectives have been formulated.

- The main objective of the research study are to evaluate the status of the loan portfolio of the banks,
- To evaluate problems and weakness in credit risk management.
- To review the prevailing laws rules and regulation enforced by Nepal Rastra Bank and assess its impact on profitability and liquidity of bank.
- To offer suitable suggestions based on findings of this study.

The liquidity position of NIB is comparatively better than NABIL. Commercial banks have to maintain more liquid assets but the current ratios of some banks are below the standard of 1:1. The mean current ratio of NABIL is 1.89 and NIB is 1.99 the current ratio of NIB is little higher than NABIL. Cash and bank balance to total deposit ratio of NIB has higher than NABIL.

The loan & advances to total deposit ratio of NABIL is lower than NIB. The total investment to total deposit of NABIL is higher than NIB i.e. 34.40% > 27.45%. It shows the NABIL is mobilizing its funds on investment in various securities efficiently. The loan & advances to total assets ratio of NIB is greater than NABIL. Investment on government securities to total assets ratio of NABIL is higher than NIB. This indicates that NABIL has invested more portions of total assets on government securities. So an asset management aspect of NABIL is better than NIB.

The profitability position of NABIL and NIB are Return on loan & advances ratio of NABIL is higher than that of NIB i.e. 4.64%> 2.46%. Return on total assets ratio of NABIL is slightly higher than NIB i.e. 2.61% > 1.79%. However, NABIL seems successful in managing and utilizing the available assets in order to generate revenue

The credit risk ratio shows the proportion of no-performing loan in total Loan & Advances. Average credit risk ratio of NIB is higher than NABIL. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. The liquidity risk of the bank defines its liquidity need for deposit. The average mean ratio of NIB is greater than that of NABIL. The analysis shows that both banks have the Asset Risk Ratio in fluctuating trend.

Khana, Bandana (2011). In her dissertation “An analysis of Credit risk Management of Himalayan Bank and Nabil Bank Limited” The main objective of the study is to evaluate the credit risk and lending management of HBL and NABIL bank., the following specific objectives have been formulated.

- To evaluate the status of the loan portfolio management of the stated banks viz HBL and NABIL.
- To evaluate problems and weakness in credit risk management of HBL and NABIL bank.
- To examine relationship between total investments, deposits, loans and advances net profit and asset and compare them

The overall aspect of liquidity position of NABIL is comparatively better than HBL. But the cash and bank balance to total deposit in the preceding years and investment to govt. securities to current assets in the succeeding years of HBL is better. Assets management aspect of NABIL is better than HBL which is justified by higher Mean loan & advances to total deposit ratio, loan & advances to total assets, lower interest earned to operating ratio, higher interest earned to total assets ratio, investment in share and debentures to total assets for NABIL whereas investment to total deposit ratio and investment on govt.

securities to total assets of HBL is higher. All these ratios show that NABIL has emphasis on loan and advances out of its total assets rather than investment (i.e. investment in other sector and investment in risk free assets). It shows that NABIL has taken more risk than that of HBL. HBL has comparatively more investment in govt. securities and other investment which is less productive however it is low risky.

Overall profitability ratios show that NABIL has earned higher profit in relation to every aspects of the bank than HBL which is justified by higher mean return on loan and advances, return on total assets, return on equity, total interest earned to total working fund, lower interest earned to total operating ratio, lower interest paid to total assets of NABIL. NABIL has better management of loan & advances because of having lower average non performing loan & advances to total loan ratio. Both banks have decreasing trend of ratio which is the good indication of credit management. Liquidity risk of HBL is lower from the mean point of view. In the latest years NABIL has lower liquidity risk. While observing mean ratio and individual ratio NABIL has lower credit risk However HBL has also decreasing trend of ratios.

HBL and NABIL banks have positive correlation between deposit and loan & advances, total assets and net profit, but there negative correlation between deposit and total investment & total investment and net profit of HBL. Comparatively NABIL has strong relationship between these variables. It is also found that there is positive correlation between total deposit, loan & advances, net profits, total investment of two banks. Total deposit, loan & advances, net profit of HBL and NABIL are in increasing trend. From the entire research study, overall all financial performance of NABIL is better than HBL. But HBL is also operating smoothly in many aspects. Investment policy ensures maximum amount of credit to all sectors with proper utilization.

2.5 Research Gap

The past researches in measuring credit management of bank have been focused on the limited ratios, which are incapable of solving the problems. In this research various ratio are systematically analyzed and generalized. The ratios are not categorized according to nature. Here in this research all ratios are categorized according to their area and nature. The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. There are various researchers conduct on lending practice, credit policy, financial performance and credit management of various commercial banks. Some of the researchers have done the credit management of one bank or between two or three different commercial bank. In order to perform those analysis researchers have used various ratio analysis.

Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts. This study tries show credit management by applying and analyzing various financial tools like liquidity ratio, asset management ratio, profitability ratio and, risk and lending efficiency ratio as well as different statistical tools like average mean, standard deviation coefficient of correlation and trend analysis. In this research comparative study of credit management of NIBL and NABIL is measuring by various ratios, trend analysis and various statistical tools as well and financial tools are used for analyzing survey data. Since the researcher have used data only five fiscal year but all the data are current and fact. Probably this will be the appropriate research in the area of credit management of Bank and financial institutions.

CHAPTER- III
RESEARCH METHODOLOGY

3.1 Introduction

The topic of the study has been selected As “A Comparative study on Credit Management of Nepal Investment Bank and NABIL Bank Limited.” in order to reach and accomplish the objectives of the study, different activities will be carried out. For this purpose, the chapter aims to present and reflect the methods and techniques that are carried out and followed during the study period. The research methodology that is adopted for the present study is mentioned in this chapter which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology.

3.2 Research Design

Research is a theory building activity. Research design is the plan, structure and strategy of investigations conceived so as to obtain answer to research questions and to control variances.

"A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combined relevance to the research purpose with economic in procedure" (Kothari, 1989:59).

Since the main objectives of this study is to analysis financial performance of the banks, all the indicators that shows the financial performance of the banks were calculated using data obtained from the five year end internally generated accounting records maintained by sampled Banks. The study depends on the secondary data. Various financial parameters and effective research techniques are employed to evaluate the financial performance of the banks. Furthermore, various descriptive as well as analytical techniques are used. The study is designed as to give a clear picture of the Bank's financial circumstances with the help of available data with useful suggestions and recommendation.

3.3 Nature and Sources of Data:

The study is mainly conducted on secondary data relating to the study of financial performance of samples Banks, as they are available at concerned Banks. For the purpose of the study, various related books, booklets, magazine, journals, newspaper and thesis made in this field have been referred. Besides necessary suggestions are taken from various experts both inside and outside the bank whenever required. Secondary data are mostly used for this research purpose.

3.4 Population and Sample

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate. A small portion chosen form the population for studying its properties is called sample. The researcher cannot normally survey everyone in the population so a small part of the total population is taken to represent the total population. Hence, a sample is a collection of items or elements from a population or universe. 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.

Here, the total 29 commercial banks shall constitute the population of the data and tow bank under the study constitute the sample under the study. So among the various commercial banks in the banking industry, Here Nepal Investment Bank Limited and NABIL Bank has been selected as sample for the present study. Likewise, financial statements of five years (beginning from 2006/07 to 2010/011) are selected as samples for the purpose of it.

3.5 Data Collection Procedure:

Especially the annual report of NIB and NABIL and the website of concern Bank limited are taken as main source of data collection for purpose of study. NRB publication such as economic report and bulletin, banking and financial statistics, annual report of NRB etc. other main source is website of NRB and web site of Nepal share market. Most of the data and substance are obtain from above source.

3.6 Method of Data Analysis Technique:

For the purpose of the study all collected secondary data are arranged, tabulated under various heads and them after disunities and statistical analysis have been carried out to enlighten the study. Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are also used. To make the study more specific and reliable, the researcher uses two types of tool for analysis,

1 Financial Analysis.

2 Statistical Analysis.

3.6.1 Financial Tools:

Stakeholders of a business firm perform several types of analyses on a bank is financial statements. All of these analyses rely on comparisons or relationship of data that enhance the utility or practical value of accounting information.

3.6.1.1 Ratio Analysis:

A ratio is simply one number expressed in term of another and as such it express the quantitative relationship between any two numbers. Ratio refers to the numerical or quantitative relationship between two items/variables. A ratio is calculated by dividing one item of relationship with the other. A ratio can be expressed in term of percentage, proportion, and as a coefficient. A ratio is a figure or a percentage representing the comparison of two variables or any substance.

The relationship between two accounting figure, expressed mathematically is known as financial ratio. The technique of ratio analysis is part of the whole process of analysis of financial statement of any business and industrial company especially to tame output and credit decision. It is defined as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. Thus ratio analysis is useful to evaluate, judgment and taking appropriate decision.

A. Liquidity Ratio:

Liquidity means the ability of a firm to meet its short- term or current obligations. Liquidity ratios are used to measure the ability of a firm to meet its short-term obligations and the present cash solvency as well as ability to remain in debt. It's not good for having excess liquidity and low liquidity in any organization. Inadequate liquidity can lead to unexpected cash short falls and reduce profitability as well as inadequate liquidity can lead to the liquidity insolvency of the institution. On the other hand, excessive liquidity can lead to low asset yields and contribute to poor earnings performance. To find -out the ability of bank or financial institution, following ratios are analyzed and find liquidity ratios to identify the liquidity position.

i. Cash Reserve Ratio:

It's also known as Cash and Bank Balance to Total Deposit Ratio. This ratio shows the ability of banks immediate funds to cover their deposit. Higher the ratio shows higher liquidity position and ability to cover the deposits and vice versa. Total deposit includes current deposit saving, fixed deposit, call short deposit, and other types of deposit. This ratio can be calculated using the following formula.

$$\text{Cash Reserve Ratio} = \frac{\text{Cash and bank balance}}{\text{Total deposit}}$$

ii. Cash and Bank Balance to current Assets Ratio:

Cash and bank balance are the liquid current assets. This ratio measures the percentage of liquid fund with the current assets. Higher ratio indicates the banks sound ability to meet the daily cash requirement of their customers' deposit. So bank has to maintain cash and bank balance to current assets ratio properly.

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

iii. Cash and Bank Balance to Interest Sensitive Deposit Ratio:

Saving deposit is deposited by public in a bank with objectives of increasing their wealth. Interest rate plays important role in the follow of interest sensitive deposit. Fixed and current deposits are not interest sensitive. Fixed deposits have a fixed term to maturity and Current deposits are not sensitive toward interest rate. The ratio of cash and bank balance to interest sensitive deposits measure the bank ability to meets its sudden out flow of interest sensitive deposits to the change interest rate.

$$\text{Cash and bank balance to interest sensitive deposit ratio} = \frac{\text{Cash and bank balance}}{\text{sensitive deposit}}$$

B. Activity Ratio:

It is also known as efficiency turnover ratio or assets management ratio. Its measures how efficiently the firm utilize the assets. Turnover means; how much number of times the assets flow through a firm's operations and into sales. Greater rate of turnover or conversion indicates more efficiency of a firm in managing and utilizing its assets, being other things equal. Various ratios are as follows.

i. Credits Advances to Fixed Deposit Ratio:

Fixed deposits are the long-term interest bearing obligations and credits and advances is the major sources of investment to generate the income by the commercial banks. This ratio measures how many times the amount is used in credits and advances in comparison to fixed deposit for the income generating purpose. The ratio is slightly differ with the former one, because it only includes the fixed deposits, where as the former on includes all the deposits. The following formula is used to obtain this ratio.

$$\text{Credits and Advances to Fixed Deposit Ratio} = \frac{\text{Credits and Advances}}{\text{Fixed Deposits}}$$

ii. Credits Advances to Total Deposits Ratio:

It is also known as loan advance to total deposit ratio. Commercial banks utilize the outsider's fund for profit generation purpose. Credits and advances to deposit ratio shows whether the banks are successful to utilize the outsiders funds (i.e. total deposits) for the profit generating purpose on the credit and advances or not. Generally, a high ratio reflects higher efficiency to utilize outsider's fund and vice-versa. The ratio can be calculated by using following formula.

$$\text{Credits and Advances to Total Deposits Ratio: } = \frac{\text{Credit and Advances}}{\text{Total Deposits}}$$

iii. Credit and Advances to Total Assets Ratios:

It measures the ability in mobilizing total assets into credits and advances for profit generating income. A higher ratio is considered as an adequate symbol for effective utilization of total assets of bank into credit and advances which creates opportunity to earn more and more. It is calculated as:

$$\text{Credit and Advances to Total Assets Ratio} = \frac{\text{Credits and Advances}}{\text{Total Assets}}$$

iv. Non-Performing Assets to Total Assets Ratio:

This ratio shows the relationship of Non-Performing assets and total assets. This ratio represents the proportion between the non-performing assets and total assets of bank. It shows the how much assets is non – performing or idle in the total assets of bank. Higher NPA to total assets ratio indicates the worst performance, which reduces the profitability of bank. Higher ratio shows the low efficient operating of the credit management and lower ratio shows the more efficient operating of credit management.

$$\text{Non-performing assets to total assets ratio} = \frac{\text{Non-performing assets}}{\text{Total assets}}$$

C. Leverage Ratio:

It is also known as capital structure ratio. Leverage ratio helps to test long term solvency position of the firm. It informs us the relationship of long-term debt with total capital or shareholder fund. The use of finance is refers by financial leverage.. These ratios are also called solvency ratio or capital structure ratio. These ratios indicate mix of funds provided by owners and lenders.. To judge the long-term financial position of the firm, leverage ratios are calculated. This ratio highlights the long-term financial health, debt servicing capacity and strength and weaknesses of the firm. Following ratios are included under leverage ratios.

i. Total Debt to Equity Ratio:

It shows the relationship between debt and equity. Total debt to equity ratio measures the relative proportion of outsiders and owner's funds employed in the total capitalization. Here, total debt includes total deposits, bills payable and other liabilities of the bank and equity includes paid up capital, retained earning and reserves. The formula used to determine the ratio is:

Total Debt = long term Debt + current liability

$$\text{Total Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Equity}} \times 100\%$$

ii. Total Debt to Total Assets Ratio:

It examines the relationship between borrowed funds (i.e. total debt) and total assets. It shows the relative extent to which the firm is using borrowed money. A lower ratio is preferable since it reduces the distress of the creditors by using more amount of equity on total assets. Total debt includes both current liabilities and long term debt. Creditors prefer low debt ratios because the lower the ratio, the greater the cushion against creditors losses in the event of liquidation. Stockholders on the other hand may want more leverage because it magnifies expected earnings. It is computed as:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$$

iii. Total Assets to Net worth Ratio:

The ratio is calculated to find out the proportion of owner's fund to finance for the total assets. Total Assets comprises of the total value of the assets side of balance sheet where as net worth is the sum of the share capital plus reverses and retained of the bank. It is calculated to see the amount of assets financed by net worth.

$$\text{Total Assets to Net Worth Ratio} = \frac{\text{Total Assets}}{\text{Net Worth}} \times 100\%$$

E. Profitability Ratio:

This ratio shows the profitability conditions of the bank. Profit is essential for the survival of bank so it is regarded as the engine that drives the banking business and indicates economic progress. Profitability ratios are calculating to measure the management ability regarding how well they have utilized their funds. Lending is one of the major functions of commercial bank so following are the various types of ratio, which should the contribution of loan and advances in profit and help to be investor whether to invest in particular firm or not.

i. Net Profit to Gross Income Ratio:

The ratio measures the position of profitability of the company to total income. This shows the sound and weakness of the company to utilize its resources. Higher ratio shows the higher efficiency of management and lower ratio shows the lower efficiency of the management. The formula of net Profit to Gross income ratio is-

$$\text{Net Profit to Gross income ratio} = \frac{\text{Net profit}}{\text{Gross income}}$$

ii. Interest Income to Total Income Ratio:

The ratio measures the volume of interest income to total income. The high ratio indicated the banks performance on other fee-based activities. The high ratio indicates the high contribution made by lending and investing activities.

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

iii. Operating Profit to Loan and Advances Ratio:

Operating profit to loan and advances ratio measure the earning capacity of commercial bank. Operating profit to loan and advances ratio is calculated by dividing operating profit by loan and advances.

$$\text{Operating profit to loan and advances ratio} = \frac{\text{Operating profit}}{\text{Loan and advances}}$$

iv. Return on Loan and Advances Ratio:

This ratio measures the earning capacity of the commercial bank through it fund mobilization as loan and advances. Higher ratio indicated greater success to mobilize fund as loan and advances and vice versa. Mostly loan and advances includes cash, credit, bank overdraft, bills purchased and discounted.

$$\text{Return on loan and advances} = \frac{\text{Net profit}}{\text{Loan and advances}}$$

v. Net Profit to Total Assets:

This ratio shows the relationship of Net profit and total assets and is to determine how efficiently the total assets and is to determine how efficiently the total assets have been used by the management. This ratio indicates the ability of generating profit per rupees of total assets. It also evaluates the present return on the total assets as a guide for return expected on future purchase of assets. Higher the ratio shows the more efficient operating of management and lower the ratio shows the low efficient operating of management. This ratio is computed by **–**

$$\text{Net profit to total assets ratio} = \frac{\text{Net profit}}{\text{Total assets}}$$

vi. Earnings per Share (EPS):

Earning per share measures the profit available to the cash equity holders. It only measures the overall operational efficiency bank. It is the profit tax figure EPS tells us what profit the common share holder get for every share.

$$\text{Earning per share} = \frac{\text{Profit after tax}}{\text{No. of common share}}$$

vii. Price Earnings Ratio:

This ratio shows the relationship between earning per share and market value per share. This ratio measures the profitability of the firm. Higher ratio shows the higher efficiency of the management and lower ratio shows the lower efficiency of the management. The ratio is computed by-

D. Lending Efficiency Ratio:

This ratio is concerned with measuring the efficiency of bank. This ratio also shows the utility of available fund. One following is the various types of lending efficiency ratio.

i. Loan Loss Provision to Total Loan and Advances ratio:

Loan loss provision to total loan and advances describes the quality assets that a bank holding. The provision for loan loss reflects the increasing probability of non-performing loan. The provision of loan mean the net profit of the banks will come down by such amount. Increase in loan loss provision decreases in profit result to decreases in dividends but its positive impact is that strengthens financial conditions of the bank by controlling the credit risk and reduced the risks related deposits. So, it can said that loan suffer it only for short term while the good financial conditions and safety of loans will make banks prosperity regulating increasing profits for long term. The low ratio indicates the good quality of assets in total volume of loan and advances. High ratio indicates more risky assets in total volume of loan advances.

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

ii. Non-Performing Loan to Total Loan and Advances:

This ratio shows the relationship of Non-Performing loan and total loan and advances and is to determine how efficiently management has used the total loan and advances. Higher ratio shows the low efficient operating of the management and lower ratio shows the more efficient operating of credit management.

$$\text{Non-performing loan to total loan and advances} = \frac{\text{Non-performing loan}}{\text{Total Loan and advances}}$$

iii. Interest Expenses to Total Deposit Ratio:

This ratio measures the percentage of total interest paid against total deposit. A high ratio indicates higher interest expenses on total deposit. Commercial banks are dependent upon its ability to generate cheaper fund. The cheaper fund has more the probability of generating loans, advances, and vice versa.

$$\text{Interest Expenses to Total Deposit Ratio} = \frac{\text{Interest Expenses}}{\text{Total Deposit Ratio}}$$

3.6.2 Statistical Tools:

For supporting the study, statistical tool such as Mean, Standard Deviation, Coefficient of Variation, Correlation and diagrammatic cum pictorial tools have been used under it.

Arithmetic Means (Average):

Arithmetic mean also called 'the mean' or 'average' as most popular and widely used measure of central tendency. Arithmetic Mean is statistical constants which enables us to comprehend in a single effort of the whole. Arithmetic mean represents the entire data by a single value. It provides the gist and gives the birds' eye view of the huge mass of a widely numerical data. It is calculated as:

$$\bar{X} = \frac{1}{n}\sum_{i=1}^{n} X_i$$

Where:

$\bar{X}$ = mean value or arithmetic mean

$\sum_{i=1}^{n} X_i$ = sum of the observation

N = number of observation

Correlation Coefficient (r):

Correlation may be defined as the degree of linear relationship existing between two or more variables. These variables are said to be correlated when the change in the value of one results change in another variable. Correlation is categorized three types. They are Simple, Partial and Multiple correlations. Correlation may be positive, negative or zero. Correlation can be classified as linear or non- linear. Here, we study simple correlation only." In simple correlation the effect of others is not included rather these are taken as constant considering them to have no serious effect on the dependent.

Formula

$$r_{x1x2} = \frac{N\Sigma X_1X_2 - (\Sigma X_1)(\Sigma X_2)}{\sqrt{[N\Sigma X_1^2 - (\Sigma X_1)^2]}\sqrt{[N\Sigma X_2^2 - (\Sigma X_2)^2]}}$$

Whereas,

r_{x1x2} = Correlation between X_1 and X_2

$N\Sigma X_1X_2$ = No. of Product observation and Sum of product $X_1$and X_2

$\Sigma X_1\Sigma X_2$ = Sum of Product $X_1$and sum of Product X_2

Coefficient of variation (c.v.):

The coefficient of variation is measures the relative measures of dispersion , hence capable to compare two variables independently in term of variability.

$$\text{c.v.} = \frac{ó}{x} * 100$$

σ = Standard deviation

x = sum of the observation

Probable Error:

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows:

$$P.E. = 0.6745 \; \frac{1 - r^2}{\sqrt{N}}$$

Here, r = Correlation coefficient

N = Number of pairs of observations

If the value of ‘r’ is less than the probable error, there is no evidence of correlation, i.e., the value of ‘r’ is not at all significant. Then, if the value of ‘r’ is more than six times of the probable error, the coefficient of correlation is practically certain, i.e., the value of ‘r’ is significant.

Times Series Analysis :

Time series is used to measure the change of financial, economical as well as commercial data. The least square method to trend analysis has been used in measuring the trend analysis. This method is widely used in practice. The straight line trend of a series of data is represented by the following formula.

$Y = a + bx$

Here,

Y is the dependent variable, a is y intercept or value of y when x = 0, b is the slope of the trend line or amount of change that comes in y for a unit change in x.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter deals with the presentation, analysis and interpretation of relevant data NIBL and NABIL in order to fulfill the objectives of this study. To obtain best result, the data have been analyzed according to the research methodology as mentioned in third chapter. The purpose of this chapter is to introduce the data analysis and interpretation. With the help of this analysis, efforts have been made to highlight the credit risk management of finance company as well as other cases or problems of NIBL and NABIL can be visualized. For analysis, different types of analytical methods and tools such as financial analysis and statistical analysis are used.

4.2 Financial Statement Analysis

Financial analysis is done by applying various financial tools in order to clear picture on the viability of the project. The financial analysis is done to ascertain the liquidity, profitability, leverage, debt servicing and interest servicing ability of the firm. The concept of financial statement analysis has been already discussed in previous chapter. Here, we study and analyze the data by using accounting tools.

4.2.1 Ratio Analysis

Ratio is the relationship between two figures. They provide two important facts about the management: the return on investment and the soundness of the company’s financial position. A single ratio will not depict a true picture of the unit. Hence a combination of ratios must be analyzed to drive a true picture. Ratio analysis has been already discussed in previous chapter. Here, different ratios of NIBL and NABIL will be calculated, analyzed and interpreted.

4.2.1.1 Liquidity Ratio:

Liquidity refers to the ability of a firm to meet its short- term or current obligations. So liquidity ratios are used to measure the ability of a firm to meet its short-term obligations. Inadequate liquidity can lead to unexpected cash short falls that must be covered at excessive costs reducing profitability. In the worst case, inadequate liquidity can lead to the liquidity insolvency of the institution. To find -out the ability of the bank to meet their short-term obligations, which are likely to mature in the short period, the following ratios are developed under the liquidity ratios to identify the liquidity position.

(a) Current Ratio:

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

Table: 4.1

Current Assets to Current Liabilities

Year	**Ratio (in times)**	
	NIBL	**NABIL**
2006/07	2.215	2.08
2007/08	2.174	1.83
2008/09	1.014	1.35
2009/010	1.039	1.2
2010/011	1.099	1.16
2011/012	1.59	3.16
Mean	1.521	1.796
S.D.	0.562	0.761
C.V.	36.941	42.394

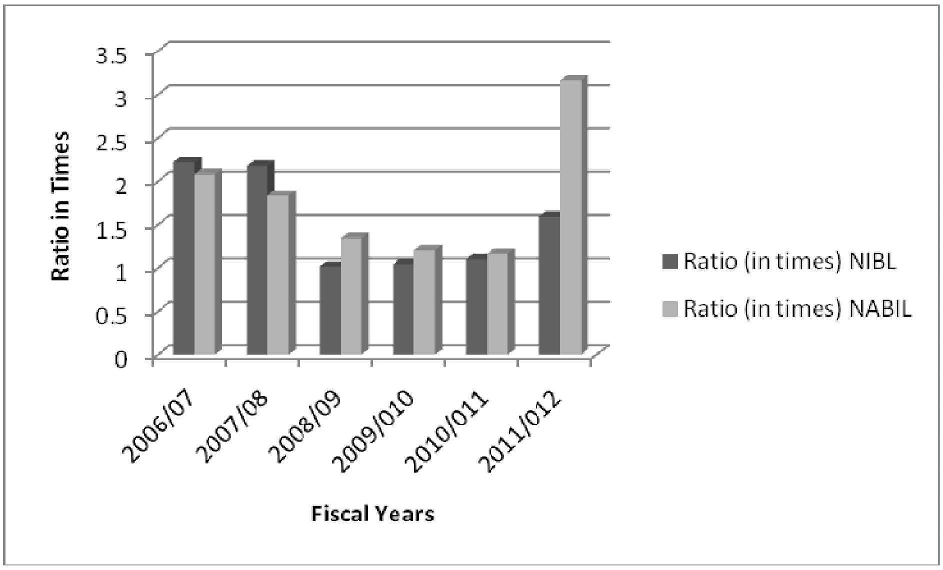
Source: Annual Report of Concern Bank

Above table shows the current ratio of selected commercial banks during the study period. The current ratio of NIBL bank is fluctuating and NABIL is in decreasing trend. In general, it can be said that all the banks have sound ability to meet their short- term obligations. In the case of NABIL current ratio has high ratio in each year. In an average, liquidity position of NABIL is greater than NIBL i.e. 1.521<1.1796 due to high mean ratio. So, NIBL is sound in meeting short-term obligation than NABIL. Likewise, S. D. and C.V. of NABIL is more than NIBL i.e. 0.76>0.56 and 0.42.39>36.941. It can be said that current ratio of NABIL is more consistent than NIBL.

Lastly from the above analysis it is known that NABIL has better liquidity position because it has higher ratio. However both banks have not met the standard ratio as the standard ratio is 2:1. The following figure shows the current ratio of NIBL and NABIL bank.

Figure: 4.1

Current assets to Current Liabilities Ratio



(b) Cash and Bank Balance to Total Deposits Ratio

This ratio measures the bank's ability of withdrawal of fund immediately by their depositors. A higher ratio represents a greater ability to cover their deposits and vice-versa. The large ratio shows the idle cash and bank balance in banks while small ratio shows the utilization of deposit from banking perspective.

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

Table: 4.2

Cash and Bank Balance to Total Deposits Ratio

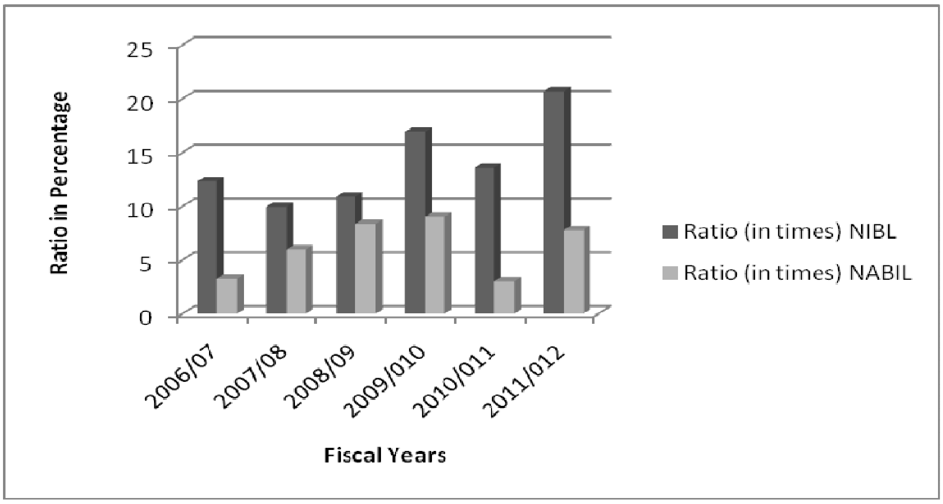
Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	12.34	3.26
2007/08	9.97	5.99
2008/09	10.9	8.37
2009/010	16.95	9.03
2010/011	13.61	3.02
2011/012	20.70	7.78
Mean	14.071	6.241
S.D.	4.057	2.607
C.V.	28.820	41.780

Source: Annual Report of Concern Bank

From the Table No 4.2 analysis, cash and bank balance to total deposits ratio of the NIBL and NABIL are fluctuating but decreasing trend. The higher ratio of NIBL and NABIL are 20.70% and 9.03% respectively. The average ratio of NIBL is greater than that of NABIL (i.e. 14.067>6.241). It signifies that NIBL has sound liquid fund to make immediate payment to the depositors from the mean point of view. Likewise, S. D. and C.V. of NABIL is more than NIBIL i.e. 4.057>2.607 and 41.78>28.82. It can be said that cash and bank balance to total deposits ratio of NABIL is more inconsistent than NIBL. Following figure show the cash and bank balance to total deposit ratio.

Figure: 4.2

Cash and Bank Balance to Total Deposits Ratio



(c) Cash and Bank Balance to Current Assets Ratio

This ratio reflects the proportion of cash and bank balance out of total current assets. It can be calculated as follows:

$$\textit{Cash and Bank Balance to Current Assets ratio} = \frac{\textit{Cash and Bank Balance}}{\textit{Current Assets}}$$

Table: 4.3

Cash and Bank Balance to Current Assets Ratio

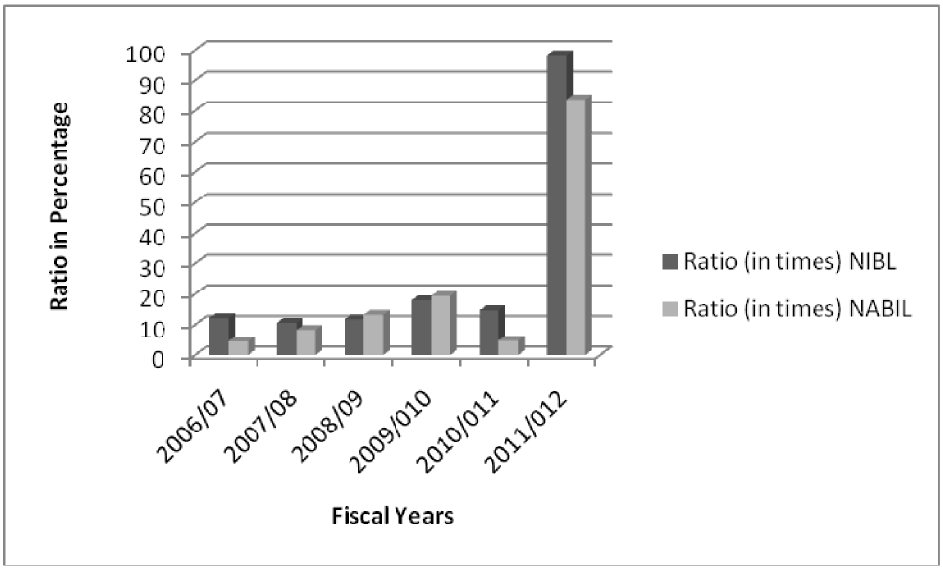
Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	12.16	4.55
2007/08	10.65	8.25
2008/09	11.78	13.27
2009/010	17.95	19.46
2010/011	14.75	4.73
2011/012	98.28	83.80
Mean	27.595	22.343
S.D.	34.727	30.636
C.V.	125.845	137.117

Source: Annual Report of Concern Bank

Above table shows that the cash and bank balance to current assets ratio of NIBL is in increasing trend except in 2010/011 and NABIL is increasing trend and decrease in the year 2010/011. The highest ratio of NIBL is 98.28 % in year 2011/012 and lowest ratio 10.65% in year 2007/08. The mean ratio is 27.59% similarly, the highest ratio of NABIL is 83.80% in 2011/012 and lowest ratio is 4.55% in 2005/2006. The mean ratio of NABIL is 22.343%. While observing the data, we notice that NIBIL has higher mean ratio. It means NIBIL has slightly sound liquid assets than that of NABIL out of its current assets from the mean point of view. Lower S.D and C.V. of NIBL shows that it has consistency in the ratios i.e. 34.72>30.636 and 125.84<137.11 than NABIL. Following figure show the cash and bank balance to current asset ratio.

Figure: 4.3

Cash and Bank Balance to Current Assets Ratio



(d) Investment on Government Securities to Current Assets Ratio

Government Securities can be easily sold in the market or they can be converted into cash. The main purpose of this ratio is to examine that portion of commercial banks current assets that has been invested into different government securities. This ratio is calculated by dividing investment on government securities by current assets.

Table: 4.4

Investment on Government Securities to Current Assets Ratio

Year	Ratio in Percent (%)	
	NIBL	NABIL
2006/07	13.14	16.6
2007/08	13.76	28.36
2008/09	9.89	23.09
2009/010	5.74	21.38
2010/011	9.09	26.85
2011/012	6.07	68.70
Mean	9.615	30.83
S.D.	3.392	19.014
C.V.	35.281	61.675

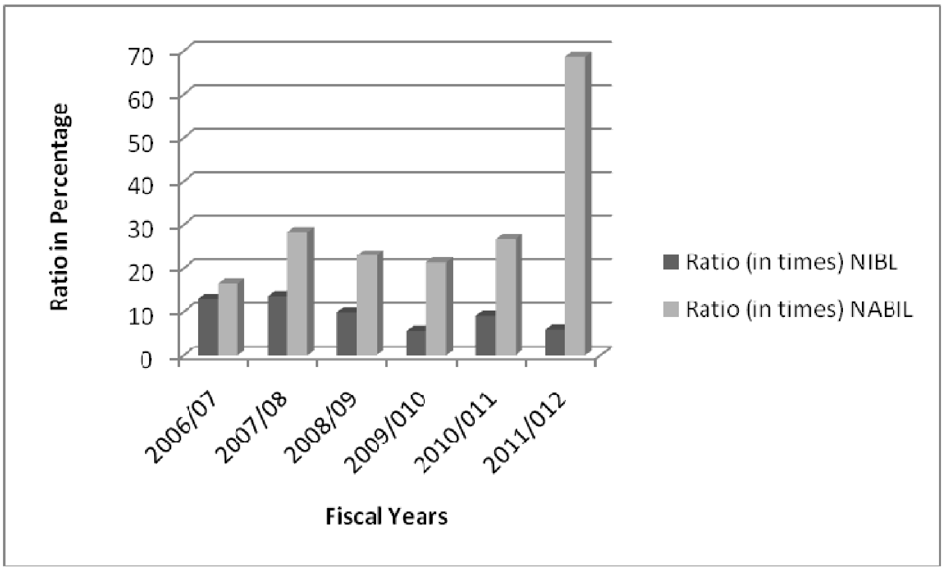
Source: Annual Report of Concern Bank

Table no 4.4 shows that the investment on government treasury bills to current assets of NIBL and NABIL are in fluctuating trend. The highest ratio of NIBL is 13.76% in 2007/08 and NABIL is 68.70% in 2011/012 and the lowest ratio of NIBL and NABIL are 5.74% in 2009/010 and 16.60% in 2006/07 respectively.

From the table we notice that mean ratio of NIBL and NABIL are 9.615% and 30.83% respectively. NABIL has higher ratio and mean too. It means NABIL has invested more money in risk free assets than that of NIBL. In another word NIBL has emphases on more loans and advances and other short term investment than investment in govt. securities. Higher C.V. and S.D. of NABIL shows that it has inconstancy in the ratios (i.e. 19.014>3.392 and 61.675>35.281). Following figure show the investment on government treasury bills to current assets of NIBL and NABIL.

Figure: 4.4

Investment on Government Securities to Current Assets Ratio



4.2.1.2 Assets Management Ratio

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

(a) Loan and Advances to Total Deposits Ratio

The ratio measures the extent to which the banks are successful to mobilize their total deposits on loan and advances. We have

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

Table: 4.5

Loan and Advances to Total Deposits Ratio

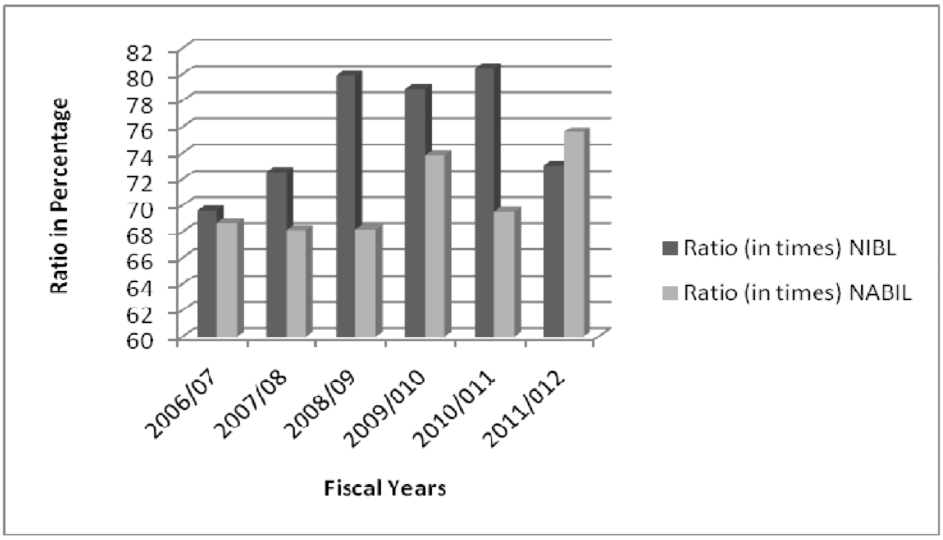
Year	Ratio in Percent (%)	
	NIBL	NABIL
2006/07	69.62	68.64
2007/08	72.56	68.13
2008/09	79.91	68.18
2009/010	78.86	73.85
2010/011	80.48	69.53
2011/012	73.03	75.61
Mean	75.743	70.656
S.D.	4.571	3.243
C.V.	6.035	4.589

Source: Annual Report of Concern Bank

Above table show the loan and advance to total deposit ratio of NIBL and NABIL. A high ratio of loan and advances indicates better mobilization of collected deposits and vice versa. But it should be noted that too high ratio might not be better from liquidity and default point of view. The Table shows that these two banks have mobilized their collected deposits in variable trend. In average NIBL has mobilized 75.74% and NABIL has mobilized 70.65% of their collected deposit in loan and advances. NIBIL has higher ratio in each year and average too. The highest ratio of NIBL is 80.48 in 2010/011 and highest of NABIL is 75.61 in 2011/12. So all of the year NIBL has not met the NRB requirement however NABIL has met the NRB requirement. Higher S.D. and C.V. (i.e. 4.571> 3.243 and 6.035 > 4.589) of NIBL shows that NIBL has inconstancies in the ratios. The loan and advance to total deposit ratio is presented in following figure.

Figure: 4.5

Loan and Advances to Total Deposits Ratio



(b) Total Investment to Total Deposits Ratio

This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities. A high ratio indicates the success in mobilizing deposit in securities and vice versa. We have,

Table: 4.6

Total Investment to Total Deposits Ratio

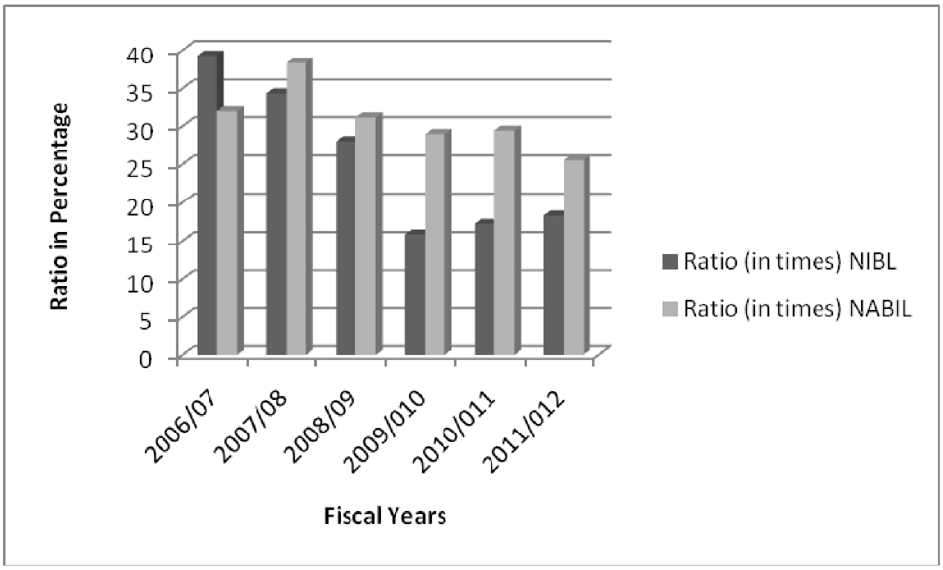
Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	39.3	31.94
2007/08	34.37	38.32
2008/09	28.07	31.14
2009/010	15.85	28.99
2010/011	17.24	29.45
2011/012	18.31	25.55
Mean	25.523	30.89833
S.D.	9.887	4.256
C.V.	38.737	13.774

Source: Annual Report of Concern Bank

From the Table No 4.6, it is observed that the investment to total deposit ratio of NIBL and NABIL are in fluctuating trend. The mean of the ratio of NIBL and NABIL are 25.52% and 30.89% respectively. NABIL has higher ratio beside 2006/07 year and mean too. It signifies NABIL has successfully allocated its deposit in investment portfolio in comparison with NIBL. Lower S. D and C.V. of NABIL shows that NABIL has more constancies in the ratios, i.e. 0.383 > 0.117. it means NIBL has more volatility in ratio than NABIL. The following figure shows the investment to total deposit ratio of NIBL and NABIL.

Figure: 4.6

Total Investment to Total Deposits Ratio



(c) Loan and Advances to Total Working Fund Ratio

This ratio reflects the extent to which the commercial banks are success in mobilizing their assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of fund on loan and advances and vice versa. We have,

$$\textit{Loan and Advances to TWF Ratio} = \frac{\textit{Total Loan and Advances}}{\textit{Total Working Fund}}$$

Table: 4.7

Loan and Advances to Total Working Fund Ratio

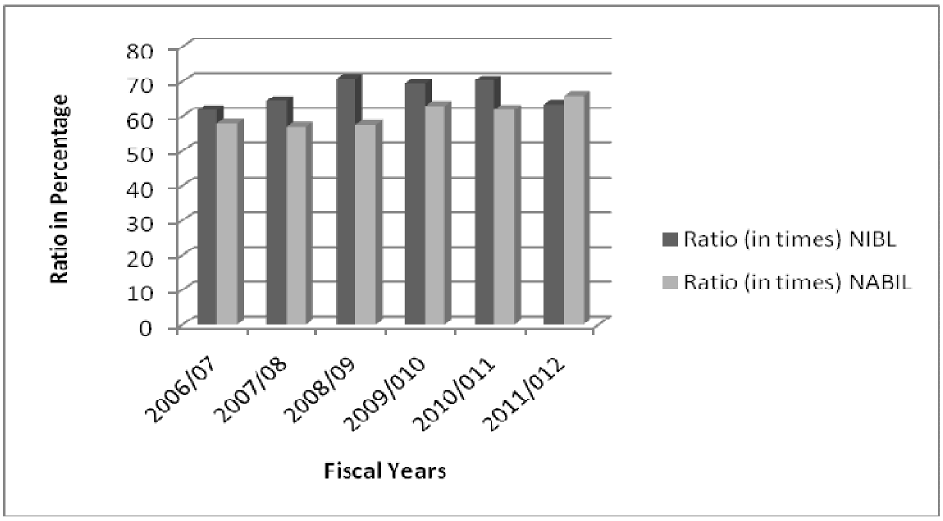
Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	61.78	57.87
2007/08	64.4	57.04
2008/09	70.82	57.54
2009/010	69.47	62.89
2010/011	70.35	61.88
2011/012	63.32	65.83
Mean	66.69	60.508
S.D.	3.972	3.568
C.V.	5.956	5.897

Source: Annual Report of Concern Bank

Above table and shows that loan and advances to total assets ratio of NIBL and NABIL are fluctuating trend. While observing their ratios; NIBL is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year. The mean of NIBL and NABIL are 66.69% and 60.50% respectively. So NIBL has higher ratio than that of NABIL. It reveals that in total assets, NIBL has high proportion of loan and advances. Lower S.D. and C.V. of NABIL show that NABIL has constancies in the ratios as well.

Figure: 4.7

Loan and Advances to Total Working Fund Ratio



(d) Investment on Government Securities to Total Working Fund Ratio

The main purpose of this ratio is to examine that portion of banks and finance total working fund that has been invested into different government securities. This ratio is calculated by dividing investment on government securities by total working fund.

Investment on Govt. Securities to Total Working Fund

$$= \frac{Total\ Investment\ on\ Govt.Securities}{Total\ Working\ Fund}$$

Table: 4.8

Investment on Govt. Securities to Total Working Fund Ratio

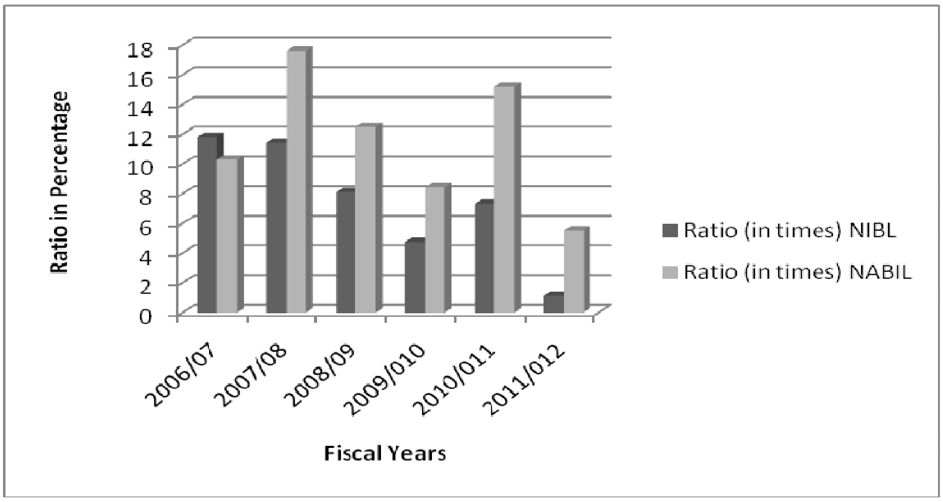
Year	Ratio in Percent (%)	
	NIBL	NABIL
2006/07	11.82	10.31
2007/08	11.43	17.64
2008/09	8.12	12.51
2009/010	4.77	8.45
2010/011	7.33	15.23
2011/012	1.12	5.54
Mean	7.431	11.613
S.D.	4.065	4.445
C.V.	54.701	38.276

Source: Annual Report of Concern Bank

Above table shows that the investment on government treasury bills to total working fund of NIBL and NABIL are in fluctuating trend. The highest ratio of NIBL is 11.82% in 2006/07 and NABIL is 17.64% in 2007/08 and the lowest ratio of NIBL and NABIL are 4.77% and 8.45% in 2009/010 respectively. From the table we notice that mean ratio of NIBL and NABIL are 8.694% and 12.828% respectively. NABIL has higher ratio in every year. It means NABIL has invested higher money in risk free assets than that of NIBL. NIBL has invested more money in risky assets out of its total assets. In another word NIBL has emphases on more loans and advances and other short term investment than investment in govt. securities out of its total assets. Higher C.V. of NIBL shows that inconstancies in the ratio.

Figure: 4.8

Investment on Govt. Securities to Total Working Fund Ratio



4.2.1.3 Profitability Ratios

(a) Return on Loan and Advances Ratio

Return on loan and advances ratio measures the earning capacity of a commercial bank on its deposit mobilized on loan and advances higher the ratio greater will be the return and vice versa. It is calculated as follow:

Table: 4.9

Return on Loan and Advances Ratio

Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	2.66	4.92
2007/08	2.82	4.34
2008/09	2.53	3.49
2009/010	2.44	3.74
2010/011	3.14	3.53
2011/012	2.4	4.14
Mean	2.665	4.026
S.D.	0.278	0.552
C.V.	10.462	13.711

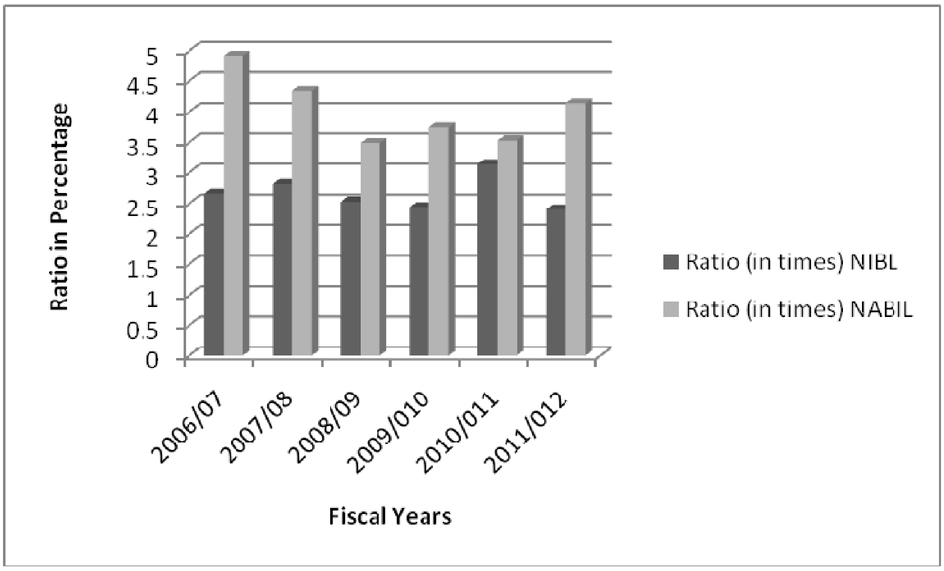
Source: Annual Report of Concern Bank

Above table shows that return on loan and advances ratio of NIBL and NABIL are in fluctuating trend. The highest ratio of NIBL is 3.14% in the year 2010/011 and lowest ratio 2.44% in year 2009/010. The mean ratio is 2.66%. This shows the normal earning capacity of NIBL in loan and advances. Whereas highest ratio of NABIL is 4.92% in year 2006/07 and lowest ratio is 3.34% in 2007/08. The mean ratio is 4.002% of NABIL.

From the table we notice that NABIL has higher ratios in each year and mean too. So it seems successful by generating higher ratio. It can be concluded that NABIL has better utilized the loan and advance for the profit generation in comparison with NIBL. However if we see the latest data NIBL has improved it little bit more. It is bad aspect of NABIL as it has decreasing trend. But NIBL increasing trend at last consecutive year. The return on loan and advance is presented in following figure.

Figure: 4.9

Return on Loan and Advances Ratio



(b) Return on Total Working Fund Ratio

Return on total working fund ratio measures the earning capacity of a commercial bank on its deposit mobilized on total working fund, higher the ratio greater will be the return and vice versa. It is calculated as follow

Table: 4.10

Return on Total Working Fund Ratio

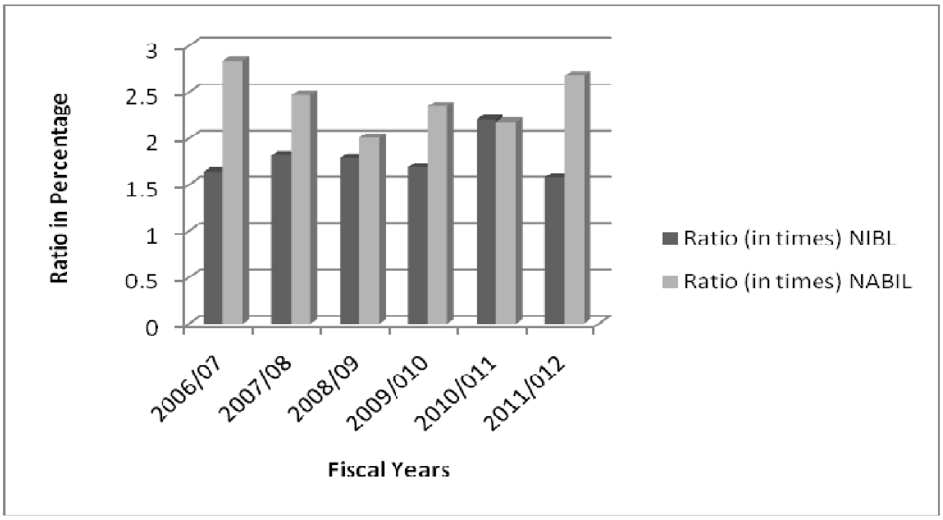
Year	**Ratio in Percent (%)**	
	NIBL	**NABIL**
2006/07	1.64	2.84
2007/08	1.82	2.47
2008/09	1.79	2.01
2009/010	1.69	2.35
2010/011	2.21	2.18
2011/012	1.58	2.68
Mean	1.788	2.421
S.D.	0.225	0.308
C.V.	12.600	12.755

Source: Annual Report of Concern Bank

Above table shows that ROA of NIBL is fluctuating but increasing trend and NABIL has decreasing trend. NABIL seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is higher than that of NIBL. NABIL has also higher ratio in beside last 2010/011 year. It indicates NABIL has utilized their total asset in income generating purpose but decreasing tendency. However it noted that NIBL is doing well in the latest year whereas NABIL is not doing well in the latest year as it has decreasing trend of ratios. Lower C.V. of NIBL shows that it has constancies in the ratios (i.e. 12.60<12.75).

Figure: 4.10

Return on Total Working Fund Ratio



(c) Return on Equity:

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

Table: 4.11

Return on equity Ratio

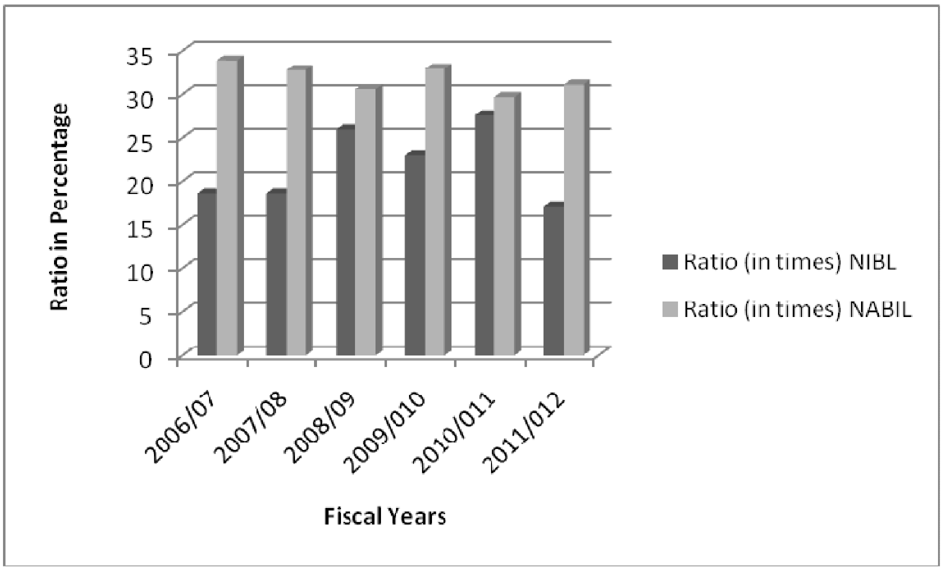
Year	Ratio (%)	
	NIBL	**NABIL**
2006/07	18.66	33.91
2007/08	18.65	32.79
2008/09	25.94	30.6
2009/010	23.05	32.94
2010/011	27.61	29.7
2011/012	17.18	31.12
Mean	21.848	31.844
S.D.	4.325	1.614
C.V.	19.800	5.070

Source: Annual Report of Concern Bank

From the above table, we notice that ROE of NIBL and NABIL are fluctuating trend. NABIL seems successful in managing and utilizing the shareholder capital in order to generate revenue since its ROE ratio is higher than that of NIBL i.e. 31.844% > 21.848% of total equity in an average. NABIL has also higher ratio in each year. However it noted that NIBL is doing well in the latest year as it has increased its ROE in the latest year drastically. Lower C.V. and S.D. of NABIL shows that it has consistencies in the ratios (i.e. 19.800>5.070). In conclusion NABIL has utilized its shareholder capital in order to generate revenue than NIBL.

Figure: 4.11

Return on Equity Ratio



(d) Total Interest Earned to Total Working Fund Ratio

This ratio actually reveals the earning capacity of commercial banks by mobilizing its working fund. Higher the ratio higher will be the income as interest. It is calculated as follow:

Table: 4.12

Total Interest Earned to Total Working Fund Ratio

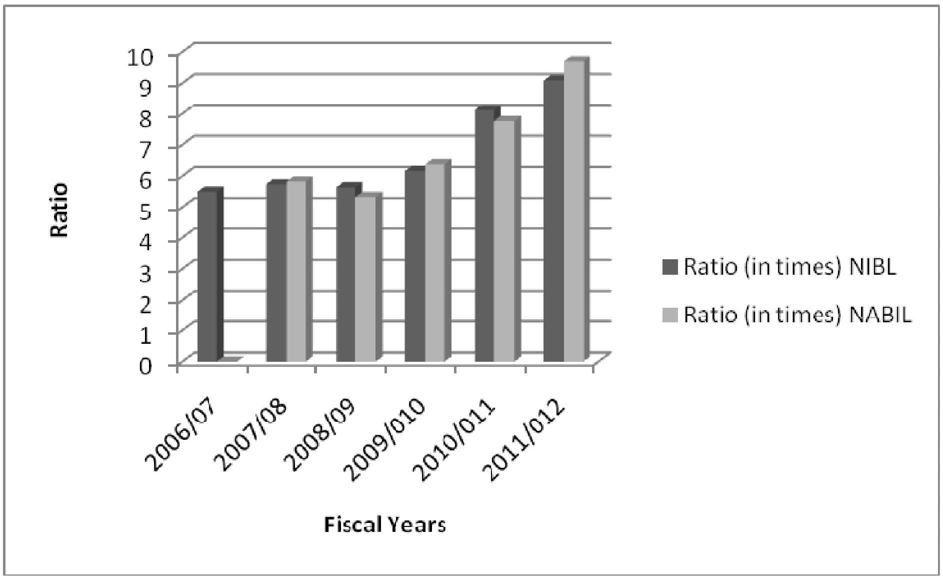
Year	**Ratio (%)**	
	NIBL	**NABIL**
2006/07	5.5	5,87
2007/08	5.74	5.83
2008/09	5.64	5.33
2009/010	6.16	6.38
2010/011	8.12	7.76
2011/012	9.09	9.70
Mean	6.708	7
S.D.	1.516	1.761
C.V.	22.612	25.162

Source: Annual Report of Concern Bank

Table No 4.13 shows interest earned to total working fund ratio of NIBL and NABIL. NIBL has increasing trend of ratio except in 2008/09 and NABIL has also increasing trend of ratio except in 2008/09. However, NIBL seems more conscious about managing its assets in order to earn more interest ratio because it has higher average ratio. NIBL has 6.708% average ratio whereas NABIL shows 7.00% average ratio. The mean ratio of NIBL is more than that of NABIL. In comparison, NIBL seems effective in earning interest to some extent but it must break the decreasing trend in coming year. NABIL is also following the same way. Lower C.V. and S.D. of NABIL shows that it has consistencies in the ratios. The following figure shows the interest eared to total working fund ratio of NIBL and NABIL.

Figure: 4.12

Total Interest Earned to Total Working Fund Ratio



(e) Total interest Earned to Total Operating Income Ratio

Total interest earned to total operating income ratio reveals that portion of interest income on total operating income of the firms. The major sources of income for the bank are interest income so the banks should mobilize their funds in more interest generating sectors considering the risk and return.

Table: 4.13

Total interest Earned to Total Operating Income Ratio

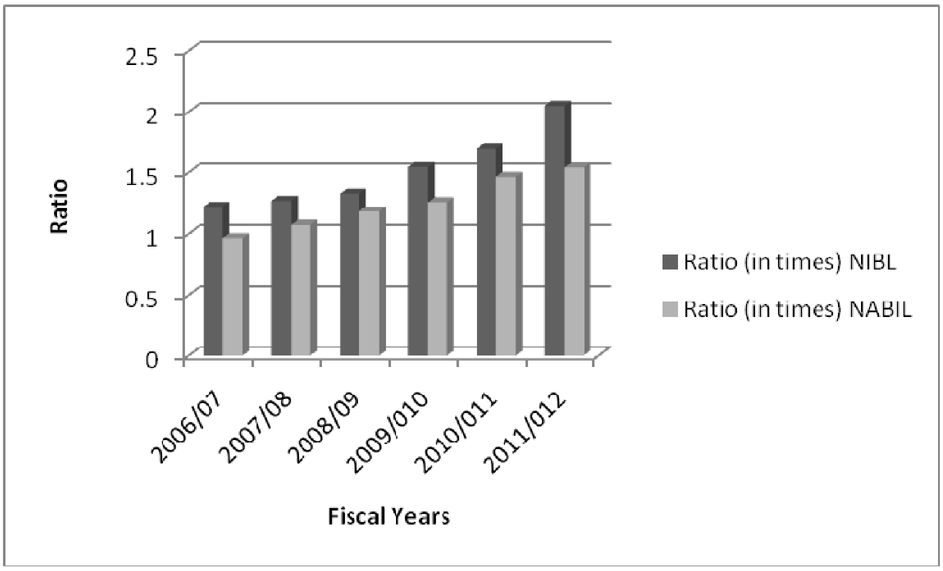
Year	**Ratio (in times)**	
	NIBL	**NABIL**
2006/07	1.222	0.964
2007/08	1.272	1.073
2008/09	1.33	1.185
2009/010	1.544	1.260
2010/011	1.701	1.464
2011/012	2.05	1.54
Mean	1.519	1.247
S.D.	0.316	0.222
C.V.	20.820	17.825

Source: Annual Report of Concern Bank

Above table shows Interest Earned to Operating Income Ratio of NIBL and NABIL. Both banks have increasing ratio during study period. NIBL has greater share of total interest earn in its total operating income in all years. The mean ratio of NIBL and NABIL are 1.519 % and 1.247 times respectively. NIBL has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity). NABIL has lower ratio, it indicates that high contribution in operating income do not made by lending and investing activities (core banking activity).High contribution in operating income made by lending and investing activities (core banking activity) is not good for long run but in short run it is not so bad. Thus, from short-term view, NIBL is in good condition but from long-term view, NABIL is in good condition as well doing gradually increasing. The S.D. and C.V of NIBL is 0.316, 20.82 similarly NABIL has 0.222, 17.82 respectively. It indicates that NIBL has relatively consistent in interest earned to total operating income due to lower C.V than that of NABIL. The following figure represents the interest earned to total operating income.

Figure: 4.13

Total interest Earned to Total Operating Income Ratio



(F) Total Interest paid to Total Working Fund Ratio

This ratio actually reveals the paying capacity of commercial banks by mobilizing its working fund. Higher the ratio higher will be the paying capacity of interest. It is calculated as follow:

Table: 4.14

Total Interest Paid to Total Working Fund Ratio

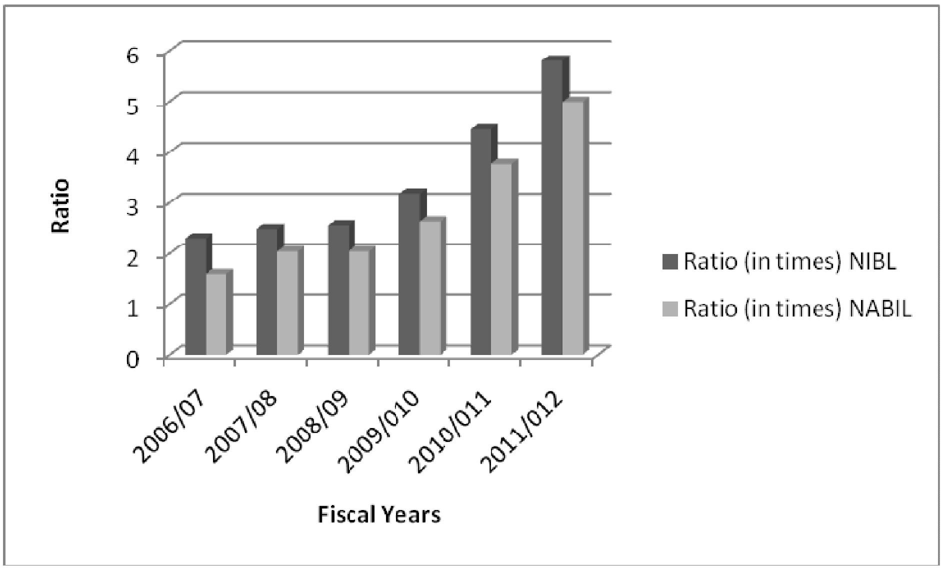
Year	Ratio (%)	
	NIBL	**NABIL**
2006/07	2.3	1.6
2007/08	2.48	2.04
2008/09	2.55	2.04
2009/010	3.18	2.63
2010/011	4.45	3.76
2011/012	5.8	4.99
Mean	3.46	2.843
S.D.	1.390	1.290
C.V.	40.189	45.396

Source: Annual Report of Concern Bank

Table No 4.14 shows Total Interest Paid to Total Working Fund of NIBL and NABIL has increasing trend. The highest ratio of NIBL is 5.8 in 2011/012 and lowest ratio is 2.3 in 2006/07. Similarly highest ratio of NABIL is 4.99 in 2011/012 and lowest ratio is 1.6 in 2006/07. the average ratio of NIBL is 3.46 and NABIL is 2.84 respectively. Due to the higher ratio in each year and average too of NIBL, it seems high interest paid and less conscious about borrowing cheaper fund. Lower C.V of NIBL shows that it has homogeneity in the ratios (i.e. 40.18<45.396). The following show the interest paid to total working fund ratio.

Figure: 4.14

Total interest Paid to Total Working Fund Ratio



4.2.1.4 Risk Ratio

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

A) Credit Risk Ratio/Non-Performing Loan to Total Loan Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non- performing loan to total Loan & Advances. Bank utilizes its collected funds by providing credit to different sections. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. The credit risk ratio shows the proportion of no-performing assets in total Loan & Advances. Higher ratio indicates more risky assets in the volume of Loan & Advances of the bank and vice-versa.

Table: 4.15

Credit Risk Ratio

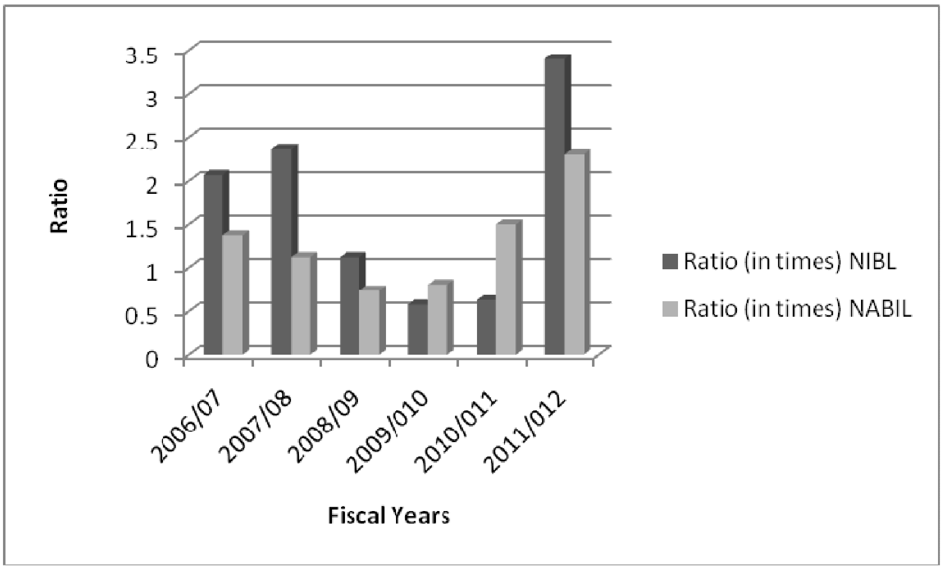
Year	**Ratio (%)**	
	NIBL	**NABIL**
2006/07	2.07	1.38
2007/08	2.37	1.12
2008/09	1.12	0.74
2009/010	0.58	0.81
2010/011	0.63	1.5
2011/012	3.4	2.3
Mean	1.695	1.308
S.D.	1.114	0.571
C.V.	65.756	43.668

Source: Annual Report of Concern Bank

Above table and figure shows that NPL to total loan and advances of NIBL is in fluctuating but decreasing trend and NABIL has fluctuating but increasing trend. Decreasing trend is the good sign of the efficient credit management. NABIL seems effective in fist year but increase gradually its NPA. But NIBL has high in fist year but decreasing gradually in its NPA. From mean point of view, non-performing loan to total loan and advances ratio of NIBL and NABIL are 1.695% and 1.308% respectively during the study period. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. However, in comparison, NABIL has efficient operating of credit management than that of NIBL from the mean point of view. The following figure presents credit risk ratio of NIBL and NABIL.

Figure: 4.15

Credit Risk Ratio



B) Liquidity Risk Ratio:

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

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

Table: 4.16

Liquidity Risk Ratio

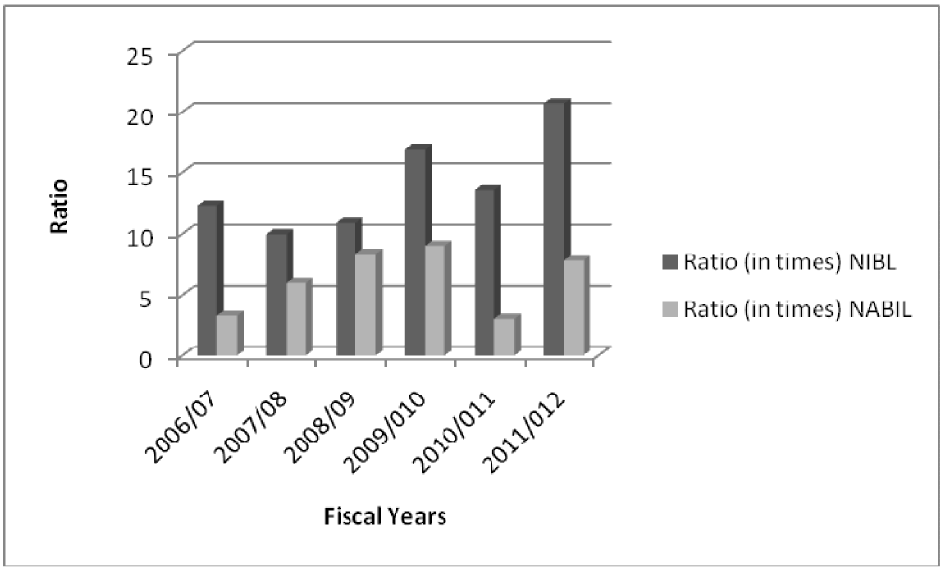
Year	Ratio (%)	
	NIBL	**NABIL**
2006/07	12.34	3.26
2007/08	9.97	5.99
2008/09	10.89	8.37
2009/010	16.95	9.03
2010/011	13.61	3.02
2011/012	20.70	7.78
Mean	14.076	6.241
S.D.	4.059	2.607
C.V.	28.835	41.780

Source: Annual Report of Concern Bank

From the Table No 4.16 shows liquidity risk ratio of NIBL and NABIL. Liquidity i.e cash and bank balance to total deposits ratio of the NIBL is in fluctuating trend whereas ratio of NABIL is in increasing trend except last year 2010/011. The higher ratio of NIBL and NABIL are 20.70% and 9.03% respectively in the year 2011/012 and 2009/010 respectively. The average ratio of NIBL is greater than that of NABIL (i.e.14.076% > 6.241%). It signifies that NIBL has sound liquid fund to make immediate payment to the depositors at demand from the mean point of view. It means NIBL kept its more deposit as cash and bank balance but NABIL kept less than NIBL. However if we see the latest data both banks have decreasing its deposit as cash and bank balance. The following chart shows the liquidity risk of NIBL and NABIL.

Figure: 4.16

Liquidity Risk Ratio



C) Asset Risk Ratio:

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

Table: 4.17

Asset Risk Ratio

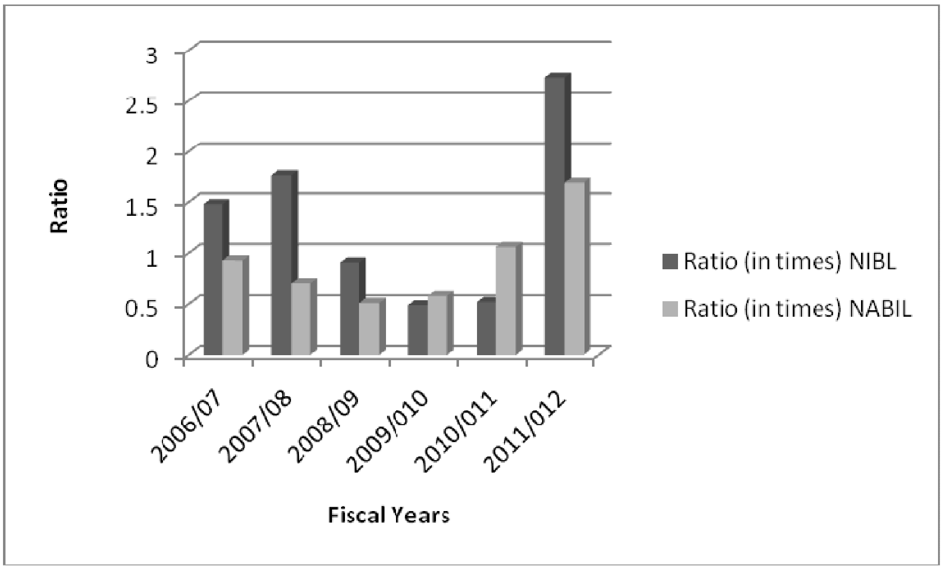
Year	Ratio (%)	
	NIBL	NABIL
2006/07	1.48	0.93
2007/08	1.77	0.71
2008/09	0.91	0.51
2009/010	0.49	0.58
2010/011	0.52	1.06
2011/012	2.73	1.7
Mean	1.3166	0.915
S.D.	0.861	0.437
C.V.	65.449	47.782

Source: Annual Report of Concern Bank

The above table shows the asset risk ratio of NIBL and NABIL. The analysis shows that NIBL has decreasing trend of asset risk ratio beside 2007/08. NIBL has highest and lowest ratio is 2.73% and 0.52% in the year 2011/012 and 2010/11. Similarly NABIL has the highest and lowest ratio of 1.7% and 0.51% in the year 2011/12 and 2008/09 respectively. The mean ratio of NIBL is higher than that of NABIL (i.e.1.316% >0.91%). Above data shows that NIBL has the higher asset risk ratio analyzing mean point of view, But NIBL decreasing its asset risk ratio current year but NABIL increasing asset risk in present year. The following figure shows the asset risk ratio.

Figure: 4.17

Asset Risk Ratio



4.3 Statistical Analysis

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

4.3.1. Relationship between Total Deposits and Total Investment

The following table describes the relationship between total deposits and total investment of NIBL and NABIL of five years study period. In this case, total deposits are independent variables say (X) and total investment is dependent variable say (Y).

Table: 4.18

Relationship between Total Deposits and Total Investment

Name of Bank	**Base of Evaluation**			
	R	**r^2**	**P.E.**	**6 x P.E.**
NIBL	0.938	0.8798	0.0362	0.2175
NABIL	0.978	0.9565	0.0131	0.0787

Source: Through SPSS Data Editor

The Table No 4.18 shows that coefficient of correlation between deposits and investment of NIBL is 0.938. i.e. positive correlation between these two variables. And the value of coefficient of determination (R^2) is 0.8798 which means 87.98% of investment decision depends upon deposit and least are depend upon other variables. Similarly probable error is 0.0362 and 6 x P. E. is 0.2175 which shows that R is higher than 6 x P. E. Therefore it reveals that relationship between deposits and investment is significant.

Likewise, in case of NABIL, coefficient of correlation between investment and deposit (r) is 0.978 that means there is a high degree of positive correlation between two variables. The value of coefficient of determination (R^2) is also 0.9565 which means 95.65% of investment decision depend upon deposit and 4.35% investment is depend upon other variables. Similarly probable error is 0.0131 and 6 x P. E. is 0.0787 which shows that R is greater than 6 x P. E. Therefore it reveals that relationship between deposit and investment is significant i.e. correlation is certain. This correlation coefficient indicates that the NABIL has performed better a little bit in order to provide investment through deposit than that of NIBL.

4.3.2 Relationship between Total Deposits and Loans and Advances

The following table describes the relationship between total deposits and loan and advances of NIBL and NABIL with comparatively under five-year period. In this case, total deposits are independent variable say (X) and loan and advances is dependent variable say (Y).

Table: 4.19

Relationship between Total Deposits and Loans and Advances

Name of Bank	**Base of Evaluation**			
	R	**R^2**	**P.E.**	**6 x P.E.**
NIBL	0.999	0.998	0.0006	0.0036
NABIL	0.993	0.986	0.0042	0.0253

Source: Through SPSS Data Editor

From the Table 4.19 we can find that the coefficient of correlation between deposits and loan and advances of NIBL and NABIL are 0.999 and 0.993 respectively. This shows the highly positive relationship between these two variables i.e. loan and advances and deposits of both banks. By considering coefficient of determination (R^2), the value of R^2 is 0.998 incase of NIBL and 0.986 incase of NABIL. The value of R^2 of NIBL is 0.998, which means only 98.8% of loan and advances decision is determined by deposit and rest 0.2% loan and advances depend upon other variables. The value of R^2 of NABIL is 0.986, which means that 98.6% of loan and advances is determined by deposit and only 1.4% loan and advances depend upon other variables.

In view of the probable error of NIBL and NABIL, the value of R of NIBL and NABIL are more than the 6 times of P.E, which indicate there is significant relationship between deposits and loan and advances of both banks.

4.3.3 Co-efficient of Correlation between Loan and Advance and Net Profit

Co-efficient of correlation between total assets and net profit is used to measure the degree of relationship between two variable i.e. Loan and advance and net profit of NIBL and NABIL during the study period. Where Loan and advance is independent variable

(X) and net profit is dependent variable (Y). The main objective of calculating this ratio is to determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to loan and advance through the coefficient of determination. The following table shows the ‘r’, R^2, P.Er. and 6 P. Er. Between those variables of NIBL and NABIL for the study period.

Table: 4.20

Correlation between Loan and Advance and Net profit

Name of Banks	**Evaluation Criterions**			
	R	R^2	P.Er.	6 P.Er.
NIBL	0.961	0.9235	0.0231	0.1384
NABIL	0.977	0.9545	0.0137	0.0823

Source: Through SPSS Data Editor

Above table shows correlation coefficient between Loan and advance and net profit of NIBL and NABIL. The correlation coefficient between Loan and advance and net profit of NIBL and NABIL are 0.961 and 0.977. It refers that there is highly positive correlation between these two variables. The coefficient of determination of NIBL is 0.9235. Which indicate 92.35 percent of net profit is contributed by Loan and advance and least are depend on other variable. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P.Er. Likewise. The coefficient of determination R^2 of NABIL is 0.9545, which indicates that 95.45 percent variability in net profit is explained by Loan and advance and least 4.55% is depend on other variable.. r is greater than 6 P.Er so the relationship between Loan and advance and net profit is significant for NABIL. In conclusion, NABILL has more significant relationship between Loan and advance and net profit than that of NIBL.

4.3.4 Coefficient of Correlation between Total Investment and Net Profit

Coefficient of correlation between total investment and net profit measures the degree of their relationship. In the, correlation analysis, investment is independent variable and net profit is dependent variable. The following Table shows the coefficient of correlation coefficient of determination, probable error and six times of P.Er. During the fiscal year 2006/07 to 2011/012.

Table: 4.21

Correlation between Total Investment and Net Profit

Name of Banks	**Evaluation Criterions**			
	R	R^2	P.Er.	6 P.Er.
NIBL	0.989	0.9781	0.0066	0.0396
NABIL	0.900	0.8100	0.0573	0.3439

Source: Through SPSS Data Editor

Above table shows correlation coefficient between total investment and net profit of NIBL and NABIL. The correlation coefficient between total investment and net profit of NIBL is 0.989 which implies there is highly positive correlation between total investment and net profit. In addition, coefficient of determination of NIBL is 0.9781. It means 97.81 percent of Profit is contributed by total investment and rest is contribution by other factor. The correlation is significant due to coefficient of correlation is higher than 6P.Error. On the other hand NABIL has positive correlation between total investment and net profit i.e. 0.900. The coefficient of determination of NABIL is 0.8100 it means 81 percent of Profit is contributed by total investment and rest are determined by other factor. This relationship is significant as its correlation coefficient is more than 6 P.Er. Thus it can be concluded that the degree of relationship between total investment and net profit of NIBL and NABIL nearly same. This correlation coefficient indicates that the NIBL has performed a little bit better in order to generate net profit through investment than that of NABIL.

4.3.5 Coefficient of correlation of Total Deposit between NIBL and NABIL

Coefficient of correlation of total deposit between NIBL and NABIL and shows their linear relationship. The following Table shows the coefficient of correlation coefficient of determination, probable error and six times of P.Er. During the fiscal year 2006/07 to 2010/011.

Table: 4.22

Correlation between Total Deposit of NIBL and NABIL

Evaluation Criterions			
R	R^2	P.Er.	6 P.Er.
0.953	0.9082	0.0277	0.1661

Source: Through SPSS Data Editor

This table shows how the total deposit of NIBL and NABIL is positively related. 0.953 of correlation coefficient shows that there is highly positive correlation between these two banks in this regard. This correlation coefficient is also significant because the correlation coefficient is high than 6 P.Er. As the 0.9082 of coefficient of determination, this shows the 90.82 percent of the degree of relationship. The degree of relationship between these two banks is also high.

4.3.6 Coefficient of correlation of Total Investment between NIBL and NABIL

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

Table: 4.23

Correlation between Total Investment of NIBL and NABIL

Evaluation Criterions			
R	R^2	P.Er.	6 P.Er.
0.994	0.988	0.0036	0.0216

Source: Through SPSS Data Editor

The above table reveals that there is highly positive correlation between NIBL and NABIL in case of total investment. It implies that the total investment of NIBL and NABIL move in the same direction. Here R > 6 P.Er. Therefore, correlation coefficient between two banks is significant. This can be said that NIBL and NABIL increase its total investment as in same direction. The coefficient of determination is 0.988, which shows there is 98.8 percent of the degree of relationship.

4.3.7 Coefficient of Correlation of Loan & Advances between NIBL and NABIL

The coefficient of correlation of loan & advances between NIBL and NABIL has been given below.

Table: 4.24

Correlation between Loan & Advances of NIBL and NABIL

Evaluation Criterions			
R	R^2	P.Er.	6 P.Er.
0.993	0.986	0.0042	0.0252

Source: Through SPSS Data Editor

Above table shows that there is high degree positive correlation between the loan & advances of NIBL and NABIL. The correlation coefficient between two banks is 0.993. It means loan & advances of these two banks moves in the same direction in high proportion. This correlation coefficient is significant in order to show the relationship between loan & advances of these two banks because correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.986, which shows the 98.6 percent of the degree of relationship.

4.3.8 Coefficient of Correlation of Net Profit between NIBL and NABIL

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

Table: 4.25

Correlation between Net Profit of NIBL and NABIL

Evaluation Criterions			
R	R^2	P.Er.	6 P.Er.
0.962	0.925	0.0225	0.135

Source: Through SPSS Data Editor

Above statistics shows that there is high degree positive correlation between profits of NIBL and NABIL, which is indicated by correlation coefficient of 0.962, This relationship is significant because its correlation coefficient is more than 6 P.Er. The coefficient of determination is 0.925 which shows the 92.5 percent of the degree of relationship.

4.4 Trend Analysis

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

A) Trend Analysis of Total Deposit:

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

Y= a + bx

Where,

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

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

Table: 4.26

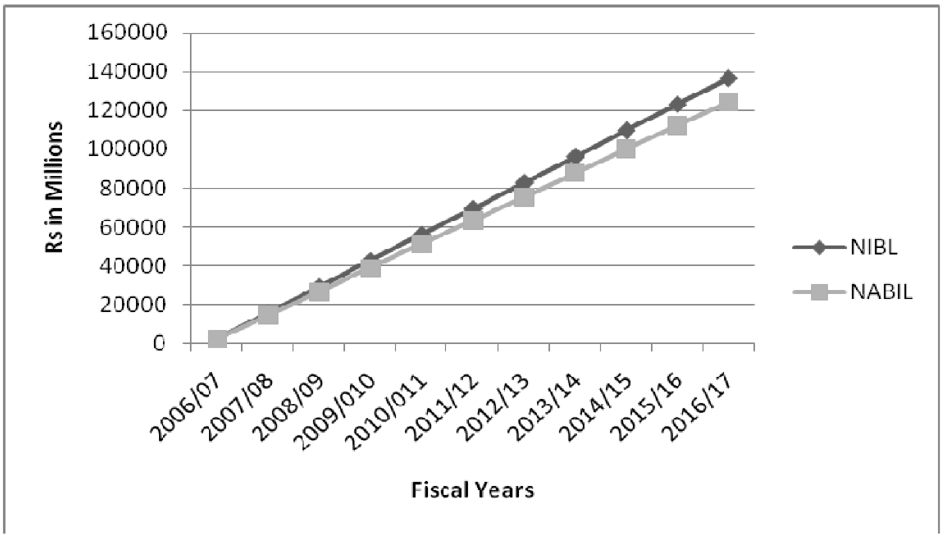
Trend Analysis of Total Deposit of NIBL and NABIL

Year(x)	NIBL	NABIL
2006/07	2207.421754	1963.972456
2007/08	15658.80754	14203.31456
2008/09	29110.19333	26442.65667
2009/010	42561.57912	38681.99877
2010/011	56012.96491	50921.34088
2011/12	69464.3507	63160.68298
2012/13	82915.73649	75400.02509
2013/14	96367.12228	87639.36719
2014/15	109818.5081	99878.7093
2015/16	123269.8939	112118.0514
2016/17	136721.2796	124357.3935

Source: Appendix -1

Figure: 4.18

Trend Line of Total Deposit of NIBL and NABIL



Above table and figure shows that total deposit of NIBL and NABIL. Both Banks is in increasing trend. The rate of increment of total deposit for NIBL seems to be higher than that of NABIL. The increasing trend of total deposit of NIBL is more aggressive and high rather than NABIL. It indicates NIBL has little more prospect of collecting Total deposit. The trend analysis has projected deposit amount in fiscal year FY 2011/012 to FY

2016/17. From the above trend analysis it is clear that NIBL has higher position in collecting deposit than NABIL.

B) Trend Analysis of Loan & advances

Here, the trend values of loan & advances Between NIBL and NABIL have been calculated for further Six year. The following Table shows the actual and trend values of NIBL and NABIL.

Y= a + bx

Where,

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

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

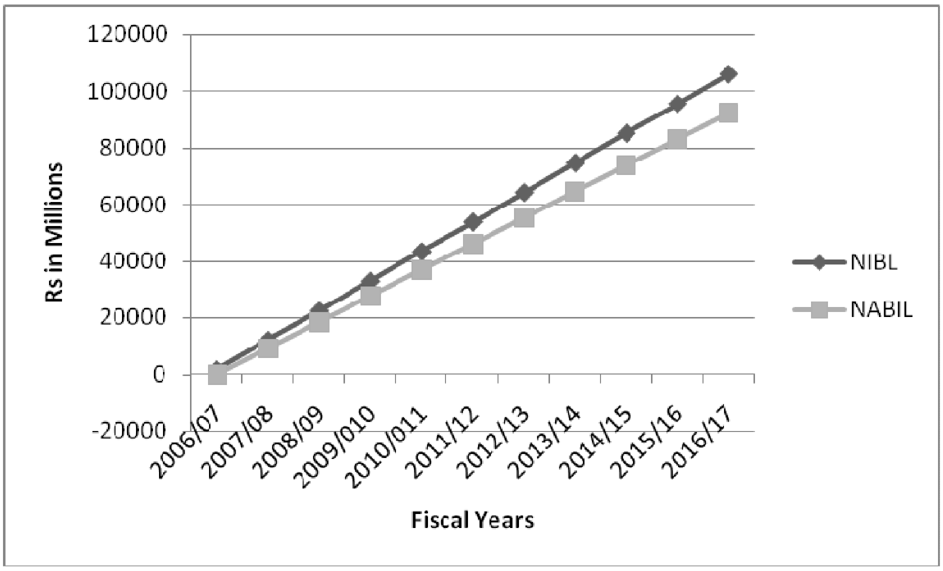
Table: 4.27

Trend of Total Loan and Advance of NIBL and NABIL		
Year(x)	NIBL	NABIL
2006/07	1735.267368	-197.3242982
2007/08	12169.44368	9042.352018
2008/09	22603.62	18282.02833
2009/010	33037.79632	27521.70465
2010/011	43471.97263	36761.38096
2011/12	53906.14895	46001.05728
2012/13	64340.32526	55240.7336
2013/14	74774.50158	64480.40991
2014/15	85208.67789	73720.08623
2015/16	95642.85421	82959.76254
2016/17	106077.0305	92199.43886

Source: Appendix – 2

Figure: 4.19

Trend line of Total Loan and Advance of NIBL and NABIL



Above table depicts that loan & advances of NIBL and NABIL. Both Banks has in increasing trend. The increasing trend of NIBL is aggressive than NIBL. The actual value of loan & advances for NABIL is little higher than in relation to NABIL. The trend projected for further seven year FY 2011/012 to FY 2016/17 From the above analysis, it is clear that both NIBL and NABIL is mobilizing its collected deposits and other funds in the form of loan & advances. Above table and figure shows the NIBL has highly mobilizing loan & advances than the NABIL.

C) Trend Analysis of Total Asset

Under this topic, an attempt has been made to analyze trend analysis total asset of NIBL and NABIL for further six years

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

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

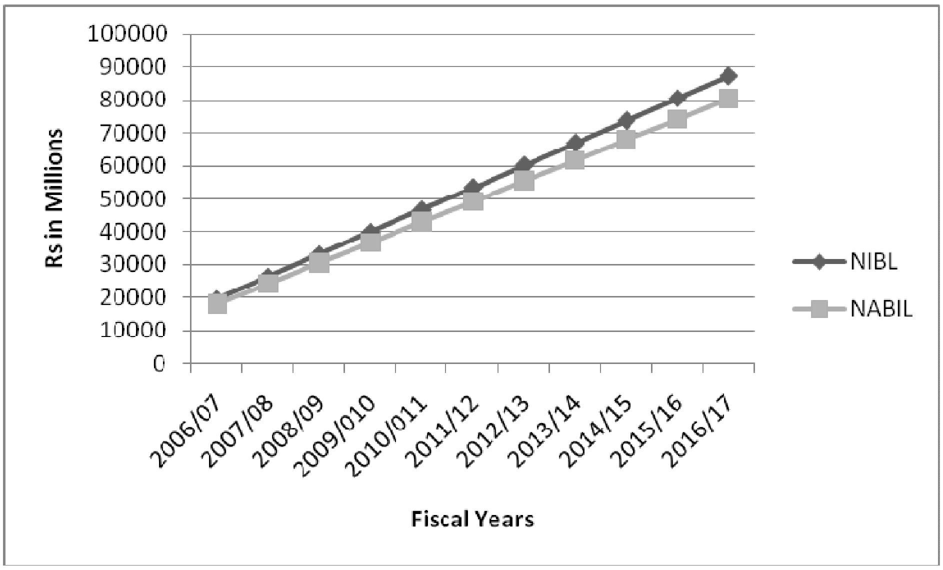
Table: 4.28

Trend of Total Asset Between NIBL and NABIL		
Year(x)	NIBL	NABIL
2006/07	19472.44544	17990.14246
2007/08	26245.30439	24222.88456
2008/09	33018.16333	30455.62667
2009/010	39791.02228	36688.36877
2010/011	46563.88123	42921.11088
2011/12	53336.74018	49153.85298
2012/13	60109.59912	55386.59509
2013/14	66882.45807	61619.33719
2014/15	73655.31702	67852.0793
2015/16	80428.17596	74084.8214
2016/17	87201.03491	80317.56351

Source: Annul Report of Concern Bank Appendix - 3

Figure: 4.20

Trend Line of Total Asset between NIBL and NABIL



Above table shows the Trend of Total asset between NIBL and NABIL. Both Bank NIBL and NABIL have increasing trend in total asset. NIBL has little high and upward trend of increasing, but NABIL has moderately increasing trend of asset. The trend of total asset projected to FY 2016/17. The forecasted trend projected that the NIBL has greater increment rate in total asset than the increment rate of NABIL. The figure indicates NIBL has little highly mobilized the total asset rather than NABIL.

D) Trend Analysis of Net Profit

Here, the trend values of net profit of NIBL and NABIL have been calculated for five years FY 2006/07 to FY 2011/012 and forecasting for the next six year till FY 20015/16.

Y= a + bx

Where,

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

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

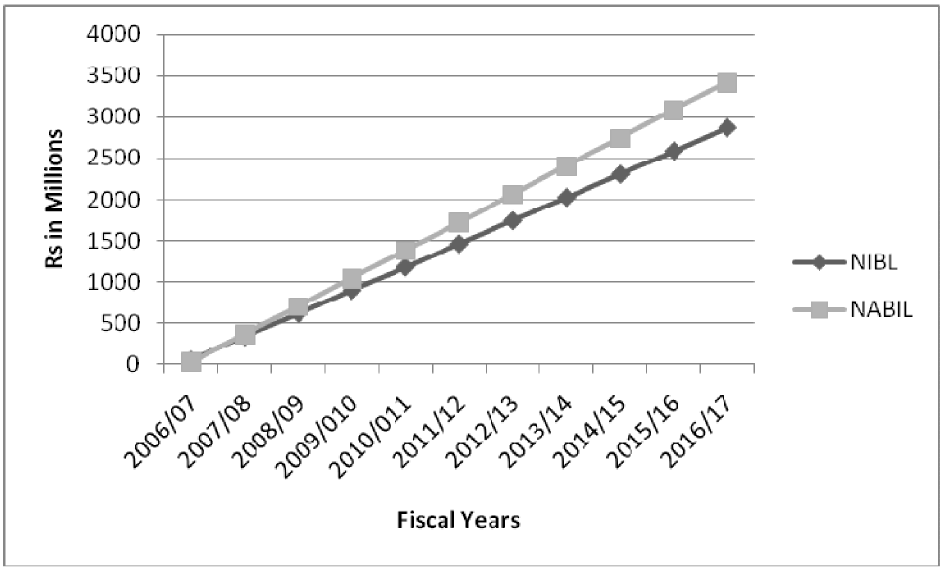
Table: 4.29

Trend Analysis of Net Profit Between NIBL and NABIL		
Year(x)	NIBL	NABIL
2006/07	56.31631579	24.97929825
2007/08	337.7831579	364.6429825
2008/09	619.25	704.3066667
2009/010	900.7168421	1043.970351
2010/011	1182.183684	1383.634035
2011/12	1463.650526	1723.297719
2012/13	1745.117368	2062.961404
2013/14	2026.584211	2402.625088
2014/15	2308.051053	2742.288772
2015/16	2589.517895	3081.952456
2016/17	2870.984737	3421.61614

Source: Annul Report of Concern Bank Appendix - 4

Figure: 4.21

Trend line of Net Profit between NIBL and NABIL



The above table reveals the trend of Net profit of NIBL and NABIL. Net profit both bank NIBL and NABIL forecasted in increasing trend. The trend of increasing value of net profit of NIBL is aggressive than NABIL. The net profit of NIBL and NABIL has been increasing every year by Rs.223.006 million and Rs. 136.445 million respectively. The trend of Net profit projected to FY 2016/17 i.e. further six year. Above statistics shows that both the banks have inconsistent net profit throughout the study period. In conclusion, NIBL is doing better in order to generate net profit during the projected study period in conclusion the prospect of profit generating capacity of NIBL is high than the NABIL because in the beginning NABIL higher increment rate but later NIBL exceed. Above figure represent trend line of Net profit of NIBL and NABIL.

4.5 Major Findings of the Study

From the analysis of the data collected from various sources following findings have been made.

1) Both banks have sound liquidity position. In an average, liquidity position of NABIL is greater than NIBL i.e. 1.521>1.179 due to high mean ratio. So, NABIL is sound in meeting short-term obligation than NIBL. Likewise, S. D. and C.V. of

NABIL is less than NIBL. It can be said that current ratio of NABIL is more consistent than NIBL. However they have not met the standard ratio.

2) The mean ratio of cash and bank balance to total deposits of NIBL is higher than NABIL. It means the liquidity position of NIBL is higher than NABIL. It shows the higher position regarding the meeting of demand of its customer on their deposit at any time than NABIL. However if we see the latest data NABIL has sound liquid fund make immediate payment to the depositor.
3) The average study of cash and bank balance to current assets ratio of NIBLL is higher than NABIL. It shows that NABIL has taken more risk to meet the daily requirement of its customer's deposit than NIBL. But NABIL is more consistency due to lower C.V than NIBL.
4) Average mean ratio of investment on government treasury bills to current assets of NIBL and NABIL are 9.619% and 30.83% respectively. NABIL has higher ratio MIBL. It means NABIL has invested more money in risk free assets than that of NIBL. In another word NIBL has emphases on more loans and advances and other investment than investment in govt. securities.
5) In average NIBL has mobilized 75.74% of its collected deposit in loan and advances that is higher than that of NABIL i.e.70.65%. According to NRB directives above 70% to 90% of loan and advances to total deposit ratio is able to better mobilization of collected deposit. So both banks have met the NRB requirement. NIBL has good condition and NABIL is moderate condition according to NRB requirement.
6) The mean ratio of the total investment to total deposit NIBL and NABIL are 25.52% and 30.89% respectively so NABIL has higher ratio. It signifies NABIL has successfully allocated its deposit in investment portfolio in comparison with NIBL. NABIL has more utilized its total deposit as investment.
7) Loan and advances to total assets ratio of NIBL is in increasing trend whereas ratio of NABIL is in fluctuating trend. While observing their ratios; NIBL is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year and mean too.

8) Mean ratio of investment in govt. securities out of its total assets NIBL and NABIL are 7.43% and 11.61% respectively. NABIL has higher ratio than NIBL. NABIL has invested more money in risk free assets out of its total assets. In another word NABIL has emphases on more loans and advances and other short term investment than investment in govt. securities out of its total assets

9) NABIL has higher return on loan and advances in each year and mean too. So it seems successful by generating higher ratio. It can be concluded that NABIL has better utilized the loan and advance for the profit generation in comparison with NIBL. But NABIL seems riskier than NIBL due to high S.D and C. V. It is bad aspect of NABIL.

10) NABIL seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is higher than that of NIBL i.e. 12.60%<12.75% of total assets in an average. NABIL has also higher ratio in each year. However it noted that NIBL is doing well in the last year whereas NABIL is not doing well in the latest year as it has decreasing trend of ratios. Lower C.V. of NIBL shows that it has constancies in the ratios.

11) NABIL seems successful in managing and utilizing the shareholder capital in order to generate revenue since its ROE ratio is higher than that of NIBL i.e. 19.80% > 5.07% of total equity in an average. NABIL has also higher ratio in each year. However it noted that NIBL is doing well in the latest year as it has increased its ROE in the latest year drastically whereas NABIL is not doing well in the latest year as it has decreasing trend of ratios.

12) The average interest earned to total working fund ratio of NIBL and NABIL are 6.70 and 7.00 respectively. NIBL seems more conscious about managing its assets in order to earn more interest ratio because it has higher ratio. Both bank has increasing trend of interest earned to total asset.

13) The mean ratio of Interest Earned to Operating Income of NIBL and NABIL are 1.414 and 1.189 times respectively. NIBL has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity). NABIL has lower ratio, it indicates that high contribution in operating income do not made by lending and investing activities (core banking

activity).High contribution in operating income made by lending and investing activities (core banking activity) is not good for long run but in short run it is not so bad. Thus, from short-term view, NIBL is in good condition but from long-term view, NABIL is in good condition. In overall, NABIL has managed sound interest earned to operating income ratio.

14) The average ratio of total Interest Paid to Total Working Fund of NIBL and NABIL are 3.46 and 2.84. Both bank NIBL and NABIL have increasing trend of interest paid to working fund ratio. Due to the higher ratio in each year and average too of NIBL, it seems less conscious about borrowing cheaper fund.

15) From mean point of view, credit risk of non-performing loan to total loan and advances ratio of NIBL and NABIL are 1.69% and 1.30% respectively during the study period. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. However, in comparison, NABIL has efficient operating of credit management than that of NIBL from the mean point of view and individual ratios of each year.

16) The average liquidity risk ratio of NIBL and NABIL are 14.07 and 6.24 respectively. The mean ratio of liquidity risk of NIBL is higher than NABIL. It means NIBL has sound liquid fund to make immediate payment to the depositors. But its cause to reduces in profit.

17) In case of asset risk ratio, NIBL has the higher risk than NABIL. However both banks have decreasing trend of credit risk. The average ratio of NIBL is greater than that of NABIL i.e. 1.31>0.91%. But present year NIBL has decreasing its asset risk ratio.

18) The correlation coefficient between total deposit and investment of NIBL has 0.938 and NABIL has 0.978. Both banks have positive correlation. It reveals that relationship between deposit and investment of NIBL and NABIL are significant i.e. correlation is certain. Due to higher correlation than 6 PEr.

19) Correlation coefficient between deposit and loan and advances of NIBL and NABIL highly positive i.e 0.999 and 0.993 respectively. There is significant

relationship between correlation coefficient of deposits and loan and advances NIBL and NABIL.

20) The correlation coefficient between Loan and advance and net profit of NIBL and NABIL are 0.961 and 0.977. both banks have highly positive correlated between Loan and advance and net profit. The relationship of both banks has significant of these variables because the coefficient of correlation is more than 6 P.Er.

21) . The degree of relationship between total investment and net profit of NIBLL is 0.989 and NABIL has 0.900. This correlation between these two variable of NIBL is higher than NABL. The correlation of both banks have significant due to coefficient of correlation is higher than 6P.Error.

22) Total deposit of NIBL and NABIL is positively related. 0.953 of correlation coefficient shows that there is highly positive correlation between these two banks in this regard. This correlation coefficient is also significant because the correlation coefficient is high than 6 P.Er. As the 0.9082 of coefficient of determination, this shows the 90.82 percent of the degree of relationship. The degrees of relationship between these two banks are significant.

23) There is highly positive correlation between NIBL and NABIL in case of total investment. It implies that the total investment of NIBL and NABIL move in same direction. Here R > 6 P.Er. Therefore, correlation coefficient is significant. This can be said that both NIBL and NABIL increase its total investment as same direction very closely. The coefficient of determination is 0.988, which shows the 98.80 percent of the degree of relationship.

24) There is high degree positive correlation between the loan & advances of NIBL and NABIL. The correlation coefficient between two banks is 0.993. It means loan & advances of these two banks moves in the same direction in high proportion. This correlation coefficient is significant in order to show the relationship between loan & advances of these two banks because correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.986 which shows the 98.60 percent of the degree of relationship.

25) There is high degree positive correlation between profits of NIBL and NABIL, which is indicated by correlation coefficient of 0.962, This relationship is

significant because its correlation coefficient is more than 6 P.Er. The coefficient of determination is 0.925 which shows the 92.50 percent of the degree of relationship.

26) The trends of total deposit of NIBL and NABIL have increasing trend. In collecting deposit the rate of increment of total deposit for NIBL seems to be higher than that of NABIL. Which indicate NIBL has better position in collecting deposit than NABIL.

27) The trend line of loan & advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan & advances. The trend line of loan and advances for NIBL seems high growing than NABIL. It refers that NIBL is more aggressive in mobilizing its loan and advance. Its forecasted for further six year.

28) The trend line of total asset for NIBL and NABIL are upward slopping where as NIBL has aggressive upward slopping of total asset trend line. The forecasted trend projected that the NIBL has greater increment rate in total asset than the increment rate of NABIL.

29) The trend line of Net profit for NIBL and NABIL are upward slopping But NIBL has aggressively and NABIL has smoothly. The net profit of NIBL and NABIL has been increasing every year by Rs.223.006 million and Rs. 136.445 million respectively In conclusion, NIBL is doing better in order to generate net profit during the projected study period in conclusion the prospect of profit generating capacity of NIBL is high than the NABIL because in the beginning NABIL higher increment rate but later NIBL exceed.

CHAPTER -V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The researcher has identified that research problem and set objectives to solve research problems about credit management of selected commercial banks as described in introduction chapter. The main objective of the study is to analyze the comparative study on credit management of Nepal Investment Bank Limited and Nabil Bank Limited. The specific objectives of the study are: to examine the impact of deposit in liquidity, to examine and evaluate the various stages occurred in loan management procedure, to analyze the lending efficiency of the NIBL and NABIL, to examine the assets management efficiency and portfolio ratios of NIBL and NABIL. The research is based on secondary source of data. To make this study more effective, related literatures have been reviewed. The review of literature provides the foundation of knowledge in order to under take this research more precisely. This section includes conceptual review and review of related studies. In conceptual review includes concept of banking, concept of credit and its types, principle and appraisal of credit as well as credit policy and management. In the review of related studies includes credit related unified NRB directives, review of books articles and journals and review of previous thesis.

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

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

In this chapter, summary conclusion and recommendation are included. All the summary and conclusion are made according to obtained data from analysis. Recommendation has made which would be beneficial for all concerned person, management of the bank and other stakeholder

5.2 Conclusions

Both banks NIBL and NABIL have sound liquidity position. In an average, liquidity position of NABIL is greater than NIBL. So, NABIL is sound in meeting short-term obligation than NIBL but the mean ratio of cash and bank balance to total deposits of NIBL is higher than NABIL. It means the liquidity position of NIBL is higher than NABIL. The average study of cash and bank balance to current assets ratio of NIBL is higher than NABIL. It shows that NABIL has taken more risk to meet the daily requirement of its customer's deposit than NIBL. Average mean ratio of investment on government treasury bills to current assets of NIBL and NABIL are 10.324% and 23.256% respectively. NABIL has higher ratio NIBL. It means NABIL has invested more money in risk free assets than that of NIBL. In another word NIBL has emphases on more loans and advances and other investment than investment in govt. securities.

In the regards of assets management aspect, NIBL has mobilized 76.286% of its collected deposit in loan and advances that is higher than that of NABIL i.e.69.666. So both bank meet the NRB requirement. The mean ratio of the total investment to total deposit of two banks, NABIL has higher ratio. It signifies NABIL has more utilized its total deposit as investment. While observing Loan and advances to total assets ratio of these two banks NIBL is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year and mean too. Mean ratio of investment in govt. securities out of its total assets NIBL and NABIL are 8.694% and 12.828% respectively. NABIL has higher ratio than NIBL. NABIL has invested more money in risk free assets out of its total assets.

In the aspect of profitability ratios, NABIL has higher return on loan and advances in each year and mean too. So it seems successful by generating higher ratio in the same way NABIL seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is higher than that of NIBL i.e. 2.37%>1.83% of total assets in an average. NABIL seems successful in managing and utilizing the shareholder capital in order to generate revenue since its ROE ratio is higher than that of NIBL. However it noted that NIBL is doing well in the latest year as it has increased its ROE.

The average interest earned to total working fund ratio of NIBL is higher than NABIL. NIBL seems more conscious about managing its assets in order to earn more interest ratio because it has higher ratio. Both banks have increasing trend of interest earned to total asset. The mean ratio of Interest Earned to Operating Income of NIBL has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity). The average ratio of total Interest Paid to Total Working Fund of NIBL is higher than NABIL Due to the higher ratio in each year and average too of NIBL, it seems less conscious about borrowing cheaper fund.

From mean point of view, credit risk of non-performing loan to total loan and advances ratio of NIBL and NABIL are 1.354% and 1.11% respectively during the study period. These Ratios indicate the more efficient operating of credit management of both banks because both banks have less than 5 % NRB directive relating to NPL. The average liquidity risk ratio of NIBL and NABIL are 12.752 and 5.934 respectively. The mean ratio of liquidity risk of NIBL is higher than NABIL. It means NIBL has sound liquid fund to make immediate payment to the depositors. But its cause to reduces in profit. NIBL has the higher asset risk than NABIL i.e. 1.034 > 0.758%. However both banks have decreasing trend of credit risk. But NIBL has decreasing its asset risk ratio significantly.

The correlation coefficient between total deposit and investment of NIBL has 0.938 and NABIL has 0.978. Both banks have positive correlation. It reveals that relationship between deposit and investment of NIBL and NABIL are significant. Similarly Correlation between deposit and loan and advances of NIBL and NABIL has highly positive. There is significant relationship between correlation coefficient of deposits and loan and advances NIBL and NABIL as well. The correlation coefficient between Loan and advance to net profit and total investment and net profit of NIBL and NABIL banks have highly positive correlated. The relationship of both banks has significant of these variables because the coefficient of correlation is more than 6 P.Er.

Total deposit of NIBL and NABIL is positively correlated. This correlation coefficient is also significant because the correlation coefficient is high than 6 P.Er. Similarly there is highly positive correlation between NIBL and NABIL in case of total investment. It implies that the total investment of NIBL and NABIL move in same direction. There is high degree positive correlation between the loan & advances of both banks NIBL and NABIL. The correlation coefficient between two banks is 0.993. It means loan & advances of these two banks moves in the same direction in high proportion. In the same way correlation between net profits of NIBL and NABIL is highly positive. This relationship is significant because its correlation coefficient is more than 6 P.Er. There is 92.50 percent of the degree of relationship.

The trends of total deposit of NIBL and NABIL have increasing trend. In collecting deposit the rate of increment of total deposit for NIBL seems to be higher than that of NABIL. Similarly, the trend line of loan & advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan & advances too. The trend line of loan and advances for NIBL seems high growing than NABIL. The trend line of total asset for NIBL and NABIL are upward slopping where as NIBL has aggressive upward slopping of total asset trend line. In the same way the trend line of Net profit for NIBL and NABIL are also upward slopping But NIBL has aggressively and NABIL has smoothly. NIBL is doing better in order to generate net profit during the projected study period.

5.3 Recommendations

On the basis of entire research study, observation, analysis and finding of the study, the following recommendations can be made as suggestions to make the credit management of NIBL and NABIL effective and efficient way. This would help to draw some outline and make reforms in the respective banks

- Generally, banks have to maintain appropriate liquid assets. The current ratio of the two banks, NIBL and NABIL is considerable. This can be regarded as good liquidity position. Considering the growth position of financial market, the lending policy management capabilities, strategic planning and fund flow situation, bank should maintain enough liquid assets to pay short-term obligations. So, it is recommended to maintain sound liquidity position.
- Government securities such as Treasury bills, Development bonds, saving certificates etc. are risk less investment alternatives because they are free of default risk as well as liquidity risk and can be easily sold in the market. In this research study, NABIL has found more invest in than NIBL. So NIBL recommend investing in government securities more. Anyway both bank NIBL and NABIL recommended investing more funds in Government securities instead of keeping them idle and investing in risky sector.
- NIBL and NABIL should minimize their existing level of excess liquidity by investing in more profitable sectors. Idle assets of theirs in form of excess cash or equivalents should be diverted in various investment opportunities available in the market.
- To get success in competitive banking environment, deposit must be utilized as loan and advances as well as investment. The largest item of bank assets side is loan and advances. It has been found that loan and advances to total deposit ratio

of NABIL is lower than that of NIBL. It means NABIL has not properly used their existing fund as loan and advances. So NABIL is recommended to follow liberal lending policy and to invest more deposit in loan and advances. But NABIL has higher total investment to total deposit than NIBL so it is recommended to NIBL focus on its investment.

- NABIL seems successful in managing and utilizing the higher return on loan and advances, available assets and shareholder capital than that of NIBL. However it noted that NIBL is doing well in the latest year. So it is recommended to emphasis in these things and tries to maximize in its return.
- The interest earned to total working fund ratio and Interest Earned to Operating Income of NIBL is higher than NABIL. So it is recommended to NABIL ti increase in this regards. But the total Interest Paid to Total Working Fund of NIBL is high. It seems less conscious about borrowing cheaper fund. Both banks recommended focusing on increase income and decreasing in its cost.
- All the banks should have to make effort to minimize their risk. Credit risk, liquidity risk and ratio asset risk ratio of NIBL is little higher than NABIL. So its strongly recommended to reduce in this type of risk. Both banks NIBL and NABIL must be more conscious on this part. Making credit policy more transparent, standard and less risky should increase the quality of the credit.
- NIBL and NABIL need to bring in newer schemes to mobilize their higher amount of deposits in extending credit.
- Both the banks are recommended to formulate and implement the sound and effective credit management to increase volume of proper investment and loan and advances and decrease in bad debts that helps to meet required level of profitability as well as social responsibility.
- Last political instability directly affected the economic sector such as hotel and tourism, manufacturing and trading sector. Bank loan and advances is decreasing in this sector. So banks should give priority to these sectors as well as banks should create new investing sector to mobilize deposit.
- Keeping all this in consideration, the both banks seems equal performance. Further more NIBL recommended investing in government securities and

focusing on reducing in its risk. Similarly NABIL recommended to increase in its income in managing its deposit. In the future ahead, the Both banks recommended to improve its weaknesses by adopting the innovative approach to marketing. In the light of growing competition in the banking sector, both bank NIBL and NABIL should be customer oriented. It should strengthen and activate its marketing function as it is an effective tool to attract and retain the customers.

- In the global competitive environment, the bank should develop an innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. The bank is also required to explore new market areas. For this purpose, it is recommended to form a strong market department in its central level, which deals with the banking products, places, price and promotion as well.

BIBLIOGRAPHY

BOOKS:

Brealy, R. & Myers'S. (1991). *Principle of corporate finance*. New Delhi: Mc-Graw Hill.

Gupta, S.C. (2000). *Fundamental of statistics. New Delhi*: Himalayan Publishing House Private Limited.

Johnson, E. (1940). *Commercial bank management*. New York: The Dryden Press Private Limited.

Kothari, C.R. (1990). *Research methodology: method and techniques.* New Delhi: Tata Mc-Graw Hill Publishing Company Limited.

Kulkarni, P. V. (1994). *Financial Management: Theory & Practice*. New Delhi; Tata MC-Graw Hill Publishing Co. Ltd.

Mundul, S. (2008). Understanding of credit derivative, *New Business Age*. September, Kathmandu. Vol. No. 7

N. Crosby, N. French and M. Oughton (2007). Banking lending valuations on commercial property. *Journal of Property Investment & Finance.* U.S.A. Vol. No.5

Nepal Rastra Bank (2006/07). *Economic Report*, NRB, Kathmandu.

Oxford Advanced Learners Dictionary. (2006). Calcutta: Oxford University Press Private Limited.

Oxford Advanced Learners Dictionary. (2006). Calcutta: Oxford University Press Private Limited.

Pandey, I. M. (1979). *Financial Management*. New Delhi: Vikas Publishing House Private Limited.

Richard, A.B. (1996). *Principles of corporate finance.* New Delhi: Tata Mc-Graw Hill Publishing Company Private Limited.

Ronald, G. (1999). The new function of banking. *Harvard business review*.

Roy, A. F. (1974). *Financial Statement Analysis*. New Delhi: Tata MC-Graw Hill Publishing Co. Ltd.

Scott, D. (1992). *Banking Institutions in Development Markets Volume-1*.Washington D. C.: World Bank.

Shekher & Shekher, (1999). B*anking theory and practice* .New Delhi: Vikas Publishing House.

Shrestha, K.N. and Manandhar, K.D. (2051). *Statistics and Quantitative Techniques for Management.* Kathmandu:Valley Publishers.

Shrestha, M. S. (2006). *Fundamentals of banking.* Kathmandu: Buddha Academic Enterprises Private Limited.

Van Horne, J. C. (1999). *Financial Management and Policy*. New Delhi: Prentice Hall of India.

Varsahney, N.P. and Swaroop, G. (1994). *Banking law and practice for C.A.I.I.B.* New Delhi: Sultan Chand and Sons Private Limited.

Wolf, H.K. and Pant P. R. (1996). *Social science research and thesis writing.* Kathmandu: Buddha Academic Enterprises Private Limited.

THESIS:

Gurung, A. K. (2010) "Lending policy and recovery management of Standard Chartered Bank Nepal ltd and NABIL Bank Limited" An Unpublished Master Level Thesis Submitted to Shanker Dev Campus, Faculty of Management, T.U.

Joshi, S. (2007)"A Comparative Study on Financial Performance of Standard Chartered Bank Nepal Limited and Everest Bank Ltd" An Unpublished Master Level Thesis Submitted to Shanker Dev Campus, Faculty of Management, T.U.

Khana, Bandana (2011). In her dissertation "An analysis of Credit risk Management of Himalayan Bank and Nabil Bank Limited" An Unpublished Master Level Thesis Submitted to Shanker Dev Campus, Faculty of Management, T.U.

Misra, S. (2011) "Credit management of Everest Bank Limited" An Unpublished Master Level Thesis Submitted to Nepal Commerce Campus, Faculty of Management, T.U.

Ojha, Suman (2006), *Lending Practices: A Study on NABIL, SCBNL and HBL.* An unpublished thesis of Master Degree, T.U.

Paudel, P. (2005) “A study on lending practices of joint venture commercial banks with reference to Nepal Bangladesh Bank Ltd (NBBL) and Himalayan Bank Ltd. (HBL)” An Unpublished Master Level Thesis Submitted to Shanker Dev Campus, Faculty of Management, T.U.

Regmi, P. (2008)“Credit Management of Commercial Banks with Reference to Nepal Bangladesh Bank and Bank of Kathmandu” An Unpublished Master Level Thesis Submitted to Nepal Commerce Campus, Faculty of Management, T.U.

Shrestha, S. (2009) “Credit management with special reference to Nepal SBI Bank ltd” An Unpublished Master Level Thesis Submitted to Shanker Dev Campus, Faculty of Management, T.U.

WEBSITES:

www.nibl.com.np

www.nrb.org

www.sebon.com

Appendix - 1

A) Trend Analysis of Total Deposit of Nepal Investment Bank Limited:

Year (x)	Total deposit(Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	18927.31	-2	4	-37855	2207.421754
2007/08	24488.85	-1	1	-24489	15658.80754
2008/09	34452	0	0	0	29110.19333
2009/010	46698	1	1	46698	42561.57912
2010/011	50095	2	4	100190	56012.96491
2011/012	57010.6	3	9	171032	69464.3507
Total	**174661.16**	**3**	**19**	**255576.3**	
2012/13		4			82915.73649
2013/14		5			96367.12228
2014/15		6			109818.5081
2015/16		7			123269.8939
2016/17		8			136721.2796

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{174661.16}{6} = 29110.19$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{255576.3}{19} = 13451.38$$

B) Trend Analysis of Total Deposit Nabil Bank Limited

Year (x)	Total deposit(Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	19101.07	-2	4	-38202	1963.972456
2007/08	24491.09	-1	1	-24491	14203.31456
2008/09	31304.82	0	0	0	26442.65667
2009/010	37348.26	1	1	37348.3	38681.99877
2010/011	46410.7	2	4	92821.4	50921.34088
2011/012	55023.69	3	9	165071	63160.68298
Total	**158655.94**	**3**	**19**	**232547.5**	
2012/13		4			75400.02509
2013/14		5			87639.36719
2014/15		6			99878.7093
2015/16		7			112118.0514
2016/17		8			124357.3935

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

$Yc = a + bx$

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{158655.94}{6} = 26442.65$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{232547.5}{19} = 12239.34$$

Appendix - 2

A) Trend Analysis of Loan and Advance of Nepal Investment Bank Limited

Year (x)	Loan and advances(Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	13178.15	-2	4	-26356	1735.267368
2007/08	17769.1	-1	1	-17769	12169.44368
2008/09	27529	0	0	0	22603.62
2009/010	36827.16	1	1	36827.2	33037.79632
2010/011	40318.31	2	4	80636.6	43471.97263
2011/012	41636.99	3	9	124911	53906.14895
Total	**135621.72**	**3**	**19**	**198249.4**	
2012/13		4			64340.32526
2013/14		5			74774.50158
2014/15		6			85208.67789
2015/16		7			95642.85421
2016/17		8			106077.0305

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{135621.72}{6} = 22603.62$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{198243.4}{19} = 10433.86$$

B.) Trend Analysis of Loan and Advance of Nabil Bank Limited

Year (x)	Loan and advances(Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	12922.54	-2	4	-25845	-197.3242982
2007/08	15545.78	-1	1	-15546	9042.352018
2008/09	21365.05	0	0	0	18282.02833
2009/010	27589.93	1	1	27589.9	27521.70465
2010/011	32268.87	2	4	64537.7	36761.38096
2011/012	41605.68	3	9	124817	46001.05728
Total	**109692.17**	**3**	**19**	**175553.9**	
2012/13		4			55240.7336
2013/14		5			64480.40991
2014/15		6			73720.08623
2015/16		7			82959.76254
2016/17		8			92199.43886

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

$Yc = a + bx$

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{109692.17}{6} = 18282.02$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{175553.9}{19} = 9239.6$$

Appendix - 3

A.) Trend Analysis of Total Investment of Nepal Investment Bank Limited:

Year (x)	Total Investment (Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	21330.14	-2	4	-42660	19472.44544
2007/08	27590.84	-1	1	-27591	26245.30439
2008/09	38873	0	0	0	33018.16333
2009/010	53010	1	1	53010	39791.02228
2010/011	57305	2	4	114610	46563.88123
2011/012	10438.48	3	9	31315.4	53336.74018
Total	**198108.98**	**3**	**19**	**128684.3**	
2012/13		4			60109.59912
2013/14		5			66882.45807
2014/15		6			73655.31702
2015/16		7			80428.17596
2016/17		8			87201.03491

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{198108.98}{6} = 33018.16$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{128684.3}{19} = 6772.85$$

B.) Trend Analysis of total Investment of Nabil Bank Limited

Year (x)	Total Investment (Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	22329.97	-2	4	-44660	17990.14246
2007/08	27253.39	-1	1	-27253	24222.88456
2008/09	37132.76	0	0	0	30455.62667
2009/010	43867.4	1	1	43867.4	36688.36877
2010/011	52150.24	2	4	104300	42921.11088
2011/012	14055.85	3	9	42167.6	49153.85298
Total	**182733.76**	**3**	**19**	**118422.1**	
2012/13		4			55386.59509
2013/14		5			61619.33719
2014/15		6			67852.0793
2015/16		7			74084.8214
2016/17		8			80317.56351

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{182733.76}{6} = 550.302$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{118422.1}{19} = 6232.74$$

Appendix - 4

A) Trend Analysis of Total Profit of Nepal Investment Bank limited

Year (x)	Net profit (Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	350.53	-2	4	-701.06	56.31631579
2007/08	501.4	-1	1	-501.4	337.7831579
2008/09	697	0	0	0	619.25
2009/010	900.62	1	1	900.62	900.7168421
2010/011	1265.95	2	4	2531.9	1182.183684
2011/012	1039.27	3	9	3117.81	1463.650526
Total	**3715.5**	**3**	**19**	**5347.87**	
2012/13		4			1745.117368
2013/14		5			2026.584211
2014/15		6			2308.051053
2015/16		7			2589.517895
2016/17		8			2870.984737

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{3715.5}{6} = 619.25$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{5347.87}{19} = 281.46$$

B). Trend Analysis of Total Profit of Nabil Bank Limited

Year (x)	Net profit (Y)	X=x-3	x^2	XY	Yc = trend value
2006/07	635.26	-2	4	-1270.5	24.97929825
2007/08	673.96	-1	1	-673.96	364.6429825
2008/09	746.47	0	0	0	704.3066667
2009/010	1031.05	1	1	1031.05	1043.970351
2010/011	1139.1	2	4	2278.2	1383.634035
2011/012	1696.28	3	9	5088.84	1723.297719
Total	**4225.84**	**3**	**19**	**6453.61**	
2012/13		4			2062.961404
2013/14		5			2402.625088
2014/15		6			2742.288772
2015/16		7			3081.952456
2016/17		8			3421.61614

The number of years is even i.e. N=6, therefore, the origin is taken at x=3

The equation of trend line is

$Yc = a + bx$

As, $\sum x = 0$

$$a = \frac{\sum Y}{N} = \frac{4225.84}{6} = 704.30$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{6453.61}{19} = 339.66$$