

**A STUDY ON NON-PERFORMING ASSETS OF
NEPALESE COMMERCIAL BANKS**
(With Reference to Nepal Investment Bank Ltd. and Kumari Bank Ltd.)

A Thesis

By:

Ashuma Shrestha
Shanker Dev Campus
TU Regd. No.7-2-346-06-2000
Campus Roll No.1125/2061

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VIVA VOCE SHEET

We have conducted the viva voce examination of this thesis presented by

Ashuma Shrestha

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And found the thesis to be original work of the student written in accordance with the prescribed format. We recommend the thesis to be accepted as the partial fulfillment of the requirement for the degree of Masters in Business Studies (M.B.S).

Viva Voce Committee

Chairperson, Research Committee

Member, (External Expert)

Member, (Thesis Supervisor)

Date:

RECOMMENDATION

This is to certify that the thesis:

Submitted by

Ashuma Shrestha

entitled

A STUDY OF NON-PERFORMING ASSETS OF NEPALESE
COMMERCIAL BANKS

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has been prepared as approved by this department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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(Asso. Prof. Kishor Maharjan)

(Prof. Bisheshwor Man Shrestha)

(Prof. Dr. Kamal Deep Dawadi)

Thesis Supervisor

Head of Research Department

Campus Chief

DECLARATION

I hereby declare that the work reported in this thesis entitled “**A ON NON-PERFORMING ASSETS OF NEPALESE COMMECRIAL BANKS (With Reference to Nepal Investment Bank Ltd. and Kumari Bank Ltd.)**” submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirements for the Master of Business Studies under the supervision of Associate Professor Kishor Maharjan, Shanker Dev Campus.

Data :

.....
Ashuma Shrestha
Researcher
Shanker Dev Campus

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CHAPTER I

INTRODUCTION

1.1 Background of the Study:

Nepal sandwiched between the two giant countries, India and china, is one of the land locked countries, and survives with her own natural beauty in Asia. Its half-century of experiments and efforts to raise the quality of life of its populace is defeated. Almost half of its population lies under absolute poverty line, especially living in the rural areas are deprived of even basic needs and facilitates like enough calories pure drinking water sanitation facilities, electricity, road facility etc. Some of the basic human indicators like life expectancy, literacy, nutrition level etc. also show that Nepal occupies among the nation to eliminate the massive poverty persisting in the country through gradual development of the total nation and by providing and availing basic needs to poor people. Actually slow pace of developing of Nepal is due to nothing but landlocked position, poor resources mobilization and its utilization, weak infrastructure development and more over unstable eco-political environment.

Banking plays significant role in the economic development of a country. Bank is a resource for the economic development which maintains the self- confidence of various segments of society and extends credit to the people. So, commercial banks are those financial institutions mainly dealing with activities of the trade, commerce, industry and agriculture that seek regular financial and other helps from them for growing and flourishing, the objectives of commercial banks is to mobilized idle resources into the most profitable sector after collecting them from scattered sources commercial bank contributes significantly n the formation and mobilization of internal capital and development effort.

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

valuables under such arrangement the depositors would leave their gold for safekeeping would get back their gold and valuable after paying a small amount as fee for safekeeping and serving.

The role of money in an economy is very important. Proper and well planned management of money directs, determines and enhances the health and productivity of total financial sector and the performance of financial sector affect the growth of economy. Hence, Money is the topic to manage and banks are the manager. The existence of a bank is for the change in every aspect of human being and its presence is for the upliftment of people. Banks are the back bone of the economy.

Assets and liabilities are the two major parts of balance sheet of commercial bank. Cash reserves, deposits to other banks, investment in securities, loan and advances and other assets comprise the total assets. Liabilities comprise public deposits, borrowings, other current liabilities and share capital. As this study is focused with the Non-performing Asset (NPA), it is mainly concerned with the assets of bank. Generally, the loan advances occupy more than two third parts of assets of bank in balance-sheet and it is found that they produce more than half of bank revenues. Therefore, in practice loan quality is mostly studied as assets quality. In banking literature, loan is often found synonymously used to assets. According to onsite inspection manual, for Commercial Banks Finance Companies, Volume - two, published by Nepal Rastra Bank, the study of asset quality is mainly concerned with loans quality. So, it should be clear that assets are used to indicate the meaning of loan.

Since this study is mainly concerned with loan, some facts are highlighted regarding loan. The deposits of public create loanable fund. Banks make their profit by issuing loans. But loans also have higher probability of default than other assets. The loans,

which are actively working gives well, return to the banks. The default loans cause the loss in return to the bank. For the strength and stability of banking system, the assets/loan should yield positive returns. The assets/loans, which do not yield positive returns, become Non-performing Assets (NPA). In a narrow sense, Non-performing Assets, NPA refer to loan and advances, which do not yield any positive, return or contribute to the profit of banks. In a broader sense, NPA includes the unutilized cash balances, physical assets and the workforce. In this study major concern is with the narrow sense of NPA, which means the loan/assets that do not yield positive return in cash.

It is well known that the loans, which do not yield positive return in cash, are NPA since the loans do not yield positive returns in cash, it has direct effect to lender bank. In this situation bank can not pay the interest to the depositors and dividend to the share holders. If the interest income which has to maintain the operational expenses including depositor's interest and share holders' expectations could not be regularized, it may have great financial effect to the bank. On one hand the outstanding interest is not allowed to show as income and on the other hand loan and advances become non-performing, which creates the situation of additional expenses to profit and loss account of bank. As a result there may be significant effect in the financial position of the bank" (Adhikary, 2062:167)

Nepal is an undeveloped country having very low per capita income and corporate growth rate. The traditional concept of business and commerce is deep rooted in the people and most of them are unaware of modern form of commerce. Majority of population live below the poverty line. The agro-dominated economy is further worsened by the complex geographical situation. Various factors like land locked ness, poor resource mobilization, lack of entrepreneurship, lack of institutional commitment, erratic government policies, political instability, Maoists problem etc. are responsible for the slow pace of development in Nepal.

But after the restoration of democracy in 1990 and universal echo of economic liberalization, Nepal has implemented liberal economic policy. As a result, many more companies are established in different sectors such as industrial, tourism, transportation, trade and mostly in the financial sector whose contribution in economy has great significance.

In Nepal, the industrial revolution took after the establishment of Biratnagar Jute Mill in 1993 B.S. (1936 A.D.) and in 1994 B.S. (1937 A.D.) Nepal Bank Limited was established (Shakespeare vaidya 1999:67). Nepal Rastra Bank was established in 2013 B.S. (1956 A.D.), which has helped to make banking system more systematic and dynamic during that time. In 2022 B.S.(1965 A.D.) Rastriya Banijya Bank was established which is fully government owned bank. His Majesty's Government with the view of accelerate the pace of economic development under the structural adjustment program undertook a significant step towards financial liberalization in the year 2043/44 B.S. (1986/87 A.D.) The liberalization policy of the government of Nepal has encouraged the private sector to invest in various fields, which support the domestic overall economic growth. The government of Nepal introduced financial sector reforms in 1980s, which encouraged the healthy competition in the financial sector as well as allowed the entry of foreign banks in the Nepalese market in the forms of joint ventures banks.

Definition of NPA

To define NPA first of all meaning of Assets should be understood. Assets mean the property of a person or a company. This indicates that assets are the property of a company accumulated with the help of sources.

Non Performing Assets (NPA) means the amount of loan that the individual commercial banks had provided and the customer has not paid in until the time

already matured. The distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing assets for the banks.

Introduction of Nepalese Commercial Banks

Introduction of Nepal Investment Bank Limited (NIBL)

Nepal Investment Bank Limited (NIBL), previously Nepal Indosuez Bank Limited, was established on 21st January 1986 as a second commercial joint venture bank with an agreement between Nepalese and French partners under the company act 1964. Initially Banque Indosuez Pares managed the bank in accordance with joint venture and technical services. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen of Nepal, has acquired on 25th April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Limited The name of the bank has been changed to Nepal Investment Bank Limited (NIBL) upon approval of bank's 15th Annual General Meeting, Nepal Rastra Bank and Company Registrar's office on 31st May 2002. The present shareholding pattern of NIBL is as follows:

A Group of Companies	50%
Rastriya Banijya Bank	15%
Rastriya Beema Sansthan	15%
General Public	20%
Authorized Capital	Rs.590,000,000.00
Issued Capital	Rs.295,293,000.00
Paid-Up Capital	Rs.295,293,000.00

Introduction of Kumari Bank Ltd.

Kumari Bank Ltd. was established in April 03, 2001 as part of the policy of Nepal Rastra Bank's liberalization of the Nepalese Banking Industry. It has been

established with an objective of providing a complete banking solution to customers backed by its state-of-the art infrastructure. Apart from its regular business loans, KBL is gearing itself up to offer a wide range of consumer banking product and services like; vehicle loan, education loan and home loans etc. At present it has 3 branches including main branch (head office) in Nepal. It was established fully investment made by Nepalese investors and its 100% equity is held by the Nepali promoters and public.

KBL is providing following facilities and services to their customers;

- Internet Banking
- Electronic Bill Payment System
- Mobile Banking
- Debit Card, Credit Card

The present capital structure of the KBL is presented as below;

Share Structure	Amount (Rs.)
Authorized Capital	1,00,00,00,000
Issued Capital	35,00,00,000
Paid-up Capital	35,00,00,500

Source:- Annual Report of KBL

1.2 Focus of the Study:

Non Performing Assets [NPA] means the amount of loan that the individual commercial bank had provided and the consumer has not paid it until the time is already matured. Once the distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing Assets for the bank. Commercial banks are loosing their profitability because of non performing assets.

In every commercial bank's profitability is affected by the Non performing assets of the banks. The main focus of this study is to examine the impact of the NPA on

profitability of the commercial banks and the proper management of non performing assets of the commercial banks. In same way the study will also be focused on non performing assets regarding made in the past five years of six sample banks.

1.3 Statement of Problem:

The main features of Commercial Bank are mobilizing the deposit and lending them to different needy sectors. Lending or loan and advances are the major source of income to commercial Banks. Without loan and advances, banks neither maintain its operational expenses nor can give good interest to depositors and dividend to shareholders. Generally loan and advances of commercial banks occupy more than 40% of total assets. So it is necessary to manage the good portfolio of loan and advances in banks. In the economy of developing countries, loan and advances are the major functions of commercial banks and the interest earning from them is the main source of income.

However, lending (loan and advances) also carries credit risk, which from the failure of borrower to fulfill its contractual obligation during the course of transactions. Such failure doesn't yield positive return in cash, which cause the rise of NPA. It is obvious that the NPA are the rising or swelling problem in the banking sector of Nepal and this issue is becoming more and more unmanageable. At present total NPA in the banking sector is about NRS 35 billion, while it is even worse in case of two largest governments sector banks: Rastriya Banijya Bank (RBB) and Nepal Bank Limited, NBL.

According to the governor of Nepal Rastra Bank, Mr. Bijaya Nath Bhattarai, the NPA of NBL and RBB are found to be 49.64 percent and 50.70 percent respectively as on the end of Asadh 2062. (NRB Samachar, 2063)

Learning the above statements, it is obvious that Nepalese Banking Sector has been becoming victim of huge NPA. Such situation raises the question, whether Nepalese management team in bank is competent enough? Whether NRB fails to regulate the commercial Banks?

In the above backdrop, the research study is focused on the following research questions.

- i. Whether or not the Nepalese Commercial banks are following NRB's regulation/directives regarding their lending and provision for NPA?
- ii. What is the proportion of NPA to total assets and lending in Nepalese Commercial Banks?
- iii. How does NPA effect in return on shareholders equity (ROE) and return on total assets(ROA)?

1.4 Objectives of the study

The main objectives of this study are to examine and find the level of, NPA to total assets, total deposits and total lending of Nepalese Commercial Banks. The specific objectives are:

- i. To study about the proportion of NPAs to total assets, total deposits and total lending of both the banks under study.
- ii. To study Non performing loan to total loan.
- iii. To examine and evaluate the effects of NPA on ROA and ROE of Banks.
- iv. To make recommendation to overcome the difficulties in managing NPA of the banks with high level of NPA.

1.5 Significance of the Study

Banking habit has been an inseparable part of modern people. Whether it is in industrial sector or personal life it has served a lot. For the safety of the depositors along with fulfillment of the need groups, banking behavior has served well. Since

commercial banks are the bridge between savers and need group of money, there should be balance between the desires of these two groups. In other words depositors get nothing unless deposits are flowed as loan and advances to borrowers and paid back interest to the depositors. But it is not always true that all loan and advances yield positive income to banks. In practice, there is certain probability of becoming default rate in loan and advances. Such defaulted loan and advances are known as NPA and they create credit risk.

Generally it is found that the loan and advances occupy 60 percent of the commercial banks' assets. The income of the commercial bank is covered by interest income earned to loan and advances in huge figure. Such earnings are possible only when the loan and advances are not defaulted. The defaulted loan and advances on one hand, has to maintain the provision against such loan and advances. So, defaulted loan and advances has double effects: minimizing the income of bank and unsafe risk of deposits.

Success of any banks doesn't depend on how much money a bank can lend? But it depends quality of the loan. Therefore we can say that the success of the bank depends upon the amount of its performing assets/loans.

This study mainly concerned with the analysis of the NPA to total assets, total deposits and total lending of Nepalese commercial banks. Therefore it is significant to find out the level of NPAs. It is also significant to find out whether Nepalese commercial banks have maintained loan loss provision according to NRB directives or not. It also examines NPA to ROA and ROE of the bank. Lastly it also provides literature to the scholars and new researchers who want to do further research in this field.

Since the study was on the background of the above stated facts, mainly it helped to identify the NPAs to total assets, total lending and total deposit of the banks.

1.6 Limitation of the Study

The research work has the following limitations:

- i. Primarily this study is concerned only with NPA of Nepalese Commercial Banks. It does not consider other financial aspects of the banks.
- ii. The study is concentrated only on commercial banks of Nepal. Hence findings were not applicable to other financial institutions; “the development banks i.e. the grade ‘b’ financial institutions and finance companies i.e. the grade ‘c’ financial institutions.”
- iii. The study is basically based on secondary data, which may or may not provide exact vision of the field. Hence, the findings will be in accordance of the data. Personal judgment sampling method is applied to draw the sample.
- iii. The study covers the five years period data of fiscal years 2004/05 to 2008/09.

1.7 Organization of the Study:

The study has been organized into five chapters. The title of each of these chapters is as follows:

CHAPTER I Introduction

Introduction chapter comprises background of the study, focus of the study, statement of problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

CHAPTER II Review of literature

Review of literature chapter comprises conceptual review of the NPA and review of the past thesis.

CHAPTER III Research methodology

Research methodology deals with the method of investigation and includes research design, nature of the data, data collection procedure and tools used.

CHAPTER IV Presentation and analysis of data and major findings

Data presentation and analysis of data deal with different statistical and the financial tools that used in the analysis of the data.

CHAPTER V Summary, conclusion and recommendations

Last chapter includes the summary, findings of the study and recommendation.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter is concerned with the review of relevant literatures available in the books, journals, articles, research reports, newspapers, magazines, policy documents which are published or unpublished. Every study is very much based on past knowledge, study and experiences. The past knowledge or the previous studies should not be ignored as it provides foundation to the present study. Various thesis works have done in different aspects of non performing assets of different organization are also reviewed for the purpose of justifying the study. This chapter consists of two parts-theoretical Framework and Review of Related Studies. In theoretical framework, review of what has been written in academic books is carried out while review of related studies is further divided into review of journals and review of master degree thesis.

2.1 Conceptual framework

2.1.1 Meaning and origin of bank

In general a bank is referred to as an institution that deals with money, currency and bullion. It collects the deposits in the form of currency and gold from the savers and supplies to the people in demand of money with different terms and conditions as to the interest and repayment. Hence it pays interest to the depositors as consideration to the money received and charges different levies in the form of processing fees, commissions, interests etc., from the people who have taken loan from it. At the same time it in the request of its customers, discounts the bills, gives guarantee, issues letter of credit, investing in different securities, underwriting of securities etc. The word BANK has been derived from Italian word, "Banco" which in Italian means a BENCH. Since the people who dealt in money used to do their work whilst

sat on bench the trade that they were carrying was called as 'Banco', which in the due course got modified into BANK.

Now a day the function of banks are changing which has induced their principle competitors to change. The principle competitors such as other financial institutions including security dealers, brokerage firms and insurance companies are trying to be similar to bank in the services they offer.

Sayers defined the bank as, "Ordinary banking business consists of changing cash for deposits and bank deposits for cash, transferring bank deposits from one person or corporation to another, giving bank deposits in exchange for bills of exchange, government bonds, the secured of unsecured promises of businessmen to repay etc." Walter Leaf defined the bank as, "A bank is that institution or individual who is always ready to service money on deposits to be returned against the cheque of their depositors." And Horace White puts bank in his words as, "Bank is a manufacturer of credit and machine for facilitating exchanges." G. Crowther says, "A banker is a dealer in debt in his own and other people's. The bankers business in then to take the debt of other people to offer his own in exchange and thereby to credit money." Dr. H. L. Hart exclaims, "A banker is one who, in the ordinary course of his business, receives money which he repays by honoring cheques of persons from whom or on who account he receives it."

The first renowned bank was called the "Bank of Venice", set up in Venice, Italy in the year 1157 A.D. The Bank of Barcelona and the Bank of Genoa were established in the year 1401 A.D. and 1407 A.D. respectively. In England the banking embarked on with English Goldsmith only after 1640 A.D. The Bank of Amsterdam was the grandest bank during the 17th Century.

2.2 Concepts of Commercial Banks

Commercial banks are the heart of the financial system. They hold deposits of many persons, government establishments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms, and government units in doing so they assist both the flow of goods and services from the producers to consumers. They dispense the large portion of medium through which monetary policy is affected. This shows the consequential role in the smooth functioning of the economy.

Commercial banks play the most important role in the modern economic organization. Their businesses mainly consist of receiving deposits, giving loans and financing the trade of a country. They provide short-term credit i.e., lend money for short period. According to the American Institute of Banking, "Commercial Banks is a corporation that accepts demand deposits subject to check and makes short-term loans to business enterprise regarding of the scope of its other services."

In the Nepalese context, the Nepal Commercial Bank Act, 2031 B.S. (1974A.D.) defines, "A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions."

In the like manner, various writers on banking have defined the bank in different ways. Since a modern bank performs number of functions. So, it has become very difficult to give a precious definition of a commercial bank.

2.2.1 Evolution of banking system in Nepal

There are several types of banks but among them commercial banks play significant contribution in the financial system of the country. They pool together the savings of the community and arrange for their productive use. They supply the financial needs of modern business by various means. They accept deposits from public on condition that they are repaid on demand or on short notice. Their business is

confined to financing the short-term and medium term needs of trade and industry such as working capital financing.

Commercial Bank Act, 2031 B.S. (1974A.D.) of Nepal has defined the commercial banks as an organization, which exchanges money, accepts, grants loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose. (Bank and Financial Institution Ordinance 2005)

It is the fact that financial sector plays a vital role for the economic development of a country. Even before the establishment of a banking system in Nepal, financial transactions were in practice as undertaken by some moneylenders like sahumahajans, zamindars, relatives, friends, and few informal organizations limited to ethnic group such as Guthi. The borrowing from the other and the informal organization was limited and based on personal understanding. At that time people deposit their gold, silver and valuable goods for the sake of security. Thus, the private moneylenders can be taken as forerunner of the concept of financial institution.

However, the private money lenders supported the economic development of a country, the transactions undertaken by them was totally based on their personal understanding. No legal restriction was against them and their monopolies in transactions were the reasons for covering the interest in personal understandings and exploiting the people. Thus, it was then realized the need to establish financial intermediaries in supporting the economic development of a country.

Nepal has been ruled over by many rulers like Kirati, Lichchhavi, Malla, Ranas, and Shahs. Mostly Kirati, Lichchhavi and Malla regimes, who were concerned with the construction of temples, pati-pouwa, chautaris, etc. At that period neither the people

nor the government needed to think about the economic development of the country. According to ancient "Vanshawali" in fourteenth century, the ruler of the Kathmandu Jayasthiti Malla segregated the local domiciles into 64 different classes according to profession they had undertaken. Tankadhari was one of those classes who used to deal in coins and precious metals such as gold. These Tankadhari's were said to have carried out the borrowing and lending of money (coins). Hence, Tankadharis can be regarded as the traditional bankers of Nepal.

After long time, during the Rana regime, only handfuls prime minister thought about the economic development of the country. They established some offices in 1993 B.S. (1936A.D.) 'Tejarath Adda' was established during the tenure of Prime Minister Ranoddip Singh Rana as a first institutionized credit house. Tejarath Adda provided loans under the security of gold and silver to the government employees and public. The government established its various branches and sub-branches at different places of the country for the sake of benefits of people. In the overall development of the banking system in Nepal, the Tejarath Adda may be regarded as the father of modern banking institution and for a quite long time it rendered a good service to the government employees as well as to the general public. The government also implemented the rules against the vast interest rate taken by moneylenders. Thus, the government financial institution occupies an important role in the banking history of Nepal.

No financial institutions were established over a long period due to political reasons. To fulfill the growing need of economy in Nepal, banking activities were performed only after the establishment of Nepal Bank Limited in 1994 B.S. (1937A.D.) as the first commercial bank in Nepal. This bank was established under the Nepal Bank Act 1994 B.S. (1937A.D.).

At beginning, 49% of the ownership belongs to the promoters as well as general public and remaining belongs to government. The incorporation of Nepal Bank Ltd. is the real starting of the banking institution in Nepal? The bank started the act of consolidating the scattered capital since its establishment in order to mobilize it in productive sector. It developed systematic tradition in culture of modern banking system in Nepal. Such system could be able to establish a strong base for the enlistment of national economy. Beside, it also acted as central bank for more than three decades.

Nepal Rastra Bank was established in Baisakh 14, 2013 B.S. (26 April 1956 A.D.) under Nepal Rastra Bank Act, 2012 B.S. (1955 A.D.), the central bank of Nepal. It is totally owned by government. NRB is heavily assisting for the development of the whole economy. It is giving timely directives to all financial institutions operating and conducting in all over the country.

After a long period, the second commercial bank namely Rastriya Banijya Bank (RBB) has been established in 2022 B.S. (1965 A.D.) with cent percent government ownership. This bank has been established under the Rastriya Banijya Bank Act 2021 B.S. (1964 A.D.) Both Nepal Bank Limited. (NBL) and Rastriya Banijya Bank (RBB) have made a remarkable contribution by providing reliable banking services to the Nepalese people. Its contribution is well noted in terms of capital formation to the small dispersed saving into meaningful capital investment in order to flourish industry, agriculture, and commercial sector in the country.

The government introduced Commercial Bank Act in Nepal in 2033 B.S. (1976 A.D.) to cover the vast field of financial sector. This act has helped to emerge number of commercial bank with a view to maintain economic interest in comfort of the public in general facilitated to provide loan for agriculture, industry, trade and make a available banking services to the country and people.

Among vacuum in the banking sector got some rays of hope only when the government forwarded the economic liberalization policy in 2039 B.S. (1982 A.D.) And decided to allow foreign banks to operate their activities in Nepal in “joint venture model”. Joint Venture Banks can be defined as an association of two or more parties having common objectives and goals so as to get maximum satisfaction. Basically at that time, it was envisioned that joint venture banks (JVBS) would support the country in various ways.

In Nepalese context the main purpose of joint venture is to develop economic forces in order to achieve distinguished result, which the partners separately could not achieve. Nowadays, joint venture banks (JVBS) are playing dynamic and vital role in economic development of the country.

The Nabil Bank Ltd. Is the first joint venture bank established in 2041 B.S. (1984 A.D.) and started its operation with modern banking services. In the same way, Nepal Indosuez Bank (currently Nepal Investment Bank), the second joint venture bank established in 2042 B.S. (1985 A.D.) with an objective to encourage efficient banking services and facilities. Likewise Standard Chartered Bank Nepal is operated in 2044 B.S. (1987 A.D.).

With the satisfactory result of joint venture banks, Nepalese promoters are highly encouraged and as a result, commercial banks are introduced with cent percent domestic investment. At present, Nepal Industrial and Commercial Bank (NIC), Lumbini Bank Ltd., Machhapuchhre Bank Ltd., Bank of Kathmandu, Nepal Credit and Commerce Bank Ltd., Laxmi Bank Ltd., Siddhartha Bank Ltd., Kumari Bank Ltd. came into operation with cent percent domestic investment by Nepalese promoters which are the plus point of development of banking sector of Nepal.

Now, there is a strong competition between commercial bank for the existence so that the growing needs of the customers can easily achieve.

2.2.2 Function of Commercial Banks

Banks can be defined according to the functions they perform. A bank is established with the prime objective of profit maximization. To achieve this, the bank carries out functional activities, "Principally, commercial banks accepts deposits, provide loan, primarily to business firms thereby facilitating the transfer of funds in the economy". Although, in the yester years banks were viewed as acceptor of deposits then provider of loan, but modern commercial banks have to perform overall development of trade, commerce, industry, agriculture including supports for priority and deprived sectors. The growing bank needs and habits of people and competitive environment has made the banking sector challenging and their operation cannot be underemphasized in present context of market globalization. Hence, a bank is a commercial institution licensed as a taker of deposits, concerned mainly with the making and receiving payments on behalf of their customers, accepting deposits, creating money and making short-term loans to private individuals, companies and other organization.

Although profit maximization is a major objective of commercial bank, to achieve this objective commercial bank performs various functions under the mandatory rules and regulations and directives of NRB and the Commercial Bank Act 2031 B.S. (1974 A.D.).

Primary Functions

Accepting Deposits:

Accepting a deposit is the most important function of commercial banks. Commercial banks collect money from those who want to deposit in different types of accounts such as:

-) Fixed Deposit Account
-) Current Deposit Account
-) Saving Account

Advancing of Loans:

Commercial banks provide the loans required or credit to various sectors of economy such as industry, trade, agriculture, business-deprived sector etc. In this way bank creates credit facilities. It provides loans from various procedures in different form such as:

-) Overdraft
-) Cash Credit
-) Direct loan with collateral
-) Discounting of bills of exchange
-) Loans of money at call and short notice

General Utility Functions:

Commercial banks also perform general utility functions such as:

-) Issuing of letter of credit to its customers.
-) Issuing of bank drafts and traveler's cheque etc., for transfer of funds from one place to another.
-) Dealing in foreign exchange and financing foreign trade by accepting or collecting foreign bills of exchange.
-) Serving as referred to the financial standing and credit worthiness of its customers.
-) Underwriting loans to be raised by public bodies and corporations.
-) Providing safety vaults of lockers for the safe custody of valuables and securities of the customers.
-) Acting as a trustee and executing the will of the deceased.
-) Remittance of money

Agency Function:

Apart from the above functions, commercial banks also perform agency functions for which they act as agent and claim commission on some facilities such as:

-) Collection of customer's money from other banks.
-) Receipt and payment of dividend, interest.
-) Security brokerage service.
-) Financial advisory service.
-) To underwrite the government and private securities.

2.3 Some Important Terms:

2.3.1 Definition of loan and advances

Loan is defined as a thing that is lent esp. a sum of money. Likewise, debt means a sum of money owed to somebody. However, in financial terms loan or debt means principal or interest available to the borrower against the security. Debt means the money that bank owes or will lend to individual or person.

Likewise, the term loan is defined as a lending. Delivery by one party to and receipt by another party of sum of money upon agreement expressed to implied, to repay it with or without interest. Any thing furnished for temporary use to a person at his request on condition that it shall be returned, or it's equivalent in kind, with or without compensation for its use. Loan includes:

-) The creation of debt by lender's payment of or agreement to pay money to the debtor or to a third party for the account of the debtor.
-) The creation of debt by a credit to an account with the lender upon which the debtor is entitled to draw immediately.
-) The creation of debt pursuant to a lender credit card or similar arrangement.
-) The forbearance of debt arising from a loan.(Koirala, 2006: 35 - 36)

Further, debt means 'Principal and interest provided to debtor by banks or financial institutions, with or without the pledge of immovable or moveable property of other securities of guarantees or without guarantee, and the word also mean over dues of the transactions beyond balance or fees, commission and interest incurred in that relation (Debt recovery act for Bank and Financial Institutions).

The supreme court of India has defined the debt during the decision of the case of United Bank of India vs. DRT. Sudhir Gupta states that "In the case in hand, there cannot be any dispute that the expression 'debt' has to be given the widest amplitude to mean any liability which is alleged as dues from any person by a bank during the course of any business activities undertaken by the bank either in cash or otherwise, whether secured or unsecured, whether payable under a decree or other of any court or otherwise and legally recoverable on the date of the application.

2.3.2 Concepts of Non Performing Assets:

Non Performing Assets [NPA] means the amount of loan that the individual commercial bank had provided and the consumer has not paid it until the time is already matured. Once the distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing Assets for the bank. Reduction of NPA has always been a significant problem for every commercial bank. NPA may be defined broadly as the Bad Debt; however, it in terms of banking sector consists of those loans and advances which are not performing well and likely to be turn as bad debt. NPA as per the current directives of Nepal Rastra Bank, NRB, has been categorized as classified loans and advances. NPA has severe impacts on the financial institutions. On the one hand, the Investment becomes worthless as expected return cannot be realized and on the other, due to the provision required for the risk mitigation the profitability is directly affected. The existence of the bank can be questioned in this situation. Thus, interest along with principal has to be recovered timely and without any obstacles.

To start with performance in terms of profitability in a benchmark for any business enterprises, including the banking industry, however increasing non performing assets have a direct impact on banks profitability as legally banks are not allowed to book income on such assets (Manamohan, 2002 : 06).

Loans and Advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loans and advances occupy major space in income statement of the banks. However it is very important to be reminded that most of the bank failures in the world are due to shrinkage in the value of the loan and advances. Hence loan is known as risky assets. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society while non-performing loans erodes even existing capital.

Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Loans are risky assets, though a bank interest most of its resources in granting loans and advances. If an individual bank has around 10% non-performing assets or loans, it sounds the death knell of that bank other remaining the same. The objectives of bound loan policy are to maintain the financial health of the banks, which result in safety of depositor's money increases in the returns to the shareholders. Since the loan is a risky asset there is inherent risk in every loans, however, the bank should not take risk above the certain degree irrespective of the returns prospects.

2.4 Classification of NPA:

As per the NRB directives NPA are said as classified loans. And this includes sub-standard, doubtful and loss categories as defined by new NRB directives. The circular further says a NPA is a credit facility in respect of which interest has remained unpaid for two quarters.

According to the circulars, the loans are classified based on weakness and dependence on collateral securities into four categories and prescribed the provisioning rate as follows:

Table No. 2.1
Classification of Loan and Advances

Classifications of loan and advances	Criteria for Provisioning	Provision Rate
Pass	Not past due and past due for a period up to 3 months. [Performing loans]	1%
Substandard	Past due for a period of 3 months to 6 months	25%
Doubtful	Past due for a period of 6 month to 1 years	50%
Loss	Past due for a period of more than 1 years or advances which have least possibility of recovery.	100%

Source: Nepal Rastra Bank, Directives for commercial banks.

2.5 Effects of NPA on Profitability of Banks:

Under the circumstances assets that do not earn any income to the bank affect the profits in a number of ways, which are explained as follows (Koirala, 2006:38 – 40):

Profitability Impact:

-) The resources locked up in NPA are borrowed at a cost and have to earn a minimum returns to service this cost.
-) NPA on the one hand do not earn any income but on the other hand drain the profits earned by performing assets through the claim on provisioning requirements.

-) Since they do not earn interest they bring down the yield on advances and the net interest margin or spread.
-) NPA have a direct impact on assets and returns on equity, the two main parameters for measuring profitability of the commercial banks.
-) Return on assets will be affected because while the total assets include the NPA they do not contribute to profits which are the numerators in the ratio.
-) Return on equity is also affected as provisioning eats more and more into profits earned.
-) The cost of maintaining these include administration costs, legal costs and cost of procuring the resources locked in them.
-) NPA bring down the profits, affects the shareholders value and thus, adversely affect the investor confidence.

As a whole, the impact of NPA can be assessed with the following:

-) Lower ROE and ROA
-) Lower image and rating of banks
-) Disclosure reduces investor's confidences.
-) Increases costs/difficulties in raising capital.
-) NPA do not generate income.
-) They require provisioning.
-) Borrowing cost of resources locked in
-) Opportunity loss due to non-recycling of funds.
-) 100% risk weight on net NPA for CRR.
-) Capital gets blocked in NPA.
-) Utilizes capital but does not generate income to sustain the capital that is locked.
-) Recapitalization by government comes with string.
-) Administration and recovery costs of NPA.
-) Effects in employee morale and decision.

2.6 Causes and Measures of NPA:

[Country-wise Analysis]

(Source: Reddy, Prashant K ' A comparative study of NPA in India in the global context, a report page 4-8)

China

Causes

- I. Moral Hazard: The SOE's believe that there the government will bail them out in case of trouble and so they contribute to take high risks and have not really strived to achieve profitability and to improve operational efficiency.
- II. Bankruptcy laws favors borrowers and law courts are not reliable enforcement vehicles.
- III. Political and social implications of restructuring bi SOE's force the government to keep them afloat.
- IV. Banks are reluctant to lend to the private enterprises due to
 - a. Non- standard accounting practices.
 - b. While an NPA of an SOE is financially undesirable, an NPA of a private enterprise is both financially and politically undesirable.

Measures

- I. Reducing risk by strengthening banks, raising disclosure standards and spearheading reforms of the SOE's by reducing their level of debt.
- II. Laws were passed allowing the creation of asset management companies, foreign equity participation in securitization and asset-backed securitization.
- III. The government, which bore the financial loss of debt 'discounting'. Debt/equity swaps were allowed in case a growth opportunity existed.
- IV. Incentives like tax breaks, exemption from administration fees and clear-cut asset evaluation norms were implemented.

Thailand

Causes

- I. Liberalized capital and current account and external borrowings with inaccurate assessment of exchange rate risk and risk of capital flight in a crisis.
- II. A legal system that made credit recovery time consuming and difficult.
- III. Real estate speculators took massive loans projecting high growth in demand and prices of properties. When this did not materialize all the loans went bad.
- IV. Steep interest rate rise turned a lot of loans into NPAs
- V. Inability to correctly assess credit risk.

Measures:

- I. Amendments were made to the Bankruptcy Act.
- II. Corporate Debt Restructuring Plan (1998) focused on capital support facilities for bank recapitalization and setting up of AMC's.
- III. New rules governing NPA exit procedures based on international standards were introduced.
- IV. Privatization of government entities was mooted, but faced strong political oppositions for fear of a social backlash.
- V. Adoption of international standards for loan classification and provisioning.
- VI. Caps on Foreign equity ownership in financial institutions were removed.

Korea

Causes

- I. Directed Credit: Protracted periods of interest rate control and selective credit allocations gave rise to an inefficient distribution of funds. The Chaebols' focus on increasing market share and pursuing diversification with little attention to profitability caused tremendous stress on the economy.
- II. The "compressed growth" policy via aggressive, leveraged expansion worked well as long as the economy was growing and the ROI exceeded the cost of

capital. This strategy backfired when slowing demand and rising input costs placed severe stress on their profitability.

- III. Lack of Monitoring-Banks relied on collaterals and guaranteed in the allocation of credit, and little attention was paid to earnings performance and cash flows.
- IV. Contagion effect from South East Asia coincided with a period of structural adjustments as well as a cyclical downturn in Korea.

Measures

- I. Speed of action:- the speedy containment of systemic risk and the domestic credit crunch problem with the injection of large public funds for bank recapitalization were critical steps towards normalizing the financial system.
- II. Corporate Restructuring Vehicles (CRVs) and debt/equity swaps were used to facilitate the resolution of bad loans.
- III. Creation of the Korea Asset Management Corporation (KAMCO) and a NPA fund to fund to finance the purchase of NPA's.
- IV. Securitization KAMCO's recoveries came through asset-backed securitization and outright sales. International investors like the Lone Star Fund participated in the process.
- V. Strengthening of Provision norms and loan classification standards based on forward-looking criteria (like future cash flow) were implemented.
- VI. The objective of the central bank was solely defined as maintaining price stability. The Financial Supervisory Commission (FSC) was created (1998) to ensure an effective supervisory system in line with universal banking practices.

Japan

Causes:

- I. Investments were made Real Estate at high prices during the boom. The recession caused prices to crash and turned a lot of these loans bad.
- II. Legal mechanisms to dispose bad loans were time consuming and expensive and NPA's remained on the balance sheet.
- III. Expansionary fiscal policy measures administered to stimulate the economy supported industrial sectors like construction and real estate, which may have further exacerbated the problem.
- IV. Crony capitalism to the Keiretsus.
- V. Weak corporate governance coupled with a non-bankruptcy doctrine was a moral hazard in Japanese economy.
- VI. Inadequate accounting systems and information flow makes assessment of loan performance outside a bank in Japan difficult.

Measures:

- I. Amendment of foreign exchange control law (1997) and the threat of suspension of banking business in case of failure to satisfy the capital adequacy ratio prescribed. Legislation to improve information flow has been passed.
- II. Accounting standards: - Major business groups established a private standard setting vehicle for Japanese accounting standards (2001) in line with international standards.
- III. Government Supports: - The government's committee public funds to deal with banking sector weakness.

2.7 Reviews of Articles:

On the way of conducting this research work, some books, journals and publications have been studied to formulate ideas about the subject matter. Although, the specific books regarding the NPA could not be found, however, some banking related books

have been consulted such as Tannan's Banking Law and Practices in India, (1997). Assessing the gravity of the problem Tannan found that the banks and financial institutions at present face considerable difficulties in recovery of dues from the clients and a significant portion of the funds of the banks and financial institutions is thus, blocked in unproductive assets.

In India for addressing the question of speeding up the process of recovery was examined in great detail by committee set-up by the government under the chairmanship of the Late Shri Tiwari.

Suneja, (1992) pointed out the causes of NPA that the risk connected with lending to business depends on an enormous number of factors. For any particular type of business the risk failure is affected. The state of economy trend in demand for the project or service provided competition from any other suppliers, financial resources are too limited and management skills and lacking. Reiterating the difficulties that Suneja says probably the most difficult decision facing a banker is to determine when it becomes necessary to recall a loan and to begin the process of liquidating the security. Further she suggests that if a customer fails to make repayment on the due date, the bank has to consider what steps need be taken to recover the debt.

Basyal (2057), discussing the financial performance of government owned banks in the article, "Placing RBB and NBL under Management Contracts Rational and Opposition" agreed that the disappointing performance of these two banks has become serious concern to all the stakeholders. Further he mentions that they are having with huge level of NPA, which could be termed as the darkest sides of their operational inefficiency and undisciplined financial behaviour.

Ghimire (2056) in her article, "efficiency indicators of commercial bank" she has made a comparative analysis and found that efficiency indicator of the banks may be

viewed on the basis of amount allocated for loan loss provisioning against loan and investment.

Pradhan (2058) in his article, "NPA Some suggestion to tackle them" expressed that unless the growth of NPA is kept in control, it has the potential to cause systematic crisis. He has mentioned that a dream of globalization led to huge investment which unfortunately could not be utilized properly due to hesitant liberalization policies. Large corporate bodies misused the credits and delayed payments and contributed indirectly for enhancing NPA ratio. He further argues that lack of vision in appraisal of proposal while loan sanctioning, reviewing or enhancing credit limits, absence of risk management policy of financing, concentration of credit in few group of parties and sector, lack of coordination among various financiers, lack of initiatives to take timely action against willful defaulters, indecision on existing out of bad loans for fear of investigating agencies like special policy, CIAA, Public Accounts Committee of the parliament have also contributed in whatsoever measures to the worsening situation of NPA front. He further pointed out that most crucial reason for the increase in the NPA is the shabby and defaulter friendly legal system. Suggesting the remedy of NPA, he adds that administrative system should be strengthened. Legal reforms should be made and Assets Reconstruction Company should be formed. Henderson (2003) CEO of RBB during his interview to New Business Age agrees that the challenging target of RBB turn around in restructuring and collection of NPA.

2.8 Review of Related Thesis:

Khadka, (2004) "Non-Performing Assets of Nepalese Commercial Banks", his objectives to study and examine the level of NPAs in total assets, total deposits and total lending of commercial banks of the banking industry of Nepal. He also had studied whether the Nepalese commercial banks have been following the directives of NRB regarding loan loss provision for non-performing loan/assets or not. He had

taken sample banks as Nepal SBI Bank Limited, Nepal Investment Bank Limited, Nepal Bangladesh Bank Limited, Bank of Kathmandu Limited, Nabil Bank Limited. From his studies, it is found that the level of NPA of Nepal Bangladesh Bank Limited seemed greater than all of the other banks under his study. Similarly, Nepal SBI Bank and Bank of Kathmandu stand at second and third position respectively. The position of Nabil Bank Limited seemed to be quite satisfactory because, the bank has been reducing its NPA every year. NPA of Nepal Investment Bank reducing it at minimum than that of all the other banks. From the study it has also been found that none of the banks have been following the directives of NRB regarding the loan loss provision. Despite of high level of NPA the loan loss provision made by the Nepal Bangladesh Bank seemed to be quite satisfactory than any of the other banks. Despite of the outstanding success in managing the NPA the loan loss provision made by Nepal Investment Bank is not considerable. It meant the loan loss provision of Nepal Investment Bank is very less than the requirement.

Ghimire (2005) "Non Performing Assets of Commercial Banks" main objectives to evaluate the impact of NPA on the profitability of the commercial banks. He also studied about the internal and the external factors that affect the non-performing assets to increase from the loan and advances. The internal factors that influence the effective management of the NPA and its increment. The objective of his study is also to find out the relationship between the non-banking assets and the non performing assets, in which he was able to find out the internal responsible factors that contribute turning good loan into bad loans, bad intention, weak monitoring and mismanagement are the most responsible factors. Similarly, weak legal provision and credit concentration are also found as the least preferred factors in turning good loans into bad loans. Some factors such as lack of portfolio analysis, not having effective credit policy and shortfall on security were identified as having average effect on NPA growth. In connection to the external factors it has been found that recession, political and legal issues are more relevant factors in turning

good loans into bad one. Like wise legal provision for recovery as a reason for increment in NPA in Nepalese Banks have been found the factors having less impact. Supervision and monitoring system have been identified as average factors. It is therefore, can be generalized that economic and industrial recession and not having strong legal provision for loan recovery are the major external factors that have major contribution for the increment of NPA.

It has also been concluded in the study that Nepalese Commercial Banks gave must priority to trade sector for lending its resources, at the same time it is found that service sectors are not being given that much emphasis. He had recommended to the sample banks, Nepal Bangladesh Bank Ltd. Nepal SBI Bank Ltd and Bank of Kathmandu Ltd. as on different headings, subject matter such as financial strength, personal integrity and security, monitoring and control system, avoidance of credit concentration, strong legal system, assets management company, avoidance of undue pressure, etc.

Thapa, (2006) "Non performing loans and loan loss provisioning of the commercial banks" revealed that the Standard Chartered Bank Nepal Limited had risk averse attitude of the management or they have policy of investing low in the risky assets i.e. loans and advances as compared to Nepal Bank Limited and Nabil Bank because the loans and advances to total assets ratio on NBL, NABIL and SCBNL during the study period was appeared to be 52.3%, 47% and 29.34% respectively. The SCBNL has higher proportion of the investment in risk free or nominally risky assets like treasury bills, National Saving bonds etc.

Similarly the loans and advances to total deposits ratio of NBL, NABIL and SCBNL during the study period was found to be 57.63%, 56.35% and 35.94% respectively. It indicates that the SCBNL has the most consistent and variability during the study

period whereas the NBL has the higher consistent and variability as compared to other two banks. NABIL has the moderate level of consistent and variability.

In the same way, the proportion of Non Performing loan with regard to total loans of NBL, NABIL and SCBNL was found to be 48.37%, 10.67%, and 4.38% respectively. That means 51.63%, 89.33% and 95.62% of the total loan of NBL, NABIL and SCBNL was found to be performing loans. Not only the public sector bank, even private sector bank like NABIL has higher proportion of non-performing loan. However, in recent years, NABIL has shown significant decrement in non-performing assets, which are the efforts of recovering bad credit through the recovery of establishment of recovery cell.

In the same way, proportion of loan loss provision of NBL was found to be significantly higher i.e. 40.17% as compared to other two commercial banks. The proportion of NABIL and SCBNL was found to be 5.69% and 4.49%.

The average ratio of provision held to non performing loan of NBL, NABIL and SCBNL was found to be 80.03%, 57.85% and 122.32% respectively shows that the SCBNL has maintained adequate level of provision against non performing loan where as NABIL was found to be comparatively lower. The NBL was found to be an average position.

Shrestha, (2007) "Non performing assets and profitability of commercial banks in Nepal" his objectives were to evaluate the impact of NPA on the profitability of the commercial banks. he also studies about the internal and external factors those influence the performing assets to non performing one. He had taken sample banks as Nabil banks Limited, Himalayan Bank Limited, Nepal Bangladesh Bank Limited, Nepal Investment Bank Limited, Nepal SBI Bank Limited and Nepal Investment Bank Limited.

The NPA of Nepal Investment Bank during the study period was increasing. The ratio of NPA to lending was found to be decreasing over the years as it was 8.29% in fiscal year 2001/02 and decreased to 2.69% in the fiscal year 2005/06. The net profit was also increasing during the study period.

In case of Nepal Investment Bank Limited, the level of NPA was decreased to 1.6% on the fiscal year 2005/06 which was 6.79% in the fiscal year 2001/02. the NPA was increasing during this period and despite of the increasing NPA profit of the bank was found to be increasing during study period.

In case of Nepal Bangladesh Bank Limited, the level of NPA was increased from 9.03% in fiscal year 2001/02 to 19.04% in fiscal year 2005/06. The NPA of the bank was found to be increased and that causing the gradual decrease in the profitability of the bank.

The NPA of the Nabil Bank Limited was decreased upto one fifth from the fiscal year 2001/02 to fiscal year 2005/06. The level of NPA was found to be decreased from 16.20% in fiscal year 2001/02 to 1.32% in fiscal year 2005/06 whereas the ROA was found to be increased from 1.71% to 3.06% over the five years period.

In case of the Nepal SBI Bank Limited, the level of NPA was found to be fluctuation in it. Although it was decreasing it was not desirable level. The level of NPA in fiscal year 2001/02 was 8.64% and in fiscal year 2005/06 it was 6.54%.

The NPA of Himalayan bank Limited was found to be fluctuating during the study period, though it was found to be decreased in fiscal year 2005/06 in comparison to fiscal year 2001/02. The level of NPA was found to be highest for the Nepal Bangladesh Bank Limited in the fiscal year 2005/06, whereas the lowest was found that of Nepal Investment Bank Limited in fiscal year 2004/05. In overall the

performance of the Nabil Bank was found to be satisfactory as the level of NPA was gradually decreasing over the years covered by this study.

Dhakal, (2008), entitled "*Loan Management of Joint Venture Banks*". with following objective in his study.

-) To analyze the effectiveness of lending policy of the selected sample banks.
-) To measure the performance in quality, efficiency

To meet the above objective, the sources of data of commercial bank are analyzed by using financial tools such as ratio analysis, frequency, mean, standard deviation are used. Among many joint venture banks the researcher took two banks EBL and NBBL with five years data.

In findings, the current ratios of these banks are considerable and considerable but mean liquid fund to total deposit ratios are fewer consistencies and are not above 1 which shows the minimum deposit mobilization. Likewise, assets to total liabilities ratios are also fluctuating.

Similarly, loan and advances to total deposit ratio, mean ratio of loan and advance and investment to total deposit ratio shows the deposit mobilization in income generating sector are being nearly equal to 1. Loan and advances to shareholders equity ratio shows how well the investment made by investor. These ratios of both banks are above 10 and are fewer consistencies.

In conclusion, the overall performance of Nepal Bangladesh Bank Limited is satisfactory then Everest Bank Limited. The liquidity position of NBBL is better than that of EBL. As loans and advances of NBBL is increasing trend deposit is also

increasing trend during the study period. There is increasing trend in profit of NBBL shows that improvement in performance and success of the firm. Purpose wise loan classification show that the NBBL and EBL banks have given priority to industrial and commercial sector lending, as well as priority and deprived sector lending. NBBL has higher lending portion in these sectors than EBL. From the selected bank NBBL has performed well in increasing growth ratio of deposit, loans and advances, investment and profit.

NBBL has good lending procedure, preliminary screening is done of all the loan application, credit appraisal and financial position of the business and cash flows of the proposal is given high importance, which is essential criterion for loan approval. There is proper control mechanism like delegation of authority, follow up visits and books of accounts inspection of the client, which results in good performance of the bank. The banks follow NRB guidelines of loans classification and provisioning which makes strong financial position of the bank instead of holding high volume of non-performing assets. After comparatively study of NBL and EBL banking performance, it can be concluded that NBL has better performance than that of EBL.

Baral (2009) has concluded his study entitled “Non-performing loans of Nepalese commercial banks.” The researchers mean objective of the study was to know the problems of the non-performing loans and its effect in the ROA and ROE of the Nepalese commercial banks and to find out whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for non-performing loan or not.

Through the research Mr. Baral has found that the no banks has been following NRB’s directives regarding the loan loss provision. He also conclude that the return on assets (ROA) and return on equity (ROE) of the bank deposed upon the NPLs.

The high degree of negative correlation between NPL and ROA and the NPL and ROE clearly indicates that there is inverse relation between them. He has recommended that for the smooth operation of the commercial banks, the NPLs should be controlled for this banks should provide necessary training regarding loan management to the manpower's. In order to remove, the NPLs, banks should take enough collateral so that banks can recover its loan amount. For the loan loss provision as per the NRB directive and to reduce the NPL, the bank management should be effective and the NRB's monitoring and regulation is necessary.

Shrestha (2010), entitled with "*A Study of Non Performing Loan & Loan Loss Provision of Commercial Bank, A Case Study of NIBL, HBL and EBL*" has made study about a part of credit risk associated with those banks. The main objectives of her study were:

-) To find out the proportion of non-performing loan in the selected commercial banks.
-) To find out the factors leading to accumulation of non performing loan in commercial banks
-) To study and analyze the guidelines and provisions pertaining to loan classification and loan loss provisioning.
-) To find out the relationship between loan and loan loss provision in the selected commercial bank.
-) To study and the impact of loan loss provision on the profitability of the commercial banks.

The major finding in her study was that the EBL has the highest portion of the loan in total asset followed by NIBL and HBL. She concludes that the HBL shows the risk-averse attitude. Likewise the non-performing loan to total loan is found highest in EBL, NIBL and HBL. Likewise the Loan Loss Provision is also highest in EBL where as the HBL has the least Loan Loss Provision.

Likewise, the EBL has the highest portion of Loss loan followed by NIBL and HBL. This study is more concentrated on non-performing loans; however, there exist lots of areas in credit risk management where further research is called for. In context of credit risk, collateral risk, concentration risk, organization risk management system can be studied.

2.9 Research Gap:

From the study of previous thesis it has found that increasing Non-performing assets is one of the major challenges faced by Nepalese commercial banks in the present context. Some researchers were done in which matter relating to loan loss provision for Non-performing assets or not. Some researcher was done what is the internal and external factors affects the Non performing assets to increase from the loan advances. The previous theses covered only upto the fiscal year 2007/08 but this thesis also based on secondary data provided by concerned Nepalese commercial banks up to the fiscal year 2008/09. Hence this thesis had attempted to fill this research gap by taking the reference of Investment Bank Limited and Kumari Bank Limited. This research will be able to deliver some of the present issue, latest information and data relating to Non-performing assets.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a systematic way to solve the research problem. In other words, research methodology describes the methods and process applied in the entire aspect of the study. Research methodology refers to the various sequential steps (along with a rationale of each step) to be adopted by a researcher in studying a problem with certain objectives in view (Kothari, 1994:9). Thus the overall approach to the research is presented in this chapter. This chapter consists of research design, sample size and selection process, data collection procedure and data processing techniques and tools.

3.2 Research Design

The overall plan of the proposed study is made to specify the appropriate research methods and procedures for obtaining specific findings as objectively, accurately and economically as possible. The planning of subject matters studied are balance sheet, profit and loss account, loan classifications and their provisioning, of sample selected banks and the directives issued by NRB regarding the loan classifications and their provisioning matters.

The populations of the study are taken the whole banks in the banking operations while samples are taken Nepal Investment Bank Limited and Kumari Bank Limited. As per the nature and requirement of the study, descriptive research design is adopted with analytical approach.

3.3 Sources of Data

The major portion of the data collected is from the secondary sources. The sources include the published annual reports of concerned banks, the different periodical

publication of Research Department and Bank and Financial Institutions Regulation Department of NRB as well. The different websites related to the required data are also visited during the data collection.

3.4 Population and Sample:

The large group about which the generalization is made is called population under study, or the universe and small portion on which the study is made is called the sample of the study.

Nowadays a number of commercial banks have been emerging rapidly. Some have already been established and others are in the process of establishment. Currently, there are 28 commercial banks are in Nepal. In this study, all the commercial banks are population of the study. Among them Nepal Investment Bank and Kumari Bank has been selected as samples for the present study on the basis of well financial performance.

5.5 Data Collecting Procedure

The study is based on the secondary data. So they are collected directly visiting the head office of the concerned banks. For this purpose the annual published report of the concerned banks are utilized and gathered the necessary data. Similarly quarterly Economic Bulletin, the publication of the Research department and the Banking and Financial Statistics the publication of Bank and financial Institutions department of NRB also are used during the data collection. The websites of the concerned banks also were visited in the course of data collection.

3.6 Data Processing Procedures

At first the raw data are collected from the various sources, which include the annual financial report of concerned banks, the various publications of NRB and the relevant websites of concerned banks. They are classified as per the nature of the

study and in accordance of the data. The tabulation is specially made on the basis of their consequent three fiscal year's data available and need base headings; such as performing loan, total NPA, substandard loan, doubtful loan and bad loan. The tabulation mainly contains the calculation of the percentage of required variables, as it is needed. The tabulation also comprises the total assets, total deposits, total lending, calculation of the return on total assets and the return on shareholder's equity. Simple percentage tool is used as arithmetic tool and Karl Pearson's coefficient of correlation as a statistical tool.

3.7 Tools for Analysis:

Few statistical packages such as Excel are used to process and analyze information. Secondary information collected from annual general reports of the sample banks was first tabulated in Excel spreadsheet and then analyzed using formula and charts of the same software. For these statistical tools such as correlation analysis is done and in some cases, financial tools such as Returns on assets have also been made. Suitable tools such as descriptive statistics, Mean, Standard Deviation, etc. were done wherever necessary.

Statistical tools

In this research, following statistical tools are used

Average:

Average is defined as sum of observations divided by their number in the selected sample.

$$\text{Average (mean)} = \frac{\text{Sum of observations}}{\text{Number of values}}$$

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

Coefficient of correlation (r):

The correlation coefficient indicates the linear relationship between two or more variables. The measures of correlation called the "correlation coefficient" can be summarized in one figure, the degree and direction of movement. It can be calculated by using the method of Karl Person's correlation coefficient, because it is one of the widely used mathematical methods of calculation, the correlation coefficient between two variables. In symbolically, it is defined as:

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

Assumptions

-) If $r = 1$, there is positively perfect correlation between the two variables.
-) If $r = -1$, there is negatively perfect correlation between the two variables.
-) If $r = 0$, the variables are uncorrelated.

The nearer the value of r to $+1$, the closer will be the relationship between two variables and the nearer the value of r , the lesser will be the relation.

Probable error (P.E):

The probable error of the correlation coefficient helps to interpret its value. P.E., which is the measure of testing the reliability of correlation coefficient, denotes it. If r be the calculated value of r from a sample of n pair of observation the P.E. is denoted by

$$P.E. = \frac{0.6745(\sum Zr^2)}{\sqrt{n}}$$

It can be interpreted to know weather its calculated value of r is significant or not in the following ways.

-) If $r < PE$, it is Insignificant perhaps there is no evidence of correlation
-) If $r > 6PE$, it is significant.

It is other causes, nothing can be concluded. The probable error of correlation may be used to determine the limits within which the population correlation coefficient lies. The limits for population correlation are $r \pm PE$.

CHAPTER -IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Data presentation is the interpretation of the study. Data analysis summarizes the collected data and its interpretation presents the major findings of the study. Analysis is not complete without interpretation and interpretation cannot proceed without analysis. In this course of analysis, data gathered from. The data have been analyzed by using financial and statistical tools. The results of the computation have also been summarized in appropriated tables. The samples of computation of each model have been included in annexes. This chapter includes presentation of data and analysis of that data to reach at a conclusion

4.2 Data Presentation and analysis of “Kumari Bank Limited”

4.2.1 Total Assets and total performing Loan of KBL

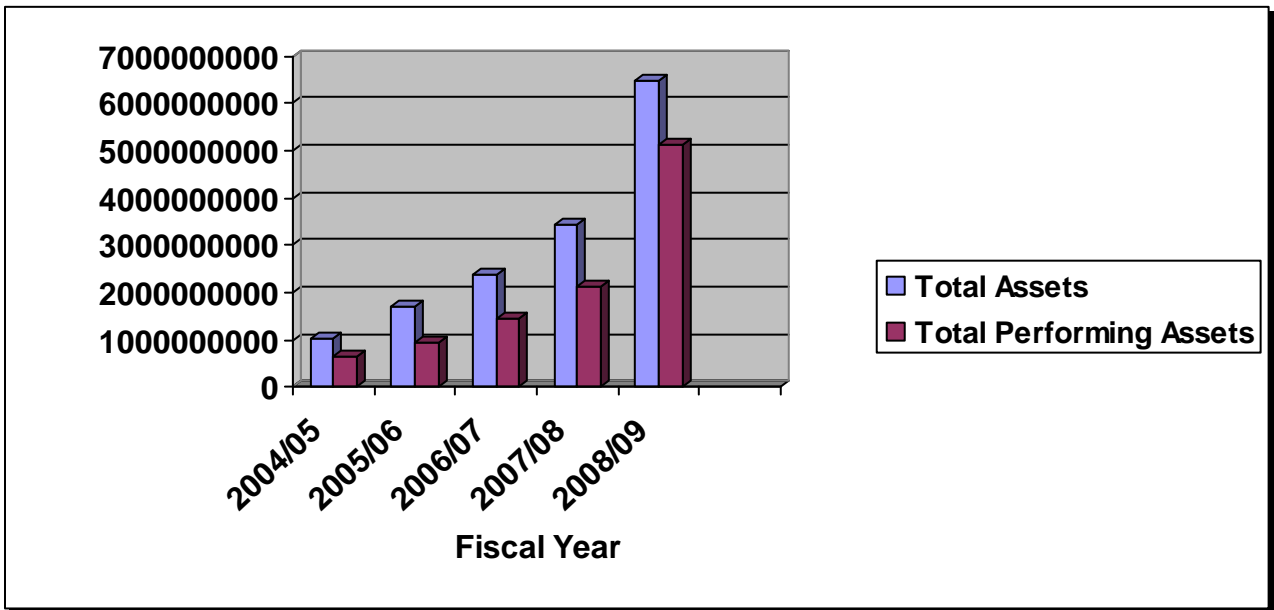
Table 4.1

Total assets and Total Performing Loan of KBL

S.N.	Particulars	2004/05	2005/06	2006/07	2007/08	2008/09
1.	Total Assets	1023435674	1688747183	2,399,857,094	3,448,634,251	6,456,460,820
2.	Total Performing Assets	667829467	9322645013	1,464,766,122	2,115,804,974	5,110,362,471

(Source: Annual Report of Kumari Bank Limited.)

Figure 4.1
Total Assets and Performing Asset of KBL



Total assets include sum of all the items at the assets side of balance sheet as it is mentioned in the introduction of balance-sheet items in the course of literature review. The figure of total assets was Rs 1023435674 in 2004/05, Rs 1688747183 in 2005/06, Rs. 2,399,857,094.00 at the end of fiscal year 2006/07 which increased to Rs. 344, 863, 4251.00 at the end of fiscal year 2007/08 and Rs. 6,456,460,820.00 at the end of fiscal year 2008/09.

The performing loans comprise those loans, which are not overdue, or they are earning in cash. At the end of fiscal year 2004/05, the total performing loan of Nepal Investment Bank Limited was Rs 667829467, Rs 93226450 in 2005/06, Rs. 1,464,766,122.00, I 2006/07 which increased to Rs. 2,115,804,974.00 in fiscal year 2007/08, and Rs. 5,110,362,471.00 at the end of fiscal year 2008/09.

Table 4.2

Percentage of Performing Loan to Total Assets

Fiscal Year	Total Assets	Performing Loan	% of Pass Loan to Total Assets
2004/05	1023435674	667829467	65.25
2005/06	1688747183	932645013	55.26
2006/07	2,399,857,094	1,464,766,122	61.04
2007/08	3,448,634,251	2,115,804,974	61.35
2008/09	6,456,460,820	5,110,362,471	79.15

(Source: Annual Report of Kumari Bank Limited)

The entire loan overdue for more than 3 months to 1 year falls in the class of Non-performing Assets. This covers substandard loan, doubtful loan and bad as well. The total figure of total Non-performing Assets was Rs 45346364 at the end of 2004/05, Rs 38287975 in 2005/06, it was Rs. 31,098,986.00 at the end of fiscal year 2006/07. The total NPAs figure was Rs. 24,983,046.00 at the end of fiscal year 2007/08 and Rs. 19,860,891.00 at the end of fiscal year 2008/09.

The entire loan, which is overdue for more than 3 months to 6 months, falls in this category. The amount of such loan was Rs 123425326 at the end of 2004/05, Rs 8253612 in 2005/06, it was Rs. 6,052,732.00 at the end of fiscal year 2006/07. It declined to Rs. 843,817.00 at the end of fiscal year 2007/08 and Rs. 2,113,042.00 at the end of fiscal year 2008/09.

The loan, which is overdue for more than 6 months to one year, falls in this class. The amount of such loan was Rs 33678286 in 2004/05, Rs 25234679 in 2005/06, Rs. 19,014,889.00 at the end of fiscal year 2006/07. It increased to 3,656,287.00 at the end of fiscal year 2007/08 and decreased to 1,178,854.00 at the end of fiscal year 2008/09.

The entire loan overdue for more than one year falls in the category of bad loan. The figure of such loan was Rs 10425546 in 2004/05, Rs 9799648 in 2005/06, was Rs. 6,031,364.00 in the fiscal year 2006/07. It increased to Rs. 20,482,941.00 at the end of fiscal year 2007/08 and Rs. 16,568,994.00 at the end of fiscal year 2008/09.

Table 4.3
The percentages of substandard loan, Doubtful loan and Bad Loan to Total NPA

Fiscal Year	% of Substandard loan to NPA	% of Doubtful loan to NPA	% of Bad loan to total NPA
2004/05	27.40	74.27	23
2005/06	21.56	65.91	12.54
2006/07	19.46	61.14	19.40
2007/08	3.38	14.64	81.99
2008/09	10.63	5.94	83.43

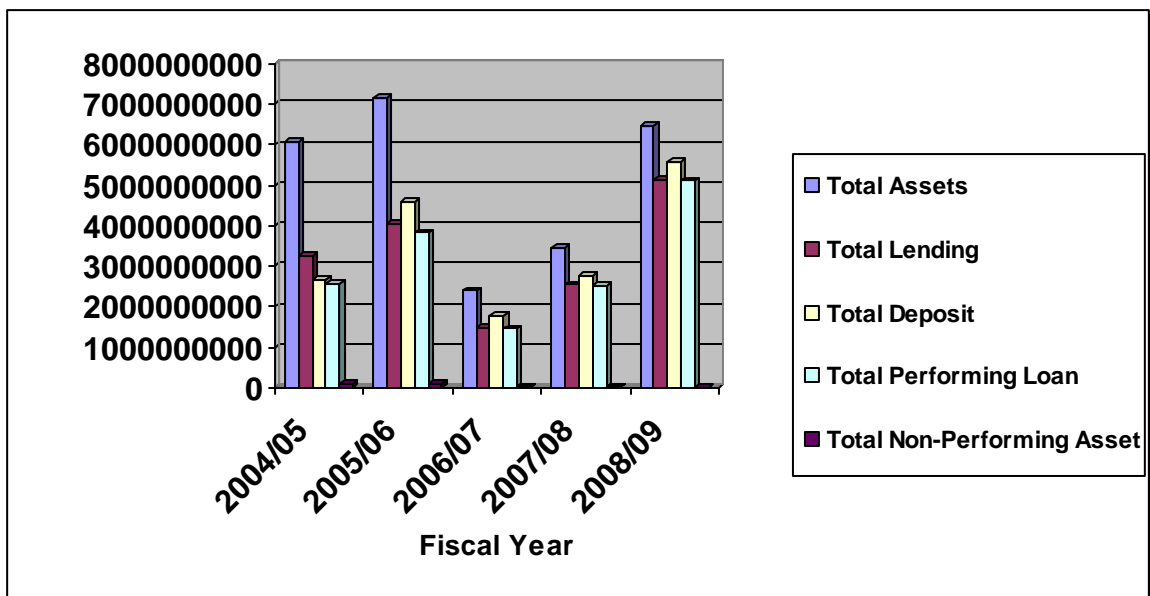
The percentage of sub-standard loan to total NPA was 27.40% at the end of 2004/05, 21.56% in 2005/06, 19.46 % at the end of fiscal year 2005/06. It increased to 3.38 % at the end of fiscal year 2007/08 and 10.63 % at the end of fiscal year 2008/09. This position indicates the satisfactory recovery of loan.

The percentage of doubtful loan to total NPA at the end fiscal year 2004/05 was 74.27%, 65.91% in 2005/06, it was 2006/07 was 61.14 %. It found to be reduced to 14.64 % at the end of fiscal year 2007/08 and 5.94% at the end of fiscal year 2008/09. The decreasing trend of portion of the doubtful loan of the bank shows the satisfactory recovery position of doubtful loan.

The percentage of bad loan to total NPA was 23 in 2004/05, 12.54 in 2005/06, 19.40 % at the end of fiscal year 2006/07. It increased to 81.99 % at the end of fiscal year 2007/08 and 81.43% at the end of fiscal year 2008/09. Though nominal, the increasing trend of bad loan to total NPA alarms that there may raise high credit risk of the bank. So the bank has to be conscious of getting steps towards the timely recovery of loan.

Diagram 4.3

Total Assets, Total Lending, Total Deposit, Total Performing Loan and Total NPA



The total assets include sum of all items at the assets side of balance sheet of bank. The figure of total assets of KBL was Rs 1023435674 at the end of year 2004/05, Rs 1688747183 in 2005/06, which was Rs. 2,399,857,094.00 at the end of fiscal year 2006/07 which increased to Rs. 3,448,634,251.00 at the end of fiscal year 2007/08 and Rs. 6,456,460,820.00 at the end of fiscal year 2008/09.

The total lending includes the entire loan and advances and bills purchased and discounted by the bank. The figure of total lending was Rs 836792045 in 2004/05, Rs

1826521849 in 2005/06, which was Rs. 1,492,865,108.00 at the end of fiscal year 2006/07 and it increased to Rs. 2,540,788,021.00 at the end of fiscal year 2007/08 and Rs. 5,130,223,362.00 at the end of fiscal year 2008/09.

The percentage of performing loan to total lending at the end of fiscal year 2004/05 was 65.25%, in year 2005/06 was 55.22, which was 97.92% in 2006/07. It increased to 99.02% at the end of fiscal year 2007/08 and 99.61 % at the end of fiscal year 2008/09.

The percentage of performing loan to total deposits at the end of fiscal year 74.47 % in 2004/05, 90.85% in 2005/06, it was 82.35% in 2006/07. It increased to 76.81 % at the end of fiscal year 2007/08 and 91.47% at the end of fiscal year 2008/09.

The percentage of NPAs to total assets was 4.4% in 2058/60, 2.27% in 2005/06, 1.30 % at the end fiscal year 2006/07. It reduced to 0.72% at the end of fiscal year 2007/08 and remained unchanged 0.31% at the end of fiscal year 2008/09.

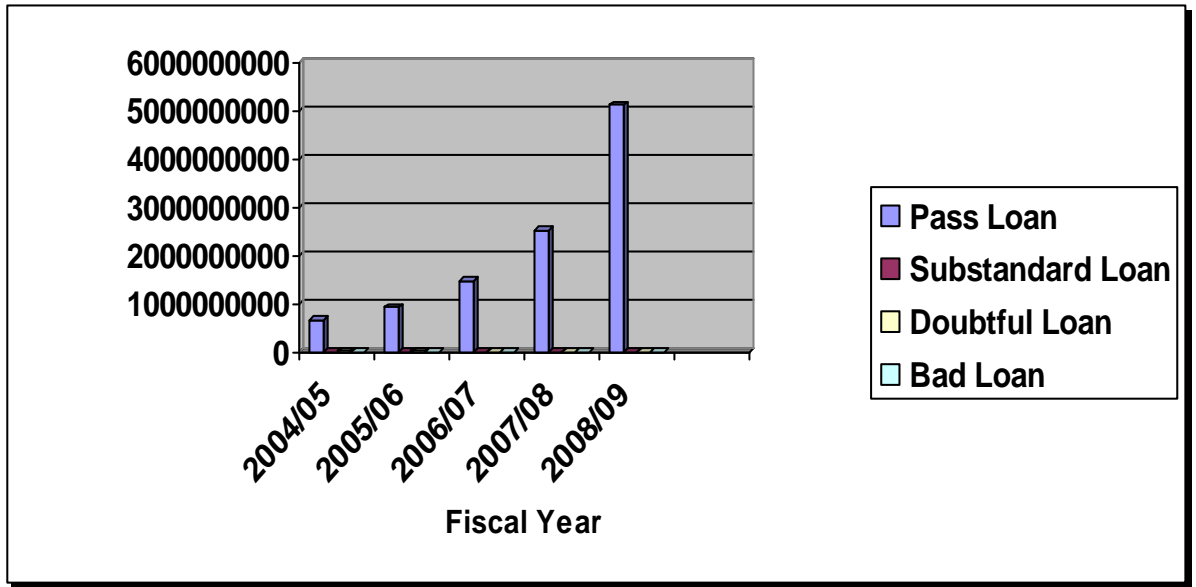
The percentage of NPA to total lending was 5.06% in 2004/05, 3.73% in 2005/06, 2.08% at the end of fiscal year 2006/07. It declined to 0.99% at the end of fiscal year 2007/08 and 0.39% at the end of fiscal year 2008/09.

The percentage of NPA to total deposits at the end of fiscal year 2004/05 was 4.68%, in 2005/06 was 3.34%, in 2006/07 was 1.75%. It remained 0.91% at the end of fiscal year 2007/08 and 0.36% at the end of fiscal year 2008/09.

Table 4.4
Loan Classification of KBL

Types of loan	Outstanding loan amount				
	2004/05	2005/06	2006/07	2007/08	2008/09
Pass loan	667829467	93264501	1,464,766,122	2,515,804,974	5,110,362,471
Substandard Loan	12425326	8253612	6,052,732	843,817	2,113,042
Doubtful loan	33678286	25234679	19,014,889	3,656,287	1,178,854
Bad loan	10425546	4799684	6,031,364	20,482,941	16,568,994

Diagram 4.4
Pass Loan, Substandard Loan, Doubtful Loan and Bad Loan



The pass loan or the loan non-overdue and/or overdue for three months falls in this class. Such loan amount was Rs 667829467 in 2004/05, Rs 93264501 In 2005/06, Rs. 1,464,766,122.00 at the end of fiscal year 2006/07. The loan in this category increased to 2,515,804,974.00 at the end of fiscal year 2007/08 and 5,110,362,471.00 at the end of fiscal year 2008/09.

The loan overdue for three months to six months falls in this class. Such loan in KBL at the end of fiscal year 2004/05 was 12425326, Rs 8253612 in 2005/06. It was Rs. 6,052,732.00 in 2006/07. This figure decreased to 843,817.00 at the end of fiscal year 2007/08 and Rs. 2,113,042.00 at the end of fiscal year 2008/09.

The loan overdue for 6 months to 1 year falls in this class. The amount of such loan in KBL at the end of fiscal year 2006/07 was Rs. 19,014,889.00. This figure increased to Rs. 3,656,287.00 at the end of fiscal year 2007/08 and decreased to Rs. 1,178,854.00 at the end of fiscal year 2008/09.

The loan overdue for more than 1 year falls in this class. The amount of such loan in KBL at the end of fiscal year 2006/07 was Rs. 6,031,364.00. This figure increased to Rs. 20,482,941.00 at the end of fiscal year 2007/08 and Rs. 16,568,994.00 at the end of fiscal year 2008/09. The increment of bad loan to total loan as well as NPA doesn't signify good repayment of disbursed loan, which has burden of more loss in cash for the bank.

Loan Loss provisioning of KBL

The amount of provisioning for pass loan or overdue up to three months loan falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for pass loan is 1% of the total loan in this class. The amount of provisioning for such loan was Rs. 14,647,661.00 at the end of fiscal year 2006/07. This covers 1 percent of total pass loan, which has maintained the required percentage.

Similarly, the amount of provisioning for pass loan at the end of fiscal year 2007/08 was Rs. 25,158,049.00 which covers the 1 percentage of total loans in this class and Rs. 51,103,624 at the end of fiscal year 2008/09, which also covers the 1 percent of

total loan in this class. It shows that there is compliance with the regulation issued by NRB.

The amount of provisioning for substandard or overdue loan for more than three months up to six months falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 25% of the total loan in the same class. The total loan in this class was Rs. 1,513,183.00 at the end of fiscal year 2006/07. This figure increased to Rs. 210,954.00 at the end fiscal year 2007/08 and Rs. 528,260.00 at the end of fiscal year 2008/09. The figure in the both fiscal years covers 25 percent of total loan in the class. It shows that the bank has compliance with the directive issued by NRB.

The amount of provisioning for doubtful or overdue loan for more than six months up to 1 year falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 50% of the total loan in the same class. The amount if provisioning for doubtful loan at the end of fiscal year 2006/07 was Rs. 9,507,444.00, which is 50 percent of the total loan in this class. Similarly, the amount of provisioning at the end of fiscal year 2007/08 was Rs. 1,828,143.00 and Rs. 589,427.00 at the end of fiscal year 2008/09. The provisioning in the both fiscal years covers 50 percent of total loan in this class. Therefore there is enough provisioning as per the directives issued by NRB.

The amount of provisioning for bad or overdue loan for more than 1 year falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 100% of the total loan in the same class. The amount of provisioning at the end of fiscal year in this class loan was Rs. 6,031,364.00 or 100 percent of the total loan in this class. Similarly, the provisioning of such loan at the end of fiscal year 2007/08 was Rs. 20,482,941.00 and Rs. 16,568,994.00 at the end of fiscal year 2008/09 which

covered 100 percent of total loan in this class. It shows that the bank has followed the directives issued by NRB.

The overall provisioning for NPA of NIBL shows that there is compliance to the prudential regulation issued by NRB. This further indicates that the bank's financial transaction is running in sound and healthy manner till the date of study.

4.3 Data Presentation and analysis of NIBL

Nepal Investment Bank Limited, a joint venture bank with Punjab National Bank, India is a reputed commercial bank in the banking industry of Nepal. It has completed its successful 12 years of continuous service in the country. In this chapter, data from the various sources of the bank are presented and analyzed. Data collected from various sources are presented in the following table in accordance to the nature of data and as per the requirement of the study as follows:

4.3.1 Total Assets and Performing Loan of Nepal Investment Bank Limited

Table 4.5

Total assets and Total Performing Asset of Nepal Investment Bank Limited.

S.N.	Particulars	2004/05	2005/06	2006/07	2007/08	2008/09
1.	Total Assets	6053247125	7142318215	8052209125	9608570861	11792126009
2.	Total Performing Assets	2565172336	3828281125	4938390206	5991085718	7771282526

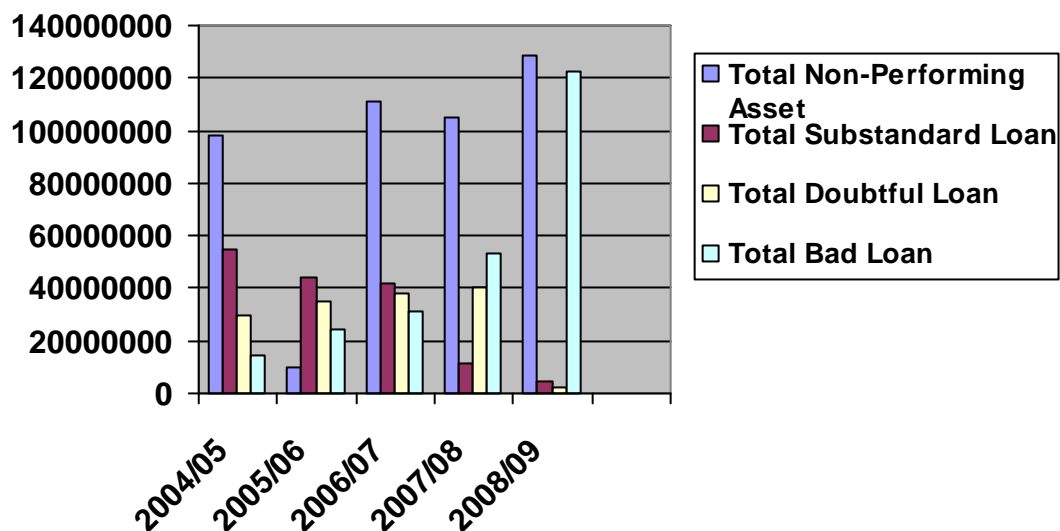
(Source: Annual Report of Nepal Investment Bank Limited.)

Total assets include sum of all the items at the assets side of balance sheet as it is mentioned in the introduction of balance-sheet items in the course of literature review. The figure of total assets was Rs6,05,32,47,125 at the end of year2004/05,Rs2,56,51,72,336i year 2005/06, Rs. 8,052,209,125.00 at the end of fiscal

year 20561/62 which increased to Rs. 9,608,570,861.00 at the end of fiscal year 2007/08 and Rs. 11,792,126,009.00 at the end of fiscal year 2008/09.

The performing loans comprise the loans, which are not overdue or earning in cash. At the end of fiscal year 2004/05 , the total performing loan of Nepal Investment Bank Limited was Rs6,05,32,47,125, Rs7,14,23,18,215 in fiscal year 2005/06, Rs. 4,938,390,206.00 in fiscal year 2006/07, which increased to Rs. 5,991,085,718.00 in fiscal year 2008/09, and Rs. 7,771,282,526.00 at the end of fiscal year 2008/09.

Figure 4.5
The diagram of Total NPA, Substandard Loan,
Doubtful Loan and Bad Loan of NIBL



The entire loan overdue for more than 3 months to 1 year falls in the category of Non-performing Assets. This covers substandard loan, doubtful loan and bad as well. The total figure of total Non-performing Assets was Rs 6053247125 at the end of fiscal year 2004/05, Rs 7142318215 in year 2005/06, Rs. 111,191,103.00 at the end of fiscal year 2006/07. The total NPA figure was Rs. 104,755,369.00 at the end of fiscal year 2007/08 and Rs. 128,807,745.00 at the end of fiscal year 2008/09.

The entire loan, which is overdue for more than 3 months to 6 months, falls in this category. The amount of such loan was Rs. 41,954,709.00 at the end of fiscal year 2006/07. It declined to Rs. 11,082,572.00 at the end of fiscal year 2007/08 and Rs. 4,408,738.00 at the end of fiscal year 2008/09.

The loan, which is overdue for more than 6 months to one year, falls in this category. The amount of such loan was Rs.38, 055,772 at the end of fiscal year 2006/07. It increased to 40,494,733 at the end of fiscal year 2007/08 and decreased to 1,977,471 at the end of fiscal year 2008/09.

The entire loan overdue for more than one year falls in the category of bad loan. The figure of such loan was Rs.31, 180,622 in the fiscal year 2005/06. It increased to Rs. 53,178,064 at the end of fiscal year 2006/07 and Rs. 122,421,536 at the end of fiscal year 2008/09. The increasing trend of bad loan of the bank doesn't show that the return in cash of the bank is not sound enough in the recent years.

Table 4.6

The percentage of substandard loan, Doubtful loan and Bad Loan to Total NPA of NIBL

S.N.	Fiscal Year	% of Substandard loan to NPA	% of Doubtful loan to NPA	% of Bad loan to total NPA
1	2004/05	55.64	29.84	14.52
2	2005/06	42.47	34.60	23.47
3	2006/07	37.73	34.23	28.04
4	2007/08	10.58	38.66	50.76
5	2008/09	3.42	1.54	95.04

(Source: Annual Report of Nepal Investment Bank Limited)

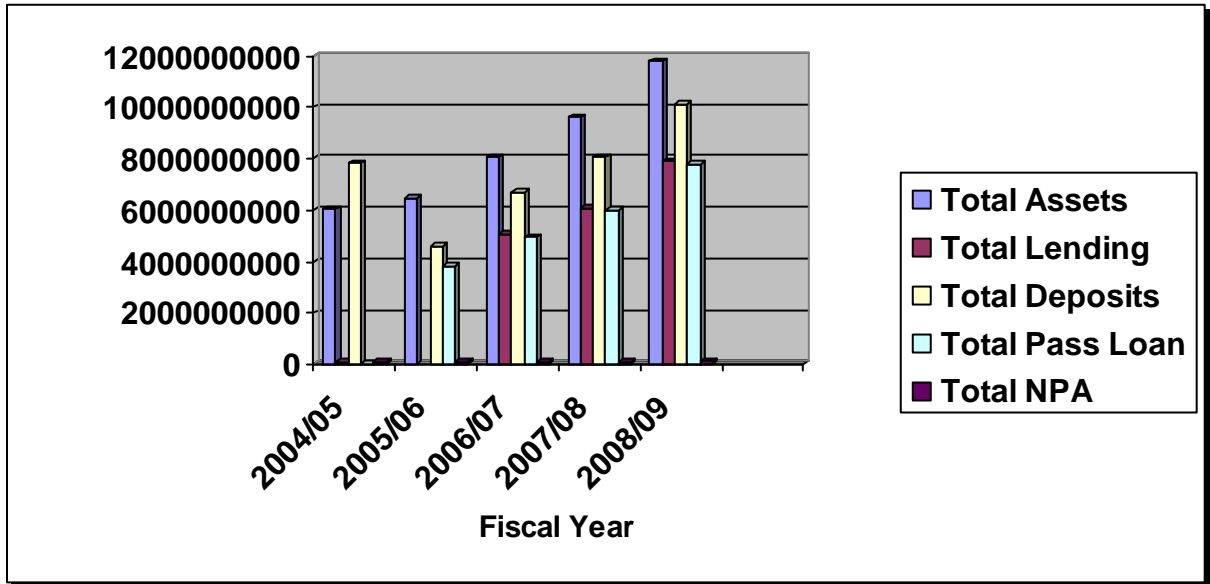
The percentage of sub-standard loan to total NPA was 55.64% at the end of year 2004/05, 42.47% in 2005/06, 37.73 % at the end of fiscal year 2005/06. It reduced to 10.58% at the end of fiscal year 2007/08 and 3.42% at the end of fiscal year 2008/09. This position indicates the satisfactory recovery of loan.

The percentage of doubtful loan to total NPA at the end fiscal year 2004/05 was 29.84; 34.06 in 2005/06, in year 2006/07 was 34.23%. It found to be reduced to 38.66% at the end of fiscal year 2007/08 and 1.54% at the end of fiscal year 2008/09. The decreasing trend of portion of the doubtful loan of the bank in the latest year shows the satisfactory recovery position of doubtful loan.

The percentage of bad loan to total NPA was 28.04% at the end of fiscal year 2005/06. It increased to 50.76 % at the end of fiscal year 2006/07 and 95.04% at the end of fiscal year 2008/09. The trend of increasing tend of bad loan to total NPAs alarms that there may raise credit risk of the bank. So the bank has to be conscious of getting steps towards the timely recovery of loan.

Diagram 4.6

The Total Assets, Total deposit, Total Lending, Total Performing Loan and Total Non-performing Assets



The figure of total assets was Rs 6,05,32,47,125 at the end of 2004/05, Rs 7,14,23,18,215 in 2005/06 Rs. 8,05,2,209,125.00 at the end of fiscal year 2006/07 which increased to Rs. 9,608,570,861.00 at the end of fiscal year 2007/08 and Rs. 11,792,126,009.00 at the end of fiscal year 2008/09.

The figure of total lending was Rs 3,24,73,45,672 at the end of year 2004/05, Rs 4,05,8692,312 in year 2005/06, Rs. 5,069,581,309.00 at the end of fiscal year 20561/62 and it increased to Rs. 6,095,841,087.00 at the end of fiscal year 2007/08 and Rs. 7,900,090,271.00 at the end of fiscal year 2008/09.

The figure of total deposits at the end of fiscal year 2004/05 was Rs 2,67,48,64,250, Rs 4,58,57,53,150 in 2005/06, in fiscal year 2006/07 was Rs. 6,694,963,060.00, which increased to Rs. 8,063,902,086.00 at the end of fiscal year 2007/08 and Rs. 10,097,690,989.00 at the end of fiscal year 2008/09.

Lending (Source: Annual Report of Nepal Investment Bank Limited)

The percentage of performing to total loan to total lending at the end of fiscal year 2004/05 was 42.38%, which was 53.6% in 2005/06, in year 2006/07 was 97.78%. It increased to 98.28% at the end of fiscal year 2007/08 and 98.37 % and 98.37 % at the end of fiscal year 2008/09.

The percentage of performing loan to total deposits at the end of fiscal year 2004/05 was 78.99%, in 2005/06 was 94.32%, in 2006/07 was 73.76%. It increased to 74.29% at the end of fiscal year 2007/08 and 76.96% at the end of fiscal year 2008/09.

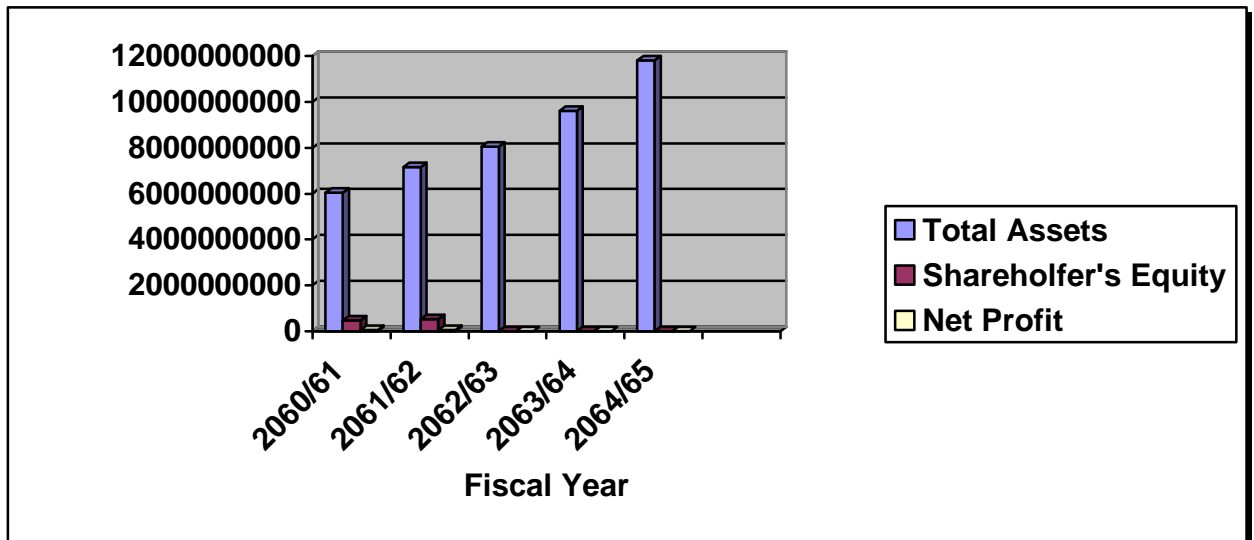
The percentage of NPAs to total assets was 1.38 % at the end fiscal year 2005/06. It reduced to 1.09% at the end of fiscal year 2007/08 and remained unchanged 1.09% at the end of fiscal year 2008/09.

The percentage of NPAs to total lending was 2.20% at the end of fiscal year 2006/07. It declined to 1.72% at the end of fiscal year 2007/08 and 1.63% at the end of fiscal year 2008/09.

The percentage of NPAs to total deposits at the end of fiscal year 2006/07 was 1.66%. It remained 1.29% at the end of fiscal year 2006/07 and 1.28% at the end of fiscal year 2008/09.

Diagram 4.7

The diagram of Total Assets, Shareholder's Equity and net Profit of NIBL



Total assets are all the sum of the items on the assets side of balance sheet. The amount of total assets was Rs 603247125 at the ed of 2004/05, Rs 7142318215 in 2005/06, Rs. 8,052,209,125.00 at the end of fiscal year 2006/07. This amount increased to Rs. 9,608,570,861.00 at the end of fiscal year 2006/07 and reached to Rs. 11,792,126,009.00 at the end of fiscal year 2008/09.

The amount of shareholder's equity was Rs 402742846 at the end of year 2004/05, Rs 462724746 in year 2005/06 it has remained the same, Rs. 612,824,701.00 at the end of fiscal year 2006/07. This figure reached to Rs. 143,566,683.00 at the end of fiscal year 2007/08 and Rs.769, 617,365.00 at the end of fiscal year 2008/09.

The net profit after tax was Rs 10367846 at the end of 2004/05, 13406576 in year 2005/06, Rs.94, 180,428.00 at the end of fiscal year 2006/07. This amount reached to Rs. 143,566,683.00 at the end of fiscal year 2007/08 and Rs. 170,807,797.00 at the end of fiscal year 2008/09. The increasing trend of net profit after tax in the recent years indicates that the earning of the bank is encouraging.

The ROA of NIBL was 1.03 percent at the end of 2004/05, 0.8 percent in 2005/06, 1.17 percent in the fiscal year 2006/07. It was found 1.49 percent in the fiscal year 2007/08 and 1.45 in the fiscal year 2008/09.

The ROE was 2.57 percent at the end of 2004/05, 3.33 percent at the end of 2005/06, 15.36 percent in the fiscal year 2006/07. It was 21.10 percent and 22.19 percent in the fiscal year 2007/08 and 2008/09 respectively.

4.3.5 Loan Classification and Loan Loss provisioning of NIBL

The higher level of the Non-performing Assets causes the larger amount of provisioning of loan loss. As per the directives issued by Nepal Rastra Bank to commercial banks and financial institutions, certain percent of provision has to be maintained against each category of loan. The loan loss-provisioning amount has to be maintained from the operational profit of a bank. So it is necessary to keep the lower level of NPAs in order to avoid the higher loss on cash for the banks. If a bank fails to maintain the loan loss provisioning as prescribed by Nepal Rastra Bank, the bank is under moral suasion or other necessary action to be taken. The loan loss provisioning maintained by Nepal Investment Bank during the study period is presented in the following table.

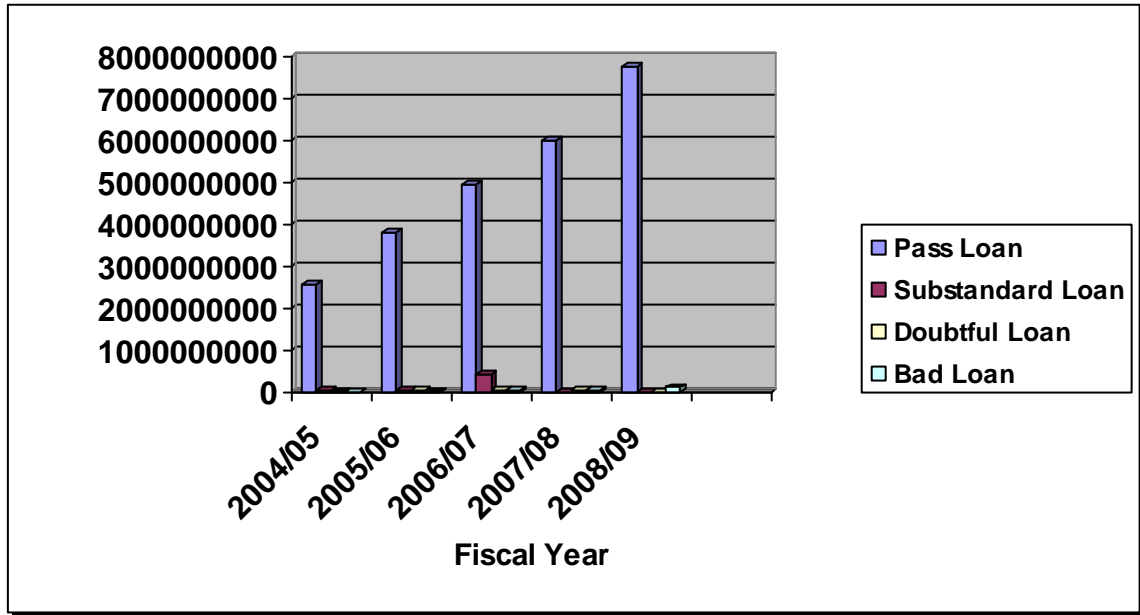
Table 4.17
Loan Classification of Nepal Investment Bank Limited

Types of loan	Outstanding loan amount				
	2004/05	2005/06	2006/07	2007/08	2008/09
Pass loan	2565172336	3828281125	4,938,390,206.00	5,991,085,718.00	7,771,282,526.00
Substandard Loan	54728132	43846304	41,954,709.00	11,082,572.00	4,408,738.00
Doubtful loan	29346428	35167032	38,055,772.00	40,494,733.00	1,977,471.00
Bad loan	14282161	24229920	31,180,622.00	53,178,064.00	122,421,536.00

(Source: Annual Report of Nepal Investment Bank Limited)

Diagram 4.8

The Diagram of Loan Classification of Nepal Investment Bank Limited



The pass loan or the loan non-overdue and/or overdue for three months falls in this category. Such loan amount was Rs 2565172336 at the end of year 2004/05, rs 3828282225 in 2005/06, Rs. 4,938,390,206.00 at the end of fiscal year 2006/07. The loan in this category increased to 5,991,085,718.00 at the end of fiscal year 2007/08 and 7,771,282,526.00 at the end of fiscal year 2008/09. The portion of pass loan is significantly high in the recent years which show that the bank's loan quality is not volatile.

The loan overdue for three months to six months falls in this category. Such loan in Nepal Investment Bank at the end of fiscal year 2004/05 was Rs 54728132. Rs 43846304 in year 2005/06. It was Rs.41, 954,709.00 in year 2006/07. This figure decreased to 11,082,572.00 at the end of fiscal year 2007/08 and Rs. 4,408,738.00 at the end of fiscal year 2008/09. The decreasing trend of substandard loan of the bank shows that the portion of the overdue loan is reduced in recent years. It means the loan quality of the bank is satisfactory.

The loan overdue for 6 months to 1 year falls in this category. The amount of such loan in Nepal Investment Bank at the end of fiscal year 2004/05 was Rs 29346428, Rs 35167032 in 2005/06, it was Rs. 38,055,772.00 at the end of 2006/07. This figure increased to Rs. 40,494,733.00 at the end of fiscal year 2007/08 and decreased to Rs. 1,977,471.00 at the end of fiscal year 2008/09.

The loan overdue for more than 1 year falls in this category. The amount of such loan in Nepal Investment Bank at the end of fiscal year 2004/05 14282161, in year 2005/06 was Rs 24229920, it was Rs. 31,180,622.00 in year 2005/06. This figure increased to Rs. 53,178,064.00 at the end of fiscal year 2007/08 and Rs. 122,421,536.00 at the end of fiscal year 2008/09. The increment of bad loan to total loan as well as NPA doesn't signify good repayment of disbursed loan, which has chances of more loss in cash for the bank.

Loan Loss provisioning of Nepal Investment Bank Limited.

The provisioning for pass loan or overdue up to three months loan falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for pass loan is 1% of the total loan in this class. The amount of such provisioning was Rs. 80,423,477.00 at the end of fiscal year 2006/07. This covers 1.63 percent of total pass loan which has maintained the required percentage.

Similarly, the provisioning for pass loan at the end of fiscal year 2007/08 was Rs. 135,522,405.00 which covers the 2.26 percentage of total loan in this class and at the end of fiscal year 2008/09 such loan was Rs. 112,264,660.00 which carries 1.44 percent provisioning of the total loan in this class. It shows that the bank has maintained the provisioning as per the directives issued by NRB.

The provisioning for substandard or overdue loan for more than three months up to six months falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 25% of the total loan in the same class. The total loan in this class was Rs. 10488,677.00 at the end of fiscal year 2006/07. This figure increased to Rs. 2,770,643 .00 at the end fiscal year 2007/08 and Rs 110,284 at the end of fiscal year 2008/09. The figure in the both fiscal year cover 25 percent of total loan in the class. It shows that the bank has maintained provisioning as per the directive issued by NRB for this class loan as well.

The provisioning for doubtful or overdue loan for more than six months up to 1 year falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 50% of the total loan in the same class. The amount if provisioning for doubtful loan at the end of fiscal year 2006/07 was Rs. 19,027,886.00, which is 50 percent of the total loan in this class. Similarly, the amount of provisioning at the end of fiscal year 2007/08 was Rs. 20247,366.00 and Rs. 988,735.00 at the end of fiscal year 2008/09. The provisioning in the both year cover 50 percent of total loan in this class. The bank has enough provisioning as per the directives issued by NRB.

The provisioning for bad or overdue loan for more than 1 year falls in this class. As per the directives of NRB issued to Banks and financial institutions licensed by NRB, the percentage of provisioning required for this class loan is 100% of the total loan in the same class. The amount of provisioning at the end of fiscal year in this class loan was Rs. 31,180,622.00 or 100 percent of the total loan in this class. Similarly, the provisioning of such loan at the end of fiscal year 2007/08 was Rs. 53,178,064.00 and Rs.122, 421,536.00 at the end of fiscal year 2008/09 which covered 100 percent of total loan in this class. The provisioning for bad loan is enough and enough for each fiscal year and the bank has maintained the prudential regulation of NRB.

The over all loan loss provisioning of NIBL is as specified by NRB directives and it is in sound level which shows that there is no alarming signal of risk to the bank.

4.4 Comparative Study of Performing Asset and NPA of NIBL and KBL

Percentage of performing loans and NPA in total assets, total deposits and total lending of the bank represent the quality of assets of a particular bank. Higher the percentage of performing loan and lower percentage of NPA indicate the higher quality of banks performance and vice-versa. Therefore, this comparative study is made for comparison of the performing and NPA of NIBL and KBL.

4.4.1 Performing Assets and NPA of NIBL and KBL up to Fiscal Year 2006/07 to 2008/09

Table 4.18

Performing Assets and NPA of NIBL up to Fiscal Year 2006/07 to 2008/09

S.N.	Particulars	2006/07	2007/08	2008/09
1.	Percentage of Performing Assets/Total Assets	61.33	62.35	65.90
2.	Percentage of Performing Asset/Total Deposits	73.76	74.29	76.96
3.	Percentage of Performing Asset/Total Lending	97.78	98.28	98.37
4.	Percentage of NPA/Total Assets	1.38	1.09	1.09
5.	Percentage of NPA/Total Deposits	1.66	1.29	1.28
6.	Percentage of NPA/Total Lending	2.20	1.72	1.63

(Source: Annual report of the Banks)

Table 4.19

Performing Assets and NPA of KBL up to Fiscal Year 2006/07 to 2008/09

S.N.	Particulars	2006/07	2007/08	2008/09
1.	Percentage of Performing Assets/Total Assets	61.04	61.35	79.15
2.	Percentage of Performing Asset/Total Deposits	82.35	76.81	91.47
3.	Percentage of Performing Asset/Total Lending	97.92	98.00	99.61
4.	Percentage of NPA/Total Assets	1.30	0.72	0.31
5.	Percentage of NPA/Total Deposits	1.75	0.91	0.36
6.	Percentage of NPA/Total Lending	2.08	61.35	0.39

(Source: Annual report of the Banks)

The above table shows the percentage of performing assets or loan and NPA to total assets, total deposits and lending of NIBL and KBL as of end fiscal year 2006/07.

At the end of fiscal year 2006/07, the percentage of performing loan to total assets of NIBL and KBL are 61.33 and 61.04 percent respectively. We can judge that the ratio of performing loan to total assets is quite similar to the both of the bank. It means that both of the banks have slight similarity in the management of loan and advances.

The percentage of performing loan to total deposit of NIBL and KBL as of fiscal year 2006/07 end were 73.76 percent and 82.35 percent respectively. KBL has higher ratio of performing loan to total deposit as compared to that of Nepal Investment Bank Limited. The higher ratio of performing loan to total deposit signifies that there is less chance of default the credit as well as public deposit.

The percentage of Performing Loan to total lending of NIBL and KBL, as of fiscal year 2006/07 end were 97.78 percent and 97.92 percent respectively. Though this ratio is quite similar in both of the banks, KBL has marginally higher ratio. Mainly performing loan is concerned with the lending and higher ratio of performing loan to total lending signifies that there is good recovery of the loan and advances. Since both of the banks have nearly 100 percent ratio of performing loan to total lending, there is least risk of default till the date of study.

The percentage of NPA to total assets of NIBL was 1.38 percent at the end of fiscal year 2006/07. This ratio was 1.30 percent in the case of KBL in the same period. The ratio NPA to total assets of both banks was similar but slightly higher in NIBL as compared to that of KBL. The higher ratio signifies higher chance of default. Since both banks have nearly 1 percent ratio of NPA to total assets, there is least chance of credit default.

The percentage of NPA to total deposit of NIBL and KBL were 1.66 percent and 1.75 percent, as of end fiscal year 2006/07 respectively. There is similarity in the ratio of both banks, but slightly higher in NIBL as compared to the KBL. The low ratio of NPA to total deposit in both banks signifies that there is least chance of default in payment to the depositors as well as credit repayment.

The percentage of NPA to total lending of NIBL as of end fiscal year 2006/07 was 2.20 percent. This ratio was 2.08 in the case of KBL as of end 2006/07. Since both banks have 1 digit low level of NPA to total lending, they are within the prudent level as per the international banking practice. It means there is least chance of credit default till the date of study.

The table shows the percentage of performing loan and NPA to total assets, total deposits and lending of NIBL and KBL as of end fiscal year 2007/08.

At the end of fiscal year 2007/08, the percentage of performing loan to total assets of NIBL and KBL are 62.35 and 61.35 percent respectively. We can judge that the ratio of performing loan to total assets is quite similar to the both of the banks. It means both of the banks have slight similarity in the management of loan and advances in this period.

The percentage of performing loan to total deposit of NIBL and KBL as of fiscal year 2007/08 end were 74.29 percent and 76.81 percent respectively. NIBL has higher ratio of performing loan to total deposit as compared to that of KBL. The higher ratio of performing loan to total deposit signifies that there is less chance of default the credit as well as public deposit. Between the two banks the management of the loan and advances seem similar.

The percentage of Performing Loan to total lending of NIBL and KBL, as of fiscal year 2007/08 end were 98.28 percent and 98.00 percent respectively. Though this ratio is quite similar in both of the banks, NIBL has marginally higher ratio. Mainly performing loan is concerned with the lending and higher ratio of performing loan to total lending signifies that there is good recovery of the loan and advances. Since both of the banks have nearly 100 percent ratio of performing loan to total lending, there is least risk of default till the date of study.

The percentage of NPA to total assets of NIBL was 1.09 percent at the end of fiscal year 2007/08. This ratio was 0.72 percent in the case of KBL in the same period. The ratio of NPA to total assets is slightly higher in NIBL as compared to that of KBL. The higher ratio signifies higher chance of default but it is not so alarming. Since both banks have nearly 1 percent ratio of NPA to total assets, there is least chance of credit default as found till the date of study.

The percentage of NPA to total deposit of NIBL and KBL are 1.29 percent and 0.91 percent, as of end fiscal year 2007/08 respectively. The ratio of NIBL is slightly higher compared to KBL. Even though, we judge that there is no significant difference in the management of NPA in between the two banks. The existence of low ratio of NPA to total deposit in both banks signifies that there is least chance of default in payment to the depositors as well as credit repayment.

The percentage of NPA to total lending of NIBL as of end fiscal year 2007/08 was 1.72 percent. This ratio was 0.98 in the case of KBL as of end 2062/623 The NIBL has 1 digit low level of NPA to total lending ratio while KBL has significantly low, i.e. below 1 percent ratio. Since both of the banks have below 5 percent ratio of NPA to total ending, they are within the prudent level as per the international banking practice. It means there is least chance of credit default till the date of study.

With the help of the above table, we know the percentage of performing and NPA to total assets, total deposits and lending of NIBL and KBL as of end fiscal year 2008/09.

The percentage of Performing Loan to total lending of NIBL and KBL 8/09, the percentage of performing loan to total assets of NIBL and KBL are 65.90 and 79.15 percent respectively. The ratio of performing loan to total assets in KBL is higher than that of NIBL. The higher ratio of performing loan to total assets shows the stronger position of outstanding loan and advances. It means KBL has better position of outstanding loan and advances compared to that of NIBL.

The percentage of performing loan to total deposit of NIBL and KBL as of fiscal year 2008/09 end were 76.96 percent and 91.47 percent respectively. KBL has higher ratio of performing loan to total deposit as compared to that of NIBL. The higher ratio of performing loan to total deposit signifies that there is less chance of default the credit as well as public deposit. Between the two banks the management of the loan

and advances seem somewhat better in KBL compared to NIBL till the date of study., as of fiscal year 2008/09 end were 98.37 percent and 99.61 percent respectively. Though this ratio is quite similar in both of the banks, KBL has marginally higher ratio. Mainly performing loan is concerned with the lending and higher ratio of performing loan to total lending signifies that there is good recovery of the loan and advances. Since both of the banks have nearly 100 percent ratio of performing loan to total lending, the management of loan and advances is better and there is least risk of default till the date of study.

The percentage of NPA to total assets of NIBL was 1.09 percent at the end of fiscal year 2008/09. This ratio was 0.31 percent in the case of KBL in the same period. The ratio of NPA to total assets is slightly higher in NIBL as compared to that of KBL. The higher ratio indicates higher chance of default. Since both banks have nearly 1 percent ratio of NPA to total assets, there is least chance of credit default as found till the date of study.

The percentage of NPA to total deposit of NIBL and KBL were 1.28 percent and 0.36 percent, as of end fiscal year 2008/09 respectively. The ratio of NIBL is slightly higher compared to KBL. Even though there is no significant difference in the management of NPA between the two banks. The existence of low ratio of NPA to total deposit in both banks indicates that there is least chance of default in payment to the depositors as well as credit repayment.

The percentage of NPA to total lending of NIBL as of end fiscal year 2008/09 was 1.63 percent. This ratio was 0.39 in the case of KBL as of end 2008/09 The NIBL has 1 digit low level of NPA to total lending ratio while KBL has significantly low, i.e. the ratio is below 1 percent. Since both of the banks have below 5 percent ratio of NPA to total Lending, the NPA of both banks are within the prudent level as per the international banking practice. It means there is least chance of credit default till the date of study.

The three years period study shows that position of the all bank's NPA is somewhat constant, which indicates that the loan management of both banks are consistent and adequately sound.

In the international banking practice the level of NPA below the 5 percent or one digit level is generally acceptable and identified to be in prudent level. Since the level of NPA in these two banks is below the 5 percent, around 1 percent, till the date of study, there is no risk of default. Good recovery of loan and advances and sound management of them can maintain the prudent level of NPA. So it is necessary to maintain the prudent level of NPA, i.e. NPA below 5 percent by all the banks for safety transaction and sound financial position of the bank and public deposit as well.

4.5 Correlation Analysis:

The correlation analysis is generally used to describe the degree to which one variable is related to another. In statistics it is used to depict the co-variance between two or more variables. In this study it helps to determine whether,

- i. A positive or negative relation exists,
- ii. The relation is significant or insignificant,
- iii. Establish cause and effect relation,

That means any relationship between NPA and ROA, ROE and also explains whether the relationship is significant or not. The NPA denotes percentage of Non-Performing Asset to total lending of the bank, which is also known as the level of NPA.

4.5.1. Correlation between NPA and ROA of NIBL and KBL

Table 4.22

Correlation Coefficient between NPA and ROA of NIBL and KBL

Banks	coefficient of correlation (r)	Relationship	coefficient of determination(r^2)	probable error (PE)	Insig/significant
NIBL	-0.996	Negative	0.992	0.5396	insignificant
KBL	-0.5	Negative	0.95	0.641	insignificant

The table 4.9.1 explains the relationship between level of Non-performing Asset to total lending (denoted here as NPA) and return on total assets ROA. The coefficient of correlation between NPA and ROA of NIBL and KBL are -0.99 and -0.5 respectively.

The table shows the similar type of correlation between the level of NPA and ROA of both banks. In case of NIBL, there is negative and high degree of correlation which is insignificant. On the other hand, KBL has negative and moderate degree of correlation which is insignificant as well.

Similarly, the coefficient of determination (r^2), of NIBL and KBL are 0.992 and 0.95 respectively. It means 99 percent and 95 percent of the total variation in ROA of NIBL and KBL has been explained by the NPA.

Since the number of observations is small in both banks, i.e. only for 5 years data is used, significance and insignificance relationship between NPA and ROA can not be concluded. But it can be clearly concluded from the analysis that the ROA is dependent on the level of NPA of the bank. It means that the NPA somehow determines the ROA.

In the case of NIBL, 99 percent of the ROA is determined by the level of NPA. Therefore, it will be better to reduce the level of NPA to get higher return in its total assets. On the other hand, 95 percent of ROA is determined by the level of NPA in KBL. Though the level of ROA determination by NPA is somewhat less than of NIBL in this bank, it is better to reduce the level of NPA to keep on getting higher return in its total assets.

In aggregate we can conclude that, the ROA is dependent upon the level of NPA. If a bank desires to increase its ROA, the bank should reduce its level of NPA to reasonable level. The negative correlation between NPA and ROA clearly indicates that the decrease in NPA will increase the ROA.

to total lending (denoted here as NPA) and ROE. The coefficient of correlation between NPA and ROE of NIBL and KBL during the period of study was -0.9543 and 0.8288 respectively.

The table shows the similar type of result in the correlation between the level of NPA and ROE. In case of NIBL, there is negative and high degree of correlation which is insignificant. In the same way, KBL also has negative and high degree of correlation which is insignificant as well.

In aggregate we can conclude that, the ROE is dependent upon the level of NPA. If a bank desires to increase its ROE, the bank should reduce its level of NPA to reasonable level. The negative correlation between NPA and ROE clearly indicates that the decrease in NPA will increase the ROE.

4.6 Major Findings:

- J The percentage of NPA to total assets of NIBL decreased at the end of fiscal year 2005/06 compared to that of fiscal year 2004/05. Again it is decreased at the end of fiscal year 2006/07 compared to year 2005/06. It remained in the same percentage at the end of fiscal year 2008/09. The percentage of NPA to total assets was 1.62 at the end of year 2004/05, 1.45 in 2005/06, 1.38 percent at the end of fiscal year 2006/07 while it reduced to 1.09 percent at the end of both fiscal years 2007/08 and 2008/09.

- J The level of NPA to total assets, total lending and total deposits of NIBL seems at acceptable level at the end of all fiscal years. That means the bank has good management of loan and advances that doesn't seem to be alarming to danger till the date of study.

- J Similarly the percentage of NPA to total lending of NIBL decreased at the end of fiscal year 2005/06 than of 2004/05, 2007/08 and 2008/09 compared to that of previous fiscal years. The NPA to total lending was 3.03 percent at the end of 2004/05, 2.54 percent in 2005/06, 2.20 percent at the end of fiscal year 2006/07 while it decreased to 1.72 percent and 1.63 percent at the end of fiscal years 2007/08 and 2008/09 respectively.

- J The percentage of NPA to total lending of KBL found to be decreasing during different fiscal years. It decreased at the end of each fiscal years compared to respective previous years. The NPA to total lending was 5.06 percent at the end of 2004/05, 3.72 percent in 2005/06, 2.08 percent at the end of fiscal year 2006/07 while it decreased to 0.98 percent at the end of fiscal year 2007/08 and further decreased to 0.39 percent at the end of fiscal year 2008/09.

- J The analysis concludes that till the date of study, both of the banks have followed the directives issued by NRB to bank and financial institutions. They have maintained prudential requirement of loan loss provision as per the directive of NRB. There is no violence of regulation and indicates that there is good management of loan and advance.

- J The percentage of NPA to total deposit of KBL decreased at the end of each fiscal years 2005/06, 2006/07,2007/08 and 2008/09 compared to that of previous fiscal years. The NPA to total deposit was 4.68 percent at the end of 2004/05, 3.34 percent in 2005/06, 1.75 percent at the end of fiscal year 2006/07 while it decreased to 0.91 and 0.36 percent at the end of fiscal years 2007/08 and 2008/09 respectively.

- J The level of NPA to total assets, total lending and total deposits of KBL seems at acceptable level at the end of all fiscal years. That means the bank has good management of loan and advances that doesn't seem to be alarming to danger till the date of study.

- J The result of correlation analysis concludes that ROA and return on equity ROE of the bank somehow depend upon the level NPA. The high degree of negative correlation between NPA and ROA as well as between NPA and ROE clearly indicates that there is inverse relation between NPA and ROA as well between NPA and ROE. It indicates that a bank should reduce its NPA to increase the ROA and ROE of the bank and vice-versa.

CHAPTER- V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Although this chapter is the important chapter for the research because this chapter is the extracts of all the previously discussed chapters. This chapter consists of mainly three parts: Summary, conclusion and recommendation. In summary part, revision or summary of all four chapters is made. In conclusion part, the result from the research is summed up and in recommendation part, suggestion and recommendation is made based on the result and experience of thesis. Recommendation is made for improving the present situation to the concerned parties as well as for further research.

5.1 Summary:

Although banking is a service, it has been a great business to the entrepreneurs in modern age. A commercial bank does the same business to earn profit by its transaction. Generally, commercial bank does the functioning pool between the saving communities and need group of the society. They accept deposit from the public on the condition that they pay the deposit on demand or on short notice. The banks mobilize the funds to different need group on their demand of loan. Apart from accepting deposit, banks are engaged in the exchanging currency, operating other commercial transactions viz. purchase and discount of bills other financial instruments. Among the many items of transactions of the bank, accepting deposit and lending or giving loan and advances occupy major space in its transaction. So bank's major concern is found to be concentrated on the loan.

The ancient history of banking dates back to Bank of Venice, Italy, in 1157 A.D. Till the modern age, there has been various types of banks, which carry out the banking transactions. The first commercial bank established in Nepal is Nepal Bank Limited,

30th Kartik, 1994. At present there are eighteen commercial banks carrying out their function in the country.

The asset of commercial banks indicates the manner in which the funds entrusted to the bank are employed. The successful working of the bank depends upon the ability of the management to distribute the fund among various kind investments: outstanding loan and advances, investment on shares, debentures and bonds, bill purchase and discount etc. make assets as a whole. Among them loan and advances are the most profitable assets of a bank. These assets constitute primary source of income to the bank. Being a profit making business institution, a bank aims at making huge profit. Since loan and advances disbursed against transparent and clear agreement of interest, they are the most profitable business to the banks which is not certain in case of investment on share and others instruments. So bank is always willing to invest on loan and advances as much as possible. But it is not so easy to earn by lending and bank has to pay more attention to safety of the disbursed loan and advances. If a bank is too much timid, it may fail to obtain the adequate return on loan able fund, which is confined to it for use. On the other hand, if the bank is too much liberal, it may easily impair its profits with the increment of bad debts or non-performing loan. Therefore, banks should keep in mind the fact that most of the bank failures in the world are due to shrinkage of loan and advances.

The existing level of NPA has been great problem in the contemporary banking business of the world. In this context, Nepal can't remain exception of the NPA problem. The level of NPA in Nepalese banking business is quite alarming. It is widespread fact that the bank and financial institution in Nepal are facing the winding problem of NPA and it is challenging even in the future. The latest figure of NPA as of mid-Jan 2006 as mentioned by Mr. M.P. Adhikary, the Director of N.R.B. is Rs. 29.06 billion which is equivalent to 18.19 percent of the total loan. It is

a great figure regarding the prudential level of NPA that should be below 5 percent. It is even worse in the case of public sector banks: NBL and RBB which possess around 50 percent NPA till mid-Jan 2006.

Since the level of NPA has been a widespread issue in the contemporary banking industry, this study was concerned to find out the level of NPA and its effect on ROA and ROE of Nepalese commercial banks. Due to time constraint and consult to the guide to this thesis, only two commercial banks: the Nepal Investment Bank Limited and KBL are selected as sample bank and study was focused on their financial statistics.

Being the apex supervisory and regulatory authority of banking sector, NRB has issued a directive regarding the outstanding loan of the banks. According to these directives, a bank has to classify its loan into pass loan, substandard loan and bad loan on the basis of their overdue aging. As classified in this directive, pass or non-overdue loan is known as performing asset while substandard, doubtful and bad loan are known as non-performing asset.

Between the two samples selected banks, both of the banks have similar status regarding the level of NPA. The level of NPA in these banks is below 5 percent till the three consequent years. Though this level found little fluctuating, it is within the acceptable limit below 5 percent and around 1 percent.

5.2 Conclusion:

-) NRB as supervisory and regulatory authority of Nepalese banking sector has issued a directive regarding the outstanding loan and advances of the bank. According to this directive, a bank has to maintain the provision against the classification of its loan. The directive has made provision of 1 percent against pass loan, 25 percent against substandard loan, 50 percent against

doubtful loan and 100 percent against bad loan. The loan loss provisions made by both of the sample banks are enough till the date of study. This result concludes that there is good compliance of NRB directive in both of the banks.

) The level of NPA to total lending in KBL at the end of fiscal year 2006/07 was 2.08 percent. It increased to 0.98 percent at the end of fiscal year 2007/08 and decreased to 0.39 percent at the end of fiscal year 2008/09. The fluctuation of NPA is within the acceptable level and the trend is not so alarming till the date of study. The level of NPA to total asset in KBL was 1.30 percent at the end of fiscal year 2006/07. It decreased to 0.72 percent at the end fiscal year 2007/08 and to 0.31 percent at the end of fiscal year 2008/09. Similarly, the level of NPA to total deposit in this bank was 1.75 percent at the end of fiscal year 2006/07. It decreased to 0.91 percent at the end fiscal year 2007/08 and further decreased to 0.36 percent at the end of fiscal year 2008/09. There is decreasing trend of NPA in the bank towards the marginal level. So it concludes that the bank is cautious of managing its loan in prudent manner till the date of study. The bank seems to implement the directive of NRB in prudent manner and indicates that there is good corporate governance in the bank.

) Finally, we can draw the conclusion that there is no alarming situation of NPA in the sampled banks till the date of study. But external as well as internal forces are always responsible for the transaction of the banks. So there is no situation of keeping themselves quiet in their transactions. The outstanding loan may get changed into bad loan within the days to come. So the banks should keep them alert towards up to date repayment of the loan. For this they have to visit the running projects whether they are operating well or not, where they have invested.

5.3 Recommendations:

-) The determination of NPA itself is under the legal and regulatory provision issued by the concerned authority. Therefore, the banks always should make compliance with the regulation issued by the supervisory and regulatory authority. The violence of the regulation weakens the loan management system and results in the growth of NPA in the banks. E.g. single obligor limit, sector limit etc controls flow of huge loan to the same person or sector.
-) Well trained and professional managers can handle the functions of loan in good way. Having the power to oversee the market risk and analyze future trend of the business; their own or client's, can manage the loan in well productive way. So training is need for existing managers and staffs and new man powers who can tackle with such challenges should be introduced to the banks. Similarly, corporate governance also helps to manage the loan in sound way. The loan sanction without influence by the Executive chief or directors and in real ground can give good return to the bank. Similarly, the internal auditor should fairly point out the errors committed by the directors or executives of the banks.
-) It is found that big borrowers' borrowings from the banks are changed in to NPA. The borrowers influence the political leaders as well as administrators and don't pay the loan even though they are already NPA. Therefore, the political leaders and administrators should be far from the influence of borrowers to enforce the law made for the recovery of bad loan. Similarly, an ethics should be developed in the borrowers and society for the timely recovery of loan to the banks. The borrowers should be aware of the facts that the loan is the lump of small savings from the people.

-) The high level of NPA in the country is still in alarming level. It is the not only the problem of an individual bank but also for the whole nation. Therefore, the government should establish an Asset Management Company, AMC, which can handle the whole NPA in the country. Similarly, an NPA management wing within the institution can help to reduce the NPA in the bank. In the lack of AMC and proper counseling to them, some of the violable companies are also collapsed in the country and contributed to the growth of NPA.

-) In most of the traditional banks in Nepal, risk identification, measurement, mitigation and control are poor. Therefore, appropriate credit risk management should be introduced in the banks so that the level of NPA will be reduced. Similarly, the supervisory authority's concentration is focused on least priority areas without proper consideration of risk identification and its management in to the bank that causes the growth of NPA.

-) There are some such projects which are very much violable in their paper projects but very poor in their business. They have widespread new plan and projects but no certain scope of their future. The loan disbursed to such projects can not repay its principal and interest and changes into NPA very soon. So the banks should invest in them only after proper risk mitigation whether that they are violable in their business or not.

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Annex-1

Calculation for NIBL

1. Calculation of percentage of substandard loan to NPA of NIBL

Fiscal Years (1)	Total NPA (2)	Total Substandard Loan (3)	% of S.L. to Total NPA (3)/(2)=(4)
2004/05	98356721	54728132	55.64
2005/06	103243256	43846304	42.47
2006/07	111,191,103	41,954,709	37.73
2007/08	104,755,369	11,082,572	10.58
2008/09	128,807,745	4,408,738	3.42

2. Calculation parentage of doubtful loan to total NPA of NIBL

Fiscal Years (1)	Total NPA (2)	Total Doubtful Loan (3)	% of D.L. to Total NPA (3)/(2)=(4)
2004/05	98356721	29346428	29.84
2005/06	103243256	35167032	34.06
2006/07	111,191,103	38,055,772	34.23
2007/08	104,755,369	40,494,733	38.66
2008/09	128,807,745	1,977,471	1.54

3. Calculation parentage of Bad Loan to total NPA of NIBL

Fiscal Years (1)	Total NPA (2)	Total Bad Loan (3)	% of B.L. to Total NPA (3)/(2)=(4)
2004/05	98356721	14282161	14.52
2005/06	103243256	24229920	23.47
2006/07	111,191,103	31,180,622	28.04
2007/08	104,755,369	53,178,064	50.76
2008/09	128,807,745	122,421,536	95.04

4. Calculation parentage of NPA to Total Assets of NIBL

Fiscal Years (1)	Total NPA (2)	Total Asset (3)	% of NPA to Total Asset (2)/(3)= (4)
2004/05	98356721	6053247125	1.62
2005/06	103243256	7142318215	1.45
2006/07	111,191,103	8,052,209,125	1.38
2007/08	104,755,369	9,608,570,861	1.09
2008/09	128,807,745	11,792,126,009	1.09

5. Calculation parentage of NPA to Total Lending of NIBL

Fiscal Years (1)	Total NPA (2)	Total Lending (3)	% of NPA to Total Asset (2)/(3)= (4)
2004/05	98356721	3247345672	3.03
2005/06	103243256	5058692312	2.54
2006/07	111,191,103	5,049,581,309	1.20
2007/08	104,755,369	6,095,841,087	1.72
2008/09	128,807,745	7,900,090,271	1.63

6. Calculation of percentage of NPA to Total Deposit of NIBL

Fiscal Years (1)	Total NPA (2)	Total Deposit (3)	% of NPA to Total Deposit (2)/(3)=(4)
2004/05	98356721	2674864250	3.68
2005/06	103243256	4585753150	2.25
2006/07	111,191,103	6,694,963,060	1.66
2007/08	104,755,369	8,063,902,086	1.29
2008/09	128,807,745	10,097,690,989	1.28

7. Calculation percentage of Performing Loan to Total Deposit of NIBL

Fiscal Years (1)	Total P.A. (2)	Total Deposit (3)	% of PA to Total Deposit (2)/(3)=(4)
2004/05	2565172336	2674864252	95.89
2005/06	3828281125	4585753150	83.48
2006/07	4,938,390,206	6,694,963,060	73.26
2007/08	5,991,085,718	8,063,902,086	74.29
2008/09	7,771,282,526	10,097,690,989	76.96

8. Calculation percentage of Performing Loan to Total Lending of NIBL

Fiscal Years (1)	Total P.A. (2)	Total Lending (3)	% of PA to Total Lending (2)/(3)=(4)
2004/05	2565172336	3247345672	78.99
2005/06	3828281125	4058682312	94.32
2006/07	4,938,390,206	5,049,581,309	97.78
2007/08	5,991,085,718	6,095,841,087	98.28
2008/09	7,771,282,526	7,900,090,271	98.37

9. Calculation percentage of Performing Loan to Total Assets of NIBL

Fiscal Years (1)	Total P.A. (2)	Total Assets (3)	% of PA to Total Assets (2)/(3)=(4)
2004/05	2565172336	6053247125	42.38
2005/06	3828281125	7142318215	53.60
2006/07	4,938,390,206	8,052,209,125	61.33
2007/08	5,991,085,718	9,608,570,861	62.35
2008/09	7,771,282,526	11,792,126,009	65.90

10. Calculation Loan Loss provision of NIBL for 2006/07

Types of Loan	for Fiscal Year 2006/07		
	Loan Amount in Rs.	provisioning in Rs.	provisioning in %
Pass Loan	4,938,390,206	80,423,477	1.63
Substandard Loan	41,954,709	10,488,677	25
Doubtful Loan	38,055,772	19,027,886	50
Bad Loan	31,180,622	31,180,622	100
Total	5,049,581,309	141,120,662	2.79

11. Calculation Loan Loss provision NIBL for 2007/08

Types of Loan	for Fiscal Year 2007/08		
	Loan Amount in Rs.	provisioning in Rs.	provisioning in %
Pass Loan	5,991,085,718	135,522,405	2.26
Substandard Loan	11,082,572	2,770,643	25
Doubtful Loan	40,494,733	20,247,366	50
Bad Loan	53,178,064	53,178,064	100
Total	6,095,841,087	211,718,478	3.47

12. Calculation Loan Loss provision of NIBL for 2008/09

Types of Loan	for Fiscal Year 2008/09		
	Loan Amount in Rs.	Provisioning in Rs.	Provisioning in %
Pass Loan	7,771,282,526	112,264,660	1.44
Substandard Loan	4,408,738	1,102,184	25
Doubtful Loan	1,977,471	988,735	50
Bad Loan	122,421,536	122,421,536	100
Additional	-	44,641,680	-
Total	7,900,090,271	281,418,795	3.56

13. Calculation of ROA of NIBL

Fiscal Years (1)	Total Assets (2)	Net Profit (3)	ROA (4)=(3)/(2)
2004/05	6053247125	42162462	0.70
2005/06	7142318215	63271342	0.88
2006/07	8,052,209,125	94,180,428	1.17
2007/08	9,608,570,861	143,566,683	1.49
2008/09	11,792,126,009	170,807,797	1.45

14. Calculation of ROE of NIBL

Fiscal Years (1)	Shareholders equity (2)	Net Profit (3)	ROE (4)=(3)/(2)
2004/05	483423723	42162462	8.00
2005/06	534515612	63271342	7.5
2006/07	612,824,701	94,180,428	15.36
2007/08	680,318,543	143,566,683	21.10
2008/09	769,617,365	170,807,797	22.19

15. Calculation of Correlation Coefficient between NPA to Total Lending and ROA of NIBL

Solution,

Where X denotes NPA to total lending and Y denotes ROA

Fiscal Year	X	Y	XY	X²	Y²
2004/05	3.03	0.7	2.121	9.181	0.49
2005/06	2.54	0.89	2.261	6.452	0.792
2006/07	2.20	1.17	2.5740	4.8400	1.3689
2007/08	1.72	1.49	2.5628	2.9584	2.2201
2008/09	1.63	1.45	2.3635	2.6569	2.1025
Total	X=11. 12	Y=5.7	XY=11.8823	X ² =26.0883	Y ² =6.9735

Here, $n=3$, $\bar{x}=11.12$, $\bar{Y}=5.7$, $\sum XY=11.8823$, $\sum X^2=26.0883$,
 $\sum Y^2=6.9735$

Now, correlation coefficient between X and Y

$$R_{xy} = \frac{n \cdot \sum XY - \sum X \cdot \sum Y}{\sqrt{n \cdot \sum X^2 - (\sum X)^2} \cdot \sqrt{n \cdot \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 11.8823 - 11.12 \times 5.7}{\sqrt{5 \times 26.0883 - (11.12)^2} \times \sqrt{5 \times 6.9735 - (5.7)^2}}$$

$$= \frac{59.41 - 63.384}{6.787 \cdot 2.378}$$

$$= -0.996$$

The coefficient of determination $r^2 = (-0.996)^2 = 0.992$

$$P.E.(r) = 0.6745 \times S.E.(r)$$

Where,

$$S.E.(r) = \sqrt{1 - r^2} / n$$

$$= \sqrt{1 - 0.992} / 5$$

$$= \sqrt{1 - 0.992} / 5$$

$$= 0.80$$

$$P.E.(r) = 0.6745 \times 0.80$$

$$= 0.5396$$

16. Calculation Correlation of coefficient between NPA to Total Lending and ROE of NIBL

Where, X denotes NPA to Total Lending and Y denotes the ROE

Fiscal Year	X	Y	XY	X ²	Y ²
2004/05	3.03	8	24.24	9.181	64
2005/06	2.54	7.5	19.05	6.452	56.25
2006/07	2.20	15.36	33.792	4.8400	235.9296
2007/08	1.72	21.10	36.292	2.9584	445.2100
2008/09	1.63	22.19	36.1697	2.6569	492.3961
Total	X=11.12	Y=74.15	XY=149.544	X ² =26.0883	Y ² =1293.7857

We have,

$$N=5, \quad X=11.12, \quad Y=74.15, \quad XY=149.544, \quad X^2=26.0883, \quad Y^2=1293.7857$$

Now, correlation coefficient between X and Y is

$$\begin{aligned} R_{xy} &= \frac{n \cdot \sum XY - \sum X \cdot \sum Y}{\sqrt{\left[n \cdot \sum X^2 - (\sum X)^2 \right] \left[n \cdot \sum Y^2 - (\sum Y)^2 \right]}} \\ &= \frac{5 \times 149.544 - 11.12 \times 74.15}{\sqrt{5 \times 26.0883 - (11.12)^2} \sqrt{5 \times 1293.7857 - (74.15)^2}} \\ &= -76.828 / 6.787 \times 970.706 \\ &= -76.828 / 2.584 \times 31.1562 \\ &= -0.9543 \end{aligned}$$

The coefficient of determination $r^2 = (-0.9543)^2 = 0.95634$

$$P.E.(r) = 0.6745 * S.E.(r)$$

Where, $S.E.(r) = \sqrt{1 - r^2} / n$

$$= \sqrt{1 - 0.9543} / 5$$

$$= .8087$$

$$= 0.6733$$

$$P.E.(r) = 0.6745 \times 0.8087$$

$$= 0.5336$$

Annex-2

Calculation for KBL

1. Calculation of percentage of substandard loan to total NPA of KBL

Fiscal Years (1)	Total NPA (2)	Total Substandard Loan (3)	% of S.L. to Total NPA (3)/(2)=(4)
2004/05	45346364	12342532	27.22
2005/06	38287975	8253612	21.56
2006/07	31,098,986	6,052,732	19.46
2007/08	24,983,046	843,817	3.38
2008/09	19,860,891	2,113,042	10.63

2. Calculation parentage of doubtful loan to total NPA of KBL

Fiscal Years (1)	Total NPA (2)	Total Doubtful Loan (3)	% of D.L. to Total NPA (3)/(2)=(4)
2004/05	45346364	33678286	74.27
2005/06	38287975	25234679	64.23
2006/07	31,098,986	19,014,889	61.14
2007/08	24,983,046	3,656,287	14.64
2008/09	19,860,891	1,178,854	5.94

3. Calculation parentage of Bad Loan to total NPA of KBL

Fiscal Years (1)	Total NPA (2)	Total Bad Loan (3)	% of B.L. to Total NPA (3)/(2)=(4)
2004/05	45346364	10425546	22.99
2005/06	38287975	4799684	12.54
2006/07	31,098,986	6,031,364	19.40
2007/08	24,983,046	20,482,941	81.99
2008/09	19,860,891	16,568,994	83.43

4. Calculation parentage of NPA to Total Assets of KBL

Fiscal Years (1)	Total NPA (2)	Total Asset (3)	% of NPA to Total Asset (2)/(3)= (4)
2004/05	45346364	1023435674	4.43
2005/06	38287975	1688547183	2.27
2006/07	31,098,986	2,399,857,094	1.30
2007/08	24,983,046	3,448,634,251	0.72
2008/09	19,860,891	6,456,460,820	0.31

5. Calculation parentage of NPA to Total Lending of KBL

Fiscal Years (1)	Total NPA (2)	Total Lending (3)	% of NPA to Total Asset (2)/(3)= (4)
2004/05	45346364	896792045	5.06
2005/06	38287975	1026521849	3.72
2006/07	31,098,986	1,492,118,362	2.08
2007/08	24,983,046	2,540,788,021	0.99
2008/09	19,860,891	5,130,223,362	0.39

6. Calculation of percentage of NPA to Total Deposit of KBL

Fiscal Years (1)	Total NPA (2)	Total Deposit (3)	% of NPA to Total Deposit (2)/(3)=(4)
2004/05	45346364	968745826	4.68
2005/06	38287975	1145028732	3.34
2006/07	31,098,986	1,778,786,289	1.75
2007/08	24,983,046	2,754,632,089	0.91
2008/09	19,860,891	5,586,802,644	0.36

7. Calculation percentage of Performing Loan to Total Deposit of KBL

Fiscal Years (1)	Total P.A. (2)	Total Deposit (3)	% of PA to Total Deposit (2)/(3)=(4)
2004/05	667829467	968745826	68.94
2005/06	932645113	1145028732	81.45
2006/07	1,464,766,122	1,778,786,289	82.35
2007/08	2,115,804,974	2,754,632,089	76.81
2008/09	5,110,362,471	5,586,802,644	91.47

8. Calculation percentage of Performing Loan to Total Lending of KBLq

Fiscal Years (1)	Total P.A. (2)	Total Lending (3)	% of PA to Total Lending (2)/(3)=(4)
2004/05	667829467	896792045	74.47
2005/06	932645113	10265211849	90.85
2006/07	1,464,766,122	1,492,118,362	97.92
2007/08	2,115,804,974	2,540,788,021	98.00
2008/09	5,110,362,471	5,130,223,362	99.61

9. Calculation percentage of Performing Loan to Total Assets of KBL

Fiscal Years (1)	Total P.A. (2)	Total Assets (3)	% of PA to Total Assets (2)/(3)=(4)
2004/05	667829467	1023435674	65.25
2005/06	932645113	168874783	55.23
2006/07	1,464,766,122	2,399,857,094	61.04
2007/08	2,115,804,974	3,448,634,251	61.35
2008/09	5,110,362,471	6,456,460,820	79.15

10. Calculation Loan Loss provision of KBL for 2006/07

Types of Loan	for Fiscal Year 2006/07		
	Loan Amount in Rs.	Provisioning in Rs.	provisioning in %
Pass Loan	1,464,766,122	14,647,661	1
Substandard Loan	6,052,732	1513,183	25
Doubtful Loan	19,014,889	9,507,444	50

Bad Loan	6,031,364	6,031,364	100
Total	1,495,865,108	31,699,653	2.12

11. Calculation Loan Loss provision of KBL for 2007/08

Types of Loan	for Fiscal Year 2007/08		
	Loan Amount in Rs.	Provisioning in Rs.	provisioning in %
Pass Loan	2,515,804,974	25,158,049	1
Substandard Loan	843,817	210,954	25
Doubtful Loan	3,656,287	1,828,143	50
Bad Loan	20,82,941	20,482,941	100
Total	2,540,788,021	47,680,089	1.88

12. Calculation Loan Loss provision of KBL for 2008/09

Types of Loan	for Fiscal Year 2008/09		
	Loan Amount in Rs.	Provisioning in Rs.	provisioning in %
Pass Loan	5,110,362,471	51,103,624	1
Substandard Loan	2,113,042	528,260	25
Doubtful Loan	1,178,854	589,427	50
Bad Loan	16,568,994	16,568,994	100
Total	5,130,223,362	68,790,306	1.34

13. Calculation of ROA of KBL

Fiscal Years (1)	Total Assets (2)	Net Profit (3)	Return on Total Assets (ROA) (4)=(3)/(2)
2004/05	1023435674	10367846	1.03
2005/06	1688747183	13406576	0.80
2006/07	2,399,857,094	15,307,485	0.64
2007/08	3,448,634,251	46,689,945	1.35
2008/09	6,456,460,820	84,870,027	1.31

14. Calculation of ROE of KBL

Fiscal Years (1)	Shareholders equity(2)	Net Profit (3)	ROE (4)=(3)/(2)
2004/05	402742846	10367846	2.57+
2005/06	462724746	13406576	3.33+
2006/07	501,705,898•	15,307,485	3.05 ⁺
2007/08	554,221,843•	46,689,945	8.42 ⁺
2008/09	637,739,384•	84,870,027	13.31 ⁺

*** Calculated by the formula,

$$ROE = \text{Net Profit/Shareholder's Equity} \times 100\%$$

15. Calculation Correlation of coefficient between NPA to Total Lending and ROA of KBL

Where, X denotes NPA to Total Lending and Y denotes the ROA

Fiscal Year	X	Y	XY	X²	Y²
2004/05	5.057	1.03	5.2087	25.573	1.0609
2005/06	3.73	0.8	2.984	13.913	0.64
2006/07	2.08	0.64	1.3312	4.3264	0.4096
2007/08	0.98	1.35	1.3230	0.9804	1.8225
2008/09	0.39	1.31	0.5109	0.1521	1.7161
Total	X= 12.237	Y= 5.13	XY= 11.3578	X ² = 44.9249	Y ² = 5.6491

We have,

$$N=5, \quad X=12.237, \quad Y=5.13, \quad XY= 11.3578, \quad X^2=44.924, \\ Y^2=5.6491$$

Now, correlation coefficient between X and Y is

$$R_{xy} = \frac{n \cdot XY - X \cdot Y}{\sqrt{n \cdot X^2 - (X)^2} \cdot \sqrt{n \cdot Y^2 - (Y)^2}} \\ = \frac{5 \times 11.3578 - 12.237 \times 5.13}{\sqrt{5 \times 44.9249 - (12.237)^2} \times \sqrt{5 \times 5.6491 - (5.13)^2}} \\ = -5.9868/12.0172 \\ = -0.5$$

The coefficient of determination $r^2 = (-0.5)^2 = 0.25$

$$P.E(r) = 0.6745 \times S.E.(r)$$

Where,

$$S.E.(r) = 1-r^2/n$$

$$= 1-0.25/5$$

$$= 0.95$$

$$P.E.(r) = 0.6745 \times 0.095$$

$$= 0.641$$

16. Calculation of Correlation coefficient between NPA to Total Lending and ROE of KBL

Where, X denotes NPA to Total Lending and Y denotes the ROE

Fiscal Year	X	Y	XY	X ²	Y ²
2004/05	5.057	2.57	12.99649	25.573	6.6049
2005/06	3.73	3.33	12.4209	13.913	11.0889
2006/07	2.08	3.05	6.344	4.3264	9.3025
2007/08	0.98	8.42	8.2516	0.9604	70.8964
2008/09	0.39	13.31	5.1909	0.1521	177.1561
Total	X= 12.237	Y= 30.68	XY= 45.2039	X ² =44.9249	Y ² =275.0488

We have,

$$N=5, \quad X=12.237, \quad Y=30.68, \quad XY= 45.2039, \quad X^2=44.9249, \\ Y^2=275.0488$$

Now, correlation coefficient between X and Y is

$$R_{xy} = \frac{n \cdot XY - X \cdot Y}{\sqrt{n \cdot X^2 - (X)^2} \cdot \sqrt{n \cdot Y^2 - (Y)^2}} \\ = \frac{5 \times 45.2039 - 12.237 \times 30.68}{\sqrt{5 \times 44.9249 - (12.237)^2} \cdot \sqrt{5 \times 275.0488 - (30.68)^2}} \\ = -149.4117 / \sqrt{74.88} \cdot \sqrt{433.982} \\ = -149.4117 / 180.2676 \\ = -0.8288$$

The coefficient of determination $r^2 = (-0.8288)^2 = 0.6869$

$$P.E(r) = 0.6745 * S.E.(r)$$

Where,

$$\begin{aligned} \text{S.E.}(r) &= 1-r^2/n \\ &= 1-0.6869/5 \\ &= 0.8626 \\ \text{P.E.}(r) &= 0.6745 \times 0.8626 \\ &= 0.5818 \end{aligned}$$