

**COMPARATIVE ANALYSIS OF NON PERFORMING ASSETS  
OF COMMERCIAL BANKS IN NEPAL**

**(With Reference to Nabil Bank Limited, Nepal Investment Bank Limited, Nepal  
Credit & Commerce Bank Limited, Rastriya Banijya Bank Limited and  
Nepal Bank Limited)**

**A THESIS**

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Master of Business Studies (M.B.S)**

**Kathmandu, Nepal**

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# RECOMMENDATION

This is to certify that the thesis

Submitted by:

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Entitled

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Nepal Bank Limited)**

has been prepared as approved by this department in the prescribed format of Faculty  
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and found the thesis to be the original work of the student and written in according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for the Degree of Master of Business Studies (M.B.S)

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## DECLARATION

I, hereby, declare that the work reported in this thesis entitled “**Comparative Analysis of Non Performing Assets of Commercial Banks in Nepal(With Reference to Nabil Bank Limited, Nepal Investment Bank Limited, Nepal Credit & Commerce Bank Limited, Rastriya Banijya Bank Limited and Nepal Bank Limited)**” submitted to Research Department of Nepal Commerce Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirements for the Degree of Master of Business Studies (M.B.S) under the guidance and supervision of Mahendra Aryal of Nepal Commerce Campus, Tribhuvan University.

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## ABBREVIATIONS

ANOVA	:	Analysis of Variance
ADB	:	Asian Development Bank
AMCs	:	Assets Management Companies
A.D.	:	Anno Domini
B.S.	:	Bikram Sambat
CD Ratio	:	Credit to Deposit Ratio
CIB	:	Credit Information Bureau
F.Y.	:	Fiscal Year
GDP	:	Gross Domestic Product
i.e.	:	That is
IMF	:	International Monetary Fund
L&A	:	Loan and Advances
LLP	:	Loan Loss Provision
Ltd	:	Limited
MoF	:	Ministry of Finance
NBL	:	Nepal Bank Limited
NPA	:	Non-Performing Assets
NPL	:	Non-Performing Loans
NIB	:	Nepal Investment Bank Limited
NCC	:	Nepal Credit & Commerce Bank Limited
NRB	:	Nepal Rastra Bank
NEPSE	:	Nepal Stock Exchange Limited
NABIL	:	Nabil Bank Limited
RBB	:	Rastriya Banijya Bank Limited
ROA	:	Return on Assets
ROE	:	Return on Equity
S.D	:	Standard Deviation
SEBON	:	Securities Board of Nepal
T.U.	:	Tribhuvan University
US	:	United States of America

## **CHAPTER - I**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Financial institutions came into existence mainly with the objective of collecting the idle fund and mobilizing them to productive sector. They are the intermediaries between the two sectors of the economy, the surplus sector and the deficit sector. Also enable the flow of money which canalize the saving and investment of general public.

Among these institutions, the banking sector's share in the total deposit and lending is not only significantly high but that the problem and stakes in these sectors are also accordingly challenging. In this period banking is not only limited to two function saving and deposit, it has also increase its area and diversify into new territory of economic activities. Banking can now be represented as the part of modern society. So the sound banking system should address these challenges like competition, increment in profit, customer satisfaction and technology.

The rocketing growth of the banks and financial institutions has led them towards cutthroat competition. At the same time economic condition is not very favorable, leading banks to invest and operate in small area. Quality of loan and advances could not be maintained to the desired level if there are not many options in financing them. The loan provided have also high chance of becoming irregular from regular one due to the factors like economic situation, attitudes of the borrowers, legal hurdles etc. Once the distributed loan is not returned timely by clients and becomes overdue then it is known as Non-Performing Assets for the banks. Non-performing loan is the outdated loan, and bad and doubtful debts. Performing loans have multiple benefits in the other hand non-performing loan erodes even existing capital. The issue of Non-Performing Assets in the financial sector has been an area of concern for all economies and reduction in NPAs has become synonymous to functional efficiency of financial intermediaries. NPA has always been a significant problem for every banks

and proper attention for the management of the NPA under top priority. Although NPAs are a balance sheet issue of individual banks and financial institutions, it has wider macroeconomic implications.

## 1.2 Statement of the Problem

After the liberalization started in 1980's with the help of International Monetary Fund (IMF), Nepal started the Economy Structural Adjustment Programme (ESAP). Like many other program financial sector reform was one, which played a significant role to promote private sector. The Nepalese banking system has undergone significant transformation following financial sector reforms. After the establishment of democracy in 1990, the growth process has gained the speed. Now day's banks are adopting international best practices with a vision to strengthen them and banking sector. In the same time role of central bank has increased. Several prudential and provisioning norms have been introduced by NRB, and these are pressurizing banks to improve efficiency and trim down NPAs to improve the financial health in the banking system.

At present Nepalese banking sector consists of commercial banks, development banks, finance company and other types of financial institutions. These banks not only play a crucial role in the economy by mobilizing the savings and channelizing the same into investments, but also by directly contributing to GDP of the economy. The Nepalese commercial banks are successfully meeting the challenge of providing service to its customers, but the biggest challenge before them is management of NPAs. Particularly the NPA in public sector commercial banks had more than 60 % in past. The soaring NPAs have adverse impact upon the progress of any bank as well as in economy, and hence a matter of great concern for the Nepalese financial system. The trend of NPA of Nepalese commercial banks is shown below:

**Table 1.1 Non-Performing Assets in Nepalese Banking Sector**

Year	2005	2006	2007	2008	2009	2010	2011	2012
NPA %	28.68	22.77	18.79	13.16	10.56	6.08	3.53	2.54

(Source: [www.nrb.org.np](http://www.nrb.org.np))

It is clear from the table that the NPA level is decreasing, but due to the establishment of new banks and high performing commercial banks the level seems low. In reality performance seems to be devastating in public sector commercial banks and few private sector commercial bank.

The very nature of the banking business is so sensitive because more than 85% of their liability is deposits from depositors'. Banks use these deposits to generate credit for their borrowers, which in fact is a revenue generating activity for most banks. This credit creation process exposes the banks to high default risk which might led to financial distress including bankruptcy. All the same, beside other services, banks must create credit for their clients to make some money, grow and survive stiff competition at the market place. The flow of fund collection to credit creation and redistribution may be dismantled because of NPA. NPA erodes current profit through provisioning requirements; these results reduce in interest income. High provisioning requirement decreases the capacity to increase good quality assets in future. Economic development will always be in infancy if there is no environment for sufficient capital to be formulated. Assurance of recovery increases the confidence among the stakeholder and ensures the flow of fund. For this the level of NPA should be reduced.

Now it has been proved that the quantity or percentage of non-performing assets (NPAs) is often associated with bank failures and financial crises in both developing and developed countries. We now have abundant evidence that states the financial/banking crises in world are preceded by high non-performing assets. The global financial crisis of 2008, which originated in the US, was also attributed to the rapid default of sub-prime loans/mortgages. In view of this situation it is therefore understandable why much emphasis is placed on non-performing assets when examining financial vulnerabilities.

Loan and advances have great role in banks performance. On the other hand negligence in administrating these assets could cause liquidity and ultimately be a cause of banks failure. Government owned banks have more defaulting customer not

paying loans and interest. It is a matter of debate regarding the real cause of NPA increment. Particularly why does commercial bank with government ownership fully or partially, have NPA greater than international level of 4%. This study will focus towards the following research questions regarding the NPA.

- ) Is there any significant difference between the NPAs of commercial banks?
- ) What are the factors leading to accumulate of non-performing assets?
- ) What are factors that influence the NPA growth?
- ) What are the methods to control NPA?

### **1.3 Objectives of the Study**

The main objective of this study is to analyze, examine the issue of non-performing assets. The specific objectives are:

1. To compare and examine the NPA of commercial banks,
2. To analyze the impact of NPA on overall financial performance of both sector banks,
3. To analyze the causes, impact, remedial action and determine sector which cover high NPA,
4. To suggest and recommend on the basis of major findings of the study.

### **1.4 Focus of the Study**

The main focus of this study is to compare the non-performing assets of commercial banks. Particularly old commercial banks have huge amount of NPA level with comparison to other banks. Nepalese banking sector has been becoming a victim of huge non-performing assets in past which seems to be declining in current period. This research compares the level of NPA of sample banks with different variables and shows difference between them.

## **1.5 Profile of Selected Banks**

The study covers five commercial banks, which includes NBL, RBB, Nabil, NIB and NCC. Brief profile of these banks is presented below.

### **1.5.1 Nepal Bank Limited (NBL)**

Nepal Bank Limited, The first bank of Nepal was established in November 15, 1937 A.D (1994/Kartik/30 BS)). It was formed under the principle of Joint venture (Joint venture between govt. & general public). This is the first bank of Nepal, which marked the beginning of an era of formal banking in Nepal. There were only 10 shareholders when the bank first started. Out of 2500 equity shares of NRs. 100 face value, 40% was subscribed by the government and the balanced i.e. 60% was offered for the sale to private sector. NBL is currently operating through 116 branches.

### **1.5.2 Rastriya Banijya Bank Limited (RBB)**

Rastriya Banijya Bank Limited (RBB) is the fully government owned, and is the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022/Magh/10 BS) under the RBB Act. The bank was established to support economic growth and development in Nepal. RBB has Nepal's most extensive banking network with over 141 branches.

### **1.5.3 Nabil Bank Limited**

Nabil Bank Limited, the first foreign joint venture bank of Nepal, commenced operations on the 12th of July 1984 through a joint-venture with Dubai Bank Ltd marking a turning point in the banking history of Nepal. This bank was known as Nepal Arab bank ltd, which is now one of the most successful banks in Nepal. It is currently providing service through 49 branches.

### **1.5.4 Nepal Investment Bank Ltd. (NIB)**

Nepal Investment Bank Ltd. (NIB) previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The

French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking groups in the world. The name of the bank has been changed to Nepal Investment Bank Ltd after a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez. It has 42 branches currently in operation throughout Nepal.

#### **1.5.5 Nepal Credit & Commerce Bank Ltd. (NCC)**

This bank was known as Nepal-Bank of Ceylon Ltd. (NBOC) started its operation on 14<sup>th</sup> October, 1996 as a joint Venture with Bank of Ceylon, Sri Lanka. The name of the Bank was changed to Nepal Credit & Commerce Bank Ltd., (NCC Bank) on 10th September, 2002, due to transfer of shares and management of the Bank from Bank of Ceylon, an undertaking of Government of Sri Lanka to Nepalese Promoters. It is providing service through 22 branches.

#### **1.6 Significance of the Study**

Investment policy of overall banking sector has significant impact on economic development of the country. Lending and investment policy of bank has a vital role in its financial performance. Proper loan loss provision and address to non-performing assets helps to gain financial strength of the bank. This research will give a real picture of non-performing assets and compare between sectors. The NPAs are considered as an important parameter to judge the performance and financial health of banks. The level of NPAs is one of the drivers of financial stability and growth of the banking sector. So this study will help to understand banks performance by studying their NPA. We have seen NPA getting worse in public commercial bank but their revival is fast. This research will find the cause why do government partially or fully own commercial banks have more NPA, is it just the case of management or other factors have also any role in it. The main focus of the study will be to know about the non-performing assets of the selected Nepalese commercial banks from different sectors and make comparative study of non-performing assets of the selected commercial bank. So this research will be able to deliver some of the present issues, latest information and data regarding non-performing assets and provision regarding



loan loss. At last study might be helpful for the management of the concern banks as well as to researchers, scholars and policy makers.

### **1.7 Limitation of the Study**

The study has following limitations:

- ) Among various banks, this study is concentrated only on commercial banks established before 2000 A.D.
- ) The research has been done for only five sample commercial banks; hence the result of the study may not represent the overall banking sector.
- ) This study is concerned only with the issue of non-performing assets in Nepalese commercial banks. It does not consider other aspects of the banks.
- ) The study follows with the specific tools such as ratio analysis, mean, standard deviation, correlation and hypothesis testing.

### **1.8 Organization of the Study**

The research work has been divided into five chapters, as follows:

#### **Chapter I: Introduction**

This chapter includes various aspects of the study like background, statement of the problem, focus of the study, objectives of the study, significance of the study, limitation of the study and organization of study, brief profile of selected banks therefore this chapter provide summary of overall study.

#### **Chapter II: Review of Literature**

This chapter includes the theoretical and related literature regarding the subject matter. Some available literature on this study is also presented.

#### **Chapter III: Research Methodology**

The third chapter constitutes the methodology adopted to conduct the study. Therefore it consists of research design, source of data, population and sample, tools and techniques used in the study.

#### **Chapter IV: Data Presentation and Analysis**

This chapter deals with analysis and presentation of data using statistical tools and presents the major findings from the given data. This is the main part of the study.

#### **Chapter V: Summary, Conclusion and Recommendations**

This is the fifth and last chapter of the study which summarizes the whole study and provides findings of the study. Also recommendation will be presented for further improvement regarding the subject matter.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

Review of literature is an integral and mandatory process in any research work. It includes reviewing of research studies or other relevant proposition in related area of study. It is a basic requirement of any research and is a way to discover what other research in the area of our problem has uncovered. Hence it helps to avoid repetition in the same task or dead end task in the area. Wolff and Pant (2005) points out the function accomplished by review of literature as:

- ) It establishes a point of departure for future research.
- ) It avoids needless duplication of costly research effort.
- ) It reveals areas of needed research.

#### **2.1 Conceptual Framework**

Conceptual framework in this study focuses on banking in Nepal, risk associated with it, meaning and concept of the term used in the study.

##### **2.1.1 Banking sector in Nepal**

Nepal Bank Limited, The first bank of Nepal was established in November 15, 1937 A.D (Kartik, 30, 1994). It was formed under the principle of Joint venture (Joint venture between govt. & general public). NBL's authorized capital was Rs. 10 million & issued capital Rs. 2.5 million of which paid-up capital was Rs. 842 thousand with 10 shareholders. Nepal Rastra Bank (NRB), the Central Bank of Nepal, was established in 1956 A.D under the Nepal Rastra Bank Act, 1955 A.D. Rastriya

Banijya Bank was established on January 23, 1966 A.D (2022/Magh/10 BS) becoming the second commercial bank in Nepal. In the mid-1980s, three joint-venture commercial banks opened branches in Nepal. The Nepal Arab Bank was co-owned by the Emirates Bank International Limited (Dubai), the Nepalese government, and the Nepalese public. The Nepal Indosuez Bank was jointly owned by the French Banque Indosuez, Rastriya Banijya Bank, Rastriya Beema Sansthan (National Insurance Corporation), and the Nepalese public. Nepal Grindlays Bank was co-owned by a British firm called Grindlays Bank, local financial interests, and the Nepalese public. Since then, the number has been increasing continuously and reached to 32 commercial banks, till the mid January 2013.

Commercial banks in Nepal can be categorized in to two groups – public and private banks. Rastriya Banijya Bank, Nepal Bank Limited and Agriculture Development Bank are government owned banks. Government owned banks have substantial shares in the total assets of the industry and have huge branch networks around the country. As the financial market was barred for private investors till the mid 1980s, these banks were the only players in the banking industry. The economic liberalization policy adopted in the mid 1980s brought about a surge in the banking industry. Private Banks came into operation in collaboration with foreign banks. A large number of banks were established and the number continues to grow after 1990s. The banks are getting stronger in terms of capital, technologies, products and operations. There is a harsh competition in the market as the number of banks is increasing while the market is constant. All the newly established commercial banks tried to operate efficiently which was also the cause for the competition. There has been significant growth in number of banks and financial institutions in these last two and half decade.

Rastriya Banijya Bank, the largest bank of Nepal is fully owned by Nepal Government. Similarly, Nepal Government holds 40 percent shares in Nepal Bank Limited and 50.78 percent shares in Agriculture Development Bank Limited. Similarly, Nepal Government has also invested NRs. 6.4 billion in irredeemable preference shares and NRs.2.3 billion in redeemable preference shares issued by Agriculture Development Bank. Although they have the advantage of high number of branches and history, financial health of these banks are poor than compared to

private banks. The private sector banks can be further divided into local private banks and Joint-Venture Banks. The banks with the local private investment are Local Private Banks while the banks with the Investment of Foreign Institutions along with the local investment are Joint-Venture Banks. There are seven Joint venture private banks in Nepal. After the Historic Peace Agreement was signed in 21 November 2006, the number of banks and their branches has increased drastically. The government and private banks have started expanding or reestablishing their branches in headquarters and business hubs of different districts. Although the fact is that government banks are still the largest banks in all aspects from deposit and credit mobilization to the number of branches in operation. With the expansion in the banks and financial institutions the number of population taking the banking facilities has increase, resulting the decrease in population taking benefit per bank.

The government owned banks have been performing dual banking services: commercial and development. Wide spread of their branches have helped to promote banking in the remote villages of this country, which has helped a lot to provide financial access to the poor. Since the deposit of only these banks is nearly one third of the deposit of the whole banking industry, these banks are too big to fail. Lack of adequate internal control, traditional way of management, government intervention in the management, poor MIS etc are some other challenges to these banks. These banks are suffered from heavy accumulated loss and negative networth. (*Bank Supervision Report 2009 p.57*)

The policy guidelines and procedures have already been implemented that allows "A" class commercial banks to open branch offices in foreign countries by meeting the designated standard. Policy Arrangement has been issued under the Section 34 of Banks and Financial Intuitions Act, 2003 for foreign banks/financial institutions that allows opening their branches in Nepal for wholesale banking. This arrangement is made in accordance with Nepal's commitment to financial service sector while entering the World Trade Organization (WTO) on 23 April 2004, as its 147th member. Permission has been granted to foreign banks and financial institutions for opening up representative office in Nepal. In this context, Mashreq Bank, PSC of

United Arab Emirates, Dubai has got the license on March 17, 2010. (*Economic Survey 2009/2010*).

### **2.1.2 Overview of Common Risks of Nepalese Commercial Banks**

Risk refers to the possibility that the outcome of an action or event could bring adverse impact on the banks capital, earning or viability. Such outcomes could either result in direct loss of earning and erosion of capital or may result in imposition of constraints on a banks' ability to meet its business objectives. Risk taking is an inherent element of banking and profits are in part the reward for successful risk taking in the business. But risk may also lead to loss and thus endanger the safety of banks depositors. The type and degree of risks a bank may be exposed to depend upon a number of factors such as its size, complexity business activities, volume etc. The most common risks of Nepalese commercial banks are Credit risk, Market risk, Operational risk and Liquidity risk.

#### **Credit Risk**

Credit risk is the likelihood that a debtor or financial instruments issuer is unwilling or unable to pay interest or repay the principal according to the terms specified in a credit agreement resulting in economic loss to the bank. Credit risk is the major risk that banks are exposed during the normal course of lending and credit underwriting. Most commonly it arises from non-performance by a borrower. Loan are the large and most obvious source of credit risk, this may arise from either inability or an unwillingness to perform in the pre-committed contracted manner. The credit risk doesn't occur in isolation. It comes from bank dealing with individuals, corporation, banks and financial institutions. In order to mitigate this risk credit procedure should be effective. The procedures should aim to obtain a deep understanding of the bank's clients and their businesses in order to fully know their customers. Hence know your customer (KYC) should be given priority. Procedures that adequately capture salient issues regarding the borrower's industry; macro economic factors; the purpose of credit; source of repayment; track record and repayment history of the borrower; repayment capacity of the borrower; the proposed terms and conditions and

covenants; adequacy and enforceability of collaterals; and appropriate authorization for the loan should also be developed by bank. Usually following points should not be ignored because they are the key indicators that show the credit quality of a loan:

- ) Financial position and business condition of borrower.
- ) Obligators account activity, repayment history and credit limit.
- ) Loan covenants
- ) Collateral valuation

Bank should establish a system that helps identify problem loan ahead of time when there may be more options available for remedial measures. Also these types of problem loan should be managed through:

- ) Negotiation and follow-up.
- ) Remedial strategies like restructuring of loan and enhancement in credit limits.
- ) Collateral and security documentation.
- ) Reporting and Reviewing.

### **Market Risk**

Market risk is the risk of losses in on and off-balance sheet positions arising from movements in market prices. It may refer to the risk to a bank resulting from movements in market prices. This also includes interest rate related instruments, equities in the trading book, foreign exchange risk and commodities risk throughout the bank. Mismatch of loan and deposit can also cause market risk. More specifically we can present factors below that are cause of market risk:

- ) Foreign Exchange Risk
- ) Interest Rate Risk
- ) Commodity Risk
- ) Equity Price Risk

Bank should set of system and procedures appropriate to its size and complexity of its operations for identifying measuring, monitoring and controlling market risk.

## **Liquidity Risk**

Liquidity risk is the inability of an institution to transfer its assets into cash or equivalent to cash in a timely manner at a reasonable price to meet its commitments as they fall due. It is one of the major risk, arises when the cushion provided by the liquid assets are not sufficient enough to meet its obligations. This is the risk of funding crisis. Bank experiencing a rapid growth in assets should have major concern for liquidity. Liquidity risk often triggered by consequence of other risks such as credit risk, market risk etc. For example, large loan defaults or changes in interest rate can adversely impact a banks liquidity positions. Therefore banks should have a deep understanding of the factors contributing the liquidity risk, and should also do periodic review in a regular basis. Bank should be able to monitor its day-to-day liquidity position and risk control. But the accuracy and timeliness of information are important so it should not be ignored.

## **Operational Risk**

The risk of loss resulting from inadequate or failed internal processes, people and system or from external events is known as operational risk. This risk is caused by omissions in the work of employees, inadequate internal process and procedures, inadequate management of information and other systems, and unforeseeable external events. Internal fraud, external fraud, employment practices & workplace safety, client, products & business practices, damage in physical assets, business disruption & system failures, execution, delivery & process management are some type of event that can cause operational risk. In other word operation risk is that type of risk that is associated with the problems of accurately processing, settling and taking or making delivery on trades in exchange for cash, accounting practices, and human activities. This type of risk exists in each level and every type of work. Proper monitoring and control can help us to minimize this type of problem. The extent and nature of the controls may vary from bank to bank but some measures like staff compensation, training and development, customer dealing, MIS, complaints handling, code of conduct and segregation of duties can be effective.



### **2.1.3 Definition of Loan and Advances**

Loan may be regarded as credit granted where money is disbursed and its recovery is made on a later date. It is debt for borrower. While granting loan, credit is given for a definite purpose and for a predetermined period. Interest is charged on the loan at an agreed rate and intervals of payments. Advance on the other hand, is a credit facility granted by the bank. Banks grants advances largely for short-term purpose, such as purchase of goods traded in and meeting other short-term trading liabilities. There is a sense of debt in loan, where as an advance is a facility being availed of by borrower. However these two terms are used interchangeably.

Loan is a type of debt. A loan entails the redistribution of financial assets over time between the lender and borrower. Banks plays an intermediately role in lending and borrowing. It collects deposit from depository customer and provides this fund as loan to borrowing customer charging some additional interest, by which it converts its liabilities into assets. Thus loan and advances are the assets of the bank. Interest is generated from these loans which is the primary source of income of the commercial banks.

Loan and advances are the most profitable of all the assets of a bank. Banks universally seek after the assets. These constitute primary source of income to banks. As the business institution, a bank aims at making a huge profit and providing loans are advances are more profitable than any other assets, banks are willing to lend as much as of their fund as possible but it has to be careful about the safety of such loan and advances. "Banking when properly organized aids and facilitates growth of trade and industries and hence of national economy. The bankers have to timer liberality with caution. If he is too liberal, he may easily impair his profits by bad debts, if he is too timid he may fail to obtain adequate return on the fund (Radhaswamy and Vasudevan, 1991: 29).

### **2.1.4 Performing Loans**

Performing loans are those loans that repay principle and interest timely to the bank from the cash flow it generates. In other words, performing loans are the productive assets that generate the profit. If the loan is repaid with its interest and principle on certain time or period then it can be called as performing loans. Usually loan under pass category are referred as performing loans. According to Unified Directives of NRB pass loan and pass loan which are rescheduled/restructure are called performing assets.

### **2.1.5 Non-Performing Assets**

An asset becomes Non-performing when it ceases to generate income for a bank. It is also defined as credit facility in respect of which the interest and/or installments of principle has remained past due of a specified period of time. Banking business is mainly that of borrowing from the public and lending it to the needy persons and business at premium. Lending of money involves credit risk. When the loans and advances made by banks or financial institutions turnout to non-productive, non-rewarding, and non-remunerative then they will become Non-performing assets.

Banks usually treat assets as non-performing if they are not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late (usually 90 days) the loan classified as non-performing. The payment period varies from nation to nation. In some country it is longer period where as in other it is shorter past due period. However a common feature of NPL is past due that have not been served .In Nepalese context, if the loans are past due since three months ,it should be reported an nonperforming loans. In other words, loans

classified under substandard, doubtful and loss category are regarded as non-performing loans.

A high level of non-performing assets compared to similar lenders may be a sign of problems. However this needs to be looked at in the context of the type of lending being done. Some banks lend to higher risk customers than others and therefore tend to have a higher proportion of non-performing debt, but will make up for this by charging borrowers higher interest rates, increasing spreads. A mortgage lender will almost certainly have lower non-performing assets than a credit card specialist, but the latter will have higher spreads and may well make a bigger profit on the same assets, even if it eventually has to write off the non-performing loans. The high level of NPAs in banks is a matter of grave concern to the public as well as to government since the bank credit is a catalyst to the economic development of the country and any bottleneck in the smooth flow of credit due to the mounting NPAs is bound to create an adverse effect for the economy of the country however the magnitude of direction is in descending order which shows banks are taking corrective measures to contain NPAs.

### **2.1.6 Factors Contributing to Non-Performing Assets**

Non-performing assets is a debt obligation where the borrower has not paid any previous agreed interest and principal to the lender. This situation may rise due to many potential factors. Primarily main reason for increasing NPAs is lending policy of concern banks. Customer's capacity to pay and willingness to pay also can't be ignored. Broadly we can classify these factors into two categories:

- a) Internal Factors
- b) External Factors

Internal Factors:-

- ) Defective lending process
- ) Inappropriate Technology
- ) Improper SWOT analysis
- ) Poor credit appraisal system
- ) Managerial deficiencies

- ) Absence of regular visit to the customer premises
- ) Re-loaning process
- ) Inadequate customer contact
- ) Excessive reliance on collateral
- ) Poor control of loan documentation
- ) Absence of following
  - ) Lack of coordination of between Banks
  - ) Lack of a mechanism of credit information dissemination
  - ) Monitoring and supervision
  - ) Lack of trainings and seminars to build the appropriate human resources

External Factors:-

- ) Willful defaults
- ) Natural calamities
- ) Revenue generation and loan repayment period
- ) Business failures
- ) Industrial sickness
- ) Power shortage
- ) Inconsistency of government policies
- ) Legal provision
- ) Collateral vs. Cash flow
- ) High and conservative provisioning requirement

### **2.1.7 Impact of Non-Performing Assets on Banking Operations**

NPAs are the assets that do not generate any income to the bank but at the same time banks are require to provide provisions for NPAs from its current profit. It has a deteriorating impact on the return of assets. NPAs affect the profitability, liquidity and competitive functioning of banks and finally the disposition towards credit delivery and credit expansion. Some effects of NPAs are as follows:

- o NPA erode current profits

- Reduces interest income
- Require high provision requirement affecting the profit
- Limit recycling of fund
- NPA bring down the profits, affect the shareholder value and thus adversely affect the investor confidence

### **2.1.8 Loan Loss Provision**

In simple it can be referred as an expense set aside as an allowance for bad loans. Loan loss provision is the accumulated fund that is provided as a safeguard to cover possible losses. It is the expected accumulated provisioning fund. The amount required for provisioning depends upon the level of NPAs and their quality. The high quality loan requires low loan loss provision, whereas bad loan requires high loan loss provision. One percent provision of total credit is minimum requirement as every pass/good loans have to be provisioned. However, the ratio of provision may differ from country to country. In Nepal, NRB has prescribed minimum 1%, 25%, 50% and 100% provision for pass, substandard, doubtful and loss loans respectively.

Generally we can find two types of loan loss provisioning

- General Loan Loss Provision
- Specific Loan Loss Provision

According to widespread accounting practices general provision refers to “ex-ante” provisions and are related to future uncertain events. Specific on the other hand are instead ex-post in nature, in that they refer to certain events (such as past due payments, or other default like events).

General loan loss provision refers to the provision created in respect of pass loan only and doesn't include provisions of rescheduled/restructured and non-performing loans. All other provisions are components of specific loan loss provision.

### **2.1.9 Directives Regarding Loan Classification and Provisioning**

Unified directives -2069, issued by NRB which is implemented from 2069-04-01 has classified assets and made provisions for loan loss according to assets category. The classification is based on period of past due for Principle or Interest of loan and advances granted by licensed financial institutions. Classification criteria of Loans and Advances are as follows:

a. Pass

Loans and advances whose principal or interest amount are not past due and past due for a period up to three months shall be included in this category.

b. Substandard

Loans and advances whose principal or interest are past due for a period of 3 months to 6 months shall be included in this category.

c. Doubtful

Loans and advances whose principal or interest are past due for a period of 6 months to 1(one) year shall be included in this category.

d. Loss

Loans and advances whose principles or interest are past due for a period of more than 1(one) year shall be included in this category.

Pass loan are performing loan. Similarly, rescheduled /restructured loans, loans and advances failing in the category of substandard, doubtful, and loss are defined as non-performing Loan. The 'term' loan and advances also includes bill purchased and discounted.

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

Classification of loan	Minimum Loan loss provision
------------------------	-----------------------------

Pass	1%
Sub-standard	25%
Doubtful	50%
Loss	100%

But provision for insured loan is only 25 % of above percentage. Provision for restructured, rescheduled loan should be minimum 12.5% although they are falling into pass category. Also loan provided to black listed person, firm, company or organized institutions should also be having provision of 100% like of loss loan. Loan loss provision set aside for pass loan is defined as "General Loan Loss Provision" and Loan loss provision set aside for Sub-standard, Doubtful and Loss is defined as "Specific Loan Loss Provision".

## **2.2 Review of Related Studies**

Different articles, journals, books, internet sites and thesis were studied to gain knowledge to complete this thesis. Some important articles and journals as well as previous works are presented below.

### **2.2.1 Review of Related Journals and Articles**

Sapkota (2004), in his article published on 19<sup>th</sup> July 2004 in Rajdhani National Daily entitled "Portion of NPA in Commercial Banks – High in Public, Low in Private", has highlighted the fact of NPA as being less in private banks in comparison to public banks. He has mentioned that the NPA of two big nationalized banks (NBL and RBB) was about 60% and the loans were in very serious situation. He further added that in

order to improve this situation and to make healthy banking environment, financial reform program had been brought; as its consequences, the management of these two big banks was handed to foreign company on a contract but the ratio of NPL was not reduced.

Reddy (2003), in his study “A Comparative Study of Non Performing Assets in India in the Global Context – Similarities and Dissimilarities, Remedial Measures” has stressed on the importance of a sound understanding of the macroeconomic variables and systemic issues pertaining to banks and the economy for solving the NPA problem along with the criticality of a strong legal framework and legislative framework. He gave following suggestions:

- ) Don't eliminate-manage. Banks should focus on management of NPA rather than elimination.
- ) Foreign experiences must be utilized along with a clear understanding of the local conditions to create a tailor made solution which is transparent and fair to all stakeholders.
- ) Changes required to tackle the NPA problem would have to span the entire gamut of Judiciary, Policy and the bureaucracy to be truly effective.

Puri (2004), in his article “Maximizing value of non-performing assets” states that Asian currency crisis severely crippled the financial system in most of the Asian countries and brought to light the magnitude of non-performing loans (NPLs) at Asian financial institutions. Driven by the need to proactively tackle the souring NPL levels, the respective government embarked upon a program of sustainable reform. He states that these lead them to establish of Assets Management Companies (AMCs) for resolving the impaired assets held by banks and financial institutions. Hence the process of establishing AMCs was often supplemented with the creation of out of court debt restructuring mechanism in these countries.

Poudel (2005), in his article “Money, foreign exchange and capital markets” states that elimination of credit controls, deregulation of interest and exchange rates, easy entry of banks and financial institution into the financial system, privatization of financial and non-financial institutions, autonomy of NRB and liberalization of



foreign investment are the important dimensions of the financial liberalization in Nepal. He says that for the smooth funding of money, foreign exchange, and capital markets, the financial health of market players is important. He further states that the major state owned banks, namely NBL and RBB which have more than 50 percent share in total commercial banking assets, have been plagued with mounting non-performing loans since the late 1990s. Similarly, the ADB/N, the major financial service provider in the rural areas, also has the problem with the NPL. The resolution of NPL of the state owned banks has become a problem to the government. The foreign management has contracted out the management of NBL and RBB, the Debt Recovery Tribunal has started its operation, the Asset Management Company Act, the Secured Transaction Act and Insolvency Act have been drafted and the NRB has been strengthening its regulatory and supervisory capability to improve the financial health of banks and financial institutions. Despite these various measures taken in past couple of years, the resolution of the NPL of state owned banks has become a daunting task in the financial system.

Dahal (2010), in his article, "Experience of the Nepalese commercial banks and challenges ahead" shows us the fact that unaudited figures of mid July 2007 show negative networth of above Rs. 25 billion in 5 commercial banks. According to him this is undoubtedly due to high level of NPL in those banks. He states that current situation is unfortunate and collapse of a large bank may invite systemic risk. So, the challenge today is to erase negative networth of the banks and to create an environment to avoid recurrence of such a situation in future.

He further writes that current measures adopted by NRB have to be continued in case of problematic private banks. However, the structural changes are necessary in case of RBB and NBL. HR Management and risk management practices of best managed private banks are to be applied in these banks. Strong commitment of government and strengthening judiciary in terms of commercial transactions are necessary to bring down NPL level of banking sector. He argues there should not be political interference and cases of ex-parte injunction should be rare. There is a need of making Debt Recovery Tribunal strong and efficient including its expansion at least in major cities and setting up an efficient assets management company. He is sad to note that

collateral based lending instead of cash flow based lending is still prevalent. This speaks the need of a comprehensive risk management system in a bank. He further adds that all the banks need to work in this direction to assure the public that they have adopted all the possible measures to keep their money safe. Moreover, regulating authorities should create an environment whereby the banks can make lending decisions based on the financial statements of the borrowers. He states commercial banks of Nepal have made significant contribution to the economy. They however need to multiply their contribution for overall economic development of the country. As the country offers multitude of opportunities amidst various adversities, the banks have to plan their operation meticulously to tap the opportunities. To achieve the broader goal of new Nepal, NRB and commercial banks should work hand in hand.

He further states even after 7 decades of formal banking history, it is sad to note that 3/4th of population is far from the formal banking net. Poverty is one of the main reasons for fuelling the social tension. Financial inclusion is a must for social and communal harmony. Banks need to work in coordination with micro credit institutions, local governments, NGOs and cooperatives to make financial service accessible to the common people across the country. Moreover, the banks can play a role in infrastructure development of the country. Proper management of remittance, attraction of remittance from high earning NRNs, FDI and control of the capital flight can be a stable source of fund for infrastructure financing.

### **2.2.2 Review of Previous Research Work**

In the research conducted by Guragain (2008), titled “Analysis of Non-Performing Assets of Commercial Banks of Nepal.” following are objectives, some major findings and recommendation.

Objectives:

- ) To examine and highlight the trend and level of Non Performing Assets of the Commercial banks of Nepal.

- ) To evaluate the relationship between the ratios of Income and the Non Performing Assets to the Loan and Advances.
- ) To analyze the impacts of Non Performing Assets to the bank and to study the general reasons for become Non Performing assets.

Major Findings:

- ) NPA have inverse relationship with Return on Equity and Return on Assets.
- ) There is no significant difference in the NPA level between the commercial banks of Nepal.

Recommendations:

- ) Bank should establish separate department for credit appraisal, inspection and recovery of loan.
- ) Loan must be given only if the banker is satisfied that the borrower can repay money from the cash flow generated from operating activities.
- ) Diversification of loan should be managed by individual banks. In the context of Nepal, it is provided to the borrowers who often go to the bank and that too not in the new sector. Default by older borrowers can be found, which should be avoided.
- ) Political influences in the loan disbursement should be avoided as it may lead to worse condition to the bank as it may increase the non performing loan of the bank.
- ) Every commercial bank should maintain loan loss provision as per NRB's directives regarding nonperforming assets.

In the study of Gautam (2012), titled “Non-Performing Assets Analysis of Nepal Bank Ltd and Nepal Rastriya Banijya Bank.” as objectives mentioned below she found following major finding and suggested following major recommendation.

Objectives:

- ) To study and examine the non performing assets of Nepal Bank Limited and Rastriya Banijya Bank.
- ) To evaluate whether the banks are efficient to face the challenges and cope with the points outlined in the statement of the problem of this study or not.

- ) To conduct opinion survey regarding the causes of NPA and their impact on the financial position of the banks.

Major Findings:

- ) Profitability of sample bank is affected by NPA because significant portion of operating profit is used for maintaining loan loss provision which results negative growth of profit.
- ) There is positive relationship between credit expansion and increment of NPA.
- ) External factors like economic and industrial recession are the main cause of NPA growth for these sample banks.

Recommendations:

- ) Establish of Assets Management Company.
- ) Enhancing bank and borrower relationship.
- ) Additional legislative support is required to deal with banking problem.
- ) Strengthening of the capabilities of NRB.

Poudyal (2008), in her thesis “A Study of Non Performing Assets of Commercial Banks of Nepal” she takes Nabil Bank and Standard Chartered Bank Nepal Limited for the sample of the study. Some key objectives, major finding and recommendation of this study is presented below:

Objectives:

- ) To identify effects of NPA on Return on Assets and Return on Equity,
- ) To analyze whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for NPA/NPL or not,
- ) To recommend to overcome the difficulties in managing NPA.

Major Findings:

- ) Negative correlation exist between NPA and Return on Assets as well as on Return on Equity.
- ) Sample banks are cautious regarding to NPA, so these banks have maintained adequate Loan loss provision.

Recommendations:

- ) Create credit appraisal department to receive application and gather necessary information and give approval for lending.

- ) Credit administrative department to disburse loans transaction, the repayment of principal and interest and provide information regularly to executive level.
- ) Credit control Department (Recovery Cell) to regularly follow up the borrowers about their installment dues and remind them their due dates in case of default.

Shrestha (2009) in conducted the thesis “Comparative Analysis of Non-Performing Assets of Commercial Banks in Nepal” which had following objectives, major finding and recommendation:

Objectives:

- ) To evaluate the relationship between loan and loan loss provision in the commercial banks,
- ) To present the trend line of the non-performing assets, loan and advances, loan loss provision of selected commercial banks,
- ) To analyze the impact of non-performing assets in the performance of commercial banks.

Major Findings:

- ) The volume of loan and advances, loan loss provision of selected commercial banks are in increasing trend while NPA is decreasing.
- ) There is positive relationship between loan and loan loss provision.
- ) Some banks are not keeping the adequate provision for NPA; where as some banks with sound financial indicators have high provision.

Recommendations:

- ) Bank should take enough collateral, so the bank at least can able to recover its principle and invest amount in case of being unable to repay by the borrower.
- ) Proper financial analysis should be done before lending to the borrowers.
- ) Banks should have to increase the provision amount to recover the bad loan.

Achou and Tenguh (2008), in their project in finance submitted to university of Skovde titled “Bank Performance and Credit Risk Management” showed that there is a significant relationship between bank performance (in terms of profitability) and credit risk management (in terms of loan performance). Better credit risk management

results in better bank performance. According to the report, it is of crucial importance that banks practice prudent credit risk management and safeguarding the assets of the banks and protect the investors' interests. The study summarizes that banks used different credit risk management tools, techniques and assessment models to manage their credit risk, and that they all have one main objective, i.e. to reduce the amount of loan default which is a principal cause of bank failure. The study also reveals that banks with good or sound credit risk management policies have lower loan default ratios (bad loans) and higher interest income (profitability). The study also reveals banks with higher profit potentials can better absorb credit losses whenever they crop up and therefore record better performances. Furthermore, the study shows that there is a direct but inverse relationship between profitability (ROE, ROA) and the ratio of non-performing loans to capital (NPL\C). They concluded that banks with higher interest income have lower non-performing.

Ghimire (2010), in her thesis titled "Comparative Study on Non-Performing Loan of Nepalese Commercial Banks", With reference to Nabil Bank Limited, Nepal Credit and Commerce Bank Limited, Nepal Investment Bank Limited. Her main objectives was to evaluate the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in selected commercial banks. Similarly, to analyze the relationship between loan and loan loss provisions. Furthermore her objective was to examine whether Nepalese commercial banks are fulfilling the NRB directives regarding loan loss provision for non performing assets or not. And at last to study the trend line of the non-performing assets, loan and advances, loan loss provision of selected commercial banks.

She found that the bank could not maintain loan loss provision, perfectly in accordance to NRB's directives. The bank maintained higher than requirements for one when lower for another class of loan. Therefore the bank should give priority to maintain loan loss provision appropriately as per NRB's directives. She suggests that obeying NRB's rules and regulation is a major responsibility of the bank. Similarly she finds that the correlation between loan and deposit shows the positive relationship in all sampled banks. And concludes that when the deposit amount increases the loan and advances also increases.

Finally she has suggested the need for proper loan classification and loan loss provisioning which helps to confront the problems of NPA. She has also recommended for hiring assets management company (AMC) for banks with serious problem of NPA. Furthermore she concludes proper homework should be done before lending to the new customer as well as while increasing the limit of the old customer too. Proper credit appraisal, site visit, financial analysis, etc should be done to decrease the credit risk which will certainly play a vital role in decreasing the level of NPL as well as to maintain a balance in the level of NPL to total loan.

Maharjan (2011), in his thesis titled, “Comparative Study on Non-Performing Assets of Himalayan Bank Ltd. & Lumbini Bank Ltd.” have objective of determining the basis of floating loan, causes, impact remedial action and sector which cover high NPA. Further he desires to know the major internal, governmental and regulatory causes that help the NPA growth.

In this study he finds that external factors are more responsible than internal factors in the conversion of good loans to bad/loss. He further states among the external factors, factors related with political and economic situation of the country and borrower related factors are found most crucial in the conversion of good loan into bad/loss. While looking for the internal factor it is found that insufficient control and monitoring system are the most contributing factors in the growth of NPA's. Further he finds that lack of assets management company, execution of the court proceedings and cumbersome legal procedure and economic recession and political instability are the main reasons for the growth in NPA.

Finally he recommends that all Nepalese commercial banks should maintain loan loss provision in accordance to the NRB directives. Similarly he says proper financial analysis should be needed before providing the loan to borrower and banks should provide necessary training regarding NPA management to the managers and staffs who are involving in managing NPA. Further he refers the improvement in corporate governance including elimination of cronyism and transparency of corporate management should be advanced under government initiatives. Also suggests that

banks having high level of NPA should take immediate actions towards recovering their bad loan as soon as possible.

### **2.3 Research Gap**

In previous studies we found that how each banks considered NPA as challenge and are in the direction to tackle with them. Previous researchers have conducted the study by selecting banks with similar nature, or similar performance. Many researchers are focused to show the correlation and trend analysis within the particular bank. There is no any study to show the similarities and dissimilarities between the public sector and private commercial banks. This study will try to deliver the answer about NPA and its impact on different types of commercial banks.



# **RESEARCH METHODOLOGY**

## **3.1 Introduction**

Research is a systematic investigation into and study of materials & sources in order to establish facts and reach new conclusions and methodology is a system of methods used in a particular area of study or activity. Thus Research Methodology is a way to solve the research problem systematically. It describes the method and process applied in the entire aspect of the study. In other words, research methodology is a systematic study of the research problem that solves them with some logical evidence. Furthermore it refers to the various sequential steps to be adopted by the researcher while studying a problem with certain objective in view. Its focus is made on the application of the technique and procedure to analysis the relevant variables to see the basic relationship between relevant topics.

This chapter includes research design, population and sample, source & data collection techniques, data analysis tools and the hypothesis to be tested, which are associated with the study.

## **3.2 Research Design**

The Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The plan is the overall scheme or program of the research. We can say that the research design is specification of methods and procedures for acquiring the information needed. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. Decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study constitute a research design. In detail, the research design has two main purposes. The first purpose is to answer the research question or test relationship; then other second purpose of a research design is to control variance.

The main objective of this research is aimed at studying the non-performing assets of commercial banks within different sectors in Nepal and to provide valuable recommendation. This will follow analytical, descriptive and exploratory research

design. The design for this research is made by collection of information from different sources by using various financial statistical tools. Hence, Descriptive cum exploratory designs have been followed to conduct this study.

### **3.3 Population and Sample**

The term 'population' for research means all the member of any well defined class of people, event or object. It means that the entire group of people, events or things of interest that a researcher wished to investigate. Population is also used to refer to a set of potential measurements or values, including not only cases actually observed but those that are potentially observable. Sample is a subset of a population. The sample represents a subset of manageable size. Samples are collected and statistics are calculated from the samples so that one can make inferences or extrapolations from the sample to the population.

All the commercial banks are taken as population. Five commercial banks are taken as sample for this study. Total thirty-two commercial banks are currently operating in Nepal. The population and the sample commercial banks are as follows:

**Table 3.1 List of Commercial Banks in Nepal & the Sample Banks for this Study**

S.No.	Names	Govt. ownership %	Selected Banks
1	Nepal Bank Limited	40.53	1
2	Rastriya Banijya Bank Ltd.	100	1
3	Agriculture Development Bank Ltd.	50.78	
4	Nabil Bank Limited		1
5	Nepal Investment Bank Limited		1
6	Standard Chartered Bank Nepal Limited.		
7	Himalayan Bank Limited		
8	Nepal SBI Bank Limited		
9	Nepal Bangladesh Bank Limited		
10	Everest Bank Limited		
11	Bank of Kathmandu Limited		
12	Nepal Credit and Commerce Bank Limited		1
13	Lumbini Bank Limited		
14	Nepal Industrial & Commercial Bank Limited		
15	Machhapuchhre Bank Limited		
16	Kumari Bank Limited		
17	Laxmi Bank Limited		
18	Siddhartha Bank Limited		
19	Global IME Bank Ltd.		
20	Citizens Bank International Ltd.		
21	Prime Commercial Bank Ltd		
22	Sunrise Bank Ltd.		
23	Bank of Asia Nepal Ltd.		
24	Grand Bank Nepal Ltd.		
25	NMB Bank Ltd.		
26	Kist Bank Ltd.		
27	Janata Bank Nepal Ltd.		
28	Mega Bank Nepal Ltd.		
29	Commerz & Trust Bank Nepal Ltd.		
30	Civil Bank Ltd.		
31.	Century Commercial Bank Ltd.		
32.	Sanima Bank Ltd.		

Total	Population =32		Sample=5
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(Source: www.nrb.org.np)

### **3.4 Sources of Data**

For the purpose of analysis in this research, necessary data and information have been collected from both primary and secondary sources. The main source of secondary data is the annual reports published by the banks. Beside that newsletter, brochures etc of the concerned banks, relevant laws guidelines and directives of NRB, text books, articles of newspapers, journals, magazine, unpublished thesis and dissertation, various reports published by NRB, CIB etc. were also used as the source. Furthermore all other related sources, such as interviews, remarks/opinion by the experts that provides valuable data and conclusion regarding the subject matter were also used.

### **3.5 Data Collection Technique**

In order to collect the data, annual report published by concerned commercial banks, Publication of NRB, Economic report and other published statistical were studied and necessary information were gathered in raw form. Also to obtain the additional information newspapers, magazines, web sites, bulletin, booklets and journal published from different banks were reviewed.

### **3.6 Data Analysis Tools**

The data collection from various sources are recorded systematically and presented in appropriate forms of tables and charts and appropriate mathematical, statistical, financial, graphical tools are applied to analyze the data. For the fulfillment of the study objectives various financial tools as well as statistical tools have been employed.

#### **3.6.1 Financial Tools**

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of balance sheet and profit & loss account. To evaluate the financial position and performance of any firm ratio is used as a key tool of financial analysis. Financial ratio analysis is designed to determine the relative strength and weakness of business operation. It also provides a framework for financial planning and control.

### **3.6.1.1 Ratio analysis**

Ratio Analysis is a form of financial statement analysis that is used to obtain a quick indication of a firm's financial performance in several key areas. Ratio Analysis as a tool possesses several important features. The data, which are provided by financial statements, are readily available. The computation of ratios facilitates the comparison of firms which differ in size. Ratios can be used to compare a firm's financial performance with industry averages. Sometimes ratio is used as a benchmark for evaluating the financial position of the firm. Ratio analysis reflects the relative strengths and weakness of any organization and also indicates the operating and financial growth of the organization. In addition, ratios can be used in a form of trend analysis to identify areas where performance has improved or deteriorated over time.

#### **Loan and Advances to Total Assets Ratio**

The ratio of loans and advances to total assets measures the volume of loans and advances in the structure of total assets of any commercial bank. High degree of ratio indicates the good performance of the banks in mobilizing its fund by way of lending functions. Interest earned from loan and advances increases profitability. But high ratio indicates low liquidity, hence carrying certain degree of risk. Therefore we can say this ratio shows management attitude towards risk. So we may conclude that high ratio indicates high productivity and low degrees of safety in liquidity, and other hand low ratio indicates low productivity and high degrees of safety in liquidity.

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

#### **Loan and Advances to Total Deposit Ratio**

This ratio is also known as Credit Deposit Ratio (CD ratio). CD ratio is an index of the health of banking system in terms of demand for credit in proportion to total deposit growth in the banking sector. A declining CD ratio implies that banking sector was flush with funds without any corresponding demand for credit affecting the

bank's profitability in the long run as they have to pay interest to depositors without corresponding income from the credit outflow. The primary function of bank is to mobilize the fund obtained from the depositors to borrowers charging interest; this ratio is calculated to find how successfully the banks are utilizing their total deposit on loans and advances to generate profit. This ratio is the proportion of total lending and total borrowing in the bank. Higher ratio implies the better utilization of total deposit and better earning, although high ratio can cause inefficiency in maintaining optimum level of liquidity required. Normally 70% to 80% CD ratio is considered better for bank. The ratio is calculated as follows,

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

#### **Loan Loss Provision to Loans and Advances Ratio**

Loan loss provision signifies the cushion against future contingency created by the default of the borrower in payment of loans and ensures the continued solvency of the banks. According to directives of NRB, provision should be maintained by commercial banks according to the loan category. High NPA results high loan loss provision and vice versa. This ratio describes the quality of assets in the form of loans and advances that bank is holding. This ratio shows the level of loan loss provision to loan & advances of the commercial bank. The low ratio shows that bank have good quality of assets in total loan and advances. Similarly, high ratio shows high level of provision caused by high NPA. The ratio is calculated as follows,

$$\text{Loan Loss Provision to Loans and Advances Ratio} = \frac{\text{Loan Loss Provision}}{\text{Loans and Advances}}$$

#### **Non-performing assets to Loan and Advances ratio**

According to NRB directives the loan falling under category of substandard, doubtful and loss are regarded as non-performing assets. This ratio determines the proportion of non-performing loans in total loan and advances. Simply this ratio is known as NPA percentage. The low ratio implies the better quality of assets and higher ratio denotes bad quality of assets. High percentage denotes assets with substandard, doubtful and loss quality, on the other hand low ratio denotes high pass category loan. Hence lower is preferable. The ratio is calculated as follows,

$$\text{Non-Performing Assets to Loan and Advances Ratio} = \frac{\text{Non-Performing Assets}}{\text{Loan and Advances}}$$

### **Loan Loss Provision to Non-Performing Assets**

The ratio of loan loss provision to non-performing assets shows the proportion of provision maintained against the non-performing assets of the banks. Banks in Nepal have to make provision for loan to minimize the risk of not recovering the loan from the customer; the minimum required provision is according to assets quality. Loan loss provision is the accumulated fund that is provided as a safeguard to cover possible losses. It is the expected accumulated provisioning fund. The amount required for provisioning depends upon the level of NPAs and their quality. The high quality loan requires low loan loss provision, whereas bad loan requires high loan loss provision. Thus higher ratio signifies that the banks have enough cushion of provision to cope the problem that may cause due to NPA. Higher ratio represents sound financial position of the bank. The ratio is calculated as follows,

$$\text{Loan Loss Provision to Non-Performing Assets Ratio} = \frac{\text{Loan Loss Provision}}{\text{Non-Performing Assets}}$$

### **Return on Loan and Advances**

This ratio is calculated by dividing net profit of banks by loan and advances. This ratio shows the profitability of bank in terms of loan and advances deployed by the bank. This ratio indicates effectiveness of bank in terms loan and advances. Higher ratio shows better performance, but other factor should be kept constant. The ratio is calculated as follows,

$$\text{Return on Loan and Advances} = \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

### **3.6.2 Statistical Tools**

Statistics deals with collection of facts. While Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. It is essential to measure the relationship of two or more variables. Furthermore statistical

tool helps to compare the performance, strengthen, weakness of the organization. It also helps to present the data, show the relation and deviations or differences of variables of organizations. Following statistical tools have been used in this study.

### 3.6.2.1 Average (Arithmetic Mean)

The sum of the all observation, divided by the total number of observation is known as arithmetic mean or simply mean. It is simply unitary value, which is expected to lie around central position of the mass of data.

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n}$$

Where,  $\sum X$  = Sum of Variable 'X'

$n$  = No. of observation

### 3.6.2.2 Standard deviation

The positive square root of the arithmetic mean of the square of the deviation taken from the arithmetic mean is known as standard deviation. Standard Deviation (S.D) is the most popular and the most useful measure of dispersion. Higher the value of standard deviation higher is the variability and vice versa. It can be calculated as follows.

$$\text{S.D. } (\sigma) = \sqrt{\frac{1}{n} \sum (X - \bar{X})^2}$$

### 3.6.2.3 Correlation Coefficient

Correlation is the statistical tool, with the help of which, we can determine whether or not two or more variables are correlated and if they are correlated the degree (extent) and direction of correlation is determined.

The most widely used in practice for calculating correlation coefficient between two variables is "Karl Pearson's coefficient of correlation." This is the mathematical method of measuring the degree of association between the two variables say X and



Y. The formulae for calculation of simple correlation coefficient (i.e. r) by Karl Pearson's method is :

$$r_{xy} = \text{Correlation coefficient between X and Y}$$

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

The numerical measurement of relationship between the two variables is denoted by the symbol "r" whose values range from -1 to +1 i.e. -1 ≤ r ≤ +1.

#### Interpretation of correlation coefficient

- (i) If r = 0, there is no relationship between the variables.
- (ii) If r < 0, there is negative relationship between the variables
- (iii) If r > 0, there is positive relationship between the variables
- (iv) If r = +1, the relationship is perfectly positive
- (v) If r = -1, the relationship is perfectly negative

#### **3.6.2.4 Probable Error (P.E) of Correlation Coefficient**

The probable error of the correlation coefficient is applicable for the measurement of reliability of the computed value of the correlation coefficient, 'r'. The probable error (P.E) is defined by,

$$\text{Probable Error (P.E)} = 0.6745 \sqrt{\frac{\sum Zr^2}{N}}$$

P.E is used in interpretation whether the calculated value of sample correlation coefficient (r) is significant or not.

- ) If r > 6 PE, then correlation coefficient is significant and reliable.
- ) If r < 6 PE, then the correlation coefficient is insignificant and there is no evidence of correlation ( i.e. insignificant).
- ) In other situations, nothing can be concluded

### 3.6.2.5 Test of Hypothesis for Small Sample (t-distribution)

The student's t-distribution states that if the sample size is less than or equal to 30 (i.e.  $n \leq 30$ ), then the sampling distribution of the sample mean follows student t-distribution. The t-distribution has number of application in statistics, but for our study we use test of significance of single mean for small sample. This test is used to test whether the given population has the particular value of mean or not.

Test Statistics under Hypothesis  $H_0$ :

$$t_{\text{cal}} = \frac{\bar{X} - Z}{\sqrt{S^2/n}}$$

Where,  $\bar{X} = \frac{\sum X}{n}$

$$S^2 = \frac{1}{n-1} \sum X^2 - \frac{(\sum X)^2}{n}$$

### 3.6.2.6 Analysis of variance (ANOVA) Test

In a situation when we have three or more samples to be considered at a time, then the ANOVA is used to test whether the samples are taken from the same population or not i.e they have the same mean or not. The main objective of ANOVA is to test the homogeneity of several means. They are of two types:

- One-way ANOVA
- Two-way ANOVA

In one-way ANOVA the effect of only one factor is taken into consideration, whereas in two-way ANOVA effect of two factors (two variables) is studied simultaneously. For our study one-way ANOVA is used, which is as follows:

Test of statistics: under  $H_0$

$$F = \frac{MSC}{MSE}$$

Where,

$$\text{Mean Sum of Square due to Error (MSE)} = \frac{SSE}{N - Z - C}$$

$$\text{Mean Sum of Square due to Column/samples (MSC)} = \frac{SSC}{C - 1}$$

$$\text{Sum Square due to Error (SSE)} = SST - SSC$$

$$SSC = \text{Sum Square due to Column/ samples}$$

$$SST = \text{Sum Square due to Total}$$

$$\text{Correction Factor (C.F)} = \frac{T^2}{N}$$

T = sum of all individual value

### **3.7 Test of Hypotheses**

#### **Hypothesis 1**

Hypothesis: There is no significant difference between the NPA levels of sample commercial banks and the international standard of 4%.

#### **Hypothesis 2**

Hypothesis: There is no significant difference between the levels of NPA among the five commercial banks.

## CHAPTER-IV

### DATA PRESENTATION AND ANALYSIS

In this chapter, data are presented and analyzed systematically to fulfill the objectives of the study. The raw data collected from the different sources are processed and changed into an understandable presentation using financial as well as statistical tools supported by diagrams and graphs. The main objective of data presentation and analysis is to modify and present the raw data into understandable form. This chapter is main part of the study, as all the findings, conclusions and recommendations are going to be derived from the calculations and analysis done in this section.

#### 4.1 Total assets, Total deposit, L&A, NPA, LLP and Net Profit of Selected Banks

In this section data collected from the different source are presented in tabular as well as in graphical form. Analysis has been using simple statistical tools.

##### 4.1.1 Nepal Bank Limited

**Table 4.1 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NBL**

(Rs. million)

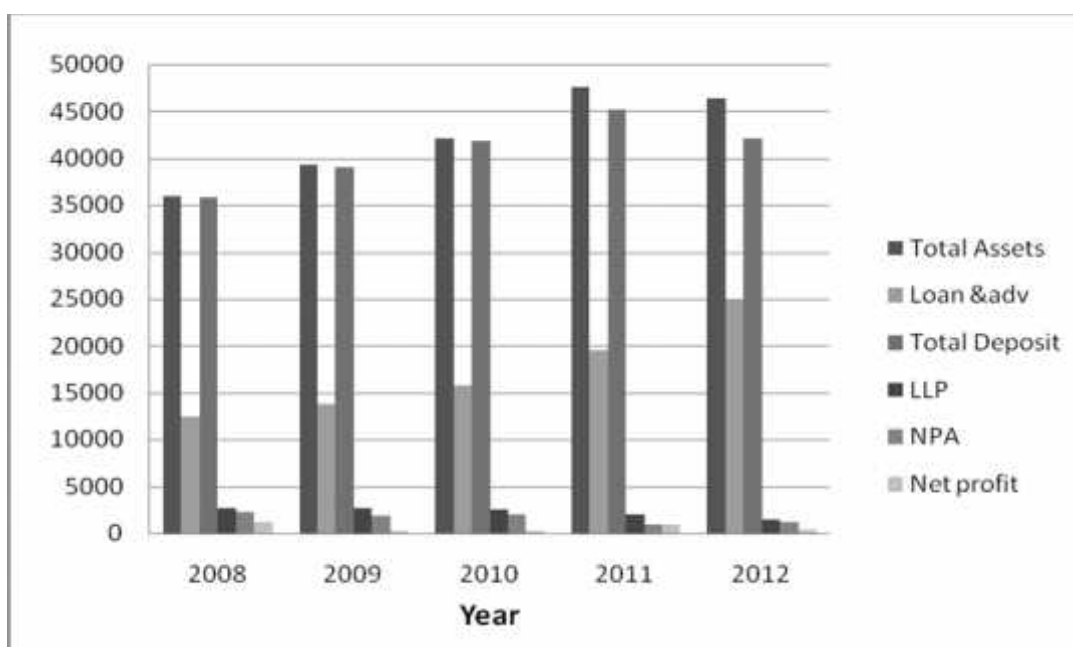
Year	Total Assets	Loan &adv	Total Deposit	LLP	NPA	NPA (in %)	Net profit
2008	35919	12441	35830	2685	2262	18.18	1207
2009	39259	13757	39014	2698	1856	13.49	227

2010	42053	15765	41829	2513	1952	12.38	239
2011	47559	19560	45194	1945	967	4.94	894
2012	46430	24935	42130	1527	1242	4.98	357

(Source: www.nepalbank.com.np)

NBL has increasing trend in Loan and Advances. Although, it's total assets has decreased in year 2012, which was increasing before that period. Total deposit has followed the same pattern as of total assets. In year 2012 total assets dropped by 2.4% and total deposit decreased by 6.8%. LLP is continuously decreasing. NPA in percentage is decreasing showing the good sign in terms of bank performance, but the NPA in amount is fluctuating without showing any definite trend. The Net profit of the bank is favorable in year 2008 and 2012 only. Banks profit was down by 60% from year 2011 to year 2012. This shows that banks performance is not satisfactory.

**Figure 4.1 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NBL**



#### 4.1.2 Rastriya Banijya Bank Limited

**Table 4.2 Total assets, Total deposit, L&A, NPA, LLP and Net profit of RBB**

(Rs. million)

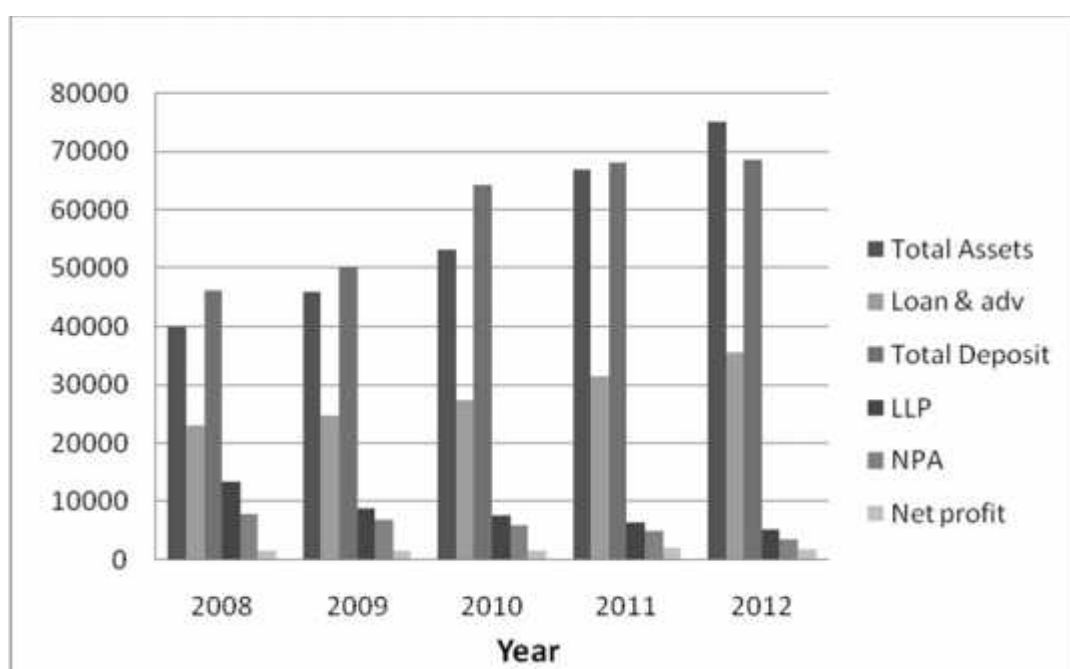
Year	Total Assets	Loan & adv	Total Deposit	LLP	NPA	NPA (in %)	Net profit
2008	39880	23101	46195	13593	8045	34.83	1591
2009	46140	24871	50464	8967	6876	27.65	1617
2010	53305	27495	64341	7709	5952	21.65	1769

2011	66883	31607	68161	6483	4956	15.68	2061
2012	75260	35692	68623	5362	3501	9.81	2010

(Source: www.rbb.com.np)

RBB bank has increasing trend in total assets as well as in loan and advances. Total Deposit of the bank is also increasing but in year 2012, total deposit increased by 0.68% which had increased by 27.5% and 6% in year 2010 and 2011 respectively. LLP has decreased by more than 60% from period 2008 to 2012. NPA have also progressively decreased through the given period. NPA has decreased from 34.83% in 2008 to 9.81% in 2012, which shows the positive indication for the bank. Net Profit is growing over the period but, it decreased by 2.5% in the latest year.

**Figure 4.2 Total assets, Total deposit, L&A, NPA, LLP and Net profit of RBB**



#### 4.1.3 Nabil Bank Limited

**Table 4.3 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NABIL**

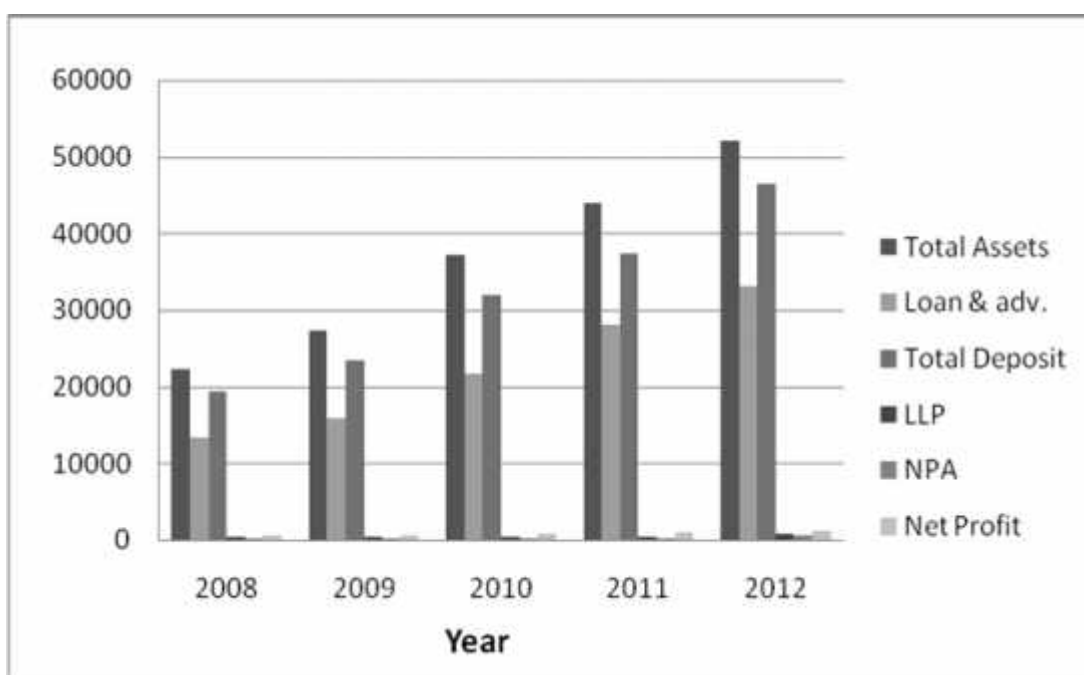
(Rs. million)

Year	Total Assets	Loan & adv.	Total Deposit	LLP	NPA	NPA (in %)	Net Profit
2008	22330	13279	19347	356	182	1.38	635
2009	27253	15903	23342	357	178	1.12	674
2010	37132	21759	31915	394	161	.74	746
2011	43867	27999	37348	409	225	.80	1031
2012	52150	33031	46411	762	486	1.47	1139

(Source: www.nabilbank.com)

Nabil bank's total asset is continuously growing. Total assets increased by 133% from 2008 to year 2012, which is more than double. Similarly Loan & advances as well as Total deposit is also increasing. NPA is also increasing in terms of amount due to the high increase in loan and advances. Likewise the NPA in percentage is also rising from 2010 onwards, before 2010 period which was decreasing. LLP is also increasing to provide the cushion. Net profit of Nabil bank shows positive indication which is increasing by nearly 10% every year, only in year 2010 it was up to 38%.

**Figure 4.3 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NABIL**



#### 4.1.4 Nepal Investment Bank Ltd.

**Table 4.4 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NIB**

(Rs. million)

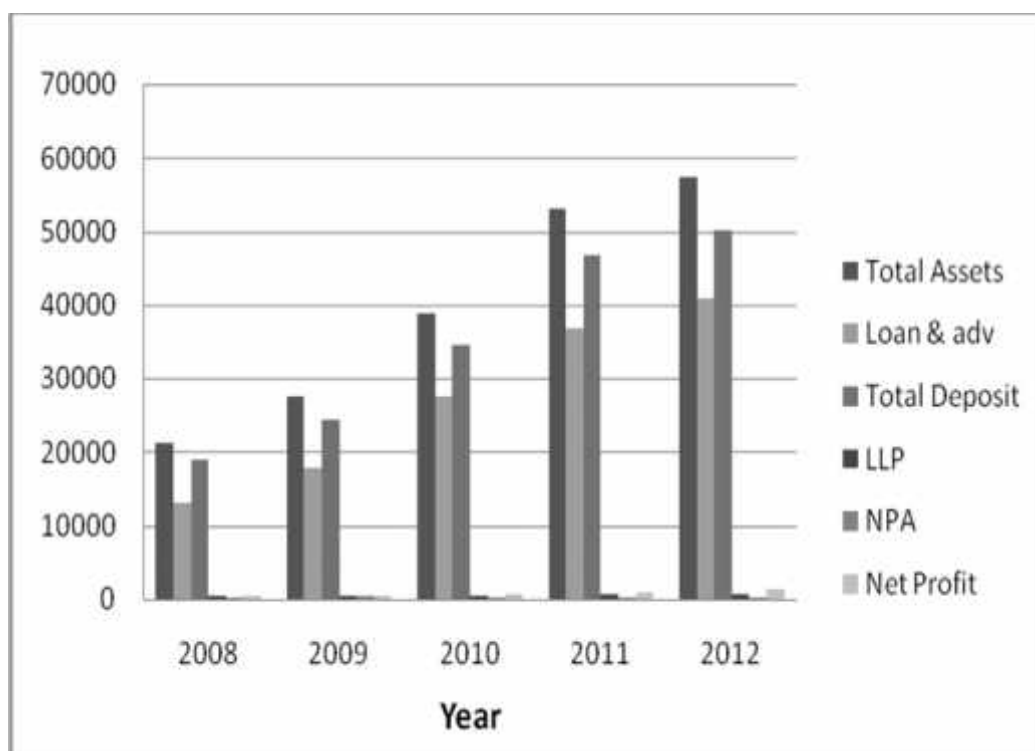
Year	Total Assets	Loan & adv	Total Deposit	LLP	NPA	NPA (in %)	Net Profit
------	--------------	------------	---------------	-----	-----	------------	------------

2008	21330	13178	18927	402	272	2.07	350
2009	27591	17769	24489	483	422	2.37	501
2010	38873	27529	34452	533	309	1.12	697
2011	53010	36827	46698	586	214	.58	901
2012	57305	40948	50094	630	254	.62	1266

(Source: www.nibl.com.np)

Total assets, Loan & advances, Total Deposit and LLP of NIB are increasing over the year. Total assets increased by 168 % during these five years. Loan & advances increased by 210 % and similarly total deposit by 164 % between year 2008 and 2012. NPA increased in year 2009 but is continuously decreasing after this period. LLP amount has also been increased over the given period. Net profit is showing good sign, which is increasing at a satisfactory rate. Net profit increased by little more than 40% in year 2012, the increased amount 365million in this period is higher than year 2008s' profit.

**Figure 4.4 Total assets, Total deposit, L&A, NPA, LLP and Net profit of NIB**



#### 4.1.5 Nepal Credit & Commerce Bank Ltd.



**Table 4.5 Total assets, Total Deposit, L&A, NPA, LLP and Net profit of NCC**

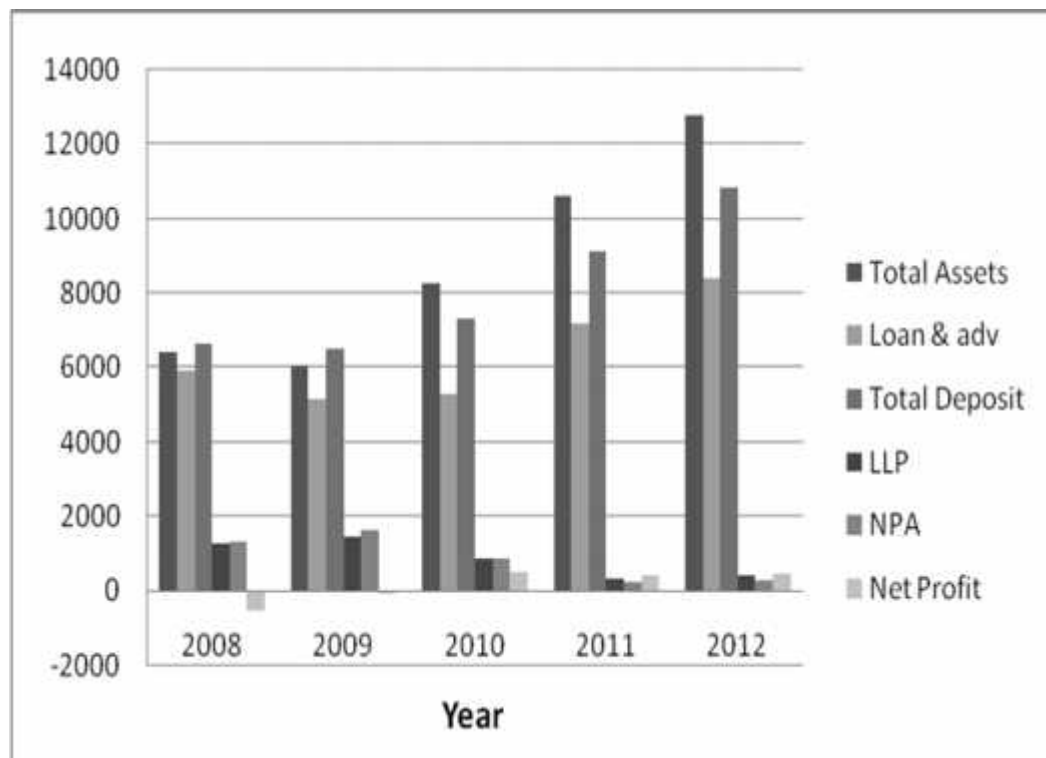
(Rs. million)

Year	Total Assets	Loan & adv	Total Deposit	LLP	NPA	NPA (in %)	Net Profit
2008	6428	5899	6619	1256	1290	21.86	(570)
2009	6037	5122	6500	1415	1607	31.4	(116)
2010	8241	5281	7320	863.2	867	16.4	499
2011	10591	7184	9128	325.4	197	2.74	415
2012	12761	8388	10825	393.2	241	2.88	424

(Source: www.nccbank.com.np)

Total assets, Loan & advances and Total Deposit of NCC bank decreased by 6.1%, 13.2% and 1.8 % respectively in year 2009 comparing to year 2010. But after 2009 all are in positive growth rate. Bank had high level of LLP in first two periods, which has been reduced in these last years. NPA of banks is reduced from 21.86% in period 2008 to just 2.88 in 2012, which shows the good recovery. Bank suffering from net loss in period 2009 and 2011 is now earning profit. But the profit is not increasing compared to an increase in Total deposit and Loan & advances.

**Figure 4.5 Total assets, total deposit, L&A, NPA, LLP and Net profit of NCC**



## 4.2 Ratio Analysis

The computation of ratios facilitates the comparison of firms which differ in size. In this section different types of ratio are compared and analyzed.

### 4.2.1 Loan and Advances to Total Asset Ratio

The ratio of loans and advances to total assets measures the volume of loans and advances in the structure of total assets of any commercial bank. High degree of ratio indicates the good performance of the banks in mobilizing its fund by way of lending functions. Interest earned from loan and advances increases profitability. But high ratio indicates low liquidity, hence carrying certain degree of risk. Therefore we can say this ratio shows management attitude towards risk. So we may conclude that high ratio indicates high productivity and low degrees of safety in liquidity, and other hand low ratio indicates low productivity and high degrees of safety in liquidity.

**Table 4.6 Loan & Advances to Total Assets Ratio**

(in %)

Year	NBL	RBB	NABIL	NIB	NCC
2008	34.6	57.9	59.5	61.8	91.8
2009	35	53.9	58.3	64.4	84.8
2010	37.5	51.6	58.6	70.8	64.1
2011	41.1	47.3	63.8	69.5	67.8
2012	53.7	47.4	63.3	71.5	65.7
Mean	40.38	51.62	60.7	67.6	74.84
S.D	7.05	4.03	2.37	3.82	11.27

(Source: Annex 1)

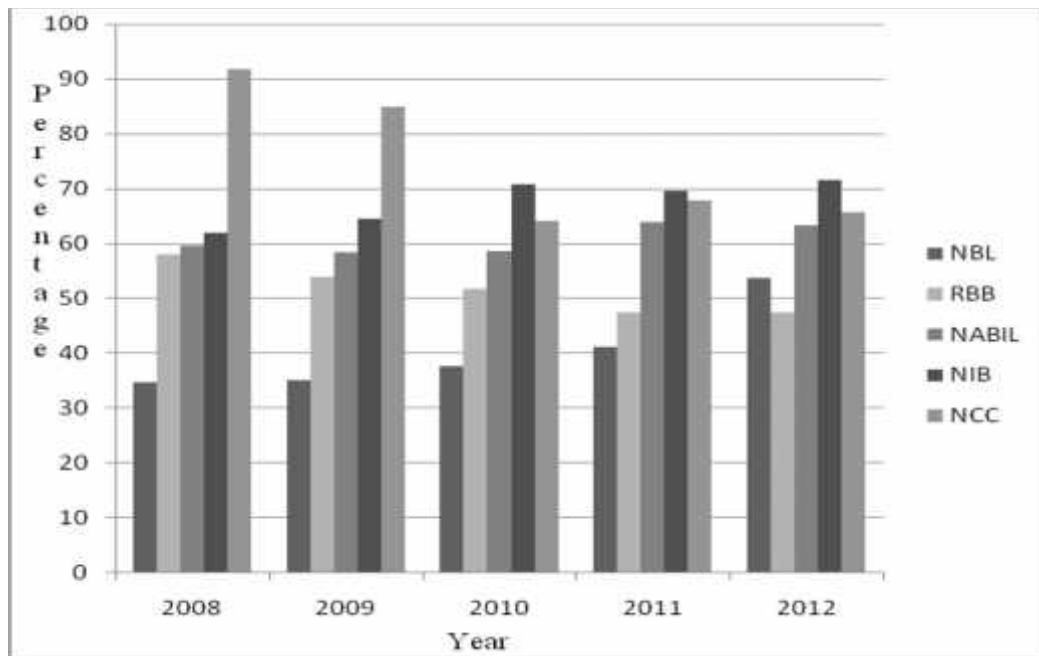
The table presented above shows the loan and advances to total assets ratio of five commercial banks for five consecutive years. Nabil Bank and NIB have less fluctuating ratio than rest three. The overall ratios of five commercial banks range from 34.6 % of NBL in year 2009 to 91.8% of NCC in the same period. Here difference between the high ratio and low ratio is 57.2 %, this shows there is high level of difference in ratio among commercial banks. RBB and NBL have ratio ranging from 34.6 % to 57.9 %. On the other hand NABIL, NIB and NCC have ratio

ranging from 58.3% to 91.8 %. From the table we can see that public NABIL, NIB and NCC have mobilized its funds highly satisfactory than RBB and NBL.

Although NCC banks have high ratio with 74.84 % average in five year, it also have high fluctuation with standard deviation of 11.27. NBL have lowest average in five years with 40.38 % per year, with standard deviation of 7.05. Similarly RBB, Nabil and NIB have average ratio of 51.62%, 60.7% and 67.6% mean ratio respectively. Also standard deviation is 4.03, 2.37 and 3.82 of RBB, Nabil and NIB respectively. It shows that Nabil and NIB have consistent and satisfactory performance.

From the figure 4.6, it can be interpreted that NIB has lower ratio except year 2012 where RBB has the lowest ratio. Similarly in year 2008 and 2009 NCC has highest ratio after that period NIB has highest ratio.

**Figure 4.6 Loan & Advances to Total Assets Ratio**



#### 4.2.2 Loan and Advances to Total Deposit Ratio

This ratio is also known as Credit Deposit Ratio (CD ratio). The primary function of bank is to mobilize the fund obtained from the depositors to borrowers charging interest; this ratio is calculated to find how successfully the banks are utilizing their total deposit on loans and advances to generate profit. This ratio is the proportion of total lending and total borrowing in the bank. Higher ratio implies the better utilization of total deposit and better earning, although high ratio can cause inefficiency in maintaining optimum level of liquidity required. Normally 70% to 80% CD ratio is considered better for bank.

**Table 4.7 Loan & Advances to Total Deposit Ratio**

(in %)

Year	NBL	RBB	NABIL	NIB	NCC
2008	34.7	50	68.6	69.6	89.1
2009	35.3	49.3	68.1	72.6	78.8
2010	37.7	42.7	68.2	79.9	72.1
2011	43.3	46.4	75	78.9	78.7
2012	59.2	52	71.2	81.7	77.5
Mean	42.04	48.08	70.22	76.54	79.24
S.D	9.1	3.23	2.65	4.63	5.51

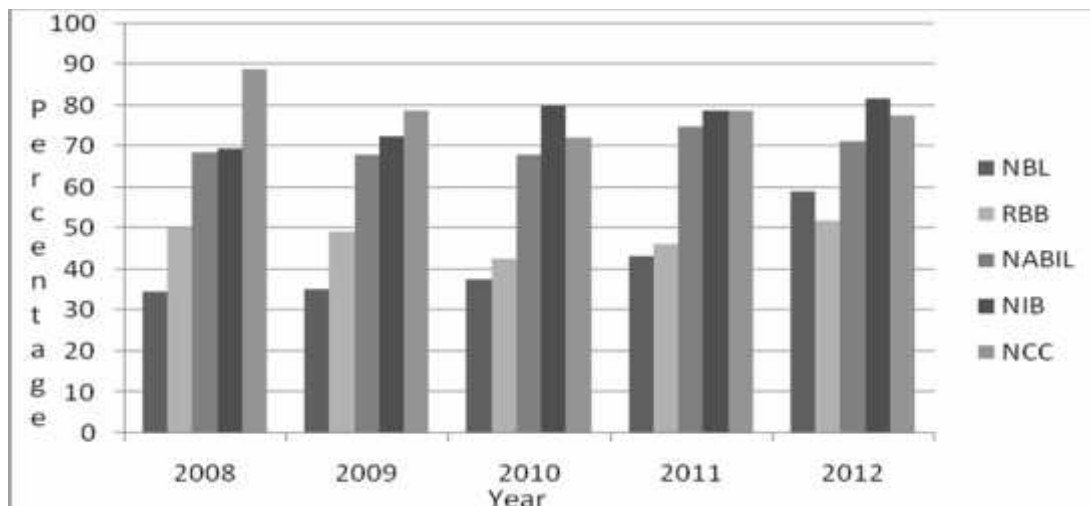
(Source: Annex 1)

The table presented above shows the loan and advances to total deposit ratio of five commercial banks for five consecutive years. NBL ratio is increasing over the year but other banks ratios are not showing any particular trend. Range of ratios lies between minimum of 34.7% of NBL in year 2008 to maximum of 89.1% in same year for NCC. NBL and RBB have ratio range from 34.7% to 59.2%. On the other hand, NABIL, NIB and NCC ratios range from 68.1% to 89.1 %. The highest ratio of 59.2% of government partially owned bank NBL, is lower by 8.9 % to minimum ratio 68.1% of private sector bank. This shows private sector commercial banks seems to have aggressive lending policy as they have higher proportion of loan and advances to total deposit.

The average ratio of NBL, RBB, NABIL, NIB and NCC bank are 42.04, 48.08, 70.22, 76.54 & 79.24 and standard deviation of 9.1, 3.23, 2.65, 4.63 & 5.51 respectively. This shows that NBL having lowest ratio, also have highest variations in ratio over

the given period. NABIL banks performance is better than rest, due to its less variability in terms of standard deviation with 2.65 and average ratio just over 70%.

**Figure 4.7 Loan & Advances to Total Deposit Ratio**



From the figure 4.7, we can see that NBL has lower ratio except year 2012 where RBB has the lowest ratio. Similarly in year 2008 and 2009 NCC has highest ratio after that period NIB has highest ratio. In year 2011 NIB, NCC and NABIL ratio lies between 70% to 80%.

#### **4.2.3 Loan Loss Provision to Loans and Advances Ratio**

This ratio describes the quality of assets in the form of loans and advances that bank is holding. Loan loss provision signifies the cushion against future contingency created by the default of the borrower in payment of loans and ensures the continued solvency of the banks. According to directives of NRB, provision should be maintained by commercial banks according to the loan category. High NPA results high loan loss provision and vice versa. This ratio shows the level of loan loss provision to loan & advances of the commercial bank. The low ratio shows that bank have good quality of assets in total loan and advances. Similarly, high ratio shows high level of provision caused by high NPA.

**Table 4.8 Loan Loss Provision to Loans and Advances Ratio**

(in %)

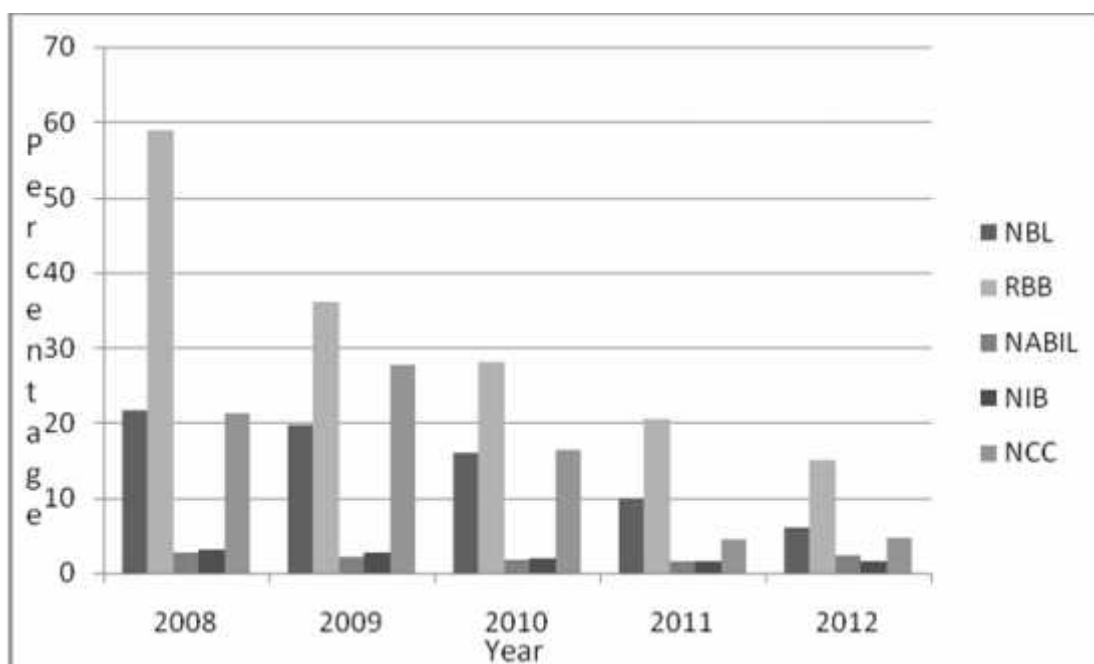
Year	NBL	RBB	NABIL	NIB	NCC
2008	21.6	58.8	2.7	3.1	21.3
2009	19.6	36.1	2.2	2.7	27.6
2010	15.9	28	1.8	1.9	16.3
2011	10	20.5	1.5	1.6	4.5
2012	6.1	15	2.3	1.5	4.7
Mean	14.64	31.68	2.1	2.16	14.88
S.D	5.81	15.31	0.42	0.63	9.13

(Source: Annex 1)

The table presented above shows the Loan Loss Provision to Loans and Advances Ratio of five commercial banks for five consecutive years. The table exhibits that RBB has highest ratio during the study period which is decreasing over the year. In the given period RBB has a highest ratio in year 2008 with 58.8% and Nabil bank has lowest of 1.5% in year 2012. RBB and NBL have high ratio which is decreasing, similar trend can be seen in case of NCC. But Nabil and NIB have low ratio from the beginning of given period, this shows that performance of these two banks is highly satisfactory. The NBL and RBB performance was worst in previous year, which now are showing recovery in the latter period particularly due to decrease in NPA.

The average ratio of NBL, RBB, NABIL, NIB and NCC bank is 14.64, 31.68, 2.1 & 2.16 and standard deviation of 5.81, 15.31, .42, 0.63 & 9.13 respectively. This shows that RBB has higher ratio as well as higher variation caused by high decrease in LLP over the year. Nabil bank shows lowest ratio and lowest variability showing best performance among the sample bank. Since LLP has direct effect in the profit of the banks, all sample banks should give their attention to decrease the level of NPA especially by government owned commercial bank.

#### **Figure 4.8 Loan Loss Provision to Loans and Advances Ratio**



From the figure 4.8, it can be seen that RBB has highest ratio through the period. NBL and NCC have similar trend in ratio and movement over the year. While Nabil and NIB performance is satisfactory with minimum ratios over the period.

#### 4.2.4 Non-Performing Assets to Loan and Advances ratio

According to NRB directives the loan falling under category of substandard, doubtful and loss are regarded as non-performing assets. This ratio determines the proportion of non-performing loans in total loan and advances. Simply this ratio is known as NPA percentage. The low ratio implies the better quality of assets and higher ratio denotes bad quality of assets. High percentage denotes assets with substandard, doubtful and loss quality, on the other hand low ratio denotes high pass category loan. Hence lower is preferable. There is debate about the optimum level of NPA %, although international standard is around 4%.

**Table 4.9 Non-Performing Assets to Loan and Advances Ratio**

(in %)

Year	NBL	RBB	NABIL	NIB	NCC
2008	18.18	34.83	1.38	2.07	21.86
2009	13.49	27.65	1.12	2.37	31.4
2010	12.38	21.65	0.74	1.12	16.4

2011	4.94	15.68	0.8	0.58	2.74
2012	4.98	9.81	1.47	0.62	2.88
Mean	10.79	21.92	1.1	1.352	15.1
S.D	5.15	8.78	0.3	0.74	11.1

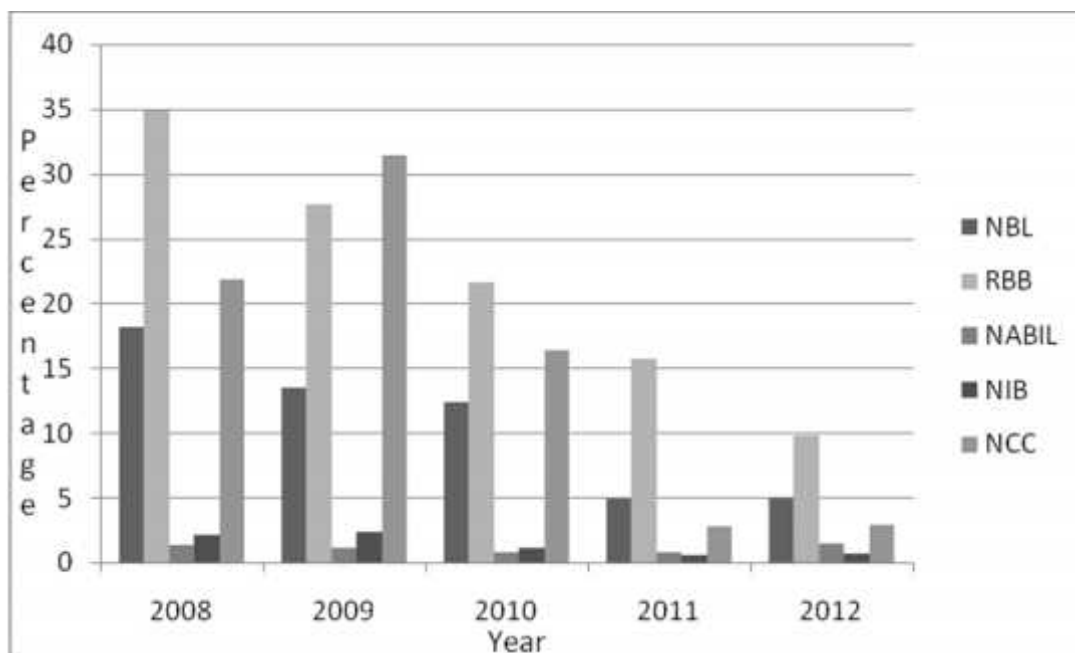
(Source: Annex 1)

The table 4.9 exhibits the ratio of Non-performing assets to loan and advances of five commercial banks for five consecutive years. The table presented above shows that RBB has the highest ratio most of the year, only in year 2009 NCC have highest ratio among the sample banks. NIB and NABIL bank have low level of NPA ratio, due to effective credit management of these banks. The overall ratios range from 34.83 % of RBB in 2008 to 0.58% of NIB in year 2011. Government owned (partially or fully) commercial banks have high ratio ranging from 34.83% to 4.94%. Although it shown the decreasing trend, it is high comparing to other bank in the industry. NCC have shown great improvement over the year, in year 2010 its ratio was just 2.88% very low from 31.4% in year 2007. Government owned (partially or fully) commercial bank should try to reduce to NPA and maintain this ratio at minimum level; otherwise it will have deteriorating influence in banks performance.

RBB have high average with 21.92% and its standard deviation of 8.78, which shows that its NPA level is decreasing by high margin. Similarly average ratio of NBL, NABIL, NIB and NCC bank is 10.79%, 1.1%, 1.352% & 15.1 and standard deviation of 5.15, 0.3, 0.74 & 11.1 respectively. NPA level as well as fluctuation level is low of NABIL and NIB, showing good performance. On other hand ratio of remaining banks is high with higher deviation.

**Figure 4.9 Non-Performing Assets to Loan and Advances Ratio**





From the figure 4.9, it can be interpreted that banks NPA is in decreasing trend. The bar clearly indicates that government owned (partially or fully) commercial bank have high NPA, So it is appropriate for these bank to reduce its level of NPA.

#### 4.2.5 Loan Loss Provision to Non-Performing Assets Ratio

The ratio of loan loss provision to non-performing assets shows the proportion of provision maintained against the non-performing assets of the banks. Banks in Nepal have to make provision for loan to minimize the risk of not recovering the loan from the customer; the minimum required provision is according to assets quality. Loan loss provision is the accumulated fund that is provided as a safeguard to cover possible losses. It is the expected accumulated provisioning fund. The amount required for provisioning depends upon the level of NPAs and their quality. The high quality loan requires low loan loss provision, whereas bad loan requires high loan loss provision. Thus higher ratio signifies that the banks have enough cushion of provision to cope the problem that may cause due to NPA. Higher ratio represents sound financial position of the bank.

**Table 4.10 Loan Loss Provision to Non-Performing Assets Ratio**

(in %)

Year	NBL	RBB	NABIL	NIB	NCC
2008	118.7	169	195.6	148	97.4
2009	145.4	130.4	200.6	114	88.1
2010	128.7	129.5	244.7	172	99.6
2011	201.1	130.8	181.8	274	165
2012	122.9	153.2	156.8	248	163
Mean	143.36	142.58	195.9	191.2	122.6
S.D	30.26	15.93	28.7	60.46	34.01

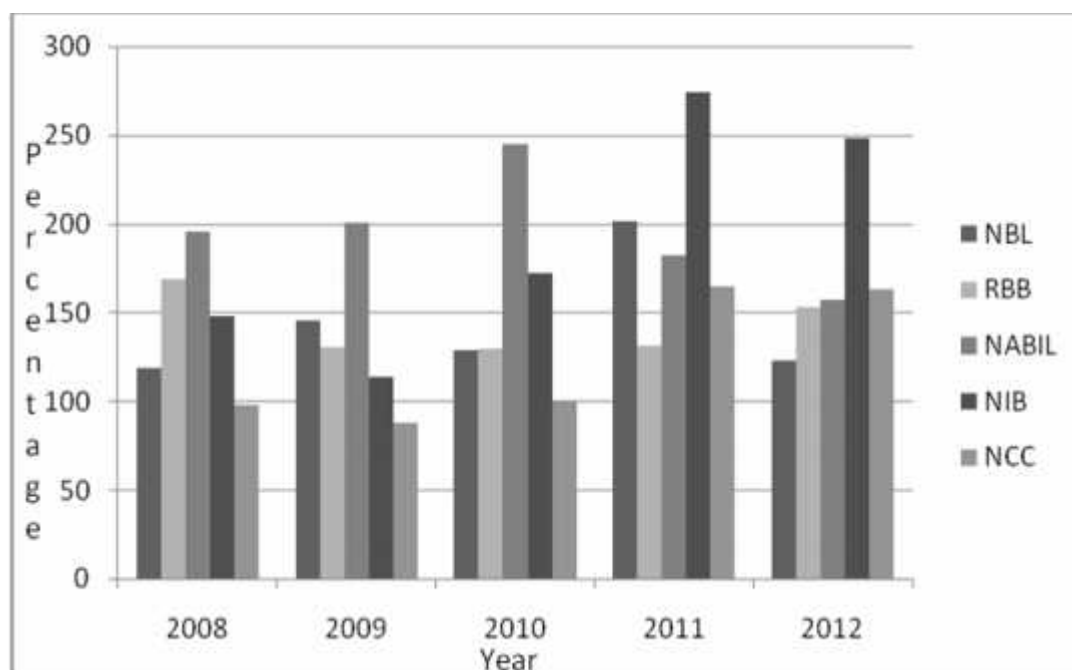
(Source: Annex 1)

The table presented above shows the Loan Loss Provision to Non Performing Assets of five commercial banks for five consecutive years. Following table shows that Nabil and NIB bank have the higher ratio among the banks. Although it seems that Nabil ratio seems to decline from year 2010 afterwards, whereas NIB has increased its ratio from that period onwards. The overall ratios of five commercial banks range from 97.4% of NCC in year 2008 to 274% of NIB in year 2011. NBL and RBB ratio shows nearly same mean, showing their provision more than its NPA. But due to high volume of NPA the higher provision could not give higher ratio. NCC scenario is worse if compared to other two commercial banks like RBB and NBL, with lowest provision maintained against the NPA.

The average ratio of NBL, RBB, NABIL, NIB and NCC bank are 143.36, 142.58, 195.9, 191.2 & 122.6 and standard deviation of 30.26, 15.93, 28.7, 64.46 & 34.01 respectively. NABIL banks have maintained high ratio, while NCC has least. We can see high deviation in ratio particularly due to high degree of fluctuation in provision made by the bank.

From the figure 4.10, it can be interpreted that NABIL has maintained highest ratio untill year 2010, after that period NIB has high ratio. We can also see all banks are increasing their ratio over the year, particularly due to increase in provision and at the same time decrease in their NPA level showing positive trend in the industry.

**Figure 4.10 Loan Loss Provision to Non-Performing Assets Ratio**



#### 4.2.6 Return on Loan and Advances

This ratio is calculated by dividing net profit of banks by loan and advances. This ratio shows the profitability of bank in terms of loan and advances deployed by the bank. This ratio indicates effectiveness of bank in terms loan and advances. Higher ratio shows better performance, but other factor should be kept constant.

**Table 4.11 Return on Loan and Advances**

(in %)

Year	NBL	RBB	NABIL	NIB	NCC
2008	9.7	6.9	4.8	2.7	(9.7)
2009	1.7	6.5	4.2	2.8	(2.3)
2010	1.5	6.4	3.4	2.5	9.5
2011	4.6	6.5	3.7	2.4	5.8
2012	1.4	5.6	3.5	3.1	5.1
Mean	3.78	6.38	3.92	2.7	1.68
S.D	3.19	0.43	0.52	0.24	6.86

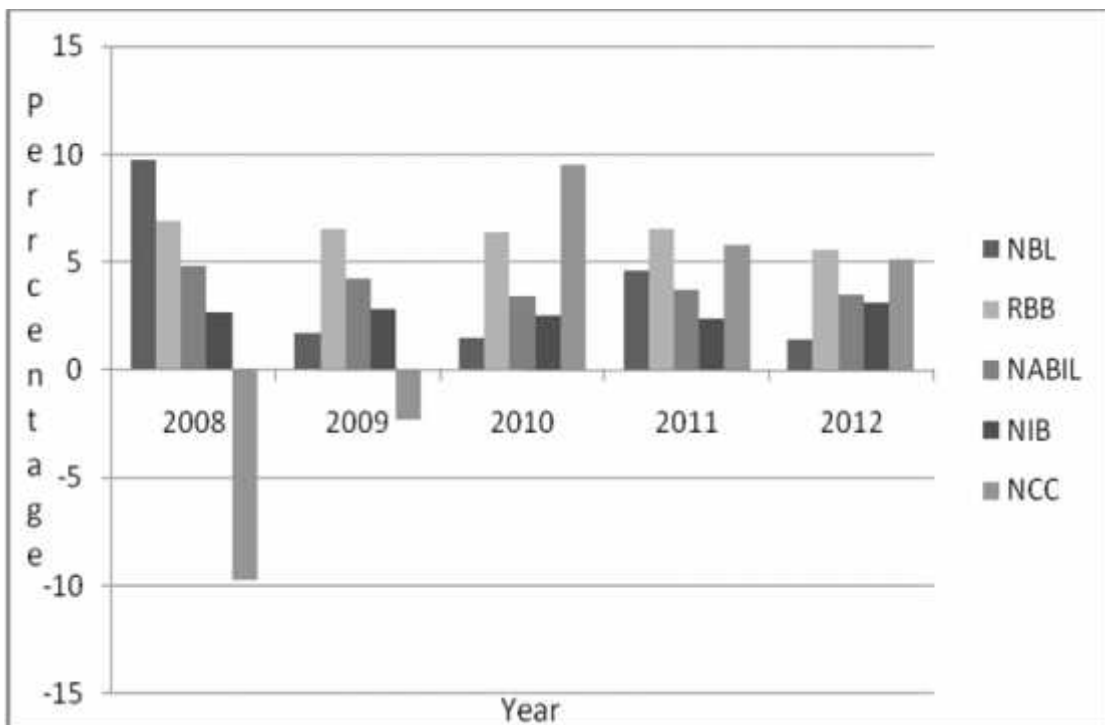
(Source: Annex 1)

The table 4.11 shows the return on loan and advances of five commercial banks for five consecutive years. Table shows RBB has highest ratio and NCC have lowest of all. The ratio ranges from -9.7% of NCC in year 2008 to 9.7% of NBL in same period.

The ratio of NCC shows irregular fluctuation having ratio -9.7% in year 2008 and 9.5% in year 2010.

The average ratio of NBL, RBB, NABIL, NIB and NCC bank are 3.78%, 6.38%, 3.92%, 2.7% & 1.68 and standard deviation of 3.19, 0.43, 0.52, 0.24 & 6.86 respectively. NCC have higher deviation because of fluctuation in earning over period. RBB seems to have consistent performance mainly due to same movement in loan & advances and net profit.

**Figure 4.11 Return on Loan and Advances**



From figure 4.11, shows that although NCC have negative ratio due to net loss in year 2008 and 2009, its recovery is praiseworthy. We can see that performance of RBB, NABIL and NIB seems constant over the year, while NBL doesn't reflect any predictable position.

### 4.3 Correlation Analysis

In this section relationship between Loan and advances and total deposit, Loan and advances and loan loss provision, loan and advances and non-performing assets and relationship between loan loss provision and non-performing assets is analyzed. Furthermore significance of the correlation is also tested.

#### 4.3.1 Correlation between Loan and Advances and Total Deposit

Deposit is one of the major items in capital and liabilities side of balance sheet of any commercial banks. Whereas loan and advances is shown on total assets column. Fund received from depositors is disburse through loan and advances. Hence amount of loan and advances to be distributed depends upon the fund collected in bank. In this case, total deposit is the independent variable and loan and advances is the dependent variable. In following table we analyze the effect in loan and advances caused by total deposit.

**Table 4.12 Correlation between Loan and Advances and Total Deposit**

Bank	Correlation coefficient (r)	Relationship	Probable Error (P.E)	6×P.E	Significant/ Insignificant
NBL	0.686	Positive	0.1597	0.9582	Significant
RBB	0.895	Positive	0.06	0.36	Significant
NABIL	0.995	Positive	0.003	0.018	Significant
NIB	0.999	Positive	0.0006	0.0036	Significant
NCC	0.957	Positive	0.0254	0.1523	Significant

(Source : Annex 2)

Above table 4.12 shows the relationship between loan and advances and total deposit of five commercial banks. It shows that relationship between these two variables is very high degree in positive direction. The correlation of NBL, RBB, NABIL, NIB and NCC are 0.686, 0.895, 0.995, 0.999 and 0.957 respectively. We can see the correlation coefficient is more than six times of probable error (P.E). This shows the relationship is definitely significant. We can conclude that the increase in deposit has

lead to higher level of loan and advances. The relationship is more positive in private commercial banks than of government commercial bank.

#### 4.3.2 Correlation between Loan Loss Provision and Loans and Advances

The correlation between LLP and loan and advances is study of degree of relationship between these two variables. Loan loss provision is the accumulated fund that is provided as a safeguard to cover possible losses. The amount required for provisioning depends upon the level of NPAs and their quality. Loan and advances quality and quantity have influence in maintaining provision. In the following table below we analyze degree of relationship between LLP and loan and advances of sample commercial banks.

**Table 4.13 Correlation between Loan Loss Provision and Loans and Advances**

Bank	Correlation coefficient (r)	Relationship	Probable Error (P.E)	6×P.E	Significant/ Insignificant
NBL	-0.987	Negative	0.0078	0.0468	Significant
RBB	-0.877	Negative	0.0696	0.4178	Significant
NABIL	0.807	Positive	0.1052	0.6312	Significant
NIB	0.98	Positive	0.0119	0.0717	Significant
NCC	-0.828	Negative	0.0948	0.569	Significant

(Source : Annex 2)

Above table 4.13 shows the relationship between loan and advances and LLP of five commercial banks. The correlation of NBL, RBB, NABIL, NIB and NCC are -0.987, -0.877, 0.807, 0.98 and -0.823 respectively. We can see the correlation coefficient is more than six times of probable error (P.E). This shows the relationship is definitely significant. NABIL and NIB have positive correlation because these banks have low LLP due to low NPA in the beginning and increase in LLP is caused due to increase in volume on loan and advances. NBL, RBB and NCC on the other hand have high degree of negative correlation; this is because these three banks had high level of provision due to high level of NPA in beginning of given period. But at the same period loan and advances was low.

### 4.3.3 Correlation between Non-Performing Assets and Loans and Advances

The correlation between Non-Performing Assets and loans and advances is study of degree of relationship between these two variables. When the loans and advances made by banks or financial institutions turnout to non-productive, non-rewarding, and non-remunerative then they will become Non-performing assets. Loan and advances quality and quantity have influence in creation or reduction of NPA. In this case, loans and advances is the independent variable and NPA is the dependent variable. In following table below we analyze degree of relationship between NPA and loan and advances of sample commercial banks.

**Table 4.14 Correlation between NPA and Loans and Advances**

Bank	Correlation coefficient (r)	Relationship	Probable Error (P.E)	6×P.E	Significant/ Insignificant
NBL	-0.818	Negative	0.0998	0.5988	Significant
RBB	-0.989	Negative	0.0007	0.0396	Significant
NABIL	0.786	Positive	0.1152	0.6917	Significant
NIB	-0.587	Negative	0.1977	1.1862	Insignificant
NCC	-0.845	Negative	0.0864	0.5176	Significant

(Source : Annex 2)

Above table 4.14 shows the relationship between NPA and loan and advances of five commercial banks. The correlation coefficient of NBL, RBB, NABIL, NIB and NCC are -0.818, -0.989, 0.786, -0.586 and -0.845 respectively. Excluding NABIL all banks have NPA in decreasing trend and loan and advances increasing trend, giving the negative relationship between the variables. NABIL bank NPA increased from year 2008 so the relationship stays positive. Except NIB we can see the correlation coefficient is more than six times of probable error (P.E) for banks. This shows the relationship is definitely significant. The correlation coefficient of NIB is less 6P.E

but more than P.E, so nothing can be concluded. We here consider the relationship to be insignificant.

#### 4.3.4 Correlation between Loan Loss Provision and Non-Performing Assets

The correlation between Loan Loss Provision and Non-Performing Assets is study of degree of relationship between these two variables. The amount required for provisioning depends upon the level of NPAs and their quality. The high quality loan requires low loan loss provision, whereas bad loan requires high loan loss provision. As earlier mentioned NPA are loan falling on the category of substandard, doubtful and loan loss category and the respective provisioning requirement is 25%, 50% and 100%. Pass loan requires only 1% provision. Higher the NPA higher will be the provisioning amount.

**Table 4.15 Correlation between Loan Loss Provision and NPA**

Bank	Correlation coefficient (r)	Relationship	Probable Error (P.E)	6×P.E	Significant/ Insignificant
NBL	0.85	Positive	0.0837	0.5022	Significant
RBB	0.932	Positive	0.0396	0.2378	Significant
NABIL	0.9873	Positive	0.00761	0.04568	Significant
NIB	-0.413	Negative	0.2502	1.5011	Insignificant
NCC	0.997	Positive	0.0018	0.1084	Significant

(Source : Annex 2)

Above table 4.15 shows the relationship between NPA and LLP of five commercial banks. The correlation coefficient of NBL, RBB, NABIL, NIB and NCC are 0.85, 0.932, 0.9873, -0.413 and 0.997 respectively. Excluding NIB all banks have NPA and LLP in decreasing trend, giving the high degree of positive relationship between the variables. For banks excluding NIB, the correlation coefficient is more than six times of probable error (P.E). This shows the relationship is definitely significant. The



correlation coefficient of NIB is less 6P.E but more than P.E, so nothing can be concluded. We here consider the relationship to be insignificant.

#### 4.4 Test Of Hypothesis

##### 4.4.1 Hypothesis 1

Hypothesis: There is no significant difference between the NPA levels of sample commercial banks and the international standard of 4%.

The calculation is done using t-test. The results found are as below:

##### Nepal Bank Limited

Tabulated Value	Calculated Value	Result
$T_{tab} = 2.132$	$t_{cal} = 2.65$	$t_{cal} > t_{tab}$

Since  $t_{cal} > t_{tab}$ ,

... $H_0$  is rejected. NPA of NBL is more than International Standard of 4%.

##### Rastriya Banijiya Bank

Tabulated Value	Calculated Value	Result
$T_{tab} = 2.132$	$t_{cal} = 4.084$	$t_{cal} > t_{tab}$

Since  $t_{cal} > t_{tab}$ ,

... $H_0$  is rejected. NPA of RBB is more than International Standard of 4%.

### **NABIL Bank Ltd**

Tabulated Value	Calculated Value	Result
$T_{tab} = 2.132$	$t_{cal} = 19.64$	$t_{cal} > t_{tab}$

Since  $t_{cal} > t_{tab}$ ,

... $H_0$  is rejected. NPA of NABIL banks is less than International Standard of 4%.

### **Nepal Investment Bank**

Tabulated Value	Calculated Value	Result
$T_{tab} = 2.132$	$t_{cal} = 7.1574$	$t_{cal} > t_{tab}$

Since  $t_{cal} > t_{tab}$ ,

... $H_0$  is rejected. NPA of NIB banks is less than International Standard of 4%.

### **Nepal Credit & Commerce Bank**

Tabulated Value	Calculated Value	Result
$T_{tab} = 2.132$	$t_{cal} = 1.9935$	$t_{cal} < t_{tab}$

Since  $t_{cal} < t_{tab}$

...  $H_0$  is accepted. There is no significant difference between the NPA of NCC and International Standard of 4%.

From the above analysis we found that private commercial banks which are more liable to the shareholders have shown good performance in terms of NPA than Nepal's two old commercial banks. The three sample commercial bank NABIL, NIB, NCC has NPA lower or equal to 4% consider optimum normally. Whereas, two oldest commercial banks which have government ownership full or partial have high level of NPA than international level of 4%.

#### 4.4.2 Hypothesis 2

Hypothesis: There is no significant difference between the levels of NPA among the five commercial banks.

All sample banks NPA was considered to test the hypothesis. Here one-way ANNOVA was used to get the conclusion. The result found is as below:

Tabulated Value	Calculated value	Result
F <sub>tab</sub> =2.87	F <sub>cal</sub> =7.091	F <sub>cal</sub> > F <sub>tab</sub>

F<sub>cal</sub> > F<sub>tab</sub> i.e H<sub>1</sub> is accepted

...There is significant difference between the levels of NPA among the five commercial banks.

#### **4.5 Major Findings of the Study**

From the analysis of data presented above, following finding was obtained.

Financial indicators show that NBLs Loan & Advances, total assets and total deposit all are increasing over the year. Although the movement was sluggish in year 2012 as total deposit and total assets both decreased. NPA decreased from 18.18 % in year 2008 to 4.94 % and 4.98 % in year 2011 and 2012 respectively. Due to this the LLP is reduced. NBL net profit is fluctuating over the year. Total assets, Loan & Advances as well as Total deposit of RBB shows the positive growth rate. High decrease in NPA resulting the reduction in LLP from Rs. 13593 million in year 2008 to Rs. 5362 million in year 2012. Net profit of RBB is increasing but the rate is lower than increase in other indicators like total assets and loan & advances. Total assets, Loan & advances and Total deposit of NABIL is growing over the course of time. Bank was able to reduce its NPA less than 1% in year 2011 and 2012, but it reached to 1.47% in year 2012. LLP is increased due to the increase in volume of NPA caused by abundance increase in Loan & advances. NABIL has healthy growth in terms for Net profit. NIB shows similar trend like NABIL. Total deposit, total assets and loan amount are increasing. LLP is increased, although the level of NPA is less than 1% in year 2011 and 2012. Net Profit shows the sound performance of the bank. NCC performance in year 2009 was not satisfactory comparing to other year, but it was able to recover form that particular time. All indicators show the positive growth after that period. Reduction of NPA by NCC is praiseworthy.

The average loan and advances to total assets ratio of NBL, RBB, NABIL, NIB and NCC during the study period are 40.38%, 51.62%, 60.7%, 67.6% and 74.84% respectively. The comparative low percentage in two banks NBL and RBB shows that risk adverse attitude, meaning they are reluctant to give high amount in loan and advances. On the other hand three other commercial banks have relatively high percentage showing their aggression to earn more profit.

Loan & Advances to total deposit ratio or simply CD ratio is an index of the health of banking system in terms of demand for credit in proportion to total deposit growth in the banking sector. The average ratio of NBL, RBB, NABIL, NIB and NCC bank are 42.04%, 48.08%, 70.22%, 76.54% & 79.24%. Declining ratio in NBL and RBB shows that banks have flush of funds but no demand for credit affecting the bank's profitability in long run. On the other hand the ratio of private commercial banks rest around 70%-80% area which is considered optimum.

Average Loan loss provision to loan and advances ratio of NBL, RBB, NABIL, NIB and NCC bank is 14.64%, 31.68%, 2.1%, 2.16% & 14.88% respectively. The high ratio of NBL, RBB and NCC is the result of high proportion of NPA in total loan. Due to the high quality of assets in NABIL and NIB the proportion is low for them.

NPA ratio of the given sample commercial banks shows that NABIL and NIB have lowest level of NPA around 1%. On the other hand the average ratio of NBL, RBB and NCC is 10.79%, 21.92% and 15.1%. The high level of non-performing assets in total loans shows the critical condition of these three commercial banks, although the ratio seems to decrease in latest period.

The average provision held to non performing assets of NBL, RBB, NABIL, NIB and NCC bank are 143.36%, 142.58%, 195.9%, 191.2% & 122.6% respectively. Here NBL and NIB have higher ratio than other three showing positive signal. NBL, RBB and NCC should try to increase their ratio by decreasing NPA or increasing provision.

Return on loan and advances shows the profitability of bank in terms of loan and advances deployed by the bank. The average ratio of NBL, RBB, NABIL, NIB and

NCC bank are 3.78%, 6.38%, 3.92%, 2.7% & 1.68%. This shows that RBB has earned highest against its loan and advances. NCC having high investment in loan and advances could not generate return as expected.

After analyzing the correlation coefficient between loan & advances and total deposit we can see all banks have positive and significant relationship. Private commercial banks have high degree of positive correlation with 0.999 of NIB, 0.995 of NABIL and 0.957 of NCC. The other NBL and RBB have correlation coefficient of 0.686 and 0.895 respectively.

The correlation coefficient between LLP and loan and advances of NBL, RBB, NABIL, NIB and NCC are -0.987, -0.877, 0.807, 0.98 and -0.828 respectively. Here correlation of NBL, RBB and NCC seems to be negative. This is because of high LLP which is decreasing during the given period where loan and advances was increasing. On the other side the relationship is positive for NIB and NABIL, due to low level of LLP for low level of NPA in beginning and increasing the level of LLP for high loan and advances in latter period.

The correlation coefficient between Non-Performing Assets and loans and advances of NBL, RBB, NABIL, NIB and NCC are -0.818, -0.989, 0.786, -0.586 and -0.845 respectively. For NIB the relationship is insignificant and NABIL has positive relationship. NABIL bank NPA increased from year 2008 so the relationship stays positive.

The correlation between LLP and NPA shows that there is positive relationship between them. For NIB the relationship seems to be negative but the P.E shows the relationship is insignificant. The correlation coefficient of NBL, RBB, NABIL, NIB and NCC are 0.85, 0.932, 0.9873, -0.413 and 0.997 respectively. The relationship is positive because LLP is maintained according to the NPA level.

From comparing NPA level of Nepalese commercial banks with international level considered optimum. We found that NPA of NABIL and NIB is less than 4%, while NCC has equal level. This shows that the performance of private commercial banks is

satisfactory. On the other hand the RBB and NIB have NPA more than 4% annually during the test period. The subsequent test showed that among the sample commercial banks there is significant difference in terms of NPA. Here we find that NPA level of commercial banks in Nepal differ from each other.

Apart from the general finding presented in numbers following are specific finding in relation to objective of the study:

- ) NPA of commercial banks in Nepal differ from each other,
- ) NPA have negative impact on overall financial performance of banks,
- ) Aggressive strategies in private and passive approach of government owned (partially or fully) commercial banks are cause for NPA in respective banks.

## **CHAPTER-V**

### **SUMMARY, CONCLUSION & RECOMMENDATIONS**

#### **5.1 Summary**

This study was undertaken to analyze and examine the NPA of different commercial banks in Nepal. The study was divided into five chapters. The first chapter discussed the reasons behind conducting the study. It was highlighted that banking sector represents the part of modern society. But due to high competition caused by rocketing growth and need to earn more, banks are in grave danger of distributing loans that can be irregular ones. This could increase the amount of non-performing assets in banks. NPA should be controlled, minimized and its effects should be reduced. NPA have negative impact on the profitability of the organization, similarly it decreases banks loan-able funds and further reduce banks reputation. In Nepal commercial banks have played a vital role. It is one of the main factors contributing in GDP as well as paying huge tax to support government expenses. But due to the economic instability, artificial increase in investment in real sector and lack of strong regulation/law banks are facing problem of non-performing assets. This problem is particularly high in government funded commercial banks. So the study was directed to know the significance difference between different commercial banks with varying background of performance. The global financial crisis of 2008, originated in US was

due to rapid default of subprime loans/mortgages. In this context study was aimed to analyze the impact of NPA on overall financial performance.

In second chapter topic under study was reviewed by learning terminologies related to NPA. Here we discussed the history of modern banking in Nepal and present condition of Nepalese commercial banks. Likewise common risks of Nepalese commercial banks like credit risk, market risk, liquidity risk and operational risk was described. Furthermore we described loan, performing loans, non-performing loans, factors contributing to NPA, Impact of NPA and loan loss provision. NRB directives for provisioning against assets quality was reviewed which showed that pass, sub-standard, doubtful and loss loan should maintain provision of 1%, 25%, 50% and 100% respectively. Moreover previous study, findings, development done in the topic was summarized.

Third chapter discussed about the research methodology used in the study. In this chapter research design, population & sample, source of data & collection techniques, data analysis tools and hypothesis to be tested was described. For this purpose descriptive cum exploratory designs was followed. All the thirty two (32) commercial banks in Nepal were taken as population. Five commercial banks were taken as sample for the study. The main source of the data was annual reports published by concerned commercial banks. Besides it newsletters, brochures, laws, guidelines, relevant thesis, journals, books articles and different websites was taken as the source. The data analysis tools like financial, statistical tools were used to analyze data of five consecutive years of five sample commercial banks under study. At last hypothesis to be tested was presented.

Fourth chapter of the study dealt about data presentation and analysis to meet the objectives of the study. Here the analysis was done by comparing different variables. The study uncovered that old commercial banks (NBL & RBB) having risk-averse nature have high assets and deposit, but low loan & advances causing high cost of the fund and low earning. In the course of analysis it was cleared that banking sector is expanding. This was justified by the increment in total assets, total deposit and total loan & advances; further reduction in NPA and increase in net profit of commercial



banks. It was also found that not only old commercial banks but private commercial banks have similar factor causing to increase in NPA. Further it was revealed that private commercial banks have higher portion of investment in most income generating assets i.e. loans and advances. On the other hand old commercial banks (NBL & RBB) have flush of funds but low credit lending policy is reducing their profit increasing opportunity. NPA in Nepal is result of improper lending and monitoring practice, the ownership of the banks have only minor role. Nepalese commercial banks have positive relationship between lending and deposit, concluding that banks lend according to deposit available to them. Further it was clear that LLP is maintained primarily according to Non-performing assets and secondarily according to loan and advances of the bank. Hypothesis test illustrated that there is difference between commercial banks in terms of NPA. While NABIL, NCC and NIB are able to maintain NPA according international level of 4%, on the other hand commercial banks funded fully or partially by government have more than the minimum level. Therefore government funded commercial banks should try to reduce the level of NPA and public ltd commercial banks funded by private citizen should try to maintain such position every year. Finally in fifth chapter the study was summarized, conclusion was drawn from the finding of the study and suggestion was made based on the research.

## **5.2 Conclusion**

Financial sector liberalization in Nepal started from mid-80s by opening the banking system to the private sector. Banking sector has expanded tremendously in this two and a half decade. Now there are several categories of financial service providers active in formal and informal sectors in Nepal. Apart from the commercial banks, the financial system has outgrown to include development banks, microfinance development banks, finance companies, nongovernment micro-credit institutions, and non-government cooperative societies. Ten years ago while particularly the commercial banks were showing good performance two state owned banks NBL and RBB were positioned as failed institutions with operating losses and huge negative net-worth. While commercial banks were almost able to hold the market share in both deposits mobilization and lending activities, RBB and NBL experienced a significant

fall in their share of deposits and lending. Nepalese economy is in fragile condition and this have a direct relationship with performance of Nepalese commercial banks. Different types of challenges are ahead of Nepalese commercial banks like weak and fragmented legal financial environment, ineffective accounting & auditing system and poor competition in banking sector. Similarly the management of non-performing assets is a great challenge faced by commercial banks from the past.

NPA symbolize bad investment. It will decrease the revenue and profitability of the banks, increases loan loss provision causing decreases in loan-able, reduces goodwill and operating effectiveness of concerned banks. In Nepal banks and government both are found conscious regarding the Non-Performing Assets. Laws and acts like NRB Act 2002, Bank and financial Institution Act 2006, Debt Recovery Tribunal Act, 2002, Secured Transactions Act 2006 are formulated. Due to the positive steps taken by NRB the level of NPA have decrease over the years. Although the pace is little slow in two oldest commercial banks, the level of NPA is declining.

The internal management system, pyramid shape organization, segmented market, weak legal and institutional system, lack of corporate culture and business ethics, poor corporate governance and risk management system, legal hurdles poor quality of credit system and lack of credit rating agency are some reasons for growth of NPA in Nepal. Hence the management of NPA is a great challenge of Nepalese commercial banks in Nepal. NPA is the outcome of multilayer causes and problem that doesn't have any specific cure.

Some commercial banks particularly like NABIL and NIB have low NPA; this has been possible through the focus of the bank on quality and diversification. But matter for concern is that Nepalese bank NPA consist more of loss loan than substandard or doubtful loan. This leads only small hope of collection of those loans. Until this very moment banks performance is seem favorable in Nepal. The loan, deposit, assets and net profit all have positive growth. But due to the factors like tight monetary policy, control on credit and sluggishness in total business sector may reduce profit in long run.

Government commercial banks with majority or minority government ownership have low level of loan and advances comparing to their total assets and deposit. In the same time their NPA is high. This does not indicate good signal. These banks must seek international best practices. Although reform program with support of World Bank started on July 2002, change the practices through restructuring of NBL and RBB to improve the operational capacity of these two commercial banks, they couldn't grasp the full benefit.

Private commercial banks have high level of loan and advances comparing to their total assets and deposit. This denotes the risk seeker and profit oriented nature of these banks. They are also seem more capable of reducing their NPA in short period of time, and earning more profit with limited resources than government commercial banks. These private commercial banks in Nepal have diversity. We could find very good performing banks like NIB and NABIL, in the mean time banks like NCC and Lumbini bank ltd are also in same circle. But major benefit and common nature for all these banks is that they are flexible and are capable of changing their performance within short frame of time. There are many cases where the management of these banks are taken under control by Central banks due to condition of being failure. So it is wrong to say that private commercial banks have good performance than government funded commercial banks in all aspects.

Finally we may conclude that the problem regarding NPA is one of the major concerns of Nepalese commercial banks. Nepalese commercial banks are found conscious regarding the NPA. They are giving full effort to decrease and minimize the level of NPA which are accumulated over the years. The central banks role seems to be prominent. The classification of loans done by the central banks had created a threshold for measuring NPA between the banks. Furthermore central banks leadership is capable of addressing this problem like NPA.

### **5.3 Recommendations**

The NPAs do not generate interest income for banks but at the same time banks are required to provide provisions for NPAs from their current profits. Sometimes the

presence of large NPAs discourages banks to accept profitable but risky proposal loan from the customers. The NPAs also affect the risk taking ability of the banks. On the whole it affects the credibility of the bank and faces difficulty in raising fresh capital from the market for future requirements. Thus reduction or minimization of NPA should always be kept in priority by banks. From the data, facts and figures, summary presented above there is some area where the improvement can be made. Some recommendations are pointed below.

1) Consideration towards risk:

Nepalese commercial banks should take risk in primary and return in secondary consideration while granting loan and advances. Furthermore CD ratio of RBB and NBL seems to be low; more concentration should be given in credit and investment by those banks.

2) Appropriate selection of loan:

Small size loan outperform large loans, similarly short term loan do better than long term loan. So selection should be based on time and volume. Larger loan should be provided in syndication to minimize the risk.

3) Improve in operating system:

Banks primarily government financed commercial banks are advised to adopt and implement appropriate governance practices. Similarly banks in Nepal should follow the international best practices like proper IT environment, effective management information system, market research system and consider human resource as its capital.

4) Different measures for different customers:

Loans turn into non-performing if the customer capacity to pay is low or customers have no willingness to pay. The punitive action should be taken against willful defaulter. On the other hand curative actions like restructuring of loan facility, enhancement in credit limits or reduction in interest rates helps improve obligor's repayment capacity.

5) Implementation of effective credit rating:

Banks in Nepal should develop internal credit risk rating system. They should categorize all credits into various classes on the basis of underlying credit quality.

6) Continuous effort towards loan recovery:

As the age of loan lingers the possibility of getting the funds back becomes difficult, mainly in two oldest commercial banks this helped to create huge NPA. So loan recovery should not be relaxed by a single moment, continuous negotiation, follow-up and proactive effort should be taken in dealing with parties should be made.

7) Adequate collateral and enforceable contract:

Bank should manage collateral, which should be of sufficient value to recover the debt. Banks should also ascertain the loan recoverable amount by updating the values of available collateral with formal valuation. Similarly banks documentation, enforceability of contracts and frequent review and monitoring should be done.

8) Selection of suitable investment portfolio:

Banks in Nepal have a habit of imitating other banks' policy. Each bank should design their own investment portfolio depending on their opportunity. Investment should be made in areas where the option of default is less. Loan portfolio of banks should include short term and small size loans that are self-liquidating. Banks should reduce their dependence on interest. The target should be investing in safer securities, which facilitates for limiting of high NPA gradually.

9) Maintain loan loss provision according to the directives:

Loan loss provision of Nepalese commercial banks differs from each other. Irony in Nepal is that banks having high NPA have comparative low LLP than banks with low NPA. Banks in Nepal should maintain loan loss provision as per NRB's directives regarding non-performing assets.

10) Adequate and suitable information on different factors:

Commercial banks should pay attention to several factors like interest, maturity, borrower's history, purpose of loan when providing loans in order to restrain the level of impaired loan. Banks should always keep in mind that whose interest are we to maximize? Before distributing the loan. Work does not end here credit quality of loan should be assessed through financial position and business condition of borrower, obligor's account activity, repayment history and obligor's ability to adhere to financial covenant stated in the loan agreement.

11) Support from governing bodies:

Acts like NRB Act 2002, Bank and financial Institution Act 2006, Debt Recovery Tribunal Act, 2002, Secured Transactions Act 2006 will not do any better unless there is any supportive role from political parties, government. They should stop giving protection to defaulters and help banks by blacklisting them.

12) Further categorization of commercial banks:

NPA level of Nepalese commercial banks differ from each other. Hence all commercial banks should not be seen from same perspective. Low performing banks and high performing banks should be monitored and supervise by NRB by creating different types of benchmark.

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Year	Total Assets	Loan &adv	Ratio(X)%	$(X - \bar{X})^2$
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**ANNEX -1**

**Calculation of Mean and Standard Deviation of Loans & Advances to Total Assets Ratio of Nepal Bank Limited**

2008	35919	12441	34.6	33.41
2009	39259	13757	35	28.94
2010	42053	15765	37.5	8.29
2011	47559	19560	41.1	0.72
2012	46430	24935	53.7	177.42
n = 5			$\bar{X} = 201.9$	$\sum (X - \bar{X})^2 = 248.78$

We know,

$$\text{Loan and Advances to Total Assets Ratio (X)} = \frac{\text{Loan and Advances}}{\text{Total Assets}}$$

Now Calculation of Arithmetic Mean is as follows

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n} = \frac{201.9}{5} = 40.38$$

Also calculation of Standard deviation is as follows

$$\text{S. D. } (\sigma) = \sqrt{\frac{1}{n} \sum (X - \bar{X})^2} = \sqrt{\frac{248.78}{5}} = 7.05$$

Similarly Mean and Standard deviation of other ratios of NBL, RBB, NABIL, NIB and NCC banks have been calculated

## ANNEX -2

### Calculation of Correlation Coefficient, P.E and 6xP.E of NABIL banks –Loan Loss Provision and Non-Performing assets

Year	LLP(X)	NPA(Y)	X <sup>2</sup>	Y <sup>2</sup>	XY
2008	356	182	12676	33124	64792
2009	357	178	127449	31648	63546
2010	394	161	155236	25921	63434

Year	NPA (X)	X <sup>2</sup>
------	------------	----------------

2011	409	225	167281	50625	92025
2012	762	486	580644	236196	370332
	X=2278	Y=1232	X <sup>2</sup> =1157346	Y <sup>2</sup> =377550	XY=654129

Now we have

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}} \\
 &= \frac{5 | 654129 - 2278 | 1232}{\sqrt{5 | 1157346 - 2278^2} \sqrt{5 | 377550 - 1232^2}} \\
 &= \frac{464149}{470117.87} = 0.98730
 \end{aligned}$$

$$\text{Probable Error (P.E)} = .6745 \sqrt{\frac{\sum Zr^2}{\sqrt{N}}} = 0.00761$$

$$6 \times \text{P.E} = 6 \times 0.00761 = 0.04568$$

Since,  $r > 6 \times \text{P.E.}$ , the value of  $r$  is significant, i.e correlation is significant.

Similarly the Correlation Coefficients, P.E., and 6P.E. between different variables of NBL, RBB, NABIL, NIB and NCC banks have been calculated.

2008	2.07	4.2849
2009	2.37	5.6169
2010	1.12	1.2544
2011	0.58	0.3364
2012	0.62	0.3844
Total	X = 6.76	X <sup>2</sup> = 11.877

**ANNEX -3**

**Hypothesis I**

T-test of Nepal Investment Bank

$$\bar{X} = \frac{X}{n} = \frac{6.76}{5} = 1.352$$

$$S^2 = \frac{1}{n} \left[ \sum X^2 - \frac{(\sum X)^2}{n} \right]$$

$$= \frac{1}{5} \left[ 11.877 - \frac{(6.76)^2}{5} \right]$$

$$= 0.68457$$

**Step 1: Null Hypothesis (H<sub>0</sub>):**  $\mu = 4$

There is no significant difference between the NPA of NIB and International Standard of 4%.

**Step 2: Alternative Hypothesis H<sub>1</sub>:**  $\mu < 4$

NPA of NIB is less than International Standard of 4%.

**Step 3: Test Statistics under Hypothesis H<sub>0</sub>:**

$$t_{\text{cal}} = \frac{\bar{X} - Z}{\sqrt{S^2/n}} = \frac{1.352 - 4}{\sqrt{0.68437/5}} = 7.1574$$

**Step 4: Critical Value under H<sub>1</sub>**

The tabulated value of t test for d.f. = 5-1 = 4 at 5% level of significance due to one tailed test is given is given by:

$$T_{\text{tab}} = 2.132$$

**Step 5: Decision**

$$t_{\text{cal}} > t_{\text{tab}}$$

...H<sub>0</sub> is rejected

... NPA of NIB is less than International Standard of 4%.

### T-test for Rastrya Banijya Bank

Year	NPA (X)	X <sup>2</sup>
2008	34.83	1213.13
2009	27.65	764.52
2010	21.65	468.72
2011	15.68	245.86
2012	9.81	96.24
Total	X = 109.62	X <sup>2</sup> = 2788.47

$$\bar{X} = \frac{\sum X}{n} = \frac{109.62}{5} = 21.924$$

$$S^2 = \frac{1}{n} \sum X^2 - \frac{(\sum X)^2}{n}$$

$$= \frac{1}{5} (2788.47) - \frac{(109.62)^2}{5}$$

$$= 96.29$$

**Step 1: Null Hypothesis (H<sub>0</sub>):**  $\mu = 4$

There is no significant difference between the NPA of NIB and International Standard of 4%.

**Step 2: Alternative Hypothesis H<sub>1</sub>:**  $\mu > 4$

NPA of RBB is more than International Standard of 4%.

**Step 3: Test Statistics under Hypothesis H<sub>0</sub>:**

$$t_{\text{cal}} = \frac{\bar{X} - \mu}{\sqrt{S^2/n}} = \frac{21.924 - 4}{\sqrt{96.29/5}} = 4.084$$

**Step 4: Critical Value under  $H_1$** 

The tabulated value of t test for d.f. =  $5-1 = 4$  at 5% level of significance due to one tailed test is given is given by:

$$T_{\text{tab}} = 2.132$$

**Step 5: Decision**

$$t_{\text{cal}} > t_{\text{tab}}$$

... $H_0$  is rejected

... NPA of RBB is more than International Standard of 4%.

Similarly calculation of T-test of other banks has been done.

## ANNEX-4

### Test of Hypothesis (F-test)

NPA									
NBL	RBB	NABIL	NIB	NCC					
X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>1</sub> <sup>2</sup>	X <sub>2</sub> <sup>2</sup>	X <sub>3</sub> <sup>2</sup>	X <sub>4</sub> <sup>2</sup>	X <sub>5</sub> <sup>2</sup>
18.18	34.83	1.38	2.07	21.86	330.5	1213.1	1.9	4.3	477.9
13.49	27.65	1.12	2.37	31.4	182	764.5	1.25	5.6	986
12.38	21.65	0.74	1.12	16.4	153.3	468.7	0.5	1.3	269
4.94	15.68	0.8	0.58	2.74	24.4	245.8	0.6	0.3	7.5
4.98	9.81	1.47	0.62	2.88	24.8	96.2	2.2	0.4	8.3
<b>X<sub>1</sub> =</b>	<b>X<sub>2</sub> =</b>	<b>X<sub>3</sub> =</b>	<b>X<sub>4</sub> =</b>	<b>X<sub>5</sub> =</b>	<b>X<sub>1</sub><sup>2</sup> =</b>	<b>X<sub>2</sub><sup>2</sup> =</b>	<b>X<sub>3</sub><sup>2</sup> =</b>	<b>X<sub>4</sub><sup>2</sup> =</b>	<b>X<sub>5</sub><sup>2</sup> =</b>
53.97	109.62	5.51	6.76	75.28	715	2788	6.5	11.9	1748.7

#### Step 1: Formulation of Hypothesis

**Null Hypothesis H<sub>0</sub>:** ~1 X ~2 X ~3 X ~4 X ~5. There is no significance difference between the NPA levels of the Commercial Banks of Nepal.

**Alternative Hypothesis H<sub>1</sub>:** ~1 | ~2 | ~3 | ~4 | ~5. There is significance difference between the NPA levels of the Commercial Banks of Nepal.

**Step 2: Level of significance: use = 5% = 0.05**

**Step 3: Test of statistics: under H<sub>0</sub>**

$$F = \frac{MSC}{MSE}$$

#### Calculation of F

a. Calculation of sum of all individual value

$$T = X_1 + X_2 + X_3 + X_4 + X_5$$

$$= 53.97 + 109.62 + 5.51 + 6.76 + 75.28$$



$$=251.14$$

b. Calculation of Correction Factor (C.F)

$$C.F = \frac{T^2}{N} = \frac{251.14^2}{25} = 2522.85$$

c. Calculation of Sum Square due to Total (SST)

$$\begin{aligned} (SST) &= X_1^2 + X_2^2 + X_3^2 + X_4^2 + X_5^2 - C.F \\ &= 715 + 2788 + 6.5 + 11.9 + 1748.7 - 2522.85 = 2747.25 \end{aligned}$$

d. Calculation of Sum Square due to Column (SSC)

$$\begin{aligned} (SSC) &= \frac{f_{X1A}}{n1} + \frac{f_{X2A}}{n2} + \frac{f_{X3A}}{n3} + \frac{f_{X4A}}{n4} + \frac{f_{X5A}}{n5} - C.F \\ &= \frac{53.97^2}{5} + \frac{109.62^2}{5} + \frac{5.51^2}{5} + \frac{6.76^2}{5} + \frac{75.28^2}{5} - 2522.85 = 1611.64 \end{aligned}$$

e. Calculation of Sum Square due to Error (SSE)

$$SSE = SST - SSC = 2747.25 - 1611.64 = 1135.61$$

f. Calculation of Mean Sum of Square due to Column (MSC)

$$MSC = \frac{SSC}{C Z1} = \frac{1611.64}{4} = 402.91$$

g. Calculation of Mean Sum of Square due to Error (MSE)

$$MSE = \frac{SSE}{N ZC} = \frac{1135.61}{25 Z5} = 56.78$$

h. Calculation of F

$$F = \frac{MSC}{MSE} = \frac{402.91}{56.78} = 7.091$$

**i. One way Annova table**

Source of Variance	Sum of Square	Degree of Freedom (D.F.)	Mean Sum Square	F- Ratio
Due to Column (between the banks)	SSC=1611.64	$C - 1 = 5 - 1 = 4$	MSC = 402.91	$F = \frac{MSC}{MSE}$ $= \frac{402.91}{56.78}$ $= 7.091$
Due to Error (within the Banks)	SSE=1135.61	$N - C = 25 - 5 = 20$	MSE = 56.78	

**Step 4: Table Value**

The tabulated value of F degree of freedom (4, 20) at 5 % level of significance due to two tailed test is given by  $F_{tab} = 2.87$

**Step5: Decision**

$F_{cal} > F_{tab}$  i.e  $H_1$  is accepted

...There is significant difference between the levels of NPA among the five commercial banks.

## ANNEX-5

### Excerpts of Financial Statements of Sample Commercial Banks

<b>Nepal Bank Limited</b>	<b>(Rs. in'000')</b>				
<b>Capital and Liabilities</b>	<b>FY 2007-08</b>	<b>FY 2008-09</b>	<b>FY 2009-10</b>	<b>FY 2010-11</b>	<b>FY 2011-12</b>
Capital	380,383	380,383	380,383	380,383	380,400
Reserves and Surplus	(6,681,838)	(6,627,898)	(6,388,684)	(5,234,694)	(5,232,200)
Debenture & Bond	-	-	-	-	-
Borrowing	1,717,442	1,604,868	1,820,089	1,970,675	2,125,100
Deposit	35,829,765	39,014,204	41,829,391	45,194,232	42,129,900
Bills Payable	100,984	60,726	52,342	12,016	47,100
Proposed & Payable dividend	1,115	2,083	2,067	2,065	2,000
Tax Liabilities	-	-	-	-	130,600
Other Liabilities	4,571,054	4,824,427	4,357,856	5,234,433	3,490,800
<b>Total Liabilities</b>	<b>35,918,905</b>	<b>39,258,793</b>	<b>42,053,444</b>	<b>47,559,110</b>	<b>43,073,700</b>
Cash Balance	1,110,953	1,086,067	1,181,792	1,515,655	1,573,700
Balance with NRB	5,353,964	5,224,859	4,430,641	6,619,700	7,350,200
Balance with Banks	709,140	806,367	1,004,559	1,036,435	1,044,700
Money At call	-	200,000	-	400,000	-
Investment	14,490,247	16,072,180	16,570,755	13,397,559	5,815,800
Loan and Advances	9,756,163	11,058,478	13,251,963	17,614,899	23,546,800
Fixed Assets	191,706	205,768	207,528	249,393	327,900
Non- Banking Assets	7,982	-	-	-	435,300
Other Assets	4,298,750	4,605,074	5,406,206	6,725,469	2,979,300
<b>Total Assets</b>	<b>35,918,905</b>	<b>39,258,793</b>	<b>42,053,444</b>	<b>47,559,110</b>	<b>43,073,700</b>
Interest Income	2,049,030	1,848,612	2,094,906	2,690,058	2,865,100
Interest Expenses	774,325	772,644	772,657	791,710	764,400
<b>Net Interest Income</b>	<b>1,274,705</b>	<b>1,075,968</b>	<b>1,322,249</b>	<b>1,898,348</b>	<b>2,100,700</b>
Commission and discount	177,784	181,019	229,724	273,106	220,700
Other Operating Income	140,843	287,648	157,432	156,757	-
Exchange Income	121,337	-	119,407	89,209	23,600
<b>Total Operating Income</b>	<b>1,714,669</b>	<b>1,544,635</b>	<b>1,828,812</b>	<b>2,417,420</b>	<b>2,345,000</b>
Employees Expenses	1,067,634	1,125,224	1,346,824	1,640,565	2,566,100
Other Operating Expenses	428,651	258,554	259,786	297,015	255,100
Exchange Loss	-	46,279	-	-	-
<b>Operating Profit Before Provision</b>	<b>218,384</b>	<b>114,578</b>	<b>222,202</b>	<b>479,840</b>	<b>(476,200)</b>
Provisions for possible losses	607,483	80,376	258,572	334,315	55,600
<b>Operating Profit</b>	<b>(389,099)</b>	<b>34,202</b>	<b>(36,370)</b>	<b>145,525</b>	<b>(531,800)</b>
Non-Operating Income/ Expenses	22,905	50,389	67,942	57,526	-
Return From Loan Loss Provision	1,813,642	-	134,362	676,372	748,700
<b>Profit From Ordinary activities</b>	<b>1,447,448</b>	<b>84,591</b>	<b>165,934</b>	<b>879,423</b>	<b>216,900</b>
Extra ordinary Income /Expenses	(119,457)	165,057	179,996	165,144	213,900
<b>Net Profit including all activities</b>	<b>1,327,991</b>	<b>249,648</b>	<b>345,930</b>	<b>1,044,567</b>	<b>430,800</b>
Provision For Staff Bonus	120,726	22,695	31,448	94,960	-
Provision For Income Tax	-	-	75,268	55,353	2,200
-This Year	-	-	-	-	-
-Up to Last Year	-	-	-	-	-
<b>Net Profit / Loss</b>	<b>1,207,265</b>	<b>226,953</b>	<b>239,214</b>	<b>894,254</b>	<b>428,600</b>
<b>Financial Indicators</b>					

Core Capital to Risk Weighted Assets	-40.44%	-37.97%	-33.05%	-13.94%	-11.74%
Capital Fund to Risk Weighted Assets	-43.09%	-38.83%	-35.46%	-13.94%	-11.74%
Non-Performing Loan to Total Loan	18.18%	13.49%	12.38%	4.94%	4.98%

## Rastriya Banijya Bank

(Rs. in '000')

Capital and Liabilities	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Capital	1,172,300	1,172,300	1,172,300	1,172,300	1,172,300
Reserves and Surplus	(19,890,877)	(18,391,801)	(16,632,278)	(13,133,193)	(11,126,990)
Debenture & Bond	-	-	-	-	-
Borrowing	4,357,727	2,219,603	2,517,009	3,873,598	4,039,791
Deposit	46,195,482	50,464,128	64,340,951	68,160,927	68,623,160
Bills Payable	40,721	63,707	68,180	68,605	-
Proposed & Payable dividend	39,350	47,220	55,090	62,960	-
Tax Liabilities	-	-	-	-	-
Other Liabilities	7,964,916	10,564,489	1,783,670	8,509,150	12,551,923
<b>Total Liabilities</b>	<b>39,879,619</b>	<b>46,139,646</b>	<b>53,304,922</b>	<b>68,714,347</b>	<b>75,260,184</b>
Cash Balance	1,202,152	1,897,762	8,640,723	2,014,077	1,674,650
Balance with NRB	3,867,105	3,708,616	3708616	8,412,752	8,264,580
Balance with Banks	159,565	197,157	197157	1,344,468	1,361,722
Money At call	-	20,000	550,000	-	-
Investment	11,555,358	12,650,196	14,443,378	15,416,020	12,989,463
Loan and Advances	14,633,545	17,328,731	21,202,987	26,187,931	35,692,514
Fixed Assets	420,849	439,505	465,553	452,209	890,805
Non- Banking Assets	97,945	110,137	51,453	23,317	199,077
Other Assets	7,943,100	9,787,542	7,950,828	14,863,573	14,187,373
<b>Total Assets</b>	<b>39,879,619</b>	<b>46,139,646</b>	<b>53,304,922</b>	<b>68,714,347</b>	<b>75,260,184</b>
Interest Income	2,282,825	2,356,940	2,708,764	3,444,188	4,207,610
Interest Expenses	850,136	942,751	1,025,586	1,067,779	1,386,980
<b>Net Interest Income</b>	<b>1,432,689</b>	<b>1,414,189</b>	<b>1,683,178</b>	<b>2,376,409</b>	<b>2,820,630</b>
Commission and discount	289,578	343,561	430,618	577,560	608,261
Other Operating Income	109,675	123,249	157,070	195,561	177,270
Exchange Income	73,950	-	-	32,098	53,215
<b>Total Operating Income</b>	<b>1,905,892</b>	<b>1,880,999</b>	<b>2,270,866</b>	<b>3,181,628</b>	<b>3,659,376</b>
Employees Expenses	745,187	789,042	875,656	1,389,012	1,629,244
Other Operating Expenses	288,625	357,753	329,090	393,316	417,546
Exchange Loss	-	12,933	30,484	-	13,067
<b>Operating Profit Before Provision</b>	<b>872,080</b>	<b>721,271</b>	<b>1,035,636</b>	<b>1,399,300</b>	<b>1,599,519</b>
Provisions for possible losses	662,879	386,922	425,542	481,042	286,546
<b>Operating Profit</b>	<b>209,201</b>	<b>334,349</b>	<b>610,094</b>	<b>918,258</b>	<b>1,312,973</b>
Non-Operating Income/ Expenses	27,233	31,334	13,872	60,887	97,738
Return From Loan Loss Provision	1,515,763	1,224,604	1,134,290	1,331,959	1,201,493
<b>Profit From Ordinary activities</b>	<b>1,752,197</b>	<b>1,590,287</b>	<b>1,758,256</b>	<b>2,311,104</b>	<b>2,612,204</b>
Extra ordinary Income /Expenses	(33,390)	155,976	152,018	138,356	(2,219)
<b>Net Profit including all activities</b>	<b>1,718,807</b>	<b>1,746,263</b>	<b>1,910,274</b>	<b>2,449,460</b>	<b>2,609,985</b>
Provision For Staff Bonus	127,319	129,353	141,502	181,441	193,332
Provision For Income Tax	-	-	-	344,337	405,966
-This Year	-	-	-	-	-
-Up to Last Year	-	-	-	-	-
<b>Net Profit / Loss</b>	<b>1,591,488</b>	<b>1,616,910</b>	<b>1,768,772</b>	<b>1,923,682</b>	<b>2,010,687</b>
<b>Financial Indicators</b>					
Core Capital to Risk Weighted Assets	-56.25%	-44.40%	-38.17%	-38.37%	-24.08%
Capital Fund to Risk Weighted Assets	-55.54%	-43.53%	-37.19%	-38.37%	-24.08%

Non-Performing Loan to Total Loan	34.83%	27.65%	21.65%	15.68%	9.8%
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## Nabil Bank Limited

(Rs. in '000')

Capital and Liabilities	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Capital	491,654	491,654	689,216	965,747	2,028,773
Reserves and Surplus	1,383,340	1,565,395	1,747,983	2,164,494	1,805,452
Debenture & Bond	-	-	240,000	300,000	300,000
Borrowing	173,202	882,573	1,360,000	1,681,305	74,900
Deposit	19,347,399	23,342,285	31,915,047	37,348,256	46,340,701
Bills Payable	112,607	83,515	238,422	463,139	425,444
Proposed & Payable dividend	435,084	509,418	437,373	361,325	434,737
Tax Liabilities	34,605	-	38,777	80,232	24,904
Other Liabilities	352,080	378,553	465,941	502,900	644,814
<b>Total Liabilities</b>	<b>22,329,971</b>	<b>27,253,393</b>	<b>37,132,759</b>	<b>43,867,398</b>	<b>52,079,725</b>
Cash Balance	237,819	270,407	511,426	674,395	635,987
Balance With NRB	318,359	1,113,415	1,829,471	2,648,596	549,454
Bank Balance with Banks	74,061	16,003	330,244	49,521	214,656
Money At call	1,734,902	563,533	1,952,361	552,888	3,118,144
Investment	6,178,533	8,945,311	9,939,771	10,826,379	13,600,917
Loan and Advances	12,922,543	15,545,779	21,365,053	27,589,933	32,268,873
Fixed Assets	319,086	286,895	598,039	660,989	781,480
Non- Banking Assets	-	-	-	-	-
Other Assets	544,668	512,050	606,394	864,696	910,214
<b>Total Assets</b>	<b>22,329,971</b>	<b>27,253,393</b>	<b>37,132,759</b>	<b>43,867,398</b>	<b>52,079,725</b>
Interest Income	1,309,999	1,587,759	1,978,696	2,798,486	4,047,725
Interest Expenses	357,161	555,710	758,436	1,153,280	1,960,108
<b>Net Interest Income</b>	<b>952,838</b>	<b>1,032,049</b>	<b>1,220,260</b>	<b>1,645,206</b>	<b>2,087,617</b>
Commission and discount	138,294	150,608	156,234	179,693	215,482
Other Operating Income	82,898	87,574	97,444	144,164	169,548
Exchange Income	185,484	209,926	196,487	251,920	291,441
<b>Total Operating Income</b>	<b>1,359,514</b>	<b>1,480,157</b>	<b>1,670,425</b>	<b>2,220,983</b>	<b>2,764,088</b>
Employees Expenses	219,781	240,161	262,907	339,898	367,162
Other Operating Expenses	182,696	188,183	220,750	265,158	334,669
Exchange Loss	-	-	-	-	-
<b>Operating Profit Before Provision</b>	<b>957,037</b>	<b>1,051,813</b>	<b>1,186,768</b>	<b>1,615,927</b>	<b>2,062,257</b>
Provisions for possible losses	3,770	14,206	64,055	45,722	355,829
<b>Operating Profit</b>	<b>953,267</b>	<b>1,037,607</b>	<b>1,122,713</b>	<b>1,570,205</b>	<b>1,706,428</b>
Non-Operating Income/ Expenses	735	5,281	24,084	2,190	6,455
Return From Loan Loss Provision	7,729	10,926	11,101	10,618	39,791
<b>Profit From Ordinary activities</b>	<b>961,731</b>	<b>1,053,814</b>	<b>1,157,898</b>	<b>1,583,013</b>	<b>1,752,674</b>
Extra ordinary Income /Expenses	26,074	40,736	39,991	43,522	34,322
<b>Net Profit including all activities</b>	<b>987,805</b>	<b>1,094,550</b>	<b>1,197,889</b>	<b>1,626,534</b>	<b>1,786,996</b>
Provision For Staff Bonus	89,800	99,504	108,899	147,867	162,518
Provision For Income Tax	262,741	321,087	342,522	447,615	485,907
-This Year	-	-	-	-	-
-Up to Last Year	-	-	-	-	-
<b>Net Profit / Loss</b>	<b>635,264</b>	<b>673,959</b>	<b>746,468</b>	<b>1,031,053</b>	<b>1,138,571</b>
<b>Financial Indicators</b>					

Core Capital to Risk Weighted Assets	10.78%	10.40%	8.75%	8.74%	8.77%
Capital Fund to Risk Weighted Assets	12.31%	12.04%	11.10%	10.70%	10.50%

Capital and Liabilities	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
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Non-Performing Loan to Total Loan	1.38%	1.12%	0.74%	0.80%	1.47%
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Capital	590,586	801,353	1,203,915	2,407,069	2,409,098
Reserves and Surplus	824,854	1,076,771	1,482,871	1,500,771	2,176,295
Debenture & Bond	550,000	800,000	1,050,000	1,050,000	1,050,000
Borrowing	-	-	-	38,800	37,315
Deposit	18,927,306	24,488,856	34,451,726	46,698,100	50,094,725
Bills Payable	18,820	32,401	78,839	82,338	38,144
Proposed & Payable dividend	121,627	43,650	93,468	485,454	602,274
Tax Liabilities	9,319	295	24,083	38,297	37,195
Other Liabilities	287,626	347,519	488,404	709,975	860,367
<b>Total Liabilities</b>	<b>21,330,138</b>	<b>27,590,845</b>	<b>38,873,306</b>	<b>53,010,803</b>	<b>57,305,413</b>
Cash Balance	562,560	763,984	1,464,483	1,833,462	1,525,442
Balance With NRB	1,526,067	1,381,352	1,820,006	4,411,133	3,237,217
Bank Balance with Banks	247,894	296,178	470,453	1,673,408	2,053,231
Money At call	70,000	362,970	-	-	-
Investment	5,602,869	6,505,680	6,874,024	7,399,812	8,635,530
Loan and Advances	12,776,208	17,286,428	26,996,652	36,241,207	40,318,308
Fixed Assets	343,450	759,456	970,092	1,060,752	1,136,247
Non- Banking Assets	-	1,125	750	375	-
Other Assets	201,090	233,672	276,846	390,653	399,438
<b>Total Assets</b>	<b>21,330,138</b>	<b>27,590,845</b>	<b>38,873,306</b>	<b>53,010,803</b>	<b>57,305,413</b>
Interest Income	1,172,742	1,584,987	2,194,275	3,267,941	4,653,521
Interest Expenses	490,947	685,530	992,158	1,686,973	2,553,847
<b>Net Interest Income</b>	<b>681,795</b>	<b>899,457</b>	<b>1,202,117</b>	<b>1,580,968</b>	<b>2,099,674</b>
Commission and discount	115,942	163,899	215,292	262,792	242,886
Other Operating Income	35,902	47,319	66,377	87,575	168,312
Exchange Income	125,748	135,355	165,839	185,327	224,056
<b>Total Operating Income</b>	<b>959,387</b>	<b>1,246,030</b>	<b>1,649,625</b>	<b>2,116,662</b>	<b>2,734,928</b>
Employees Expenses	111,054	145,371	187,150	225,721	279,851
Other Operating Expenses	200,215	243,430	313,154	413,884	433,596
Exchange Loss	-	-	-	-	-
<b>Operating Profit Before Provision</b>	<b>648,118</b>	<b>857,229</b>	<b>1,149,321</b>	<b>1,477,056</b>	<b>2,021,481</b>
Provisions for possible losses	103,808	129,719	135,989	166,201	93,056
<b>Operating Profit</b>	<b>544,310</b>	<b>727,510</b>	<b>1,013,332</b>	<b>1,310,855</b>	<b>1,928,425</b>
Non-Operating Income/ Expenses	391	1,426	7,048	2,953	10,606
Return From Loan Loss Provision	10,704	66,777	101,577	114,653	50,000
<b>Profit From Ordinary activities</b>	<b>555,405</b>	<b>795,713</b>	<b>1,121,957</b>	<b>1,428,461</b>	<b>1,989,031</b>
Extra ordinary Income /Expenses	-	-	-	-	-
<b>Net Profit including all activities</b>	<b>555,405</b>	<b>795,713</b>	<b>1,121,957</b>	<b>1,428,461</b>	<b>1,989,031</b>
Provision For Staff Bonus	50,491	72,337	101,996	129,860	180,821
Provision For Income Tax	154,378	221,977	323,229	397,982	542,261
-This Year	-	-	-	-	-
-Up to Last Year	-	-	-	-	-
<b>Net Profit / Loss</b>	<b>350,536</b>	<b>501,399</b>	<b>696,732</b>	<b>900,619</b>	<b>1,265,949</b>
<b>Financial Indicators</b>					
Core Capital to Risk Weighted Assets	7.97%	7.90%	7.71%	8.56%	8.50%
Capital Fund to Risk Weighted Assets	11.97%	12.17%	11.28%	11.24%	10.55%
Non-Performing Loan to Total Loan	2.07%	2.37%	1.12%	0.58%	0.62%

**Nepal Investment Bank Limited**

**(Rs. in '000')**

## Nepal Credit and Commerce Bank Limited

(Rs. in '000')

Capital and Liabilities	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Capital	698,415	699,117	1,399,558	1,399,558	1,399,671
Reserves and Surplus	(1,007,452)	(1,209,453)	(714,475)	(300,637)	123,036
Debenture & Bond	-	-	-	-	-
Borrowing	13,600	-	-	-	206,900
Deposit	6,619,581	6,500,343	7,320,236	9,127,749	10,824,692
Bills Payable	63,605	14,509	110,171	15,375	30,652
Proposed & Payable dividend	-	-	-	-	-
Tax Liabilities	-	-	2,643	-	-
Other Liabilities	39,951	32,160	123,201	348,803	176,121
<b>Total Liabilities</b>	<b>6,427,700</b>	<b>6,036,676</b>	<b>8,241,334</b>	<b>10,590,847</b>	<b>12,761,072</b>
Cash Balance	230,561	265,782	592,632	342,794	517,662
Balance With NRB	478,205	255,573	762,438	781,447	1,483,099
Bank Balance with Banks	75,190	236,808	122,763	62,764	195,585
Money At call	21,100	75,665	154,406	186,402	99,951
Investment	591,644	1,236,621	1,900,758	1,583,103	1,947,614
Loan and Advances	4,643,262	3,707,642	4,417,857	6,858,194	7,994,718
Fixed Assets	111,837	104,233	114,064	216,858	284,166
Non- Banking Assets	72,617	46,556	59,963	235,574	-
Other Assets	203,284	107,796	116,453	323,712	238,277
<b>Total Assets</b>	<b>6,427,700</b>	<b>6,036,676</b>	<b>8,241,334</b>	<b>10,590,847</b>	<b>12,761,072</b>
Interest Income	562,780	474,408	576,609	758,363	1,042,243
Interest Expenses	315,991	283,006	278,724	352,060	580,165
<b>Net Interest Income</b>	<b>246,789</b>	<b>191,402</b>	<b>297,885</b>	<b>406,303</b>	<b>462,078</b>
Commission and discount	37,470	31,773	34,235	55,454	52,666
Other Operating Income	20,098	36,257	75,763	76,173	59,021
Exchange Income	13,773	5,940	18,467	20,314	18,767
<b>Total Operating Income</b>	<b>318,130</b>	<b>265,372</b>	<b>426,350</b>	<b>558,243</b>	<b>592,532</b>
Employees Expenses	48,178	56,156	76,072	93,390	105,112
Other Operating Expenses	69,829	89,623	95,931	96,089	111,353
Exchange Loss	-	-	-	-	-
<b>Operating Profit Before Provision</b>	<b>200,123</b>	<b>119,593</b>	<b>254,347</b>	<b>368,764</b>	<b>376,067</b>
Provisions for possible losses	782,710	206,867	163,874	74,557	121,088
<b>Operating Profit</b>	<b>(582,587)</b>	<b>(87,274)</b>	<b>90,473</b>	<b>294,207</b>	<b>254,979</b>
Non-Operating Income/ Expenses	4,686	2,913	29,562	6,295	65,199
Return From Loan Loss Provision	95,783	50,901	733,488	300,767	240,083
<b>Profit From Ordinary activities</b>	<b>(482,118)</b>	<b>(33,460)</b>	<b>853,523</b>	<b>601,269</b>	<b>560,261</b>
Extra ordinary Income /Expenses	(72,144)	(42,420)	(222,019)	(36,202)	12,022
<b>Net Profit including all activities</b>	<b>(554,262)</b>	<b>(75,880)</b>	<b>631,504</b>	<b>565,067</b>	<b>572,283</b>
Provision For Staff Bonus	-	-	57,409	51,370	52,026
Provision For Income Tax	15,483	40,049	75,340	98,236	96,484
-This Year	-	-	0	-	-
-Up to Last Year	-	-	0	-	-
<b>Net Profit / Loss</b>	<b>(569,745)</b>	<b>(115,929)</b>	<b>498,755</b>	<b>415,461</b>	<b>423,773</b>
<b>Financial Indicators</b>					
Core Capital to Risk Weighted Assets	-5.05%	-9.14%	9.61%	9.81%	12.69%
Capital Fund to Risk Weighted Assets	-3.46%	-9.14%	11.09%	11.07%	13.94%
Non-Performing Loan to Total Loan	21.90%	31.40%	16.42%	8.60%	2.88%