## CHAPTER - I INTRODUCTION

### 1.1 Background of the Study

Bank and Financial institutions are the backbone of the economic development of any country. A financial institution is a vital contributor to the financial health of the national economy. The financial institutions are often fragile and susceptible to failure because of poor management, particularly financial management. National development of any country depends upon the economic development of that country and economic and economic development is supported by financial infrastructure of that country. Financial infrastructure indicates the financial strength, position and environment of the institutions. The various branches of bank in towns and villages are offering various types of services. In the past, they just used to accept deposits from the savers of money (surplus units of the society) and give loan to the users of money (deficit units of the society). Savers of the money are those units whose earning exceeds expenditure on real assets and user of money are those units whose expenditure on real assets exceeds their earnings.

Any institution offering deposits is subject to withdrawal on demand and making loan of a commercial or business nature is a bank. Banks constitute an important segment of financial infrastructure of any country. Bank comes into existence mainly with the objective of collecting the idle fund, and mobilizing them to productive sector causing overall economic development. A bank is the financial departmental store, which render various financial services besides taking deposits and lending loans. Bank is the financial institution, which deals with money by accepting various types of financial services. In the modern economy, banks are to be not as the dealer of money but as the lender of the economic development. Banks are not just the storehouse of the country's wealth but also are the mobilize of the resources necessary for the economic development.

It cannot be denied that the issue of development rests upon the mobilization of resources and banks deals in the process in the process of canalizing the available resources in the
needed sector. Commercial banks collect deposits from the public and the largest portion of the deposited money is utilized in disbursing loans and advances. The balance sheets of the commercial banks reflect deposits constitute a major portion of the liabilities and loans and advances constitute a major portion of the assets. Similarly, the profit of the bank depends upon the spread that it enjoys between the interest it receives from the borrowers and that to be paid to the borrowers. An average bank generates $60-70 \%$ of its revenues through its lending activities. The return that the bank enjoys of deposit mobilization through loans and advances is very attractive but they do not come free of cost and free of risk. There is risk inherent in lending portfolio. Banking sector is exposed to number of risk like interest rate risk, liquidity risk, credit risk, borrower's risk etc. such risks in excessive form had led many banks to go bankrupt in a number of countries Including Nepal, Nepal development bank limited case in point.

One of the most critical is the borrower's risk- the risk of non-payment of the disbursed loans and advances. It is called Non-Performing assets or non-performing loans. Failure to collect money disbursed may sometimes results in the bank's inability to make repayment of the money to the depositors and return to the shareholders. The risk involved is so high that this may result in bankruptcy. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving. If a bank behaves irresponsibly, the cost borne by the economy is enormous.

Non - Performing assets can be defined as those assets that cannot be used productively. In other words, NPA is the outdated loan, and bad and doubtful debts. NPA could wreck banks' profitability both through a loss of interest income and write off the principle loan amount. To start with, performance in terms of profitability is a benchmark for any business enterprises including the banking industry. However, increasing non-performing assets have the direct impacts on banks' profitability, as legally banks are not allowed to book income on such accounts and at the same since banks are forced to make provision on such assets.

Performing assets are those that repay principle and interest to the banks. These assets constitute the primary sources of income to banks. Banks are willing to lend as much as possible. But they have to be careful about the safety of such loans. Loans are risky assets, even though bank interest most of its resources in granting loans.

Now a day, banks are taking different principles for granting loan (i.e. liquidity, profitability, safety \& security, social responsibility etc.). In spite of all these, NPA has not declined. An asset is classified as non-performing assets, if the borrower does not pay dues in the form of principle and interest. If any credit facilities or loan granted by bank to a borrower became non-performing. Then the bank will have to treat all the credit facilities or loan granted to that borrower as non-performing assets can be nonperforming loan, non-banking assets, remaining non-performing loan, suspend interest, unutilized assets etc.

The notion of non-performing loans or assets is often used as a proxy for asset quality of a particular bank or banking system. Although, there is no uniform definition of non performing assets, in many countries, including most G-10 countries, assets are considered to be non-performing when (a) principal or interest is due and unpaid for 90 days or more (b) interest payment equal to 90 day or more have been capitalized, refinanced or rolled over. The bottom line in the international manuals concerning nonperforming loan, seems to be that loans are good unless there is absolute certainty that a loan is not going to be repaid under existing arrangement.

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

Due to their central role in the economy, governments and central banks try their best to rescue banks from such situations. Hence, to protect the banks from such situation and protect depositors and shareholders money, central bank issues various directives and guidelines from time to time with modifications and amendments for the sound regulation of the banking system. All the banks have to abide by the rules and regulation issued by the central bank. Of the many directives, there are ten directives relating to the banking prudential regulation/norms to be followed by the banks.

### 1.2. Brief Profile of the Selected Banks

## A. Nabil Bank Limited.

Nabil Bank (Nepal Arab Bank) the 1st foreign joint venture Bank set up in the nation with an objective to introduce modern banking services, commenced its operations on 12th of July 1984 or 2041 Ashad 29 B.S. with Rs. 28 million capital. Dubai Bank Limited, Dubai was the foreign joint venture partner who extended Nabil a technical service agreement in the initial period. The Bank, through its quality customer service and innovative products, has today attained a distinguished recognition in the banking industry of Nepal. The first Joint Venture Bank in Nepal with a 23 Year old journey of History.

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

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

NABIL bank is a full services bank providing an entire range of products and services, starting with deposit accounts in local and foreign currency, Visa and Master-Card denominated in rupees and dollars, Visa Electron Debit Cards, Personal Lending Products for Auto, Home and Personal loans, Trade Finance Products, Treasury Services and Corporate Financing. Main aim is to be able to meet customer's entire gamut of financial requirements that is why it prides us in being 'Your Bank at Your Service'. Nabil Bank Limited was the first joint venture bank established in 1984 with $50 \%$ invest by Dubai Bank Limited of UAE and of remaining $50 \%$ by Nepalese financial institutions comprise $30 \%$ by general public. The shares owned by DBL were transferred to Emirates Bank International ltd (EBIL), Dubai. Later EBIL sold its entire holding go National Bank ltd, Bangladesh (NBLB). Hence $50 \%$ of equity shares of Nabil Bank ltd are held by NBLB and out of remaining, financial institutions have taken $30 \%$ issued to general public of Nepal. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 28 points of representation across the nation and over 170 reputed correspondent banks across the globe.

## B. BANK OF KATHMANDU (BOK)

Bank of Kathmandu Ltd. (BOK) is a one of the private sectors banks of the country in established in 1993 which commenced its commercial business in March, 1995. BOK was established by a group of distinguished civil servants and renowned businessmen in collaboration with the SIAM Commercial Public Company Limited (SCB) - a leading bank of Thailand. Upon establishing BOK as one of the reputed banks in a short period, the Nepalese promoters decided to conclude the technical service agreement with SCB and BOK to be arranged by the Nepalese professionals as it could further enhance its business performance years ahead under the Nepalese management. With the wellacclaimed capabilities of the Nepalese management team, BOK has successfully enhanced its capital structure, profitability; reach to the customers and image in the market. It has created a position in the industry in a shortest possible span of time. Since, BOK is established with the objective of providing prompt and quality services the clients. Therefore, it has become successful Commercial banks in Nepal.

BOK's organizational structure is based on a multi -pronged strategy of administrative streamlining, human resource experienced cost management, timely assets management and planned asset growth. The organizational structure to guarantee consistency and high level of standards in all its operations. At the same time, because of confidence from time proven methods, it is also flexible enough to ensure effective control and supervision while still being in its functions and diversity of services. BOK also aims to facilitate the nation's economy and to become more competitive globally. To achieve these, BOK has been focusing on its set objectives right from the beginning. Bank of Kathmandu provides cost effective and efficient financial services to its clients through the following major areas of service delivery.

### 1.3 Focus of the Study

Increasing non-performing assets is one of the emerging problems of Nepalese commercial banks. This study mainly focuses on non-performing loans or assets of selected commercial banks, Ratios like loan and advances to total assets, loan and advances to total deposit, non-performing loans to total loans and advances, provision
held to non-performing assets, which indicates the performance and provides comparable forum on non-performing assets. It also tries to show the effects on profitability of commercial banks and related NRB directives, which is concerned towards loan and loan loss provision. The total NPA of Nepalese commercial banks are growing rapidly and it is one of the main causes of bank. In this study, the NPA of commercial banks are presented, analyzed, summarized and ends with findings and recommendation. Likewise, related issues such as loan administration involves the creation of management of risk assets. The process of lending takes into consideration the people and system required for the evaluation and approval of loan requests, negotiations of term, documentation, disbursement, administration of outstanding loans and workouts, knowledge the process awareness of its strengths and weakness are important in setting objectives and goals for lending activities and for allocating available funds to various lending functions such as commercial, instatement and mortgage profits. The main focus of the study is to highlight the non performing asset of commercial banks especially NABIL and BOK expecting that the study can be bridge the gap.

### 1.4 Statement of Problem

Commercial bank being the financial institution play significant role by collecting scattered surplus funds and deploy these fund in the productive sectors as lending and investment. Economic development of the country is directly related to the volume of lending and investment made and return obtained by the bank.

Currently, the banking sector is facing various problems. One of them, the banking has been becoming a victim of huge Non-Performing Assets (NPAs). NPAs are one of the serious problems faced by the commercial banks. Due to unstable political condition, insecurity and other many factors, industries in Nepal are closing down. Lending carries credit risk, which arises from the failure of borrower to fulfill its contractual obligation during the course of transaction. It is well known fact that the bank and financial institution in Nepal face the problem of swelling non-performing assets (NPAs) and issue is becoming more and more unmanageable. The main focus of the statement of the problem is the matter related to the NPAs of the commercial banks.

Financial institution is the backbone or engine of the growth of economy of Nepal. It has several problems like lack of smooth functioning of economy, different policies and guidelines of Nepal Rastra Bank, political instability, security problem, poor information system, over liquidity caused by lack of good lending opportunities, increasing nonperforming system, over liquidity caused by lack of good lending opportunities, increasing non performing assets etc. The bank management has not been so much sensitive enough to give this issue top priority. The NPA reduces the profitability and lending its causes to failure of the Bank. So, in the recent days not only government owned banks but some of the Banks under private ownership are also suffering from NPA burden. From the past analysis NPA of commercial banks have gradually decreasing. This study focuses on NPAs with special reference to Nabil bank Ltd and Bank of Kathmandu Ltd. is stated below:

- What are the trend line of the non-performing assets, loan and advance, loan loss of selected commercial Banks?
- What are the causes of NPA?
- What is the relationship between loan and loan loss provision of selected commercial banks?
- What is the impact of NPA on the profitability in the selected commercial Banks?
- What is the level of NPA in total assets, total deposits and loans and advance in selected commercial Banks?
- What is the proportion of NPA in NABIL and HBL Banks?
- What are the trend line of the non-performing assets, loan and advance, loan loss of sample commercial Banks?


### 1.5 Objectives of the Study

The major objective of this study is to examine the level of non-performing assets (NPAs). The specific objectives are:

- To determine the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- To assess the impact of non-performing assets in the performance of commercial banks.
- To examine the trend of the total deposit, NPA, loan and advance, total asset and net profit of NABIL and BOK.
- To provide suggestions and recommendations for the further important.


### 1.6 Significance of the Study

The success and prosperity of the bank heavily depends upon the successful implementation and investment is collected resources, which develops the economy of the country. Good investment policy of the bank has positive impact on economic development of the country and vice versa. Increasing non-performing loan followed by increasing loans and loan loss provision is one of the challenges faced by commercial banks in the present context. Proper loan provision and loan loss provision helps to get financial strength of the bank. This research will be able to give some of the present issues, latest information and data regarding non-performing loan and loan loss provision. Not only that, this study gives the real picture of the current non-performing assets to its stakeholders. The main focus of this study will be to know about the non-performing assets of selected Nepalese commercial banks and compare of non-performing assets of selected commercial banks.

The study is mainly concerned with the analysis of level of NPAs in total assets, total deposits and total lending of different Nepalese commercial banks. It is also significant to find out whether the Nepalese commercial banks maintain loan loss provision in accordance to NRB's directives or not. It also examines the return on loan and advances of the bank. Last but not the least, it also provides literature to the researcher who wants to carry on further research in this field.

### 1.7 Limitations of the Study

The study is based on secondary data, published books, unpublished reports, public documents, articles of different writers, annual report of the selected banks and so on.

The criteria of this study are non-performing assets (NPAs) of commercial banks. This research has the following limitations:

- This study is concerned only with non-performing assets of Nepalese commercial banks. It does not consider other aspects of the banks.
- The period of the study is limited to fiscal year 2007/08 to 2011/12.
- The study is basically based on secondary data, articles, publication, and journals of the respective banks, which may or may not provide exact vision of the field.


### 1.8 Organization of the Study

The present study is organized in such way that the stated objectives can easily be fulfilled. The structure of the study tries to analyze the study in a systematic way. The study report has presented the systematic presentation and finding of the study. The study report is designed in five chapters which are as follows:

## Chapter-I: Introduction

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

## Chapter -II: Review of Literature

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

## Chapter - III: Research Methodology

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

## Chapter - IV: Presentation and Analysis of Data

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

Chapter -V: Summary, Conclusion and Recommendation
On the basis of the results from data analysis, the researcher concludes the performance of the sample banks for better improvement.

At the beginning part of the study recommendation, viva voce sheet, declaration, acknowledgement, table of contents, list of table, list of figure and abbreviation are presented and bibliography and appendix are presented at the end of the study.

## CHAPTER - II

## REVIEW OF LITERATURE

Review of literature is the chapter where a researcher reviews the books, journals, magazines, or any other type of studies related to their field of the study. Research is a continuous process it never ends. The procedure and the findings may change but research continues. So for analyzing the data and to find something new a researcher must review earlier studies. This chapter is related to review of some related books and articles, published and unpublished different economic journals, bulletins, magazines, newspapers, and web sites. This chapter has been divided into the following parts.
i. Conceptual framework
ii. Review of related studies

### 2.1 Conceptual Framework

This heading is devoted to the meaning and concept of the term used in the study.

### 2.1.1 Loan and Advances

The main function of the commercial banks is to generate the resources or funds and provides loan and advance. It is the most profitable assets of bank. Loan and advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loan and advances occupy a major space in income statement of the bank. It is the asset that fetches income for the bank. The profitability of the banks depends upon the extent to which it grants loan and advances to customers. Loan granted in the form of overdraft, cash credit and direct loan. Loans are granted against adequate security. The banks should have to take in consideration safeties of loan and advances at the time of lending but not only on profitability. At the time of lending the loan, the banks carefully study the lending sectors and make a sound policy for rendering loan. The policy should contain the credit deposit ratio (CDR), the bank wishes to maintain. CDR ratio is very much influenced by the behaviors of bank's liabilities. The higher the volatile deposit's and volatile borrowing lower the volume of loan and vice versa.

### 2.1.1.1 Types of loan

A loan-unlike equity-is a fixed payment contract, irrespective of whether there is profit or not. Yet businesses fail and the contractual payments are not honored. If the loan is secured through collateral, the bank can seize and sell the collateral, but in many countries that involves legalities and delays.

Loans and advances are the primary assets of the commercial banks. Most of banks fund are used to acquire earning assets, which provide the bulk of revenue and enable them to cover expenses, including the cost of capital. There are various types of bank loans, according to the way in which the interest payments are calculated. Banks loans may be classified as, (Shrestha and Bhandari, 2004: 263-266).

## a. Amortized Loans

Amortized loan refers to the determination of the equal annual loan payments necessary to provide a lender with a specified interest return and repay the loan principal over a specified period, so the loan takes the form of an annuity.

In the amortized loans system, first step is to calculate installments to be paid for every period. Suppose the loam amount is Rs. L, the rate of interest is K percent per period, and the number of payments is $n$, then the installment payment can be calculated as follows.

$$
\text { Periodical Installment }=\frac{\text { Loanborrowed }}{P V I F A_{K, n}}
$$

## b. Add-On Loans

The term add-on means that the interest is calculated and then added to the amount received to determine the loans face value. The sum of the principal and interest is then divided over the number of periods to calculate the constant periodic payments.

## c. Discount Interest Loans

In a discount interest loan, the bank deducts the interest in advance (beginning of the period). In this type of loan, the lender receives payments of all the interest that will
accrue on the loan at the time the loan is granted. Since the interest is prepaid, the borrower must only repay the principal, usually in equal payments.

### 2.1.2 Performing loan

Performing loans are those loans that repay principle and interest timely to the bank from the cash flow it generates. In other word, performing loan are the productive assets that generate the some profits. Loans have the certain time period to return its principle with its interest. If anyone repays loan with its interest on time, is known as the performing loan. It is the most profitable assets of banks. Its helps to rapid growth of banking sector in this fast pace competitive age. Better performing loan are the symbol of success of banks. But many banks are suffering from the non repayment of loan amount.

### 2.1.3 Non-Performing Assets/Loan (NPAs/NPL)

One of the most emerging problems of the commercial banks is management of nonperforming assets/loan. Due to the effects of non- performing assets/loan, many banks have already closed down. In this fast pace competitive age, the banks should taking in consideration on that thing. Those loans, which don't repay principle and interest on time to the banks, are known as non-performing assets (NPAS). If any advances or credit facilities granted by bank to a borrower becomes non-performing. Then the bank will have to treat all the advance/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may be still exist certain advance/credit facilities having performing status.

NPAs have a different meaning that varies from country to country. In some countries, it means that the loan is impaired. In some countries, it means that the payment are due but there are significant different among countries how many days a payment should be in arrears before past due status is triggered (Shrestha, 2004:14). According to current Banking Act, the banks have to make provision for bad and doubtful debts. After deducting the debt and doubtful debts from the non-performing assets, net nonperforming assets can be achieved.
$\mathrm{NPA}=(\mathrm{NPL}+\mathrm{NBA}+\mathrm{RNPL}+\mathrm{SI}+\mathrm{UA})$
Where;
NPA $=$ Non-Performing Assets
NPL $=$ Non-Performing Loan
NBA = Non- Banking Assets
RNPL $=$ Remaining non performing loan
SI = Suspend Interest
UA = Unutilized Assets

Non-Performing loan (NPL) can be defined as the non-productive assets of the banks. In other words, it is the loan or bad and doubtful debts that doesn't repay timely. Generally the loan, which doesn't repay within three months, is known as non-performing loan. The loan amount that doesn't covered by the collateral after selling is known as non-banking assets (NBA). Non - performing assets also includes the suspend interest. It is the interest, which become receivable unutilized assets and those investments which don't generate any cash or incomes to the bank are also non-performing assets (NPAs). The proper management of those assets to generate income is known as management of nonperforming assets. Increasing NPAs is the emerging problem of the banks. We know that the some banks are closed shown due to the uncontrollable NPAs. In USA, 1016 commercial banks were declared as unsuccessful (bankruptcy) from 1985 to 1990 and 27 banks from 1995 to 2001. However, Nepalese commercial banks face this type of problem till now but they have to take step towards it. For this, appropriate amount of bad and doubtful debts is made provision from their incomes/profits (Regmi, 2063:75).

### 2.1.3.1. Causes of occurring NPA

There are various causes to increase the NPAs. NPAs increased due to:

- Lack of transparent and clear policy to mobilize the assets productively.
- Lack of effective forecasting or deviation between expectation and actual outcomes of the business.
- Wrong choose of project and business to lend the fund.
- Lack of supervision, monitoring and control.
- Lack of information and communication between bank and customer.
- Lack of closed relationship between banker and customer.
- Lack of proper information about the situation and transaction of the customer at the time of rendering loan.
- Wrong valuation of accepted collateral by the bank to the loan.
- Lack of step towards the decrease or sell the NPAs, which don't useful to the bank.
- Lack of training and seminars to build the smart human resources.
- Loss from the operation of the business/project by the customer of the bank.
- Depression of the economy of the country due to the in security and instability of the business environment.
- Lack of proper policy and act to return the expired loan (Shrestha, 2007: 27)


### 2.1.3.2. Effect of NPAs

NPAs has affected the profitability liquidity and competitive functioning of public and private sector banks and finally the psychology of the bankers in respect of their disposition towards, credit delivery and credit expansion. Increasing Non-Performing Assets (NPAs) has the direct effects to banks, investors and customers. It has also negative impact to the economic health and business of country. It has two types of effects (Shrestha, 2004:19).

## Internal Effect:

The bank for increasing the profitability can't mobilize the non-performing assets. in the other hand, the banks have to make provision doubtful debts from their profits and other sources. That's why the profit of the banks decreases or may occur losses. As a result, share capital also becomes capital erosion and capital inadequacy. In the present context, capital adequacy ratio of Nepal, India, UAE, and Indonesia are $11 \%, 12.6 \%, 12.7 \%$ and $21.4 \%$ respectively. The central bank of the country can take action to bank, which banks have lower capital or capital adequacy ratio. For example, Nepal Development Bank Ltd. is suffering the same problem that can't take deposit due to the action taken by Nepal Rastra Bank.

When the non-performing assets increase, the banks have to increase the amount of provision for doubtful debts and when the loan is repaid, the profit treated as profit. If the provision for doubtful debts crosses $5 \%$ of the total loan amount, the bank have to pay income tax as profit. So, it has direct effect to the cash flow of bank. As a result, the employment of human resources and profit of the bank has also affected.

## External Effect:

The banks accept deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with its interest, it becomes nonperforming assets and banks will not able to return the deposited amount to their customer. If the banks is unable to return the deposited amount, the banks will loose public supports and faiths. The Banks have to take loan at a higher rate to pay deposit, which directly affects the profitability of banks thats leads to bank bankruptcy. It also affects the monetary system and economy of the country.

## Impact on Profitability:

The NPAs has negative impacts on the profitability of the banks. Non-Performing assets are the idle assets of the banks, which do not generate any return for the banks. Thus, we can say that the NPAs reduce the profitability of the banks due to the becoming the idle resources. Not only it reduces the profitability of the banks, but also it may the causes for losing the customer's faiths and supports.

## Impact on the Outlook of Banker towards Credit Delivery:

The psychology of the banks today is to insulate them selves with zero percent risk and turn lukewarm to fresh credit. This has affected adversely credit growth compared to growth of deposits, resulting to a low C/D Ratio around $50 \%$ to $54 \%$ for the industry. It is evident that the existence of collateral security at best may convert the credit extended to productive sectors into an investment against real estate, but will not prevent the account turning into NPA. Further blocked assets and real estate represent the most illiquid security and NPA in such advances has the tendency to persist for a long duration.

Nationalized banks have reached a dead-end of the tunnel and their future prosperity depends on an urgent solution of this hovering threat.

### 2.1.3.3. Excessive Focus on Credit Risk Management:

The most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank's functioning. The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. A bank with high level of NPAs would be forced to incur carrying costs on a non-income yielding assets. Other consequences would be reduction in interest income, high level of provisioning, stress on profitability and capital adequacy, gradual decline in ability to meet steady increase in cost, increased pressure on net interest margin (NIM) thereby reducing competitiveness, steady erosion of capital resources and increased difficulty in augmenting capital resources. The lesser-appreciated implications are reputation risks arising out of greater disclosures on quantum and movement of NPAs, provisions etc. The non-quantifiable implications can be psychological like 'play safe" attitude and risk aversion, lower morale and disinclination to take decisions at all levels of staff in bank.

Two decades of regimented and directed to credit delivery has deprived bank managers of the instinct skill and knowledge. Nationalized banking did not produce a spring of talent resources. Directive inputs and course direction came externally from NRB and Finance Ministry, which were external to the day-to-day affairs and problems of the Nepalese banking industry. The system did not promote initiative and talent, but bred corruption and nepotism. This is the scene of Nepalese Banking struggling hard to transition from old primitive systems and values to modern professional business ethics and corporate good governance.

## High Cost of Fund Due to NPAs:

Quite often genuine borrowers face the difficulties in raising funds form banks due to mounting NPAs. Either the bank is reluctant in providing the requisite funds to the genuine borrowers or if the funds are provided, come at a very high cost to compensate
the lender's losses caused due to high level of NPAs. Therefore, quite often corporate prefer to raise funds through commercial papers (CPs) where the interest rate on working capital charged by banks is higher.

## Impact on Banks Scrip on Stock Exchange

The NRB has said informational asymmetries arising from less onsite/off site inspection, declining performance and shooting NPAs weighed heavily on bank stocks. The NRB has for the first time included stock market behavior of bank scrip in its annual review of the banking sector. As per a NRB Report, despite the various reforms being carried out in Nepalese Stock exchange, much bank scrip remains illiquid and thinly traded. The NRB report says, "Private sector bank stocks whose market performance was affected and attributed the battering the scrip got in the secondary market to their poor performance in general and the concern of the market over their NPAs" (Aryal, 2008:19).

There are various other pressing factors that are relevant from the point of view of Nepalese banking operations with a view to focusing on NPAs and its related effects.

## i. Excess liquidity lending default

The banks in Nepal are faced with the problem of increasing liquidity in the system. Further, the Rastriya Banijya Bank (RBB) is increasing the liquidity in the system through various rate cuts. Banks can get rid of its excess liquidity by increasing its lending but, often shy away from such an option due to the high risk of default. In order to promote certain prudential norms for healthy banking practices, most of the developed economics require all banks to maintain minimum liquid and cash reserves broadly classified into Cash Reserve Ratio (CCR) and the statutory liquidity ratio (SLR). A rate cut (for instance, decrease in CRR) results into lesser funds to be locked up in NRB's vaults and further infuses greater funds into a system. However, almost all the banks are facing the problem of bad loans, non-performing assets, thinning margins, etc. as a result of which, banks are little reluctant in granting loans to corporate. In the monetary policy NRB announces the bankers no longer warmly greet rate cut but such news.

## ii. Importance of credit rating in assessing the risk of default for lenders

Credit rating has been explained by Moody's, a credit rating agency, as forming an opinion of the future ability, legal obligation and willingness of a bond issuer make full and timely payments on principal and interest due to the investors. Banks do rely on credit rating agencies to measure credit risk and assign a probability of default. It depends on the information available to the credit rating agency. Besides, there may be conflict of interest, which a credit rating agency may not be able to resolve in the interest of investors and lenders. Stock prices are an important (but not the sole) indicator of the credit risk involved. Stock prices are much more forward looking in assessing the creditworthiness of a business enterprise.

## iii. NRB guidelines on NPAs and ICAI Accounting Standard 9 on revenue recognition

In view of the guidelines issued by the Nepal Rastra Bank (NRB), income on NPAs should be recognized only when it is actually realized. As such, a doubt may arise as to whether the aforesaid guidelines with respect to recognition of interest income on NPAs on realization basis are consistent with Accounting Standard 9, 'Revenue Recognition'. For this purpose, the guidelines issued by the NRB for treating certain assets as NPAs seem to be based on an assumption that the collection of interest on such assets is uncertain. Therefore complying with AS 9, interest income is not recognized based on uncertainty involved but is recognized at a subsequent stage when actually realized thereby complying with NRB guidelines as well. In order to ensure proper appreciation of financial statement, banks should disclose the accounting policies adopted in respect of determination of NPAs and basis on which income is recognized with other significant accounting policies.

## iv. Usage of financial statements in assessing the risk of default for lenders

For banks and financial institutions, both the balance sheet and income statement have a key role to play by providing valuable information on a borrower's viability. However, the approach of scrutinizing financial statements is a backward looking approach. This is because the focus of accounting is on past performance and current positions. The key accounting ratios generally used for the purpose of ascertaining the creditworthiness of a
business entity is that of debt-equity ratio and interest coverage ratio. Highly rated companies generally have low advantage. This is because, high leverage is followed by high fixed interest charges, non-payment of which results into a default.

### 2.1.4 Loan Loss Provision

There is associated risk in every loan. To minimize the risk from possible losses of them loans bank has to allocate some funds as loan loss provision. Loan loss provision is the accumulated funds that are provided as a safeguard to cover possible losses upon classification of risk inherited by individual loans. The level of provisioning in depended upon the level of NPAs and their quality. Increased portion of NPAs generate additional liability of resources to the financial institutions. In other words higher the NPA, higher the provision as down graded loans need more provision. $1 \%$ provision of total credit is minimum requirement as every pass/good loan has to provision by $1 \%$. However, the ratio of provision may differ from nation to nation. In Nepal, NRB has prescribed:

| Pass | $1 \%$ |
| :--- | :--- |
| Substandard | $25 \%$ |
| Doubtful | $50 \%$ |
| Loss loan | $100 \%$ |

### 2.1.5 Principles of Lending loan and advances

The precautions to be taken by a banker, and the principles to be taken care of, while granting advances. By way of introduction, an attempt is being made to discuss the general principle to be borne in mind by a banker while granting advances (Shekher and Shekher, 1999:551).

## - Liquidity:

The term 'Liquidity' implies the ability to produce cash on demand. A bank mainly utilizes its deposits for the purpose of granting advances. These deposits are repayable on demand or on the expiry of a specified period. In either case, the banker must be ready to meet these liabilities whenever necessary. The advances granted by the banker are as liquid as possible.

## - Profitability

Banks are essentially commercial venture. It is true that excessive and unjustifiable profits can only be at the cost of the customer, in so far as higher lending rates push up production costs, and in the ultimate analysis, adversely affects society in general. At the same time, the facts remains that while strong operating profits allow for full prudential provisioning high net profits allow for allocation to capital and reserves, which is essential for any bank to maintain its competitive viability and expand its lending operations. Also, the shareholders of a bank are entitled to reasonable dividend. All this indicated that it is that their lending operations are sufficiently profitable.

## - Safety and Security

The banker should ensure that the borrower has the ability and will to repay the advances as per agreement. The banker should carefully consider the margin of safety. If it is as unsecured advance, its repayment depends on the creditworthiness of the borrower, and that of guarantor. The banker should consider the Charter, Capacity, and Capital (popularly known as 3 Cs ) or Reliability, Responsibility, and Resources (popularly known as 3 Rs ) of the borrower and the guarantor.

## - Purposes

The banker has to carefully examine the purpose for which the advance has been applied, of course the exact purpose for which the advance is actually utilized. There is always the possibility that the advance, once granted, may be diverted for purposes other than that indicated by the borrower at the time of application. Thus, there should be proper analysis of purpose.

## - Social Responsibility:

While admitting banker are essentially commercial ventures, a bank should not forget the fact it is not enough only people of means are given bank finance. The identification of priority sectors for the purpose of extending bank credit should be considered as a positive development in the banking system, aimed at effectively discharging its responsibility should not deter the banks from paying adequate attention to the qualitative aspects of lending. Social responsibility is, no doubt, highly exacting.

### 2.1.6 Action Guidelines According to State Of Loan

On different states of loan different actions should be taken (Dahal \& Dahal, 1992: 55).

## i Pass Loan

Provide "good" service, retain customer. Consider new facilities.

## Indicative of Sub- Standard

- Obtain legal review of all documentation.
- No new facilities.
- Frequent contact to gain more information/monitor problems.
- Suggest ways to strengthen company and protect bank.
- Consider inter-creditor agreement.


## ii Substandard

- Service not at issue, move immediately to strengthen Banks position.
- Seek reduction in facilities and/or increase in security, restructure debt if advantageous to Bank.
- Take "hard- line" with management, demand specific plan to improve situation.
- Look for ways to improve management, control management, etc.


## iii Doubtful

- No interest taken to profit.
- Look for ways to avoid losses.
- Take legal action now, sell security if advantageous to bank, force management to repay/ finance.
- Structure workout agreements with other creditors if necessary and advantageous.
- Offset where possible, control payments.
- Monitor weekly, track performance, control all assets and liabilities, if possible.
- Look for ways to control all cash flows, appoint receivers as appropriate.


## iv. Bad

- Loss inevitable, take provision to cover loss and all costs of liquidation.
- Look for ways to minimize losses, study timing of sales.
- Be creative, but remember time value of money.

These are general guidelines for managing loans and advances according to its state.

### 2.1.7 Highlight On Performance of Nepalese Commercial Bank.

The number of commercial bank operating in the country in till 2013 are total 32 commercial banks, 79 development banks and 78 finance company. The no of bank and financial institution are decreasing recently due to merge and acquisition policy applied by NRB. Which strategy makes bank more strong and capable. The sizes of total assets of commercial banks have increasing continuously over the last few years.

### 2.1.8. Non-Performing Assets/Loans (NPAs/Ls) In East Asia

In July 1997, the financial crisis hit Asian economics. As a result, East Asian countries in 1998 recorded negative growth ranging from 5 to 12 \%. In 1999, however, economics improved in several countries: South Korea in particular recorded a "V" type of recovery. Although the growth process has slowed somewhat in 2000, progress continues and on the basis of the recent rapid recovery, there is optimism that the East Asian financial crisis has ended. On the other hand, there is also the opinion that the situation does not problems in the financial and corporate sectors have not progressed sufficiently. This paper looks into the issues that beset East Asian economics, based on the assessment of the status of NPL restructuring in Malaysia, South Korea, Thailand and Indonesia.

Immediately preceding the Asian financial crisis, Japan was tackling a NPL problem that resulted from the bursting of the so-called bubble economy in 1990. Economic depression has continued for nearly ten years since then, and the Japanese economy has yet to get back to the track of sustainable growth. The chief cause of this crisis, in a nutshell, was that the government did not take measures to deal with NPLs in a timely manner. Cooperative credit purchasing company was launched in 1993 to buy NPLs and the Housing Loans Management Company was set up in 1996 to deal with the problem of
housing-related NPLs. These efforts were inadequate and the real solution had to wait for larger-scale public funds that were made available to financial institutions in March 1998, eight years after the bursting of the bubble economy. The process of resolving NPLs in Japan was indeed too little, too late. Japan adopted the policy of waiting for the economic environment to take a favorable turn, instead of taking swift, decisive action.

On the other hand, many East Asian countries addressed the problem of NPLs rather swiftly. For example, South Korea immediately injected large amounts of public funds into financial institutions. Three years after the financial crisis, the solution to NPLs is progressing relatively well in South Korea and Malaysia, while Thailand and Indonesia are lagging behind. To solve the issue of NPLs, it is necessary to make structural improvements, especially in the financial system and corporate governance that actually caused the NPL problem.

The economic growth rate in each of these countries is projected to a register downward trend in 2000, compared to the previous year, and the current account surplus is diminishing. Since East Asian economics depend heavily upon the US economy, its current slowdown will be a damper to these countries recovery. It is therefore necessary to analyze the current status of NPL problem, financial restructuring and corporate governance to make sure they can cope with adversely changing economic environment (Shekher and Shekher, 1999:85).

### 2.1.9 Non-Performing Assets in Nepalese Banking Sector:

Nepal Rastra Bank expressed his concerns over the outstanding level of non-performing assets in the banking sector that currently stands at $30 \%$. "The total NPA in the banking system is about 35 billion, while it is even worse in case of the two largest commercial banks-Rastriya Banijya Bank and Nepal Bank.", said Dr. Rawal, during the inauguration of a workshop on 'managing non-performing assets' organized by NRB in collaboration with the bank of Korea and Bank Negare Malaysia. The NPA levels at the state run RBB stands at $52 \%$, while the figure at the NBL reads $62 \%$, which together accounts for $37 \%$ of the total deposits of some Rs. 200 billion of the banking system. The NRB report shows the NPL to total gross loan $22.77 \%$ in $2004,18.94 \%$ in 2005 and $14.22 \%$ in 2006.

The following are the non-performing loan to total gross loan status of individual commercial banks (Rawal, 2059:43).

In order to address this deplorable situation and to make domestic financial players competent enough to utilize the opportunities of the globalization, various financial reform measure are underway. The financial sector reform measures undertaken can be broadly grouped under three heads- re-engineering of NRB, restructuring of RBB and NBL, and capacity building of the financial sector. Management of the two ailing banks has been handed over to two teams, consisting of exports from within and outside Nepal.
"NRB as Central Bank will now concentrate only on care functions and initiate different measure to improve corporate governance in the financial sector. Willful defaulters will not be let off at any cost and NRB will initiate stringent measures to stop depletion of common man's deposits and erosion of common stockholder's capital" (Rawal, 2059:46).

The item 'advance and loan' comes next in the order of liquidity. For all practical purposes, we may say that they are not shiftable. Of course, this is the most profitable asset and the profit is mainly derived from these asses. As a rule, a commercial banker will generally lead only for short-term commercial purposes. It is not concerned with long-term loans for investment purposes. Such loans are provided by specialized agencies like industrial banks. The reason advanced in support of this view is that in the case of long-term loans the banker will find it difficult to realize them when emergencies arise. For instance, in the case of a mortgage, the mortgaged property may cover the loan with a safe margin. But when the bank needs liquid cash most, it may find it difficult to convert the mortgaged property into liquid cash. Here in lies the meaning of the off quoted statement. "The art of banking lies in knowing the differences between a mortgage and a bill of exchange (Shekhar and Shekhar, 1999:28).

The timing of loan repayment is a basic term of bank's lending policy. Loan repayment is generally agreed upon prior to the extension of the loan and should represent a realistic evaluation of the customer's ability to repay. The objective is to secure repayment through liquidation of the transaction being financed by rather than through forced sale of
the pledged security. Therefore, term and condition of loan repayment is highly influenced by the nature of transaction, type of the loan, and the period of loan.

Baidya has also discussed project failures and sickness in Nepal, challenges to investor for investment risk management and early warning system for investment risk management. He has also included number of examples about crisis created by banks in the world.
"Nepalese financial institutions have made significant progress especially during this decade, although they are still far behind the developed markets. In spite of having great risk management i.e. focused on collateral rather than on project, credit culture is a new aspect both to the investors and corporate. Unless we have a credit culture, they will end up nowhere. How to identify a good bank? Huge deposits, high technology, strong marketing, broad branching network etc? Finally we arrive the point collection of the loans; on the whole, private sector banks have lower non-performing assets (NPAs) than their public sector counterparts. NPAs are the loans that cannot be or have not been recovered. The government owned banks suffers acutely from this, as they have to lend to various priority sectors, at the whims of their political masters and then forget everything about the money forever" (Baidya, 2001:37).

Banks and financial institution invoke penal measure when an installment of a term loan is defaulted. This is simply a banking procedure to offend the borrowers in case of defaults; however, it is not the complete panacea for project failure. The follow up machinery to enquire into the reasons for the default is generally slow in movement or maximum time would have already been consumed when banks normally acknowledge the failure of the projects. The consequence is that the lending institution is able to ascertain the causes for the first default and more installments are overdue. Delays in implementation schedule, cost escalation in mid-stream, inadequate cash generation or siphoning of fund are few of the factors responsible for default. A lending institution unless it has an effective monitoring system, may miss these signs of potential sickness. The first default should be ample evidence that something is out of order and the term
lending institution should take immediate steps to review the position detail before go out of hand.

Finally, he concludes, "in order to safeguard the banks from the financial crisis likely to be arise from the project failures and sick units, that is, non-performing loans, the government needs to do a number of things and fast. It must bring broad rules for poor financial institutions, transferring bad loans to bridge bank or loan recovery agency, removes many non-performing loans from even healthier bank's balance sheet, beef up regulation, supervision and disclosure, improve ability to banks to sell the collateral that backs soured loans, and recapitalize the banking system." (Baidya, 2001:39).

A bank is judged on the basis of Capital, Assets Quality, Management, Earning, Liquidity and Sensitivity to market risk (CAMEL)". Though almost all the private sector banks are showing profit, it is very difficult to call them sound if appraised from CAMELS approach. Some banks have very low Capital Adequacy Ratio (CAR) while some banks have piled up non-performing assets (NPAs). Similarly, banks don't have proper system in place for management of market risks. The people have been raising questions over the correctness of credit classification and provisioning of some banks. Should the suspicion come true, it will prove very costly to the depositors, creditors and national economy as a whole. It would be prudent to advice NRB to strictly implement its recently introduction directive so that other banks avert the fate of NBL, RBB and NIDC.
"Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Loans are risky assets though a bank invests most of its resources in granting loans and advances. If an individual bank has around $10 \%$ non-performing assets/loan, (NPA/Ls) it sounds the death knell of that bank ceteris paribus (all other things remain constant). The objective of sound loan policy is to maintain the financial health of the bank, which results in safety of depositors' money and increase in the returns to the shareholders. Since the loan is a risk assets, there is inherent risk in every loan. However, the bank should not take risk above a certain degree irrespective of
returns prospect. The different aspects of banking. In their view, the banks lend and recover the loan amount in different fields/sectors of the society (Timilsina, 2004:85).

In their opinion, loan and advances dominate the assets side of the balance sheet of any bank and earning from such loan and advances occupy a major space in income statement. Hence, loan is known as risky asses. Risk of non-repayment of loan is known as credit or default risk. Performing loans have benefits to the society while nonperforming loan erodes even existing capital. If loan is given to disable project not only lenders and borrower but also the whole society gets benefits but society loses its scarce capital if loan is given to project, which is not viable.

The loan and advances are the necessity for the sound banking program and it helps the bank to increase the profitability of the banks. He has also stated that the economy slows down or the industries in which the bank has made a substantial portion of its loans develop significant problem, the frequency of loan review should be increased to safeguard the bank from unexpected risk.
"Loan review is not a luxury, but a necessity for a sound bank lending program. It not only helps management spot loan-problem more quickly, but also acts as a continuing check on whether loan officers are adhering to the bank's loan policy. For this reason, and to promote objectivity in the loan review process, many of the largest banks separate their loan review personnel from the loan department and the bank's board of directors in assessing the bank's overall exposure to risk and its possible need for more capital in the future. Separate loan review division also helps to detect any mishaps and undue influences in the lending process, if any" (Singh, 1999:46).

### 2.2 Review of Related Studies

### 2.2.1 Review of Related Articles and Journals

Chhetri, (2057) in his articles Non-Performing Assets: A Need for Rationalization on Nepal Rastra Bank Samachar has provided connection of the NPA and its potential sources, implication of NPA in financial sector in the South East Asian Resign. He has
also given possible measure to contain NPA. "Loan and Advances of financial institution are mean to be serviced either part of principle of the interest of the amount borrowed in stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loans becomes non-performing assets. The book of the account with lending institution should be effectively operative by means of real transaction effected on the part of the debtor in order to remain loan performing."

As per his opinion, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been arrear for at least 6 months; similarly, it is after three months in India, Loans thus defaulted are classified into different categories having their differing implication on the assets management of financial institution. He also stated that NPAs are classified according to international practice into three categories namely substandard, doubtful and loss depending upon the temporal position of loan default. "Thus the degree of NPA assets depends solely on the length of time the assets has been in the form of none obliged by the lone. The more time it has elapsed the worsted condition of asses is being perceived and such assets are treated according.

As per Chhetri's view, failure of business for which loan was used, defective and below standard credit appraisal system, credit program sponsored by Government, slowdown in economy/recession, diversion of fund are some of the lending to accumulation of NPAs.

He said that there is serious implication of NPAs, on financial institution. He further added that the liability of credit institution dose not limit to the amount declared as NPA but extend to extra amount that requires by regulation of supervisory authority in the form of provisioning as the amount required for provisioning depends upon the level of NPAs create a psyche of worse environment especially in the financial institution like waiving interest, rescheduling the loan, writing off the loan, appointing private recovery agent, taking help of tribunals and law of land etc NPAs can be reduced. Finally he concluded that financial institutions are beset with the burden of mounting level of NPAs in developing countries. "Such assets debar the income flow of the financial institution
while claiming additional resources in the form of provisioning thereby hindering gainful investment. Rising level of NPAs can't be taken as stimulus but the vigilance demanded to solve the problem like this, eventually will generate vigor to gear up the banking and financial activities in more active way contributing to energizing growth.

Neupane, (2058) has said in his articles NPA in Nepalese Institutions on The Kathmandu Post that thinking rationally no one shall be surprised to note two of the giant commercial banks of this country such as Nepal Bank Ltd. and Rastriya Banijya Bank accounting for the highest number and amount of non-performing assets (NPA) among players in the industry. In general and more specifically, in least developed countries like ours, the larger the size of the credit portfolio the larger the amount of NPAs.

As per his view, "the concept and realization of NPAs in the Nepalese financial sector evolved round about a decade ago along with the notion of prudential accounting norms. I reckon that ten years time frame should have been more that enough to formulate and implement strategies for identifying and canalizing the ever accumulating NPAs at Nepalese financial institutions (FIs). However, the Nepal Rastra Bank (NRB) seems to have realized the panic only a year ago. As a result, the NRB came up with a nineteenpoint strategy, primarily pertaining to ways to tackle NPAs. Some of the measures the NRB has envisaged are formation of an assets reconstruction company, credit rating agencies, legal reforms, strengthening administrative/monitoring/supervising mechanisms etc, and above all, the recent NRB directive (number 1to7). Although the NRB, the FIs would have been much better off had it come up with all these philosophies some five years ago, better late than never.

Researcher expressed the one major reason that can be attributed for the already prevalent and ever increasing NPA is unhealthy competition among the commercial banks. Since, the size of our economy has remained more or less stagnant over the past half a decade or so, the size of the total pie has not changed much. Every player in the market means bu7siness and its primary motto is "making profit". This has enhanced unhealthy competition among the banks through interest rate reduction, issuing loans irrespective of borrowers' credibility and authenticity, etc. in course of making their credit portfolios
bigger, all the players have been pouring their investments into the same pie thereby over financing the pie. Given this scenario, it is no surprise to discover a good loan turning into an NPA because of over financing.

There is no denying that no capital market around the world can be termed perfect. However, the capital markets are primarily driven by certain norms, which make lots of sense, and every single movement including stock price fluctuation is guided by prudential norms. By contrast, share prices at the Nepal Stock Exchange (NEPSE) move very surprisingly. Share prices at NEPSE are bound to move upward if a bank registers say Rs. 800 million in profit, an accounting profit, even if it does not contribute anything towards shareholders' wealth maximization. The bank, even while accumulating a sizable NPA, can manage to fool the general public in terms of the accounting profit it registers.

Even the most profitable sector of the economy, be it a primary source of foreign currency earning, should not be over financed. There should always be an upper limit for any sector that deserves banks financing. Recently, the NRB came up with a directive to lessen risk concentration on a single borrower/single sector of the economy. The directive states that large sectoral concentrations constitute a source of risk. Bank managements shall have adequate internal policies and systems in place to monitor the bank's sectral exposure. However, if the NRB so directs, judging it necessary, a bank shall have to provide additional capital with a view to providing uniformity in the categorization of various sectors of the economy. NRB's policy of limiting FIs from pouring their lending into a single sector of the economy can be regarded very positive since it sis likely to diversify the risk of the total investment evenly and thereby minimize the risk of NPA. NRB shall continue to be more stringent in formulating firm policies in the days ahead too to protect shareholder interests.

At last, even if the banks endeavor to recoup NPAs through the auction of mortgaged property, the legal system and the regulations are so shabby and defaulter friendly that they have to struggle for many years to realize the auction process. Just imagine this process; a borrower, initially, default payment, the bank calls back the loan, six months thereon the concerned authority blacklists the borrower, a 35 days notice goes to the
papers for auction and after that a 7 days ultimatum and so on and so forth. Hundreds of cases have been lingering in the courts for many years. Inefficient legal provisions, from the point of view of the bankers, have encouraged borrowers to default and contributed more towards enhancing the quantum of NPA in Nepalese FIs.

Problem in Nepalese Financial Sector and NPLs remained enough from major financial crisis, especially, from the influence of the Asian crisis. However, at the beginning of the Asian crisis in 1997, Nepalese currency depreciated by $11.2 \%$ against US dollar within a short span of time. Though, this was not so big deal as compared to problems encountered by the East Asian Nations.

Pyakuryal, (2001) has stated in his articles Our Economy is in a Volatile Stage on Nepal News.con that the banks have not able to collect their overdue due to the increasing cumulative NPAs in Nepalese commercial banks. There is no additional demand of the investment due to the higher risk and present uncertainty.

Researcher said, Revenue collection is negative and regular expenditure is higher than the revenue. This indicates volatility of the economy. Even before the declaration of emergency, the government didn't have surplus revenue to pay for the remuneration and benefits of retired civil servants. The year 2002 is going to be difficult as major loans are going to mature. Debt servicing will also demand a significant share of the budget. Up to $65 \%$ of our development expenditure is being financed by foreign aid. But if we can't meet the regular expenditure (through our revenue), it will be very difficult for us to convince the donor community. This could push our society toward what is called a 'mass unrest society.'

He also adds, "The government is about to establish an Assets Management Company to take over the non-performing assets (NPAs) of the government-owned banks. On the other hand, it looks like the government's entire concentration has been on two commercial banks only (Nepal Bank Ltd. and Rastriya Banijya Bank). Due to cumulative growth of the NPAs, the banks haven't been able to collect their overdue. Due to the present uncertainty and higher risks, there is virtually no demand for new investments.

That's why many banks are concentrating on conventional areas. We haven't been able to explore potential areas of competitive advantage in the regional context."

After 1990, we have seen that macroeconomic stability could not ensure the reduction of poverty. If the present rate of economic growth and population growth continues, it will take at least 20 years to double our per capital income. It has been proved that macroeconomic stability alone can't ensure economic development in country like Nepal. At the same time, the low-level of inflation at present may not reflect future prospects for Nepalese economy.

Basyal, (2060), in his articles "Problems in Nepalese financial sector \& NPLs" on Nepal Rastra Bank Samachar has state in a broader term, states that the large intermediation cost and inefficiencies in the financial system have remained major drawbacks of the Nepalese financial structure. He further emphasizes the challenges and complexities of the Nepalese financial system as below:

- Weak financial position of most of the government owned financial institutions
- Negative net worth and large accumulated losses of the government owned commercial banks.
- High interest rate differentials between formal and informal financial sector.
- Large interest spread in the formal financial sector.
- Operational inefficiencies, managerial deficiencies and least improvements in financial dealings.
- Active participation of government in the financial system.
- Lack of internationally recognized accounting and auditing practice in the system
- Higher proportion of non-performing assets.

Rawal, (2003), in his articles Financial Sector Reform on NRB Samachar has addressed that financial sector reform measures can be broadly grouped under three heads: (1) restructuring of large two state-owned banks (ii) reengineering of the central banks and (iii) capacity building in the financial sector. In this connection, management of two state-owned banks has been handed over to the expert groups comprising the people within and outside of Nepal, the reengineering and restructuring process of the central
bank (Nepal Rastra Bank) is in progress. Side by side, the capacity building in the financial sector is smoothly approaching ahead. Enactment of new NRB Act 2002 which, gives greater autonomy in its operation, enforcement of inspection and supervision directives based on international standard, withdrawal of government/ NRB involvement from the financial institutions, adoption of accommodative monetary measures are the efforts made to build up sound financial environment. Moreover, with a view to strengthening legal arrangement s, Debt Recovery Act has been approved and the Debt consolidate financial sector through an umbrella act Banks and Financial Institutions Act has recently been approved and for the purpose to resolve the problem of non-performing assets- Asset Management Company Act is in the process of being approved. In addition, establishment of Credit Rating Company, strengthening of Credit Bureau and Bankers' Training Center are some of the tasks progressing ahead. With the arrangement of such a legislative, regulatory, supervisory and institutional framework, the financial sector would, hopefully, take a pace for reviving which, in turn, would help NPLs to be reduced.

Regmi, (2062) in his articles Non-Performing Assets Management on Nepal Rastra Bank Samachar stated about the management of NPAs in the commercial banks. He writes, the NPAs includes the non-performing loan, non-banking assets, remaining non-performing loan, suspend interest and unutilized assets. The increasing NPA are the emerging problem in commercial banks, which is the main factor of failure of banks.

He said, NPAs caused by investment of assets in non-productive sectors, lack of future prediction, lack of proper supervision, monitor, control lack of information and failure of recovery of loan and their interest on time. He also added, the low quality of collateral of loans, failure of projects, and lack of appropriate rules and regulations to punished the bad loan takers. He shows the following NPAs in commercial banks.

He added that increasing NPAs directly affects to the banks, investors and human resources. Not only that but also it affects the customer, economy of country, and business activities. Increasing NPA has two types of impact on banks: internal impact and external impact. In internal, it affects directly on profitability and human resources and in external, it affects to customers, investors, management and country's economy.

He concludes that it is like a cancer of banks. Thus, it is necessary to control this cancer on time; otherwise, it becomes a big issue for bankruptcy. NPA have to need microanalysis to protect the banks, investors, customers, human resources and country's economy.

For that, a clear 'Road Map' is required. To success the laws and policies, all the stakeholders should take responsibilities.

Adhikari, (2062) states in his articles Nonperforming Loan and its Management on Nepal Rastra Bank, Samachar one of the main functions of commercial bank is to management of Non performing loan. Main function of commercial bank and financial institution is accept deposit and provide loan. In underdeveloped country like Nepal providing Loan and interest income generating through loan is the main source of bank and financial institution. If provided loan become nonperforming loan the bank and financial institution suffer from big financial scarcity. One side un-recover interest cannot make income and other side loan its self converts in NPL that make huge effect in financial condition of bank and financial institution. So management of NPL is crucial factor any bank and financial institution.

In practical some there may default rate in aggregate banking system. two commercial banks hold by gvt. Nepal Bank Ltd. and Rastriya Banijya Bank accounting for the highest number and amount of non-performing assets (NPA) among the other commercial banks. Some commercial banks have found 1 to 13 percent of NPL. Some banks are reducing their NPL. In 2059/60, NPL of Gvt. hold banks NBL and RBB was $60.28 \%$ and other private commercial banks has 7.63 . Its reduces in $2060 / 061$ to $56.01 \%$ and $5.74 \%$. Its indicate that bank are managing their NPL.

The main causes of being loan become non perfuming loan are as follows

- Lack of proper analysis
- Lack of specific loan policy
- Lack of supervision
- slump on aggregate economy
- monopoly on corporate loan and its unsuccessful
- weak in consortium loan
- less responsibility of loanee
- Inadequate in internal Control and Audit
- Inadequate in supervision of Central bank

In this way NPA generate in bank and financial institution. Every Banking s system there is some level of Non performing loan. So its should be manage differently. Bank manages their loan and credit if nonperforming loan are acceptable level. But if bank's NPL is more than acceptable level then it impacts on aggregate financial position of bank and market as worse. In this case bank should manage and treat its NPL differently. A single unit with expert should be assign for proper and appropriate management of huge amount of nonperforming loan. For better management of nonperforming loan asset Management Company or corporation (AMC) is required. Proper management of nonperforming loan and recapitalization, these two important improvements are requiring for better every banking system.

### 2.2.2 Review of Theses

Shrestha, (2004) in her research "A Study on Non-Performing loan and Loan Loss Provisioning of Commercial Banks" has made an attempt to analyze the various aspects of non-performing loan in the commercial banks. Her main objectives of the study is to find out the proportion of non-performing loan, factors lending to accumulation of nonperforming loan, relationship between loan and loan loss provision and impact of loan loss provision on profitability of the commercial bank.

She concludes, "Increasing non-performing loan is the serious problem of the baking sector in Nepal. Non-performing assets directly affects the income flow of the bank. It has been found that NBL has very high portion of non-performing loan resulting to higher portion. Hence, even the bank has the highest investment in the most income generating assets i.e. loan and advances, it is in loss. Even the private sector bank like NABIL has higher non-performing loan and according higher provision. NABIL's average proportion on non-performing loan during the study period is higher than the
acceptable. However in recent two year NABIL's non-performing loan has shown significant decrement and according provision has also decreased. Among the three banks, SCBNL has the least non-performing loan and thus the least loan provision. From these indicators it can be said that SCBNL is the best among the three banks. However, SCBNL seems less oriented towards lending. Hence, the lower percentage of NPL and provisioning of SCBNL in not only due to proper lending function but also due to relatively lower investment in loans and advances.

She also said that ineffective credit policy, political pressure to lend uncredit worthy borrowers, overvaluation of collateral are the major caused of mounting non-performing assets in government owed banks like NBL. Other factors lending to accumulation of NPAs are weak loan sanctioning process, ineffective credit monitoring and supervision system, economic slowdown, borrower's misconduct etc. In addition to this establishing recovery cell hiring Asset Management Company is also measure to resolve the problem of NPL.

She recommended that the factor which leads to non-performing loan are improper credit appraisal system, ineffective credit monitoring and supervision system etc. Besides that negligence in taking information from credit information bureau may also lead to bad debts. Hence all the three banks are recommended to be more cautions and realistic while granting loans and advances. After advancing loans there should be regular supervision and follow up for proper utilization of loan. It also recommended that the banks to initiate training and development program for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management. The regulation regarding loan classification and provisioning is stringent and tighter than the previous. Hence, NRB should not only impose directives but also create supportive environment for the commercial banks. NRB is recommended to strength credit information bureau (CIB) so that banks can get required credit information about the borrowers on time. This help in reducing NPL.

Khadka, (2004) stated in "Non-Performing Assets of Nepalese Commercial Banks" with an objective to examine the level of NPAs in total assets, total deposit and total landing
of Nepalese commercial banks. He also showed that the effects of non-performing assets on Return on Assets and Return on Equity of Nepalese commercial banks.

He said that 'despite of being loan and advances more profitable those other assets, it creates risk of non-payment for the bank. Such risk is known as credit risk or default risk. Therefore, like other assets on the basis of overdue schedule. Escalating level of NPAs has been becoming great problem in banking business in the world. In this context, Nepal can't be run off from such situation. The level of NPAs in Nepalese banking business is very alarming. It is well known fact the problem of swelling non-performing assets (NPAs) and the issue is becoming more and more unmanageable day by day. We are well known from different financial reports, newspaper and news that the total NPA in Nepalese banking system is about 35 billion, while it is very worse in case of two largest commercial banks Rastriya Banijya Bank (RBB) and Nepal Bank Ltd. (NBL).

Finally, he concludes that the level of NPA in sampled Nepalese Commercial banks is not so alarming. The situation is quite satisfactory. But the increasing trend remain continue in coming days, the situation will be unmanageable and alarming. The commercial banks could not give full attention towards supervising their lending and towards recovering their bad loans perfectly. Level of NPA has been increasing. The level of NPA of Nepal Bangladesh Bank ltd. (NBBL), Nepal SBI Bank ltd. (NSBIBL), and Bank of Kathmandu ltd (BOKL) seems very unsatisfactory. If the situation is not handing right now, it will be unmanageable and difficult to handle.

In other level of NPA of Nepal Investment Bank and NABIL bank has been gradually decreasing every year. The NPA of NIBL is least (minimum) than all of other banks at the end of 2059/60. The high degree of negative correlation of different commercial banks between NPA and ROA, and NPA and ROE indicates towards the inverse relation between NPA and ROA, and NPA and ROE. It means the level of NPA effect the return on assets and return on shareholder's equity. Therefore, banks should reduce their level of NPA to increase the ROE and ROA.

He recommends that the banks should have to take enough collateral while lending loan, appropriate financial analysis, supervision, monitoring and control should be done.

Lastly, those banks having high level of NPA should take immediate action towards recovering their bad loan as possible as soon. In case of default to repay the loan by borrower, the bank should dispose off the collateral taken from the borrower and recover principle and interest amount.

Pradhan, (2006) in his research "A study on non-performing Assets of Commercial Bank in Nepal" has stated main objective of his study are to find out the proportion of nonperforming loan and the level of NPA in total assets, total deposit and total lending in the selected commercial bank relationship between loan loss provisions in the commercial bank impact of non-performing assets in the performance of commercial bank.

He has concluded improper credit policy, political pressure to lend, lack of supervision and monitoring, economic slow down, overvaluation of collateral are the major cause of occurring NPA. In recent year, not only the private sector's bank (like NBBL, EBL and SCBNL) but also public sector's banks (RBB and NBL) are trying to maintain their loan and advances to control over becoming the non-performing assets. To overcome the NPA from public banks, they should try to recover their loan and interest amount on time and make a suitable loan loss policy.

He has concluded "high level of non-performing assets not only decrease the profitability of the banks but also affect the entire financial as well as operational health of the organization. If the NPA does not control immediately, it will be main causes for shutdown of the banks in future.

He suggest that reduce the NPA problem immediate remedial action for taking enough collateral, so that the bank at least can able to recover its principle and interest amount in case of being unable to repay by the borrower, proper financial analysis should be done before lending to the borrowers bank should provide appropriate training regarding loan management, risk management, credit appraisal etc to the employee. Bank should apply precautions before granting any loan and advances to decrease the bad loans.

Shrestha, (2007) in her dissertation "A Study on Non-Performing loan and Loan Loss Provisioning of Commercial Bank" aimed of studying the non-performing assets of
private commercial banks. For this purpose, descriptive and analytical research design was adopted out of total population of 18 commercial bank, four private banks were taken as sample using judgment sampling method. They are LUBL, NCC, NBBL and SCBNL. In this study secondary data are used. Besides this, newspaper, relevant thesis, journals, articles, related website etc. are also taken for this research. The data collected from various sources are recorded systematically and presented in appropriate forms of table and charts and appropriate mathematical, statistical, financial and graphical tools have been applied to analyze the collected data in suitable manner. The data of five consecutive yrs of the four banks have been analyzed to meet the objective of the study. The major objective of this research is to examine the level of non-performing assets (NPAs). The specific objectives are:

- To evaluate the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- 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.
- To provide suggestions and recommendations for the further important.

Lumbini has the highest proportion of loan and advances to total assets of bank but the SCBNL has the lowest proportion of loan and advances during the study period. It indicates the risk averse attitude of the management of SCBNL, NBBL and NCC have moderate ratio. Same thing can be known on the basis of loan and advances to total deposit ratio. The Lumbini has the highest proportion among where as SCBNL show the lowest ratio. From this ratio Lumbini, NCC, NBBL are the higher loan provider. They are rendering an average of $89.156,81.738$, and 77.78 of their total deposit funds.

It is found that the NCC has the highest NPA to total loan \& advance secondly, the Lumbini has the NPA to total loan \& advance. They are generating most of their assets in loan and advance but they are in loss. SCBNL invest least amount of their resources in
loan and advances even NBBL invest the lesser amount of their resources in loan and advances comparing with NCC and Lumbini. That's why their profits show the positive during the study period. Among them SCBNL is the best bank and also it can be said that the NBBL are quite satisfactory banks according to their return on loan and advances. As a sample drawn from private sector, we can see the different between their transactions. Among this private bank SCBNL is less interested in lending loan and advances. Thus it may be caused to get less NPA and LLP and vice-versa to the other banks.

In conclusion, improper credit policy political pressure to lend, lack of supervision and monitoring, economic (slow down, overvaluations of collateral are the major causes of occurring NPAs. In recent yr, not only the private sectors banks but also public sector's banks are trying to maintain their loan \& advances to control over becoming the NPA.

Shrestha, (2008) on her research "A study on the credit risk management of Nepalese Commercial Banks" aims following objective taking Kumari Bank and Machhapuchre Bank Limited.

- To examine the credit risk position of the selected commercial banks in Nepal
- To analyze the credit risk management system and practices of KBL and MBL
- To evaluate the organizational structure of KBL and MBL to manage the credit risk.

From the analyses of credit risks, following major findings have been obtained:
From the analysis of primary data, it is found that the majority of the respondents of both banks have favored with the bank's single sector, which is up to $10 \%$ of total loan. However, the sector wise lending analysis portrays that KBL and MBL have extended up to $19.88 \%$ and $30.12 \%$ of loan in a single sector respectively in FY 2005/06. Similarly, the exposure on the single sector of KBL and MBL exceeds $10 \%$ of total loan in 3 and 5 sectors respectively. The single sector loan to core capital shows that the ratio crossed $100 \%$ in 2 sectors of both KBL and MBL. Concerning concentration risk, KBL has more risk in manufacturing, others sector where as MBL has more risk on manufacturing, and Whole seller and sectors as the single sector credit to core capital ratio in these sectors is
more than $100 \%$. MBL has very high loan concentration on manufacturing sector of $199.35 \%$ of the core capital. From the personal interview of the key respondents it was found that both banks have been extending credit in those highly concentrated sectors after getting approval from the board of director. This clarifies that concentration risk is the main source of credit risk for KBL and MBL.

Similarly, lack of systematic and thorough credit processing is also the major source of credit risk in these banks. The problems in credit processing include lack of thorough credit assessment, absence of testing and validation of new lending techniques, subjective decision-making by senior management, lack of effective credit review process, failure to monitor borrowers or collateral values, and failure of banks to take sufficient account of business cycle effects etc. Likewise the market-sensitive and Liquidity-sensitive exposures also increase the credit risk of these banks. Both banks have ranked $1^{\text {st }}$ to the manufacturing sector where as the Agriculture sector has been ranked the last on the basis of priority. KBL has chosen others sector and real estate business in $2^{\text {nd }}$ and $3^{\text {rd }}$ position respectively, where as the MBL has just opposite preference in these sectors. Likewise, KBL has ranked Character, Collateral and Capacity of borrower first, second and third criterion for granting credit where as MBL ranked Character, Capacity and Capital first, second and third priority respectively Lending analysis against various collaterals: it has been found that both the banks have lent highest amount of loan against the movable/ immovable property. The average lending over 5 years period of KBL and MBL against movable/ immovable property is Rs. 2,987 million and 2,673 million respectively. Similarly, the lending against others securities (i.e. other than prescribed by NRB) is second position for both banks, whereas the lending against guarantee of local banks and finance companies is in third position. However, MBL has also granted loan without any collateral. The average amount of loan without collateral is Rs. 3 million annually, which is in the $6^{\text {th }}$ place on ranking. On the contrary, KBL has not granted any loan without backing any collateral.

In conclusion, the major banking risks include credit risk, market risk (i.e. liquidity risk, interest risk, operation risk etc). Among these risks, credit risk has the major impact on
banking (i.e. more than 60\%). Because of the credit risk, the Non Performing Loan (NPL) of bank will increase. With the increase in NPL, the loan loss provisioning will also increase simultaneously leading to decrease in profit. The decrease in profit results in low dividend to shareholder and bonus to employees.

For proper management of the credit risk, both banks have their own set of policies and practices, which is in consistence with NRB guidelines. For credit risk management, both banks have Credit Policies Guidelines (CPG). Similarly, NPL is regularly monitored by both the banks on regular basis and provisioning is done on quarterly basis by categorizing the loan as per NRB guidelines. Similarly, sector wise and security wise lending is being analyzed by these banks on monthly basis. Organizational structure of these banks is frequently restructured for proper credit risk management as per requirement.

Shrestha, (2009) "Credit risk management of Nabil Bank Limited and Nepal Investment Bank Limited in Nepal" The main objective of the study is to evaluate the credit risk management. In order to achieve this, the following specific objectives have been formulated.

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

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

The loan \& advances to total deposit ratio of NABIL is lower than NIB. The total investment to total deposit of NABIL is higher than NIB i.e. $34.40 \%>27.45 \%$. It shows
the NABIL is mobilizing its funds on investment in various securities efficiently. The loan \& advances to total assets ratio of NIB is greater than NABIL. Investment on government securities to total assets ratio of NABIL is higher than NIB. This indicates that NABIL has invested more portions of total assets on government securities. So an asset management aspect of NABIL is better than NIB. The profitability position of NABIL and NIB are Return on loan \& advances ratio of NABIL is higher than that of NIB i.e. $4.64 \%>2.46 \%$. Return on total assets ratio of NABIL is slightly higher than NIB i.e. $2.61 \%>1.79 \%$. However, NABIL seems successful in managing and utilizing the available assets in order to generate revenue.

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

Dangol, (2010) in her research Non-performing assets of commercial banks of Nepal (With Special Reference to Kumari Bank Limited, Machhapuchre Bank Limited and NIC Bank Limited). The major objective of this research is to examine the level of nonperforming assets (NPAs). The specific objectives are

- To evaluate the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- To evaluate the relationship and trend line of total deposit, loan and advance, total asset and net profit of selected commercial banks.
- To analyze the impact of non-performing assets in the performance of commercial banks.
- To provide suggestions and recommendations for the further important.

It is found that the NIC has the highest NPA to total loan \& advance secondly the KBL has the moderate NPA to total loan \& advance and MBL has the least ratio. They are
generating most of their assets in loan and advance. If we see latest data NIC has the lowest ratio. All three banks have met the NRB directives. That's why their profits show the positive trend during the study period. Among them NIC is the best bank and also it can be said that the KBL are quite satisfactory banks according to their return on loan and advances. If we see return on loan and advances MBL has the lowest ratio as its higher provision to NPL. It is May due to bad loan in loan and advances. As a sample drawn from private sector we can see the different between their transactions. Among this private bank NIC is less interested in lending loan and advances. Thus it may be caused to get less LLP and vice-versa to the other banks.

MBL has the highest loan loss provision than other two banks. It is recommended that KBL and NIC increase the provision amount to recover the bad loan for the safe guard of future losses. KBL and MBL have the lowest ratio in return on loan and advances during the study period. So they must take serious step to ensure higher return.

In conclusion, improper credit policy political pressure to lend, lack of supervision and monitoring, economic (slow down, overvaluation of collateral is the major causes of occurring NPAs. In recent year not only the private sectors banks but also public sector banks are trying to control over their loan \& advances to minimize NPA.

Joshi, (2011) has conducted research topic on Non - performing assets of commercial banks of Nepal (with special reference to NABIL bank limited and Machhapuchchhre bank limited). The major objective of this research is to examine the level of nonperforming assets (NPAs). The specific objectives are as follows:

- To see the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- To see the impact of non-performing assets in the performance of commercial banks.
- To see the trend of the total deposit, NPA, loan and advance, total asset and net profit of selected commercial banks.
- To provide suggestions and recommendations for the further important.

The major findings of the study are as follows, the loan \& advances to total assets ratio of NABIL and MBL are in fluctuating trend during the study period. The mean of NABIL and MBL are $5939 \%$ and $70.52 \%$ respectively. The mean ratio of loan \& advances to total deposit of NABIL and MBL are $6935 \%$ and $80.36 \%$ respectively. So MBL has higher ratio than that of NABIL. It indicates the better mobilization of deposit or converted in to loan and advances to earn income by MBL. The average mean ratio of non-performing assets to total loan and advance of NABIL is 0.2566. Similarly, MBL has high mean ratio of non-performing assets to total loan and advance is 0.5922 , which is much higher than NABIL. It can be said that NABIL performing well or maintaining their NPAs perfectly. But he MBL has the high degree of NPL. The ratio of provision held to total non-performing assets for the MBL has the highest ratio than the NABIL. The average mean ratio of NABIL is 2.142 . The mean ratio of MBL is 3.064 respectively. MBL has high ratio of NPL as so bank has make high provision as well.

Non-performing assets to total assets ratio, MBL has the approximately higher ratio than the NABIL. The average ratio of Nonperforming asset to total asset is 0.1575 . The average mean ratio of MBL is 0.751 . MBL has the highest ratio, which shows the bad performances and lower profitability on its assets in this way NABIL is better than MBL in respect of NPA to total asset. The NABIL has the highest ratio through the study period. The mean ratio of MBL is 0.0138 . Thus, it signifies that along with the lower return and high degree of variation in this ratio of MBL. The price-earning ratio mean point of view, mean ratio of the NABIL and MBL are 32.65 and 55.01 times respectively. Non performing loan of NABIL and MBL bank limited are categorized according to substandard, doubtful and bad debts. The average sub standard loan is 76.79 million. Similarly the average amount of doubtful loan is 26.86 million. The average amount of bad debts is 74.612 million of NABIL. Similarly, the average sub standard loan is 21.087 million. The average amount of doubtful loan is 7.578 million. The average amount of bad debts is 74.874 million. Bad debt is loss for the company. The total non performing loan is increasing over the study period.

### 2.3 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. Many research work have been done on the study of investment policy, financial performance and credit management through loan loss provision, nonperforming loans and capital adequacy. However, very few thesis have been found on the non-performing asset management which is the most important aspect of the banking sector. So, the researcher can make further research on liquidity, asset management, profitability and other risk and the actual practices followed by the management of Nepalese commercial banks from its own side besides the NRB directives to manage and control the credit risks etc.

This study trying attempts to fill this gap by measuring the Non-performing assets of commercial banks of Nepal (With Special Reference to Nabil Bank and Limited, Bank of Kathmandu Limited) by studying their non performing asset management system. Here non-performing asset is measured by using various financial and statistical tools and technique. Financial tools like various liquidity ratio, activity ratio, NPA ratio like pass loan, substandard, doubtful and bad debts etc, and in statistical tools, mean, standard deviation and correlation coefficient are analyzed. Here various ratio are analyzed while preparing research which previous researcher excluded. The analyzed data are only five fiscal year but all the data are current and fact. Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts This study also aims to find out the organizational structure of NABIL and BOK for the proper implementation and compliance of NRB Directives and to manage the credit risk.

## CHAPTER - III

## RESEARCH METHODOLOGY

Research is a systematic inquiry of any particular topic and methodology is the method of doing research in well manner and Human nature's get satisfied with the same thing that regularly takes place for a long time. They are always curious to learn, understand or investigate when some particular things happens or happened. The topic of the study has been selected as "The Non performing asset of commercial bank in Nepal (With special reference to Nabil Bank Limited and Bank of Kathmandu Limited). In order to reach and accomplish the objectives of the study, different activities will be carried out. For this purpose, the chapter aims to present and reflect the methods and techniques that are carried out and followed during the study period. The research methodology that is adopted for the present study is mentioned in this chapter, which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology.

### 3.1 Research Design

"Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research question and control variance. The plan mean now researcher investigator collect the data structure in term controlling the data in term of money and time" (Joshi, 2001).

We can say that the research design is specification of methods and procedures for acquiring the information needed. It is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control; variances. It is the overall operational pattern of framework of the projects that stipulates what information is to be collected from which sources by what purpose. A good design will ensure that the information obtained is relevant to the research question and that it was collected by objective and economically procedure.

The main objective of research design is to make analysis in non-performing assets of commercial banks in Nepal and provide valuable recommendation. In other words, this
research is aimed at studying the non-performing assets of commercial banks. This will follow analytical and descriptive research design. And it also analyzes the composition of trend of non-performing assets, loan recovery and profitability condition of commercial banks. The design for this research is made by collection of information from different sources by using various financial statistical tools. To achieve the objective of this study, analytical and descriptive research designs have been used.

### 3.2 Sources of Data

Making study more reliable and justifiable, secondary data has been used in this study. Published articles, books, newspaper, websites and annual reports of concerned banks are the secondary sources of data. In this study, secondary data were taken from annual reports of related banks, annual reports of Nepal Rastra Bank Samachar, news papers and magazines, different web sites, libraries, unpublished thesis and journals.

### 3.3 Population and Sample

The term 'population' for research means all the members 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 wishes to investigate. A representative part of population selected from it with the objection of investigation its propertied is called sample. For purpose of the study, the judgmental sampling method has been used to analysis about total number which constitutes population.

Total 32 commercial banks constitute the population of the data and the banks under the study constitute the sample of the study. So among the various commercial banks in the banking industry, Here Nabil Bank limted and Bank of Kathmadu limited have been selected for the present study. Likewise, financial statements of five years have been analyzed for study purpose.

### 3.4 Data Processing Procedures \& Analysis

Data collected from various sources were in raw form. They were classified and tabulated as per the nature of the study and in accordance of the data. Applying different financial
and statistical tool made data analysis. Further to represent the data in simple form bar diagrams and graphs have also been used.

### 3.4.1 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" (Pandey, 2000:108). While adopting financial tools, a ratio is used as benchmark for evaluating the financial position and performance of any firm. "Financial analysis is the use of financial statement to analyze a company's financial position and performance and to assess future financial performance.

### 3.4.1.1 Ratio Analysis

Ratio analysis is the most effective tool of financial analysis. It is the widely used tool in financial analysis. A ratio simply shows the relationship between the two variables or one another. It presents the relative strengths and weakness of any firms or organization. It also shows the financial growth of the organization and financial performances of the organization. It summaries the financial figurer and make quantitative judgment about the financial performances and positions. The relationship between two accounting figures expressed mathematically is known as financial ratio. To make analysis, we can use various ratios. But only those ratios have been calculated which are related to the subject matter.

## i. Loan \& Advances to Total Assets Ratio

The loan and advances to total assets ratio measures the amount of loan and advances in total assets. It means that it shows the proportion of loan and advances to total assets. High degree of loan and advances indicates the good position of the organization that of good mobilization of deposits of funds. In inverse, low degree of loan and indicates that not use of fund properly. Loan is the risky assets. Thus, higher loan and advances to total assets ratio shows high risk and inversely low loan and advances to total assets ratio shows low risk. Risk consists the uncertainty and future is uncertain. Thus, the loan and
advances may or may not be recovered with its interest. This ratio can be calculated as follows:

Loan \& Advances to Total Assets Ratio $=\frac{\text { Loans and advances }}{\text { Total Asset }}$

## ii. Loan and Advances to Total Deposit Ratio (CD ratio)

The main objective of commercial banks is to make deposits and lend it in the secure field. The loan and advances to total deposit ratio shows the relationship between the loan and advances and total deposit. It shows how much fund of deposit is provided as loan and advances. This ratio is used to find out how successfully the banks are utilizing their deposited fund on credit or loan for profit generating purpose as loans and advances yield high rate of return. Higher CD Ratio implies the better utilization of total deposits and better earnings. Hence $70 \%$ to $80 \%$ CD Ratio is considered a more appropriate. This ratio can be calculated as follows:

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

## iii. Non-Performing Assets to total Loans and Advances Ratio:

This ratio determines the non-performing assets in the total loan and advances portfolio. Greater ratio implies the bad quality of loan of the bank. Hence lower non-performing assets to loans and advances ratio are preferable. As per international standard only 5\% NPA is allowed but in the context of Nepal $10 \%$ NPA is acceptable. It is calculated as under:

NPA to Total loan and Advances Ratio $=\frac{\text { Total non }- \text { performing loans }}{\text { Total loans } \& \text { advances }}$

## iv. Provision Held to Non-Performing Assets Ratio:

This ratio describes the proportion of provision held to non-performing assets of the bank. This ratio measures up to what extent of risk inherent in NPA is covered by the total loan provision. Higher ratio signifies that the banks are safe guarded against future contingencies that may create due to non-performing assets. So, higher the ratio better is the financial strength of the bank. This ratio is calculated as follows:

$$
\text { Pr ovision held to } N P A=\frac{\text { Total } \operatorname{Pr} \text { ovision }}{\text { Nonperfor } \min g \text { Assets }}
$$

## v. Non-Performing Assets to Total Assets

This ratio indicates the ratio between the non-performing assets and total assets. Higher NPA to assets ratio implies the bad effects in banks performance and it decrease the profit ability of the banks and lower ratio implies the better performance of the bank and it increase the profitability of banks. This ratio can be calculated as follows:

$$
\text { NPA to Total Assets }=\frac{\text { Total Nonperforming Asset }}{\text { Total Assets }}
$$

## vi. Return on loan and Advances

This ratio indicates the proportion of the return over total loan and advances. It describes how efficiently the bank has employed its resources in the form of loans and advances of the bank. Higher the ratio is the performance of the bank and vice-versa. It is calculated as followed:

Return on Loan and Advances $=\frac{\text { Net Profit }}{\text { Total loans \& advances }}$

## Vii. Price Earning Ratio

This ratio is closely related to the earning per share. It is calculated by dividing the market value per share by EPS. Price earning ratio indicates investor's judgments or expectation about the firm's performance. This ratio widely used by the security analysis to value the firm's performance. This ratio widely used by the security analysis to value the firm's performance as accepted by investors. Price earning ratio reflects investor expectations about the growth in the firm's earning. Higher ratio indicates the more value of the stock that is being ascribed to future earning as opposed to present earning.

Price Earning Ratio $=\frac{\text { Market Price per Share }}{\text { Earning per share }}$

### 3.4.2 Statistical Tools

The statistical tools are essential to measure the relationship of two or more variable. It is the mathematical technique used to facilitate the analysis and interpretation of the performances of the organization. It 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. In this study, the following statistical tools are used:

## i. Arithmetic Means (average):

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

$$
\begin{aligned}
& \bar{X}=\frac{1}{n} \sum_{i=1}^{n} X_{i} \\
& \text { Where: } \\
& \bar{X} \quad=\text { mean value or arithmetic mean } \\
& \sum_{i=1}^{n} X_{i}=\text { sum of the observation } \\
& \mathrm{N} \quad=\text { number of observation }
\end{aligned}
$$

## ii. Standard Deviation:

The standard deviation is the absolute measure of dispersion in which the drawback present in other measure of dispersion as it satisfied most of the requisites of a good measure of dispersion. (Bajaracharya, 1996:177). Standard deviation is defined as the positive square root of the mean of square of the deviation take from the arithmetic mean. It indicates the ranger and size of deviance from the middle or mean. It measures the absolute dispersion. Higher the standard deviation higher will be the variability and vice versa.

Dispersion measures the variation of the data from the central value. In other words, it helps to analyze the quality of data regarding its variability. It can be :

## iii. Correlation Coefficient (r):

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

Formula

$$
\mathrm{r}_{\mathrm{x} 1 \times 2}=\frac{\mathrm{N} \Sigma \mathrm{X}_{1} \mathrm{X}_{2}-\left(\Sigma \mathrm{X}_{1}\right)\left(\Sigma \mathrm{X}_{2}\right)}{\sqrt{\left[\mathrm{N} \Sigma \mathrm{X}_{1}^{2}-\left(\Sigma \mathrm{X}_{1}\right)^{2}\right]} \sqrt{\left[\mathrm{N} \Sigma \mathrm{X}_{2}^{2}-\left(\Sigma \mathrm{X}_{2}\right)^{2}\right]}}
$$

Whereas,
$\mathrm{r}_{\mathrm{x} 1 \times 2}=$ Correlation between $\mathrm{X}_{1}$ and $\mathrm{X}_{2}$
$N \Sigma X_{1} X_{2}=$ No. of Product observation and Sum of product $X_{1}$ and $X_{2}$
$\Sigma \mathrm{X}_{1} \Sigma \mathrm{X}_{2}=$ Sum of Product $\mathrm{X}_{1}$ and sum of Product $\mathrm{X}_{2}$

The karl pearson coefficient of correlation, always falls between -1 to +1 . The value of correlation of coefficient in -1 signifies the negative correlation and in +1 signifies the positive correlation coefficient.

If $r=0$, there is no relationship between the variables.
If $r<0$ there is negative relationship between the variable
If $r>0$ there is positive relationship between the variable
If $r=-1$ the relationship is perfectly negative between the variable.
If $r=+1$ the relationship is perfectly positive between the variable

## iv. Coefficient of variation (c.v.):

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

$$
\begin{aligned}
& \text { c.v. }=\frac{o}{x} * 100 \\
& \sigma=\text { Standard deviation } \\
& x=\text { sum of the observation }
\end{aligned}
$$

## v. Probable Error:

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows:
P.E. $=0.6745 \frac{1-r^{2}}{\sqrt{N}}$

Here, $\quad r=$ Correlation coefficient
$\mathrm{N}=$ Number of pairs of observations
If the value of ' $r$ ' is less than the probable error, there is no evidence of correlation, i.e., the value of ' $r$ ' is not at all significant. Then, if the value of ' $r$ ' is more than six times of the probable error, the coefficient of correlation is practically certain, i.e., the value of ' $r$ ' is significant.

## vi. Times series Analysis (Trend Analysis)

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

$$
\mathrm{Y}=\mathrm{a}+\mathrm{bx}
$$

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

Where,
$\mathrm{Y}=$ Trend value
A = y intercept
$\mathrm{b}=$ slope of trend line of the amount of change in y variable that is an associate with change in 1 unit in X variable.
$\mathrm{X}=$ Time variable

## CHAPTER - IV DATA PRESENTATION AND ANALYSIS

In this chapter, efforts have been made to present and analyze the collected data. Data collected from various sources were classified and tabulated as requirement of the study and in accordance to the nature of collected data. In this chapter data collected are analyzed and interpreted as per the stated methodology in the previous chapter. Presentation and analysis of data is the main body of the study. Here researcher has analyzed and diagnosed the Non performing asset of Nabil Bank and Bank of Kathmandu Limited. All the financial positions of both the banks are analyzed by calculating subsequent ratio. Different arithmetical and statistical tools are used to analysis the data. To make easier to understand, data are presented in the required figure also.

### 4.1 Financial Analysis

Financials ratios related to the NPA are presented to evaluate and analyze the condition of NABIL and BOK. Some important financial ratios are calculated in the point of view of NPA. The ratios are designed and calculated to highlight the relationship between financial items and figures.

### 4.2 Classification of Non-performing loan and advances

From the effective Fiscal year 2007/08 to 2011/12, banks should classify Non-performing Loans and Advances. Non-performing Loans and Advances of NABIL and BOK are classified into the following categories

## 1. Sub-Standard Loans

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

## 2. Doubtful Loans

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

## 3. Loss Loans

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

### 4.2.1 Portion of Non-performing loan and advance of NABIL

## Table No 4.1

Non performing loan of NABIL
(Rs in Million)

| Year | Sub standard | Doubt full | Bad Debts | Total |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 66.22 | 42.58 | 52.29 | 161.09 |
| $2008 / 09$ | 113.31 | 45.76 | 65.76 | 224.83 |
| $2009 / 10$ | 59.02 | 22.73 | 404.53 | 487.54 |
| $2010 / 11$ | 170.21 | 104.66 | 392.84 | 689.85 |
| $2011 / 12$ | 162.44 | 36.78 | 783.63 | 1000.06 |
| Total | 571.2 | 252.51 | 1699.05 | 571.2 |
| Average | 114.24 | 50.502 | 339.81 | 114.24 |

## Source: Annual Report of concerned Banks

Figure No. 4.1
Portion of Non performing loan and advance of NABIL


Above table and figure show the non performing loan of NABIL bank limited. The total NPL includes sub standard, doubt full and bad debts loans. The highest sub standard loan is 170.21 million in $2010 / 11$ and lowest amount is 59.02 in 2009/10. The average sub standard loan is 114.24 million. Similarly highest doubt full loan is 104.66 in 2010/11 and lowest amount of doubt full loan is 22.73 million in 2009/10. The average amount of doubtful loan is 50.502 million. Bad debt is bad thing for commercial banks. The highest amount of bad debts is 783.63 million in 2011/12 and lowest amount of bad debts is 52.29 million in 2007/08. The average amount of bad debts is 339.81 million. Bad debt is loss for the company. The total nonperforming loan of NABIL is increasing form, which is undesirable for company. Anyway NABIL has performing well.

### 4.2.2 Portion of Non-performing loan and advance of BOK

Table No 4.2
Non performing loan of BOK
(Rs in Million)

| Year | Sub standard | Doubt full | Bad Debts | Total |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 100.18 | 19.25 | 117.48 | 236.90 |
| $2008 / 09$ | 36.91 | 21.07 | 132.32 | 190.32 |
| $2009 / 10$ | 11.46 | 70.85 | 174.91 | 257.52 |
| $2010 / 11$ | 12.67 | 6.22 | 304.05 | 326.33 |
| $2011 / 12$ | 95.04 | 106.55 | 239.03 | 443.39 |
| Total | 256.26 | 223.94 | 967.79 | 256.26 |
| Average | 51.252 | 44.788 | 193.558 | 51.252 |

Source: Annual Report of concerned Banks

Figure No. 4.2
Portion of Non performing loan and advance of BOK


Above table show the non performing loan of Bank of Kathmandu limited. The total NPL includes sub standard, doubt full and bad debts loans. The highest sub standard loan of BOK is 100.18 million in $2007 / 08$ and lowest amount is 11.46 million in 2010/11. The average sub standard loan is 51.252 million. Similarly highest doubt full loan of BOK is 106.55 in 2011/12 and lowest amount of doubt full loan is 6.22 million in 2010/11. The average amount of doubtful loan is 44.788 million. In the same way the highest amount of bad debts of BOK is 304.05 million in 2010/11 and lowest amount of bad debts is 117.48 in 2007/08. The average amount of bad debts is 193.558 million. Bad debt is loss for the company. The total non performing loan of BOK is increasing over the study period beside F/Y 2008/09.

### 4.3 Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the banks. It also provide for the quantitative judgment with which the investment policy of banks can be presented.

### 4.3.1 Loan and Advances to Total Assets Ratio

A commercial bank's working fund plays very active role in profit generation through fund mobilization. The ratio of loan and advances to total assets measures the volume of loan and advances in the capital structure of total assets. The high degree of ratio indicates the good performance of the banks in mobilizing its fund by way of lending functions. In the opposite side, the low degree of ratio is the representative of the low degree of liquidity ratio. Granting loan and advances always carries a certain degree of risk. Thus, this asset of banking business is regarded as risky assets. Hence, this ratio measured the management attitude toward risky assets. The low ratio is indicative of low productivity and high degree in liquidity and vice-versa. The size of total assets of commercial banks increased continuously over the last few years. The following table shows loan \& advances to total assets of NABIL and BOK as follows.

Table No. 4.3
Loan and Advances to Total Assets Ratio
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loan and advance | Total Asset | Ratio | Loan and advance | Total Asset | Ratio |  |  |  |  |  |
| $2007 / 08$ | 21365.05 | 37132.76 | 57.54 | 12462.64 | 17721.93 | 70.32 |  |  |  |  |  |
| $2008 / 09$ | 27589.93 | 43867.4 | 62.89 | 14647.3 | 20496 | 71.46 |  |  |  |  |  |
| $2009 / 10$ | 32268.87 | 52150.24 | 61.88 | 16664.93 | 23396.19 | 71.23 |  |  |  |  |  |
| $2010 / 11$ | 38034.09 | 58141.44 | 65.42 | 17468.19 | 24757.75 | 70.56 |  |  |  |  |  |
| $2011 / 12$ | 41605.68 | 63257.37 | 65.77 | 18813.94 | 28881.99 | 65.14 |  |  |  |  |  |
| Total | 160863.6 | 254549.2 | 313.5 | 80057 | 115253.9 | 348.7142 |  |  |  |  |  |
| Mean | 32172.72 | 50909.84 | 62.7 | 16011.4 | 23050.77 | 69.743 |  |  |  |  |  |
| S.D |  |  | 3.323 |  |  | 2.615 |  |  |  |  |  |
| C.V |  |  |  |  |  |  |  |  | 0.0529 |  | 0.0375 |

[^0]Figure No. 4.3
Loan and Advances to Total Assets Ratio


Above table and figure show the loan and advances to total assets ratio of NABIL and BOK banks for last five consecutive years. The loan \& advances to total assets ratio of NABIL and BOK are in fluctuating trend during the study period. While observing their ratios BOK is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year in comparison of NABIL, but last year NABIL has exceeded.

The ratios of NABIL are $57.54 \%, 62.89 \%, 61.88 \%, 65.62 \%$ and 65.77 percent in their respective year. The highest ratio is $65.77 \%$ in the year 2011/12 and the lowest ratio is $57.04 \%$ year 2006/07. The ratios of BOK are $70.32 \%, 71.46 \%, 71.23 \%, 70.56 \%$ and $65.14 \%$ in their respective year. The highest ratio is $71.46 \%$ in the year 2008/09 and the lowest ratio is $65.14 \%$ year $2011 / 12$. The mean of NABIL and BOK are $62.70 \%$ and $69.743 \%$ respectively. So BOK has higher average ratio than that of NABIL. It reveals that in total assets, BOK has high proportion of loan and advances. BOK has utilized its total assets more efficiently in the form of loan \& advances. The S.D. and C.V. of NABIL and BOK have 3.323, 2.615 and 0.0529 and 0.0375 respectively. The higher C.V. of NABIL states that it has less uniformity in these ratios throughout the study period than that of BOK. BOK has efficiently it total asset as loan and advances.

### 4.1.2 Loan and Advance to Total Deposit Ratio:

The loan and advances to total deposit ratio is also known as credit deposit ratio (CD ratio). This ratio actually measures the extent to which the banks are successful to mobilize the total deposit on loan \& advances for the purpose of profit generation. It is the proportion between the total loan lunching and the total deposit in the banks. It can be calculated by dividing the total loan and advances by the total deposit amount. This ratio shows how successfully the banks are utilizing their deposited funds as credit or loan for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies that better utilization of total deposit of banks and higher earning from that loan and advances with the higher risk. A higher ratio of loan \& advances indicates better mobilization of collection deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table shows the loan \& advances to total deposit ratio of related banks Thus, $70 \%-80 \%$ CD ratio is assumed as more suitable for the banks.

## Table No. 4.4

Loan and Advance to Total Deposit Ratio
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loan and <br> advance | Total <br> Deposit | Ratio | Loan and <br> advance | Total <br> Deposit | Ratio |
| $2007 / 08$ | 21365.05 | 31304.82 | 68.18 | 12462.64 | 15833.74 | 78.709 |
| $2008 / 09$ | 27589.93 | 37348.26 | 73.85 | 14647.3 | 18083.98 | 80.996 |
| $2009 / 10$ | 32268.87 | 46410.7 | 69.53 | 16664.93 | 20315.83 | 82.029 |
| $2010 / 11$ | 38034.09 | 49696.11 | 76.53 | 17468.19 | 21018.42 | 83.109 |
| $2011 / 12$ | 41605.68 | 54905.68 | 75.78 | 18813.94 | 24119.45 | 78.003 |
| Total | 160863.6 | 219665.6 | 363.87 | 80057 | 99371.42 | 402.847 |
| Mean | 32172.72 | 43933.11 | 72.774 | 16011.4 | 19874.28 | 80.569 |
| S.D |  |  | 3.739 |  |  | 2.168 |
| C.V |  |  | 0.0514 |  |  | 0.0269 |

Source: Annual Report of Concerned Banks

Figure No. 4.4
Loan and Advance to Total Deposit Ratio


The above table and figure show that the loan \& advances to total deposit ratio of NABIL and BOK. The loan \& advances to total deposit ratio of NABIL and BOK is fluctuating trends. BOK has higher ratio than that of NABIL in each year and mean too. It indicates the better mobilization of deposit by BOK. The mean of NABIL and BOK are 72.774\% and $80.569 \%$ respectively. The highest ratio of NABIL is $76.53 \%$ in Fiscal year 2010/11 and lowest ratio is $68.18 \%$ in 2007/08. Similarly highest ratio of BOK is $83.109 \%$ in 2010/11 and lowest ratio is 78.003 in Fiscal year 2011/12. So BOK has higher ratio than that of NABIL. It reveals that the deposit of BOK is quickly converted in to loan and advances to earn income. BOK has the greater mean ratio, which signifies that the BOK lend higher amount in the form of loan and advances to earn better returns. The NABIL has the lower mean ratio than BOK. It provides lower amount in the form of loan than BOK. Thus, it can be said that the management of NABIL lending standard form where BOK has lending high portion. The bank will be able to better mobilization of collected deposit if there is above $70 \%$ to $90 \%$ of loan and advances to total deposit according to NRB. So in all of the year the BOK has met the NRB requirement or it has utilized its deposit to provide loan. But NABIL has not met the NRB requirement or it has not
utilized its deposit to provide loan properly in some year. The S.D. and C.V of NABIL is higher than BOK. Thus, it signifies that NABIL has higher deviation. The higher C.V. of NABIL shows the more inconsistency in the ratios with compare to BOK.

### 4.1.3 Non- Performing Assets to Total Loan and Advance

This ratio determines the proportion of non-performing assets in the total loan and advances portfolio. As per NRB directives the loan falling under category of substandard, doubtful and loss are regarded as non-performing assets or loan. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances where as lower ratio implies the better quality of assets of banks in the form of loan and advances. Hence, lower ratio is preferable as per international standard only 5\% NPAs is allowed but in the case of Nepal, maximum $10 \%$ NPAs is acceptable, where as NABIL and BOK are as follow.

Table No. 4.5
Non- Performing Assets to Total Loan and Advance
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nonperforming <br> Asset | Loan and <br> advance | Ratio in <br> $\%$ | Nonperforming <br> Asset | Loan and <br> advance | Ratio <br> in $\%$ |  |  |  |  |  |  |
| $2007 / 08$ | 161.09 | 21365.05 | 0.74 | 236.9 | 12462.64 | 1.901 |  |  |  |  |  |  |
| $2008 / 09$ | 224.82 | 27589.93 | 0.81 | 190.32 | 14647.3 | 1.299 |  |  |  |  |  |  |
| $2009 / 10$ | 486.28 | 32268.87 | 1.51 | 257.22 | 16664.93 | 1.543 |  |  |  |  |  |  |
| $2010 / 11$ | 689.7 | 38034.09 | 1.81 | 326.33 | 17468.19 | 1.868 |  |  |  |  |  |  |
| $2011 / 12$ | 999.75 | 41605.68 | 2.40 | 443.39 | 18813.94 | 2.357 |  |  |  |  |  |  |
| Total | 2561.64 | 160863.6 | 7.27 | 1454.16 | 80057 | 8.968 |  |  |  |  |  |  |
| Mean | 512.328 | 32172.72 | 1.454 | 290.832 | 16011.4 | 1.794 |  |  |  |  |  |  |
| S.D |  |  | 0.6981 |  |  | 0.4006 |  |  |  |  |  |  |
| C.V |  |  |  |  |  |  |  |  | 0.4801 |  |  | 0.2234 |

[^1]Figure No. 4.5
Non- Performing Assets to Total Loan and Advance


The table and figure 4.5 exhibits the non-performing assets to loan and advances ratio of NABIL and BOK. The ratios of NABIL are $0.74,0.81,1.51,1.81$ and 2.40 in five consecutive years respectively. The highest ratio is 2.40 in year 2011/12 and lowest ratio is 0.74 in year 2007/8. The average mean ratio of NABIL is 1.454 . The S.D is 0.6981 and C.V. is 0.4801 of NABIL. Similarly the ratios of BOK are $1.901,1.299,1.543,1.868$ and 2.357 in year 2007/08, 2008/09, 2009/10, 2010/11 and 2011/12 respectively. Mean ratio of BOK is 1.794 , which is higher than NABIL. The highest ratio of BOK is 2.357 in 2011/12 and lowest ratio is 1.299 in 2008/09 respectively. The S.D of BOK is 0.4006 and C.V is 0.2234 respectively.

The table shows that the BOK has the highest ratio through out the study period and also shows the fluctuating trend of NPA. The NABIL has the lower ratio which indicates better quality of assets of banks in the form of loan and advances. It can be said that they are performing well or maintaining their NPAs perfectly. But he BOK has the high degree of NPL. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances. The mean ratio of BOK is little high in comparisons to NABIL. its indicate more NPA than NABIL. The S.D of NABIL is higher than BOK, it
signify the high variation in ratio. NPA is the one of the main cause which decreases the profit and fund would allocate for provision and it cause to become bank failure. Thus, they have to pay attention towards these matters.

### 4.1.4 Total Provision to Non-Performing Assets Ratio

The provision held to non-performing assets ratio shows the proportion of loan loss provision to non-performing assets of the banks. Every bank should have to make provision for the loan to minimize the risk of not recovering the loan from the customer on time. Thus, this ratio measures up to what extent of risk inherent in NPL is covered by the total loan loss provision. From this ratio it can be concluded that which banks make sage guard for the future contingencies. Higher ratio indicates that the banks are safeguard against future contingencies. Higher ratio indicates that the banks are safeguard against future contingencies that may create due to non-performing loan. Thus, higher ratio shows better financial position of banks and lower ratio shows weak in financial position.

Table No 4.6
Provision Held to Non-Performing Assets Ratio
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Provision | Nonperforming <br> Asset | Ratio | Total <br> Provision | Nonperforming <br> Asset | Ratio |  |  |  |  |  |  |
| $2007 / 08$ | 394.41 | 161.09 | 2.448 | 285.08 | 236.9 | 1.203 |  |  |  |  |  |  |
| $2008 / 09$ | 409.08 | 224.82 | 1.819 | 298.42 | 190.32 | 1.568 |  |  |  |  |  |  |
| $2009 / 10$ | 762.09 | 486.28 | 1.567 | 379.37 | 257.22 | 1.475 |  |  |  |  |  |  |
| $2010 / 11$ | 989.91 | 689.7 | 1.435 | 488.76 | 326.33 | 1.498 |  |  |  |  |  |  |
| $2011 / 12$ | 1260.98 | 999.75 | 1.261 | 492.67 | 443.39 | 1.111 |  |  |  |  |  |  |
| Total | 3816.47 | 2561.64 | 8.53 | 1944.3 | 1454.16 | 6.855 |  |  |  |  |  |  |
| Mean | 763.294 | 512.328 | 1.706 | 388.86 | 290.832 | 1.371 |  |  |  |  |  |  |
| S.D |  |  |  |  |  |  |  |  | 0.4621 |  |  | 0.2010 |
| C.V |  |  |  |  |  |  |  |  | 0.2708 |  |  | 0.1466 |

Source: Annual Report of Concerned Banks

Figure No. 4.6
Total Provision to Non-Performing Assets Ratio


The above table and figure show the ratio of provision held to total non-performing assets of NABIL and BOK for 5 consecutive years. Through out the study period, the both NABIL and BOK have decreasing form. The ratios of NABIL are 2.448, 1.819, 1.567, 1.435 and 1.261 in year 2007/08, 2008/09, 2009/10, 2010/11 and 2011/12 respectively. The highest ratio is 2.448 in 2007/08 and lowest ratio is 1.261 in year 2011/12. The average mean ratio of NABIL is 1.706 . The standard deviation is 0.4621 and C.V. is 0.2708. It indicates Nabil Bank has appropriate provision for nonperforming asset.

Similarly, the mean ratio of BOK is 1.371 respectively. The ratio are $1.203,1.568,1.475$, 1.498 and 1.111 respectively in 2007/08, 2008/09, 2009/10, 2010/11 and 2011/12 consecutive year. The highest provision ratio is 1.568 in 2008/09 and lowest ratio is 1.111 in $2011 / 12$. The S.D of BOK 0.2010 and coefficient of variation is 0.1466 respectively. The average mean ratio of NABIL has little higher than in comparison with BOK banks and its portray that the bank has adequate provision against non-performing loan. NABIL has little high ratio of NPL as so bank has make high provision as well. It
means that both banks try to maintain the higher ratio for the safeguard of loan loss. Anyway both banks have low NPA due to low provision held by banks.

### 4.1.5 Non-Performing Assets to Total Assets Ratio

This ratio represents the proportion between the non-performing assets and total assets of banks. It shows the how much assets is non-performing or idle in the total assets of banks. Higher NPA, to total assets ratio indicates the works performance, which reduces the profit ability of the banks. Lower ratio indicates the better performance and higher profitability of the banks. Thus, lower NPA to total assets ratio is better for the banks that exhibits the better profitability.

Table No 4.7
Non-Performing Assets to Total Assets Ratio
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nonperforming <br> Asset | Total <br> Asset | Ratio in <br> $\%$ | Nonperforming <br> Asset | Total <br> Asset | Ratio in <br> $\%$ |
| $2004 / 05$ | 161.09 | 37132.76 | 0.434 | 236.9 | 17721.93 | 1.337 |
| $2005 / 06$ | 224.82 | 43867.4 | 0.512 | 190.32 | 20496 | 0.929 |
| $2006 / 07$ | 486.28 | 52150.24 | 0.932 | 257.22 | 23396.19 | 1.099 |
| $2007 / 08$ | 689.7 | 58141.44 | 1.186 | 326.33 | 24757.75 | 1.318 |
| $2008 / 09$ | 999.75 | 63257.37 | 1.58 | 443.39 | 28881.99 | 1.535 |
| Total | 2561.64 | 254549.2 | 4.644 | 1454.16 | 115253.9 | 6.218 |
| Mean | 512.328 | 50909.84 | 0.316 | 290.832 | 23050.77 | 1.244 |
| S.D |  |  | 0.7066 |  |  | 0.2340 |
| C.V |  |  | 2.2361 |  |  | 0.1882 |

Source: Annual Report of Concerned Banks

Figure No. 4.5
Non-Performing Assets to Total Assets Ratio


The table and figure 4.5 present the non-performing assets to total assets ratio of NABIL and BOK for five consecutive periods. The non-performing assets to total assets ratio of NABIL and BOK are increasing form. The BOK has the approximately highest ratio than the NABIL beside last year. The ratio of Nonperforming asset to total asset of NABIL are $0.434,0.512,0.932,1.186$ and 1.58 respectively in 2007/08, 2008/09, 2009/10, 2010/11 and 2011/12 consecutive year. The ratios of NABIL are continuously increasing form. It indicates that NPA of bank has increasing according to its assets. The highest ratio is 1.58 and lowest ratio is 0.434 in F/Y 2011/12 and 2007/08. The S.D of NABIL 0.7066 and coefficient of variation is 2.2361 respectively. Nabil has the lowest ratio beside last year of study period. The NABIL has the lowest and decreasing ratio all over the period that indicates the greater profitability and the better performance to recover the loan and its interest during the study period.

Similarly the ratio of Nonperforming asset to total asset ratio of BOK are 1.337, 0.929, $1.099,1.318$ and 1.535 respectively in 2007/08, 2008/09, 2009/10, 2010/11 and 2011/12 consecutive year. The ratio of BOK is increasing form beside first year. The highest ratio is 1.535 and lowest ratio is 0.929 percent in $2011 / 12$ and 2008/09. The S.D of BOK 0.2340 and coefficient of variation is 0.1882 respectively.

The average mean ratio of NABIL and BOK are 0.316 and 1.244. The average ration of BOK is higher than NABIL, which shows the bad performances and lower profitability on its assets. The NABIL has the lowest ratio than BOK beside last year of study period. BOK has the highest ratio, which shows the bad performances and lower profitability on its assets. The NABIL has the highest deviation it signifies that the greater variability in this ratio due to high S.D and C.V. both bank have increasing form of its ratio.

### 4.1.6 Return on Total Loan and Advances.

This ratio indicates how efficiently the bank has employed it s resources in the form of loan and advances. This ratio is calculated by dividing the net profit of the bank by total loan and advances. Net profit refers to that profit, which is obtained after all types of deduction like employees bonus, tax provision etc. Hence, this ratio measures bank's profitability with respect to loan and advances, higher the ratios better the performance.

Table No 4.6

## Return on Total Loan and Advances

(Rs in Million)

| Year | NABIL |  |  |  | BOK |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net <br> Profit | Loan and <br> advance | Ratio | Net <br> profit | Loan and <br> advance | Ratio |  |
|  | 746.47 | 21365.05 | 3.49 | 361.49 | 12462.64 | 2.901 |  |
| $2008 / 09$ | 1031.05 | 27589.93 | 3.74 | 461.73 | 14647.3 | 3.152 |  |
| $2009 / 10$ | 1139.1 | 32268.87 | 3.53 | 509.63 | 16664.93 | 3.058 |  |
| $2010 / 11$ | 1337.75 | 38034.09 | 3.52 | 605.15 | 17468.19 | 3.464 |  |
| $2011 / 12$ | 1700.38 | 41605.68 | 4.09 | 607.66 | 18813.94 | 3.230 |  |
| Total | 5954.75 | 160863.6 | 18.37 | 2545.66 | 80057 | 15.805 |  |
| Mean | 1190.95 | 32172.72 | 3.674 | 509.132 | 16011.4 | 3.161 |  |
| S.D |  |  | 0.2528 |  |  | 0.2091 |  |
| C.V |  |  |  |  |  |  |  |

Source: Annual Report of Concerned Banks

Figure No. 4.6

## Return on Total Loan and Advances



Above table and figure show the ratio of returns on loans \& advances of Nabil and BOK Bank for 5 consecutive years. The table represents that the NABIL has the higher ratio than BOK through the study period. The highest ratio of NABIL is 0.0409 times i.e. $4.09 \%$ in $2011 / 12$ and lowest ratio is 0.0349 times i.e. $3.49 \%$ in F/Y 2007/08 study period. The ratio is fluctuating. The average mean ratio of NABIL is 3.647 percent. The S.D of is 0.2528 and coefficient of variation is 0.0688 respectively. Lowe S.D. and higher C.V. indicate not variability in ratio of NABIL.

Similarly, the returns on loans \& advances ratios of BOK are also fluctuating trend in study period. The highest ratio is 0.03464 times i.e. $3.464 \%$ in $2010 / 11$ and lowest ratio is 0.02901 i.e. $2.901 \%$ in $2007 / 8$ respectively. The S.D of BOK is 0.2091 and C.V is 0.0661 respectively. The mean ratio of BOK is $3.161 \%$ respectively. Thus, it signifies that along with the lower return and high degree of variation in this ratio.

The average returns on loans \& advances NABIL has the high ratio all over the period that indicates the greater profitability and the better performance to recover the loan and its interest during the study period. BOK has the low ratio, which shows the bad
performances and lower profitability on its assets. But BOK has the low deviation in its ratio. it signifies that the lower variability in this ratio. It can be concluded that NABIL is better than BOK to generating profit through loan and advance.

### 4.1.7 Price Earning Ratio

This ratio is closely related to the earning per share. It is calculated by dividing the market value per share by EPS. Price earning ratio indicates investor's judgments or expectation about the firm's performance. This ratio widely used by the security analysis to value the firm's performance. This ratio widely used by the security analysis to value the firm's performance as accepted by investors. Price earning ratio reflects investor expectations about the growth in the firm's earning. Higher ratio indicates the more value of the stock that is being ascribed to future earning as opposed to present earning.

Table No. 4.7
Price Earning Ratio
(Rs in Million)

| Year | NABIL |  |  | BOK |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MPS | EPS | Ratio | MPS | EPS | Ratio |  |  |  |  |  |
| $2007 / 08$ | 5275 | 108.31 | 48.7 | 2350 | 59.94 | 39.206 |  |  |  |  |  |
| $2008 / 09$ | 4899 | 106.76 | 45.89 | 1825 | 54.68 | 33.376 |  |  |  |  |  |
| $2009 / 10$ | 2384 | 78.61 | 30.33 | 840 | 43.08 | 19.499 |  |  |  |  |  |
| $2010 / 11$ | 1252 | 70.76 | 17.69 | 570 | 44.51 | 12.806 |  |  |  |  |  |
| $2011 / 12$ | 1355 | 83.57 | 16.21 | 628 | 37.88 | 16.579 |  |  |  |  |  |
| Total | 15165 | 448.01 | 158.82 | 6213 | 240.09 | 121.465 |  |  |  |  |  |
| Mean | 3033 | 89.602 | 31.764 | 1242.6 | 48.018 | 24.293 |  |  |  |  |  |
| S.D |  |  | 15.235 |  |  | 11.3945 |  |  |  |  |  |
| C.V |  |  |  |  |  |  |  | 0.4796 |  |  | 0.4690 |

Source: Annual Report of Concerned Banks

Figure No. 4.7
Price Earning Ratio


Above table and figure show the price-earning ratio of NABIL and BOK. The priceearning ratio of NABIL and BOK are in decreasing trend beside last study year of BOK. The highest P/E ratio of NABIL is 48.7 and lowest ratio is 16.21 times. Similarly highest ratio of BOK is 39.206 and lowest ratio is 12.806 times. The mean price-earning ratio of the NABIL and BOK are 31.764 and 24.293 times respectively. It indicates that for getting Rs 1 as earning, one should invest Rs 31.746 in NABIL and Rs 24.393 in BOK. Looking the mean ratio we conclude that in short run, investor of BOK are getting better profitability because they are selling their shares in high price although EPS of BOK is lower in comparison than that of NABIL. But from the long term view and sustainable fair price, investor of NABIL will get better profitability and they will be in safe side in comparison with BOK as low ratio is preferable for fair and sustainable market price. The S.D and C.V of NABIL is high than the BOK it indicate high volatile in its ratio. It is recommended to sale stock of NABIL due to high price earning ratio in short run. But in long run both bank are considerable.

### 4.3 Correlation Analysis

### 4.3.1 Correlation Coefficient between Total Deposit \& Loan \& Advances

Deposit have played vary important role in performance of a commercial banks and similarly loan \& advances are very important to mobilize the collected deposits. Coefficient of correlation between deposit and loan \& advances measures the degree of relationship between these two variables. In this analysis, deposit is independent variable $(\mathrm{X})$ and loan \& advances are dependent variable ( Y ). The main objectives of computing ' $r$ ' between these two variables is to justify whether deposit are significantly used as loan \& advances in proper way or not.

Table No. 4.10
Correlation between Deposit and Loan \& Advances

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.988 | 0.9761 | 0.0072 | 0.0432 |
| BOK | 0.980 | 0.9604 | 0.0119 | 0.0717 |

Source: BY SPSS Data Editor

From the above table, it is found that coefficient of correlation between deposits and loan \& advances of NABIL and BOK is 0.988 and 0.980 . It is shows that both have the positive relationship between these two variables. It refers that deposit and loan \& advances of NABIL and BOK move together very closely. Moreover, the coefficient of determination of NABIL is 0.9761 . It means 97.61 percent of variation in loan \& advances has been explained by deposit. Similarly, value of coefficient of determination of BOK is 0.9604 . It refers that 96.04 percent variance in loan $\&$ advances are affected by total deposit. The correlation coefficient of both banks is significant because the correlation coefficient is greater than the relative value of 6 P .Er. In other words, there is significant relationship between deposits and loan \& advances.

## B) Co-efficient of Correlation between Loan and advance and Net Profit

Co-efficient of correlation between total assets and net profit is used to measure the degree of relationship between two variable i.e. Loan and advance and net profit of

NABIL and BOK during the study period. Where Loan and advance is independent variable ( X ) and net profit is dependent variable ( Y ). The main objective of calculating this ratio is to determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to loan and advance through the coefficient of determination. The following table shows the 'r', R', P.Er. and 6 P. Er. between those variables of NABIL and BOK for the study period.

Table No. 4.11
Correlation between Loan and advance and Net profit

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.973 | 0.9467 | 0.0161 | 0.0964 |
| BOK | 0.972 | 0.9448 | 0.0166 | 0.0999 |

Source: Through SPSS Data Editor

Above table shows correlation coefficient between, Loan and advance and net profit. The correlation coefficient between, Loan and advance and net profit is 0.973 of NABIL. It refers that there is positive correlation between these two variables. Here, 94.67 percent of net profit is contribute by Loan and advance as its coefficient of determination of 0.9467 shows. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P.Er. The BOK has also positive degree of correlation i.e. 0.972 between Loan and advance and net profit. The coefficient of determination $\mathrm{R}^{2}$ is 0.9448 which indicates that 94.48 percent variability in net profit is explained by Loan and advance and least are explain by other factor. Moreover, the relationship between Loan and advance and net profit is also significant for BOK. In conclusion, both NABIL and BOK has significant relationship between Loan and advance and net profit.

## D) Correlation between loan loss provision and loan $\&$ advances

The correlation between loan loss provision (LLP) and loan \& advances show the degree of relationship between these two items. How a unit increment in loan and advances
affect the loan loss provision is measured by this correlation. Here loan \& advances is independent variable and loan loss provision is dependent variable.

Table No. 4.12
Correlation between Loan loss Provision and Loan and advance

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.961 | 0.9235 | 0.0231 | 0.1384 |
| BOK | 0.927 | 0.8593 | 0.0424 | 0.2546 |

Source: Through SPSS Data Editor

Above table shows correlation coefficient between, Loan loss Provision and Loan and advance. The correlation coefficient between, Loan loss Provision and Loan and advance is 0.961 of NABIL. It refers that there is positive correlation between these two variables. Here, 92.35 percent of provision is contributed by as loan and advance its coefficient of determination of 0.9235 shows. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P.Er. Likewise, BOK has also high positive correlation i.e. 0.927 between Loan loss Provision and Loan and advance. The coefficient of determination $\mathrm{R}^{2}$ is 0.8593 which indicates that 85.93 percent variability in Provision is explained by Loan and advance. Both banks have more correlation coefficient than 6 P.Er. Shows that the relationship between Loan loss Provision and Loan and advance is significant. As a whole there are significant correlation coefficient of bank between LLP and loan and advances during the study period

## E) Correlation between Non-Performing assets and loan and advances

This correlation coefficient shows the degree of relation ship between the NPA and loan \& advance. The NPA is independent variable and loan \& advance is dependent variable. It shows how a unit of change of loan \& advance effects to the NPA and what is the relation of them. It means how is effected the NPA due to the change (increase or decrease) of loan and advance of banks.

Table No. 4.13
Correlation between Non-performing Asset and Loan and advance

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.964 | 0.9293 | 0.0213 | 0.1279 |
| BOK | 0.801 | 0.6416 | 0.1081 | 0.6487 |

Source: Through SPSS Data Editor

The above table shows Correlation between Non-performing Asset and Loan and advance. The correlation coefficient between, Non-performing Asset and Loan and advance of NABIL is 0.964 . It refers that there is positive correlation between these two variables. Here, coefficient of determination is 0.9293 which indicate 92.93 percent of Non-performing asset is contributed by as loan and advance. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P . Er. In the case of BOK there also positive correlation by 0.801 between Non-performing Asset and Loan and advance. The coefficient of determination $\mathrm{R}^{2}$ is 0.6416 which indicates that 64.16 percent variability in Nonperforming asset is explained by Loan and advance. The relationship is significant because the coefficient of correlation is high than $6 \mathrm{P} . \mathrm{Er}$. As a whole there are significant correlation coefficient of bank between Non-performing Asset and Loan and advance during the study. BOK has high positive correlation between NPA and Loan and advances.

## F) Correlation between NPA and Total Assets

The correlation coefficient shows the degree of relationship between the NPA and Total assets for the study period. In this correlation coefficient, NPA is an independent variable and Total asset is dependent variable. It shows how units of change in total assets affect the NPA.

Table No. 4.14
Correlation between Non-performing Asset and Total Asset

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.971 | 0.9428 | 0.0172 | 0.1035 |
| BOK | 0.889 | 0.7903 | 0.0633 | 0.3795 |

Source: Through SPSS Data Editor

The above table shows the relationship between the Nonperforming asset and Total Assets of NABIL and BOK for five consecutive. The correlation between NPA and total Asset of NABIL is 0.971 . It refers that there is positive correlation between these two variables. The coefficient of determination of NABIL is 0.9428 which indicate 94.28 percent of Non-performing asset is contributed by Total Asset. The relationship between LLP \& Total Asset of NABIL is significant because the coefficient of correlation is more than 6 P.Er. Likewise, BOK has also positive correlation i.e. 0.889 between the Nonperforming asset and total assets. The coefficient of determination ${ }^{\text {is }} 0.7903$, which indicates that 79.03 percent of Nonperforming asset is explained by total asset. The coefficient of correlation is more than 6 P.Er. So the relationship between Nonperforming asset and Total Assets is significant.

The NABIL has 94.28 percent of Non-performing asset contribute by Total Asset but BOK has79.03 percent of Nonperforming asset is contribute by Total asset. NABIL has the higher degree of NPA to total asset in comparison to NABIL.

## G) Correlation between loan loss provision and NPA

The correlation between LLP and NPA shows the relationship of them. How a unit of LLP effect the NPA is exhibited by this correlation. In this case, NPA is the independent variable and LLP is the dependent variable. As earlier mentioned NPA are the loan falling on the category of substandard, doubtful and loss loan and the respectively provisioning requirement is $25 \%, 50 \%$ and $100 \%$ respectively. Higher the NPL higher will be the provisioning amount.

Table No. 4.15
Correlation between Loan loss Provision and Non-performing Asset

| Name of Banks | Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | r | $\mathrm{R}^{2}$ | P.Er. | 6 P.Er. |
| NABIL | 0.996 | 0.992 | 0.0024 | 0.0144 |
| BOK | 0.877 | 0.7691 | 0.0696 | 0.4179 |

Source: Through SPSS Data Editor

The above table 4.15 shows the relationship between LLP \& NPA of NABIL and BOK. The correlation between LLP \& NPA of NABIL is 0.996 . It refers that there is positive correlation between these two variables. The coefficient of determination of NABIL is 0.992. The relationship between LLP \& NPA is insignificant because the coefficient of correlation is less than 6 P.Er. Likewise BOK has also positive correlation between Loan loss Provision and Non-performing Asset by0.877. The coefficient of determination is 0.7691 which indicates that 76.91 percent variability in Provision is explained by Nonperforming asset. The coefficient of correlation is more than 6P.Er. so the relationship between Loan loss Provision and Loan and advance is significant. NABIL has the higher degree of NPA in comparison to BOK.

### 4.4 Trend Analysis

Trend analysis the statistical tools for the analyzing the data of selected banks in suitable manners. It helps to forecast the future value of bank of future expectation of different variables. It shows the behavior of different variables. It shows the behavior of the variables. It is based on the assumption that past tendencies continues in the future. In this study, its data are presented for further three years. For 2007/08 to 2011/12 and forecast is done on the basis of these trend lines.

## A) Trend Analysis of Total Deposit:

Deposits are the important part in banking sector hence its trend for next three years will be forecasted for future analysis. This is calculated by the least square method. Here the
effort has been made to calculate the trend values of Total deposit of Nabil bank and Bank of Kathmandu Ltd for further three year.
$Y=a+b x$
Where,
$\mathrm{Y}=$ dependent variable,
$\mathrm{a}=\mathrm{Y}$-intercept,
$\mathrm{b}=$ slope of trend line or annual growth rate,
$\mathrm{X}=$ deviation from some convenient time periods.
Let trend line be
$Y=a+b x$
Where $\mathrm{x}=\mathrm{X}$ - Middle year
Here,
$a=\frac{S Y}{N}$
$b=\frac{S X Y}{S X 2}$
NABIL
$\mathrm{a}=43933.114$

## BOK

b $=5954.957$
$\mathrm{a}=19874.248$

Where as
$\mathrm{Yc}=43933.114+5954.957 * \mathrm{X}$ of NABIL
$\mathrm{Yc}=19874.248+1950.586 * \mathrm{X}$ of BOK

Table No. 4.16

| Trend analysis of Total Deposit of NABIL and BOK |  |  |
| :---: | :---: | :---: |
| Year(x) | NABIL | BOK |
| $2007 / 08$ | 32023.2 | 15973.08 |
| $2008 / 09$ | 37978.16 | 17923.66 |
| $2009 / 10$ | 43933.11 | 19874.25 |
| $2010 / 11$ | 49888.07 | 21824.83 |
| $2011 / 12$ | 55843.03 | 23775.42 |
| $2012 / 13$ | 61797.99 | 25726.01 |
| $2013 / 14$ | 67752.94 | 27676.59 |
| $2014 / 15$ | 73707.9 | 29627.18 |

Source: Appendix - 1

## Figure No 4.10

Trend Line of Total Deposit of NABIL and BOK


Above table and figure shows that total deposit of NABIL and BOK. Both Banks is in increasing trend. The rate of increment of total deposit for NABIL seems to be higher than that of BOK. The increasing trend of total deposit of NABIL is more aggressive and high rather than BOK. It indicates NABIL has more prospect of collecting Total deposit. The trend analysis has projected deposit amount in fiscal year FY 2008/09 to FY

2011/12. From the above trend analysis it is clear that NABIL has higher position in collecting deposit than BOK.

## B) Trend Analysis of Loan \& advances

Here, the trend values of loan \& advances Between NABIL and BOK have been calculated for further three year. The following Table shows the actual and trend values of NABIL and BOK.
$Y=a+b x$
Where,
$\mathrm{Y}=$ dependent variable, $\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
$\mathrm{X}=$ deviation from some convenient time periods.
Let trend line be
$Y=a+b x$
Where $\mathrm{x}=\mathrm{X}$ - Middle year
Here,
$a=\frac{S Y}{N}$
$b=\frac{S X Y}{S X 2}$
NABIL
$\mathrm{a}=32172.724$

## BOK

$\mathrm{b}=5092.542$
$\mathrm{a}=16011.4$
$\mathrm{Yc}=32172.724+5092.542 * \mathrm{X}$ of NABIL
$\mathrm{Yc}=16011.4+1552.349 * \mathrm{X}$ of BOK

Table No. 4.17

| Trend Analysis of Total Loan \& Advance of NABIL and BOK |  |  |
| :---: | :---: | :---: |
| Year(x) | NABIL | BOK |
| $2007 / 08$ | 21987.64 | 12906.7 |
| $2008 / 09$ | 27080.18 | 14459.05 |
| $2009 / 10$ | 32172.72 | 16011.4 |
| $2010 / 11$ | 37265.27 | 17563.75 |
| $2011 / 12$ | 42357.81 | 19116.1 |
| $2012 / 13$ | 47450.35 | 20668.45 |
| $2013 / 14$ | 52542.89 | 22220.8 |
| $2014 / 15$ | 57635.43 | 23773.15 |

Source: Appendix - 2

Figure No 4.11
Trend line of Total Loan and Advance of NABIL and BOK


Above table depicts that loan \& advances of NABIL and BOK. Both Banks has in increasing trend. The increasing trend of NABIL is higher than BOK. The actual value of loan \& advances for BOK is quite fluctuating in relation to NABIL. The trend projected for father three year FY 20011/12 to FY 2014/15 From the above analysis, it is clear that both NABIL and BOK is mobilizing its collected deposits and other funds in the form of
loan \& advances. Above table and figure shows the NABIL has highly mobilizing loan \& advances than the BOK.

## C) Trend Analysis of Net Profit

Here, the trend values of net profit of NABIL and BOK have been calculated for five years FY 2007/08 to FY 2011/12 and forecasting for the next three year till FY 2014/15.
$Y=a+b x$
Where,
$\mathrm{Y}=$ dependent variable,
$a=Y$-intercept, $b=$ slope of trend line or annual growth rate,
$\mathrm{X}=$ deviation from some convenient time periods.
Let trend line be
$Y=a+b x$
Where $\mathrm{x}=\mathrm{X}$ - Middle year
Here,
$a=\frac{S Y}{N}$
$b=\frac{S X Y}{S X 2}$

NABIL
$a=1190.95$
$\mathrm{b}=221.452$
$\mathrm{Yc}=1190.95+221.452 * \mathrm{X}$ NABIL
$\mathrm{Yc}=509.132+63.576 * \mathrm{X} \mathrm{BOK}$

## BOK

$\mathrm{a}=509.132$
$b=63.576$

Table No. 4.18

| Trend Analysis of Net Profit Between NABIL and BOK |  |  |
| :---: | :---: | :---: |
| Year(x) | NABIL | BOK |
| $2007 / 08$ | 748.046 | 381.988 |
| $2008 / 09$ | 969.498 | 445.56 |
| $2009 / 10$ | 1190.95 | 509.132 |
| $2010 / 11$ | 1412.402 | 572.704 |
| $2011 / 12$ | 1633.854 | 636.276 |
| $2012 / 13$ | 1855.306 | 699.848 |
| $2013 / 14$ | 2076.758 | 763.42 |
| $2014 / 15$ | 2298.21 | 826.992 |

Source: Appendix - 3

Figure No 4.12
Trend Line of Net Profit between NABIL and BOK


The above table reveals the trend of Net profit of NABIL and BOK. Net profit of NABIL is increasing trend BOK has constant increasingly trend. The trend of increasing value of net profit of NABIL is higher and aggressive than BOK. The net profit of NABIL and BOK has been increasing every year by Rs. 221.425 million and Rs. 63.756 million
respectively. The trend of Net profit projected to FY 2014/15 i.e. further three year. Above statistics shows that both the banks have inconsistent net profit throughout the study period. In conclusion, NABIL is doing better in order to generate net profit during the projected study period in conclusion the prospect of profit generating capacity of NABIL is high than the BOK.

## D) Trend Analysis of Non- performing Asset

Here, the trend values of Non-Performing Asset of NABIL and BOK have been calculated for three years FY 2007/08 to FY 2011/12 and forecasting for the next three year till FY 20014/15.

Where,
$\mathrm{Y}=$ dependent variable,
$\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
$\mathrm{X}=$ deviation from some convenient time periods.
Let trend line be
$Y=a+b x$
$\mathrm{x}=\mathrm{X}$ - Middle year
$\mathrm{a}=\frac{\mathrm{SY}}{\mathrm{N}}$
$\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX} 2}$

NABIL
$\mathrm{a}=512.328$
b $=214.22$
$\mathrm{Yc}=512.328+214.22 * \mathrm{X}$ NABIL
$\mathrm{Yc}=290.832+54.899 * \mathrm{X} \mathrm{BOK}$

## BOK

$\mathrm{a}=290.832$
$\mathrm{b}=54.899$

Table No. 4.19

| Trend Analysis of Non-Performing Asset Between NABIL and BOK |  |  |
| :---: | :---: | :---: |
| Year(x) | NABIL | BOK |
| $2007 / 08$ | 83.888 | 181.034 |
| $2008 / 09$ | 298.108 | 235.933 |
| $2009 / 10$ | 512.328 | 290.832 |
| $2010 / 11$ | 726.548 | 345.731 |
| $2011 / 12$ | 940.768 | 400.63 |
| $2012 / 13$ | 1154.988 | 455.529 |
| $2013 / 14$ | 1369.208 | 510.428 |
| $2014 / 15$ | 1583.428 | 565.327 |

Source: Appendix - 4

Figure No 4.13
Trend Line of Non-Performing Asset between NABIL and BOK


The above table reveals the trend of Non-Performing Asset of NABIL and BOK. NonPerforming Asset of both banks has forecasted in little increasing trend. The trend of Non-Performing Asset of NABIL is increasing higher than BOK. The trend of NonPerforming Asset of BOK is less increasing which indicate Non-Performing Asset is little
increasing during the study period. The trend of Non-Performing Asset projected to FY 2014/15 i.e. further three year. Above statistics, shows that BOK is better than NABIL in managing Non-Performing Asset.

## E) Trend Analysis of Loan loss Provision

Here, the trend values of loss loan provision of NABIL and BOK have been calculated for five years FY 2007/08 to FY 2011/12 and forecasting for the next three year till FY 20014/15.
$Y=a+b x$
Where,
$Y=$ dependent variable, $a=Y$-intercept,$b=$ slope of trend line or annual growth rate,
$X=$ deviation from some convenient time periods.
Let trend line be
$Y=a+b x$
Where
$\mathrm{x}=\mathrm{X}$ - Middle year
Here,
$\mathrm{a}=\frac{\mathrm{SY}}{\mathrm{N}}$
NABIL
$\mathrm{a}=763.294$
$\mathrm{b}=+231.397$
$\mathrm{Yc}=763.294+231.397 *$ X NABIL
$\mathrm{Yc}=388.86+60.552 * \mathrm{X}$ BOK
$\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX} 2}$
BOK
$\mathrm{a}=388.86$
$\mathrm{b}=60.552$

Table No. 4.20

| Trend Analysis of loss loan provision Between NABIL and BOK |  |  |
| :---: | :---: | :---: |
| Year(x) | NABIL | BOK |
| $2007 / 08$ | 300.5 | 267.756 |
| $2008 / 09$ | 531.897 | 328.308 |
| $2009 / 10$ | 763.294 | 388.86 |
| $2010 / 11$ | 994.691 | 449.412 |
| $2011 / 12$ | 1226.088 | 509.964 |
| $2012 / 13$ | 1457.485 | 570.516 |
| $2013 / 14$ | 1688.882 | 631.068 |
| $2014 / 15$ | 1920.279 | 691.62 |

Source: Appendix - 5

Figure No 4.14
Trend Analysis of loss loan provision between NABIL and BOK


The above table reveals the trend of loss loan provision of NABIL and BOK. Loss loan provision of both banks have forecasted increasing trend. The trend of increasing value of loss loan provision of NABIL is higher than BOK. The loss loan provision of NABIL increasing every year only by Rs.231.397 and BOK has been increasing every year by

Rs. 60.552 million respectively. The trend of loss loan provision projected to FY 2014/15 i.e. further three year. In conclusion, BOK is doing better because constant in loss loan provision than NABIL.

### 4.5 Major Finding of the Study:

The study is fully based on the secondary data of related banks. From the data analysis of concerned banks, the major things, which have been finding are as follows:

1. Non performing loan of NABIL bank limited are categorized according to substandard, doubtful and bad debts. The highest sub standard loan is 170.21 million and lowest amount is 59.02. The average sub standard loan is 114.24 million. Similarly highest doubt full loan is 104.66 and lowest amount of doubt full loan is 22.73 million. The average amount of doubtful loan is 50.502 million. Bad debt is bad thing for commercial banks. The highest amount of bad debts is 783.63 million and lowest amount of bad debts is 52.29 million. The average amount of bad debts is 339.81 million. Bad debt is loss for the company. The total nonperforming loan of NABIL is increasing form, which is undesirable for company.
2. The non performing loan of Bank of Kathmandu limited shows the total NPL includes sub standard, doubt full and bad debts loans. The highest sub standard loan of BOK is 100.18 million and lowest amount is 11.46 million. The average sub standard loan is 51.252 million. Similarly highest doubt full loan of BOK is 106.55 and lowest amount of doubt full loan is 6.22 million. The average amount of doubtful loan is 44.788 million. The highest amount of bad debts of BOK is 304.05 million and lowest amount of bad debts is 117.48 . The average amount of bad debts is 193.558 million. Bad debt is loss for the company. The total non performing loan of BOK is increasing over the study period beside F/Y 2008/09.
3. The loan \& advances to total assets ratio of NABIL and BOK are in fluctuating trend during the study period. The mean of NABIL and BOK are $5939 \%$ and $70.52 \%$ respectively. While observing their ratios BOK is better mobilizing of fund as loan and advances in total assets and it seems quite successful in generating higher ratio in each year in comparison of NABIL.
4. The loan \& advances to total assets ratio of NABIL and BOK are in fluctuating trend during the study period. The mean of NABIL and BOK are $62.7 \%$ and $69.74 \%$ respectively. While observing their ratios BOK is better mobilizing of fund as loan and advances in total assets and it seems quite successful in generating higher ratio in each year in comparison of NABIL.
5. The loan \& advances to total deposit ratio of NABIL is fluctuating BOK has increasing. The mean of NABIL and BOK are $72.774 \%$ and $80.569 \%$ respectively. So BOK has higher ratio than that of NABIL. It indicates the better mobilization of deposit or converted in to loan and advances to earn income by BOK. The higher S.D. and C.V of NABIL indicate inconsistency in its ratio.
6. The average mean ratio of non-performing assets to total lending of NABIL is 1.454. The S.D is 0.6981 and C.V. is 0.4801 of NABIL. Similarly, the mean ration of BOK is 1.749 . The S.D of BOK is 0.4006 and C.V is 0.2234 respectively BOK has high mean ratio of non-performing assets to total loan and advance than NABIL. It can be said that NABIL has good performing loan than BOK. But higher C.V. NABIL indicates inconsistency in its ratio.
7. The non-performing assets to total assets ratio of NABIL and BOK have increasing. The average ratio of Non performing asset to total asset ratio of NABIL is 0.316 and BOK has 1.244 . The average ratio of BOK has the higher than the NABIL, which indicates that BOK bank has more NPA than NABIL. The higher C.V. of NABIL indicates inconsistency its ratio.
8. The returns on loans \& advances of NABIL and BOK have fluting trend. These ratios show how much bank making earning through providing loan and advances. The average mean ratio of NABIL is 3.647 and BOK has 3.161. The higher ratio of NABIL indicates more return from lending than BOK. Lower C.V. of BOK indicates low variability in ratio than NABIL.
9. The price-earning ratio earning of NABIL and BOK are decreasing trend. From the mean point of view, mean ratio of the NABIL and BOK are 31.764 and 24.293 times respectively. It indicates that for getting Rs 1 as earning, one should invest Rs 31.764 in NABIL and Rs 24.293 in BOK. The lower S.D and C.V of BOK indicates more consistency in its ratio. It better to sale stock of BOK.
10. The correlation between deposits and loan \& advances of NABIL and BOK are 0.988 and 0.980. It is shows that both have the positive relationship between these two variables. The coefficient of determination of NABIL is 0.9761 . Similarly, value of coefficient of determination of BOK is 0.9604 . The correlation coefficient of both banks is significant because the correlation coefficient is greater than the relative value of $6 \mathrm{P} . E r$. In other words, there is significant relationship between deposits and loan \& advances
11. The correlation between lending and net profit of NABIL is 0.973 . It refers that there is positive correlation between these two variables. Here, 94.67 percent of net profit is contributed by Loan and advance. The relationship is significant because the coefficient of correlation is more than 6 P Er. Similarly BOK has also positive correlation i.e. 0.972 . There is 94.48 percent variability in net profit is explained by Loan and advance. The relationship between lending and net profit is significant due to high correlation than 6 P Er. In conclusion, both banks have significant relation between loan and advance and net profit.
12. The correlation between Loan loss Provision and Loan and advance of NABIL and BOK are 0.961 and 0.927 . It refers that there is positive correlation between these two variables. Here, 92.35 percent of provision of NABIL is contributed by as loan and advance and 85.93 percent variability in Provision of BOK is due to Loan and advance. Both Banks has more correlation than 6 P.Er. Shows that the relationship between Loan loss Provision and Loan and advance are significant.
13. The correlation between LLP \& NPA of NABIL and BOK are positive. The correlation between LLP \& NPA of NABIL and BOK are 0.964 and 0.801 . The coefficient of determination of NABIL is 0.9293 and BOK is 0.6416 . The coefficient of correlation is more than 6 P Er. So the relationship between Loan loss Provision and Loan and advance are significant.
14. The correlation between Non-performing Asset and Loan and advance of NABIL is 0.971 . It refers that there is positive correlation between these two variables. Here, 94.28 percent of Non-performing asset is contributed by as loan and advance. BOK has also positive correlation by 0.889 . Here 79.03 percent variability in Nonperforming asset is explained by Loan and advance. The
relationships of both banks are significant because the coefficient of correlation is higher less than 6 P.Er.
15. The correlation between the Nonperforming asset and total assets of NABIL and BOK are positive. The correlation between NPA and total Asset of NABIL and BOK are 0.971 and 0.889 percent of NPA is contributed by total asset of NABIL and 79.03 percent of BOK NPA is contributed by total asset. The relationship between LLP \& Total Asset of NABIL and BOK are significant. So the relationship between Nonperforming asset and total assets are significant.
16. The relationship between LLP \& NPA of NABIL and BOK are positive. The correlation between LLP \& NPA of NABIL and BOK are 0.996AND 0.877 . The coefficient of determination of NABIL is 0.992 . The coefficient of determination is 0.7691 . The correlation is more than 6 P.Er. So the relationship is significant. So both banks have significant relation between LLP and NPA.
17. The trend line of total deposit of NABIL and BOK is in increasing trend. The rate of increment of total deposit for NABIL seems to be higher than that of BOK. The increasing trend of total deposit of NABIL is more aggressive and high rather than BOK. It indicates NABIL has more prospect of collecting Total deposit.
18. The loan \& advances of NABIL and BOK Banks have in increasing trend. The increasing trend of NABIL is higher than BOK. It is clear that both NABIL and BOK is mobilizing its deposits and other funds in the form of loan \& advances. But the NABIL has highly mobilizing loan \& advances than the BOK.
19. The trend of Net profit both bank NABIL and BOK forecasted increasing trend. The trend of increasing value of net profit of NABIL is higher than BOK. The net profit of NABIL and BOK has been increasing every year by Rs.221.452 million and Rs. 63.576 million respectively. NABIL is doing better in order to generate net profit during the projected study period in conclusion the prospect of profit generating capacity of NABIL is high than the BOK. Anyway both bank doing well due to being increasing trend.
20. The trend of Non-Performing Asset of NABIL and BOK are increasing trend. Non-Performing Asset of NABIL is forecasted more than BOK. Which indicate

Non-Performing Asset of NABIL is highly increasing. NPA of NABIL is increasing highly than BOK.
21. The trend of Loss loan provision of NABIL and BOK have forecasted increasing trend. The trend of increasing value of loss loan provision of NABIL is higher and aggressive than BOK. The provision of NABIL is high due to high NPA. So provision of NABIL is increasing form.

## CHAPTER - V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary

The researcher has identified that research problem and set objectives to solve research problems about non performing asset of selected commercial banks as described in introduction chapter. The major objective of this research is to examine the level of nonperforming assets (NPAs). It has served orientation for readers to know about the basic information of the research area, focus of the study, problems of the study and objectives of the study. The specific objectives are to evaluate the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks. The need or significance of the study and limitation of the study are included in the study. To make this study more effective, related literatures have been reviewed. The review of literature provides the foundation of knowledge in order to under take this research more precisely. This section also includes concept of banking, commercial banks, joint venture banks, lending, loan and advance, investment and nonperforming asset. It also establishes that the study as a link in a chain of research that is developing and emerging knowledge about concerned field.

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

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

The assets of commercial bank indicate the manner in which the fund entrusted to the bank is employed. The successful workings of the bank depend on ability of the management to distribute the fund among the various kinds of investments known as loan and advances. Loan and advances are the most profitable assets of a bank. These assets constitute primary sources of income to the bank. As being a business institution a bank aims at making huge profit. Since loan and advances are more profitable than any other assets of the banks, banks will be lending as much as possible. But bank has to be careful about the safety of such loan and advances. It means bank has to be careful about the repayment of loan and interest before giving loan. If a bank is too risk averse, it may fail to obtain the adequate return on the fund. Similarly, if the bank is too liberal, it may easily impair profit by bad debts. Therefore, banks should not forget the reality that most of the bank failures in the world is due to shrinkage in the value of the loan and advances Despite of being loan and advances more profitable than other assets, it creates risk of non-repayment for the bank and such risk is known as credit risk or default risk. Therefore, like other assets the loan and advances are classified into performing and nonperforming on the basis of overdue schedule. If the due in the form of principal and interest are not paid by the borrower for a certain period, it is called non-performing loan or assets (NPAs). It means NPAs could wreck banks profitability both through loss of interest income and write off the principal loans amount. Non-performing loan are also known as non-performing assets (NPAs). Performing assets have multiple benefits to the company as well as to the society while non-performing assets erode even existing capital of the banks. NPAs are becoming great problem in banking business in the world. In this context Nepal can not be an exception. The level of NPA in Nepalese banking business is
very alarming. It is well known fact that the bank and financial institution in Nepal have been facing the problem of swelling non-performing assets (NPAs) and the issue is becoming more and more unmanageable. While it is very worse in case of two largest commercial banks, Rastriya Banijya Bank and Nepal Bank Ltd.(NBL). But preset scenario the commercial banks are decreasing their NPAs. This research has studied the non-performing assets of private commercial banks. For this purpose, descriptive and analytical research design was adopted. Two commercial banks out of 32 commercial banks were selected as sample using judgmental sampling method. They are NABIL and BOK.

### 5.2 Conclusion

Today's banking industry is severely affected by the problem of non-performing assets (NPA). It can be concluded that improper credit appraisal system, ineffective credit monitoring and supervision system, economic slow down, borrower's misconduct and over valuation of collateral, political pressures to lend for non creditworthy parties etc are the major factors for non-performing assets(NPAs). While NPA can't be eliminated, but can only be contained, it has to be done not at a heavy cost of provisioning and increasing the portfolio of credit. Along with recovery fresh inflow of NPA should be brought down at a level much less than the quantum of its exit. If this specific goal is reached, there is an eventual solution for this problem. Good governance is essential for the success in NPA management.

The main objective of commercial banks is to collect the idle funds from public and mobilize it into productive sector for overall economic development. The banks have to take into consideration the interest of depositors, shareholders, and society. Lending is one of the main functions of the commercial banks. It is said "high risk, high return". To minimize this risk, banks should have to make loan loss provision for safety. Higher amount of loan loss provision is required in case of high loan and advances as per NRB directives. The non performing loan of NABIL bank limited shows, the total NPL includes sub standard, doubt full and bad debts loans. The average sub standard loan is 114.24 million. The average amount of doubtful loan is 50.502 million. The average
amount of bad debts is 339.81 million. Similarly the average sub standard loan of BOK is 51.252 million. The average amount of doubtful loan is 44.788 million. The average amount of bad debts is 193.558 million. Bad debt is loss for the company. The loan \& advances to total assets ratio of NABIL and BOK are fluctuating. The loan \& advances to total assets ratio of NABIL and BOK are in fluctuating. The mean ratio of BOK higher than NABIL. BOK is better mobilizing of fund as loan and advances in total. The loan \& advances to total deposit ratio of NABIL is fluctuating BOK has increasing. BOK has higher ratio than that of NABIL. It indicates the better mobilization of deposit or converted in to loan and advances to earn income by BOK. The BOK has high mean ratio of non-performing assets to total loan and advance than NABIL. The NABIL has good performing loan than BOK. The non-performing assets to total assets ratio of NABIL and BOK have increasing. The average Non performing asset to total asset ratio of BOK has the higher than the NABIL, which indicates that BOK bank has more NPA than NABIL. The returns on loans \& advances of NABIL and BOK also fluting trend. The higher average ratio of NABIL indicates more return from lending than BOK. The price-earning ratio earning of NABIL and BOK are decreasing. NABIL has higer P/E ratio than BOK. It indicates that for getting Rs 1 as earning, one should invest Rs 31.764 in NABIL and Rs 24.293 in BOK. Its better to sale stock of BOK.

The correlation between deposits and loan \& advances of NABIL and BOK are positive by 0.988 and 0.980 . The relations of both banks have significant because the correlation coefficient is greater than the relative value of 6 PEr . In other words, there is significant relationship between deposits and loan \& advances. The correlation between lending and net profit of NABIL is 0.973 and BOK has 0.972 . Both banks have significant relation between loan and advance and net profit. The correlation between LLP and Loan and advance of NABIL and BOK are positive by 0.961 and 0.927 . Both Banks has more correlation than 6 PEr. Which indicates significant relationship between Loan loss Provision and Loan and advance. The correlation between LLP \& NPA of NABIL and BOK are positive. The coefficient of determination of NABIL is 0.9293 and BOK is 0.6416 . The relationship between Loan loss Provision and Loan and advance are significant due to higher correlation than 6 PErr. The correlation between Non-
performing Asset and Loan and advance of NABIL and BOK are positive. The relationships of both banks are significant. The correlation between the Nonperforming asset and total assets of NABIL and BOK are positive. The correlation between NPA and total Asset of NABIL and BOK are 0.971 and 0.889. The relationship between LLP \& total asset of NABIL and BOK are significant. The correlation between LLP \& NPA of NABIL and BOK are 0.996 and 0.877 . The coefficient of determination of NABIL is 0.992 . The coefficient of determination is 0.7691 . Both banks have significant relation between LLP and NPA. The trend line of total deposit of NABIL and BOK is in increasing trend. The rate of increment of total deposit for NABIL seems to be higher than that of BOK. It indicates NABIL has more prospect of collecting Total deposit. The loan \& advances of NABIL and BOK Banks have also increasing. Both NABIL and BOK is mobilizing its deposits and other funds in the form of loan \& advances. But the NABIL has highly mobilizing loan \& advances than the BOK. The trend of Net profit both bank NABIL and BOK forecasted increasing trend. The value of net profit of NABIL is higher than BOK. The net profit of NABIL and BOK has been increasing every year by Rs. 221.452 million and Rs. 63.576 million respectively. NABIL is doing better in order to generate net profit during the study period. in conclusion the prospect of profit generating capacity of NABIL is high than the BOK. The trend of Non-Performing Asset of NABIL and BOK are increasing trend. Non-Performing Asset of NABIL is forecasted more than BOK. NPA of NABIL is increasing highly than BOK. Similarly the trend of Loss loan provision of NABIL and BOK have also increasing trend. The trend of increasing value of loss loan provision of NABIL is higher and aggressive than BOK. The provision of NABIL is high due to high NPA. So provision of NABIL is increasing form.

### 5.3 Recommendations

High level of non-performing assets not only decreases the profitability of the banks but also affects the entire financial as well as operational health of the organization. If he NPA is not controlled immediately, it will be the main cause for shutdown of the banks in future. Therefore following are some of the recommendations, which will help to reduce the level of NPA of Nepalese Commercial Banks.

- It is recommended to NABIL and BOK take serious action to recovering the bad loan (NPA) and also should make remedial action for new loans in the latest years. NABIL was good in decreasing NPAs but last year NPA has increased.
- NABIL has the higher loan loss provision than BOK. It is recommended that BOK increase the provision amount to recover the bad loan for the safe guard of future losses.
- BOK has the lowest ratio in return on loan and advances during the study period. So they must take serious step to ensure higher return.
- One of the main causes of default loan and increase in the NPAs is that the banks are not taking much collateral. Collateral is overvalued. Therefore, bank should take enough collateral, so that the bank can recover its principle.
- Lack of proper financial analysis of the borrower by the banks is one of the major causes behind increasing NPA of Nepalese commercial banks. Thus proper financial analysis should be made before lending.
- Inefficient management may be the cause of increase in the non-performing assets in Nepalese commercial banks. Therefore, all banks should provide appropriate training regarding loan management, risk management and credit appraisal etc to the employees.
- The other factors which lead to non-performing assets are lack of proper supervision and monitoring, ineffectiveness of credit policy, political scenarios, and economic conditions. Besides that negligence in taking information from Credit Information Bureau. It is recommended that bank should apply precaution before granting loan and advances.
- Lower ratio of NPAs is preferable as per international standard only 5\% NPAs is allowed but in the case of Nepal, maximum $10 \%$ NPAs is acceptable. Where as NABIL and BOK are average non performing asset to total asset ratio
- The Bank staff must know their responsibility rather than their self interest. They must have strong commitment to follow rule and regulations.
- Banks must take timely action against willful defaulter.
- The accounting policies must be transparent and must practice best auditing practices.


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- Appendix - 1
- A) Trend Analysis of Nabil Bank Limited

| Year(x) | Total Deposit (Y) | $\mathbf{X}=\mathbf{x} \mathbf{- 2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 31304.82 | -2 | 4 | -62610 |
| $2008 / 09$ | 37348.26 | -1 | 1 | -37348 |
| $2009 / 10$ | 46410.7 | 0 | 0 | 0 |
| $2010 / 11$ | 49696.11 | 1 | 1 | 49696.1 |
| $2011 / 12$ | 54905.68 | 2 | 4 | 109811 |
| Tot n=5 | $\sum \mathrm{Y}=219665.57$ | $\Sigma \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=59549.6$ |

- Source: Annul Report of Nabil Bank Limited
- Where,
- $\mathrm{Y}=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept
- $b=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- NABIL
- $\mathrm{a}=43933.114$
- $\mathrm{b}=5954.957$
- Where as
- $\mathrm{Yc}=43933.114+5954.957 * X$ of NABIL
- B.) Trend Analysis of Bank of Kathmandu Limited

| Year(x) | Total Deposit(Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2005 / 06$ | 15833.74 | -2 | 4 | -31667 |
| $2006 / 07$ | 18083.98 | -1 | 1 | -18084 |
| $2007 / 08$ | 20315.83 | 0 | 0 | 0 |
| $2008 / 09$ | 21018.42 | 1 | 1 | 21018.4 |
| $2009 / 10$ | 24119.45 | 2 | 4 | 48238.9 |
| Tot n=5 | $\sum Y=99371.42$ | $\sum X=0$ | $\sum X^{2}=10$ | $\sum X Y=19505.9$ |

- Source: Annul Report of Bank of Kathmandu Limited
- Where,
- $Y=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
- $X=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- BOK
- $\mathrm{a}=19874.248$
- $\mathrm{b}=1950.586$
- Where as
- $\mathrm{Y}=19874.248+1950.586 * \mathrm{X}$ of BOK
- Appendix - 2
- A) Trend Analysis of Nabil Bank Limited

| Year(x) | Loan and advances (Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 21365.05 | -2 | 4 | -42730 |
| $2008 / 09$ | 27589.93 | -1 | 1 | -27590 |
| $2009 / 10$ | 32268.87 | 0 | 0 | 0 |
| $2010 / 11$ | 38034.09 | 1 | 1 | 38034.1 |
| $2011 / 12$ | 41605.68 | 2 | 4 | 83211.4 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=160863.62$ | $\sum \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=50925.4$ |

- Source: Annul Report of Nabil Bank Limited
- Where,
- $\mathrm{Y}=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept
- $b=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Here,
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- NABIL
- $\mathrm{a}=32172.724$
- $\mathrm{b}=5092.542$
- $\mathrm{Y}=32172.724+5092.542 * \mathrm{X}$ of NABIL
- B) Trend Analysis of Bank of Kathmandu Limited

| Year(x) | Loan and advances (Y) | $\mathbf{X = x} \mathbf{- 2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | ---: | ---: | ---: |
| $2005 / 06$ | 12462.64 | -2 | 4 | -24925 |
| $2006 / 07$ | 14647.3 | -1 | 1 | -14647 |
| $2007 / 08$ | 16664.93 | 0 | 0 | 0 |
| $2008 / 09$ | 17468.19 | 1 | 1 | 17468.2 |
| $2009 / 10$ | 18813.94 | 2 | 4 | 37627.9 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=80057$ | $\Sigma \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=15523.5$ |

- Source: Annul Report of Bank of Kathmandu Limited
- Where,
- $Y=$ dependent variable
- $a=Y$-intercept, $b=$ slope of trend line or annual growth rate,
- $X=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- BOK
- $\mathrm{a}=16011.4$
- $\mathrm{b}=1552.349$
- Where as
- $\mathrm{Y}=16011.4+1552.349 * \mathrm{X}$
- Appendix - 3
- A) Trend Analysis of Nabil Bank Limited

| Year(x) | Net Profit (Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 746.47 | -2 | 4 | -1492.9 |
| $2008 / 09$ | 1031.05 | -1 | 1 | -1031.1 |
| $2009 / 10$ | 1139.1 | 0 | 0 | 0 |
| $2010 / 11$ | 1337.75 | 1 | 1 | 1337.75 |
| $2011 / 12$ | 1700.38 | 2 | 4 | 3400.76 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=5954.75$ | $\sum X=0$ | $\sum X^{2}=10$ | $\sum X Y=2214.52$ |

- Source: Annul Report of Nabil Bank Limited
- Where,
- $\mathrm{Y}=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept
- $b=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- NABIL
- $\mathrm{a}=1190.95$
- $\mathrm{b}=221.452$
- Where as
- $\mathrm{Yc}=1190.95+221.452 * \mathrm{X}$ of NABIL
- B.) Trend Analysis of Bank of Kathmandu Limited

| Year(x) | Net profit (Y) | $\mathbf{X}=\mathbf{x} \mathbf{- 2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2005 / 06$ | 361.49 | -2 | 4 | -722.98 |
| $2006 / 07$ | 461.73 | -1 | 1 | -461.73 |
| $2007 / 08$ | 509.63 | 0 | 0 | 0 |
| $2008 / 09$ | 605.15 | 1 | 1 | 605.15 |
| $2009 / 10$ | 607.66 | 2 | 4 | 1215.32 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=2545.66$ | $\sum \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=635.76$ |

- Source: Annul Report of Bank of Kathmandu Limited
- Where,
- $Y=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
- $X=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- BOK
- $\mathrm{a}=509.132$
- $b=63.576$
- Where as
- $\mathrm{Yc}=509.132+63.576 * \mathrm{X}$ of BOK
- Appendix - 4
- A) Trend Analysis of Nabil Bank Limited

| Year(x) | NPA (Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 161.09 | -2 | 4 | -322.18 |
| $2008 / 09$ | 224.82 | -1 | 1 | -224.82 |
| $2009 / 10$ | 486.28 | 0 | 0 | 0 |
| $2010 / 11$ | 689.7 | 1 | 1 | 689.7 |
| $2011 / 12$ | 999.75 | 2 | 4 | 1999.5 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=2561.64$ | $\sum \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{xy}=2142.2$ |

- Source: Annul Report of Nabil Bank Limited
- Let trend line be
- $\mathrm{Y}=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept
- $b=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- Here,
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- NABIL
- $\mathrm{a}=512.328$
- $\mathrm{b}=214.22$
- $\mathrm{Yc}=512.328+214.22 * \mathrm{X}$ of NABIL
- B.) Trend Analysis of Bank of Kathmandu Limited

| Year(x) | NPA (Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2005 / 06$ | 236.9 | -2 | 4 | -473.8 |
| $2006 / 07$ | 190.32 | -1 | 1 | -190.32 |
| $2007 / 08$ | 257.22 | 0 | 0 | 0 |
| $2008 / 09$ | 326.33 | 1 | 1 | 326.33 |
| $2009 / 10$ | 443.39 | 2 | 4 | 886.78 |
| Tot $\mathrm{n}=5$ | $\Sigma \mathrm{Y}=1454.16$ | $\Sigma \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=548.99$ |

- Source: Annul Report of Bank of Kathmandu Limited
- Where,
- $Y=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $\mathrm{a}=\frac{\mathrm{SY}}{\mathrm{N}}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}}$
- BOK
- $\mathrm{a}=290.832$
- $\mathrm{b}=54.899$
- Where as
- $\mathrm{Yc}=290.832+54.899 * \mathrm{X}$ of BOK
- Appendix - 4
- A) Trend Analysis of Nabil Bank Limited

| Year(x) | Loss Loan Provision(Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :--- | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 394.41 | -2 | 4 | -788.82 |
| $2008 / 09$ | 409.08 | -1 | 1 | -409.08 |
| $2009 / 10$ | 762.09 | 0 | 0 | 0 |
| $2010 / 11$ | 989.91 | 1 | 1 | 989.91 |
| $2011 / 12$ | 1260.98 | 2 | 4 | 2521.96 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=3816.47$ | $\sum \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{xy}=2313.97$ |

- Source: Annul Report of Nabil Bank Limited
- Let trend line be
- $\mathrm{Y}=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept
- $b=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- Here,
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- NABIL
- $\mathrm{a}=763.294$
- $\mathrm{b}=231.397$
- $\mathrm{Yc}=763.294+231.397 * \mathrm{X}$ of NABIL
- B.) Trend Analysis of Bank of Kathmandu Limited

| Year(x) | Loss Loan Provision(Y) | $\mathbf{X}=\mathbf{x}-\mathbf{2 0 0 9 / 1 0}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2005 / 06$ | 285.08 | -2 | 4 | -570.16 |
| $2006 / 07$ | 298.42 | -1 | 1 | -298.42 |
| $2007 / 08$ | 379.37 | 0 | 0 | 0 |
| $2008 / 09$ | 488.76 | 1 | 1 | 488.76 |
| $2009 / 10$ | 492.67 | 2 | 4 | 985.34 |
| Tot $\mathrm{n}=5$ | $\sum \mathrm{Y}=1944.3$ | $\sum \mathrm{X}=0$ | $\sum \mathrm{X}^{2}=10$ | $\sum \mathrm{XY}=605.52$ |

- Source: Annul Report of Bank of Kathmandu Limited
- 
- Where,
- $Y=$ dependent variable
- $\mathrm{a}=\mathrm{Y}$-intercept, $\mathrm{b}=$ slope of trend line or annual growth rate,
- $\mathrm{X}=$ deviation from some convenient time periods.
- Let trend line be
- $Y=a+b x$.
- Where $\mathrm{x}=\mathrm{X}$ - Middle year
- $a=\frac{S Y}{N}$
- $\mathrm{b}=\frac{\mathrm{SXY}}{\mathrm{SX}^{2}}$
- BOK
- $\mathrm{a}=388.86$
- $b=60.552$
- Where as
- $\mathrm{Yc}=388.86+60.552 * \mathrm{X}$ of BOK


[^0]:    Source: Annual Report of concerned Banks

[^1]:    Source: Annual Report of Concerned Banks

