

# **CHAPTER - I**

## **INTRODUCTION**

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

A sound banking system is a precondition for healthy economy and economic policy formulation. Banking sectors plays an important role in the national economy of the nation. 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. Commercial banks are one of the vital sectors, which deals in the process of channeling the available resources in the needed sector.

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. 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 mobilizer of the resources necessary for the economic development (Shrestha, 2004:2).

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.

Banking system is volatile and sensitive sectors of national economy, which requires effective monitoring and efficient supervision. Smooth and effective regulation of banking activities is a must for sustainable economic growth of a country. The regulatory agency should always be watchful of banking activities carried out by governmental and non-governmental banking and financial institution." (Gandhi, 2002:31)

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 non-performing 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 non-performing 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. The SNA 1993 and other international statistics manuals are silent on defining non-performing loans (Dahal, 2004: 17).

"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. otherwise 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"(Dahal and Dahal, 2002:114).

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.

## **Brief Profile of the Selected Banks**

### **1.1.1 Introduction of Kumari Bank Limited (KBL)**

Kumari Bank Ltd (KBL) was established in December 10, 1999 as the fifteenth commercial bank in Nepal and started its operation from March 3, 2001. The head office of KBL is located at Putalisadak in Kathmandu. The bank has 28 branches in different urban and rural areas of the country. The main mission of the bank is to provide world-class service to the customer at a higher satisfaction level, practice total quality management, and embrace good governance and optimization of the assets to achieve sound business growth.

Kumari Bank Limited (KBL) is the growing bank of Nepal. The bank has the paid-up capital of Rs. 1,306.02 million, with total deposit of 17,432.26 million and Rs. 14,966.12 million worth of loans, advances and bills in fiscal year 2009/10. The bank has adopted computerized system in banking. The bank has the Any Branch Banking System (ABBS). The bank also provides different services such as ATM, electronic banking and mobile banking etc. The bank has been providing loans and advances in various sectors such as agriculture, manufacturing, deprived sector, industry and consumer financing etc.

Based on the personal interview with key personnel, it is found that risk is considered as the major threatening factor in KBL and mainly the credit risk, which is given high priority by the top management. For its proper management, the bank has developed well defined policies and procedure with structured organizational layers for management of credit risks.

### **1.1.2 Introduction of Machhapuchchhre Bank Limited (MBL)**

Machhapuchchhre Bank Limited (MBL) started its operation in December 10, 2000 as the 14th commercial bank and the first commercial bank in the western part of Nepal. The head office of Machhapuchchhre is located in Pokhara and the corporate office is in Kathmandu. The bank has 39 branches located all over the country. The bank also established its branch in far remote part of the country like Jomsom, Mustang district. The bank aims to serve the people of both urban and rural areas. It has the plan to extend its branches in more rural as well as urban areas in the near future. The bank has issued paid up capital of Rs. 1479.30 million. The bank has the deposit and loan and advances of Rs. 13060.20 million and Rs. 12984.51 million respectively in fiscal year 2009/10.

Risk management has been identified as the key function of the bank in all levels of management. The Loan Committee, Internal Audit & Compliance Department are the key departments that are concerned with the management, compliance and evaluation of the risk management procedure.

### **C. Introduction of Nepal Industrial & Commercial Bank Limited (NIC)**

Nepal Industrial & Commercial Bank Limited (NIC Bank) commenced its operation on 21<sup>st</sup> July 1998 from Biratnagar. Some of the prominent business houses of the country promoted the Bank. The current shareholding pattern of the Bank constitutes of promoters holding 65% of the shares while 35% is held by general public. NIC Bank is one of the most widely held Banking companies in Nepal, with over 32,000 shareholders. The shares of the Bank are actively traded in Nepal Stock Exchange with current market capitalization of about NPR 10,699 million. Within 10 years of commencing business, the Bank has grown rapidly with 16 branches throughout the

country while 2 more are planned to be opened this year. All branches are interconnected through V-Sat and are capable of providing real time on-line transactions. The Bank is the first commercial Bank in Nepal to have received ISO 9001:2000 certification for quality management system. Furthermore, NIC Bank became the 1st Bank in Nepal to be provided a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade Finance Program, enabling the Bank's Letter of Credit and Guarantee to be accepted/ confirmed by more than 200 banks worldwide. To add to these achievements, the Bank has also been awarded the "Bank of the Year 2007-Nepal" by the world-renowned financial publication of The Financial Times, U.K.-The Banker. This is the fruit of the Bank's outstanding performance backed by belief and support of its customers towards the Bank. The Bank is run by professionals and believes in the highest standards of corporate governance.

The organization structure is divided into five major areas viz Consumer Banking, Business Banking, Special Assets Management, Treasury and Liability Marketing and Transaction Banking all of which are supported by the corporate office. The Bank is committed towards providing financial services to its patrons by the means of efficient and cost effective service delivery through its transaction banking, consumer banking, business banking and treasury divisions.

Consumer banking comprises of consumer lending, retail credit products and banking services for individuals with dedicated teams. Consumer banking services include home loans, auto loans, personal loans, education loans, travel loans, etc. Liability Marketing & Transaction Banking comprises of institutional and personal deposit products and transaction banking services including debit cards, ATMs, safe deposit lockers, payment services, drafts, remittance, SMS Banking, Travelers' Cheques, etc.

Business banking group comprises of corporate banking business including credit products and other banking services. It also includes corporate transaction banking, trade finance services, foreign exchange and corporate financing solutions including project & infrastructure finance, working capital & term loan credit, structured financing, syndication, cash management and advisory services.

Special assets management division is responsible for managing non-performing and structured loans. Treasury is responsible for management of liquidity and exposure to market risk, mobilization of resources, balance sheet management, pricing, investor relations and international operation. The Bank's treasury division offers a full range of risk management and cash management products and provides effective treasury advisory services. Further, treasury also leverages its strong relationships with financial institutions to provide a wide range of banking services. The Corporate office comprises all shared services and corporate functions including finance, secretarial, risk management, legal, human resources, branding and corporate communications. The Bank believes in continuously offering new and value added services to its customers, with commitment to quality and value to its clients at the same time. The bank has been in the forefront in launching innovative and superior products having unique customer friendly features with immense success.

## **1.2. 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 that 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, NPA of CBs are presented, analyzed, and ends with findings & recommendation.

Likewise, related issues such as loan administration involve 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 (Jonson and Jonson, 1940:158).

### **1.3. Statement of Problem**

Financial institutions assist in the economic development of the country. Commercial bank being the financial institution play significant role by collecting scattered surplus funds and deploy these fund in the productive sectors as investment. Economic development of the country is directly related to the volume of investment made and return obtained by the bank. Investment problem has become very serious for the least developed country like Nepal. This is due to lack of sound investment policy of commercial bank.

As the bank has to meet various challenges, this study will be helpful to the bank to identify and solve some of its weaknesses and problem. In every organization, the resources are scare and out of these scare resources, the objectives of the organizations are to be accomplished. Increase in revenue and control over expenditure significantly contributes to improvement.

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 non-performing system, over liquidity caused by lack of good lending opportunities, increasing non-performing assets etc. The bank management have not been so much sensitive enough to give this issue top priority. The NPA in reduces the profitability and ultimately may be dead to the failure of the Bank. So, in the recent days not only government owned banks but some other Banks under private



ownership are also suffering from NPA burden. This study focuses on NPAs with special reference to Kumari Bank Ltd., Machhapuchchhre Bank Ltd. and NIC Bank Ltd. as stated below:

- ) What are the trend line of the non-performing assets, loan and advance, loan loss of selected commercial Banks?
- ) What is the relationship between loan and loan loss provision of 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 selected commercial Banks?
- ) What are the trend line of the non-performing assets, loan and advance, loan loss of selected commercial Banks?

#### **1.4. Objectives of the Study**

The is the preparation in course of the fulfillment of requirement for the degree of master of business studies as approved by the Tribhuvan University which deals with non-performing assets of commercial banks. This thesis will help the researchers in the course of preparation of the research report in the topic "Non-performing Assets". The major objective of this research is to examine the level of non-performing assets (NPAs). The specific objectives are:

1. 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.
2. To evaluate the relationship between loan and loan loss provision of selected commercial banks.
3. To analyze the impact of non-performing assets in the performance of commercial banks.
4. To present the trend line of the total deposit, loan and advance, total asset and net profit of selected commercial banks.
5. To provide suggestions and recommendations for the future research.

### **1.5. Significance of the Study**

The success and prosperity of the bank heavily depends upon the successful implementation and investment of 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 NPA of Nepalese CBs. It does not consider other aspects of the banks.
- ) Only selected sample banks have been considered for the study. Hence, the findings may not be applicable to other commercial banks
- ) The period of the study is limited to fiscal year 2003/4 to 2009/10.
- ) The study is basically based on secondary data, 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 has served orientation for readers to know about the 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. It also establishes that the study as a link in a chain of research that is developing and emerging knowledge about concerned field.

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

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

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

This chapter analysis the data related 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.

## **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. The purpose of reviewing the literature is to develop some expertise in one's area, to explore what new contributions can be made, and to receive some ideas for developing a research design. Thus, the previous studies cannot be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past research studies. In short there is a significant important of review of literature:

- ) To identify the problem.
- ) To determine the methodology for research work.
- ) To draw the scope of studies.
- ) To avoid replication of previous studies.
- ) To interpret the significance of researcher results in a precise manner.

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 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.

### **2.1.2 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. 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 non-performing 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 non-performing assets can be achieved.

$$\text{NPA} = (\text{NPL} + \text{NBA} + \text{RNPL} + \text{SI} + \text{UA})$$

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 non-performing 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)

Concept and classification of NPA may differ from one country to other country but overall concept of NPA comprises from the failure of the lending of the banks. Therefore, we can say that NPA is that portion of lending or loans, which is irrecoverable by in the specific period as marked up by central bank.

### **2.1.4 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.

### **2.2 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 (Batra and Das 2003:6)

#### **2.2.1 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.

### **2.2.2 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 non-performing assets and banks will not able to return the deposited amount to their customer. If the banks are 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 that may also leads to bank bankruptcy. It also affects the monetary system and economic health of the country.

## **2.3 Impact of NPA**

### **2.3.1 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.

### **2.3.2 Impact on the Outlook of Banker towards Credit Delivery**

The psychology of the banks today is to insulate themselves 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.

### **2.3.3 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 & risk aversion, lower morale & 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.

### **2.3.4 High Cost of Fund Due to NPAs**

Quite often genuine borrowers face the difficulties in raising funds from 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.

### **2.3.5 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)

#### **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.

## **2.4 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 downgraded 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%
Bad loan	100%

### **2.4.1 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.

#### **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 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.

### **2.5 Highlight On Performance of Nepalese Commercial Bank.**

The number of commercial bank branches operating in the country in mid-August 2009 totaled 947, belonged to 26 commercial banks, performing commercial banking activities. The regional distribution of these bank branches seemed to be much skewed. Of the total bank branches, 177 branches are being operated in the central development region, followed by eastern development region (84) and western development region (80). The size of total assets of commercial banks increased continuously over the last few years.

### **2.5.1 Non-Performing Assets in Nepalese Banking Sector:**

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:

Dr. Rawal (2009) former governor of NRB has 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 Negara 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.

"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," he added.

"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 experts from within and outside Nepal".

"NRB as Central Bank will now concentrate only on core 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," Dr. Rawal warned. ([www.thehimalayantimes.com](http://www.thehimalayantimes.com))

### **2.5.2 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.

## **2.6 Reviews from Books**

Shekhar & Shekhar, (1999) expressed different aspects of loan & advances. In their view, loan & advances, the most profitable banker's earnings are mainly derived from these assets.

"The item 'advance and loan' comes next in the order of liquidity. 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. Herein 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."

Certain general principles may be laid down which should guide a banker when he/she is making loan and advances. Before granting a secured loan, he/she should carefully consider the margin of safety offered by the security, possibility of fluctuation in its values and shiftability. If it is an unsecured loan its repayment entirely depends on the credit of the customer and as such, the cardinal principles, which a banker should consider, 'character, capacity, and capital' of the customer.

Baidya, (2001) has dealt with the timing of repayment of loan, customer's habit about the loan payment and lending policy.



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 suffer 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"

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)

Dahal and Dahal, (2002) have expressed the different aspects of banking. In their view, the banks lend and recover the loan amount in different fields/sectors of the society.

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." (Dahal and Dahal, 2002).

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 non-performing 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.

Singh, (1999) has described that 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).

## **2.7 Review of Related Studies**

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

Rejda (1998) said non-performing loans and interest brings the very bad and crucial situations in the banks and it leads to the bank in the liquidation. "The market- value accounting controversy is not the only contentious issue surrounding how bankers keep their books. Another controversy has centered on how banks, until recently, dealt with the interest income they were losing when customers stopped paying on their loans. Realizing that the industry was for the most part ignoring this issue, the

US Financial Accounting Standard Board recently issued yet another important bank accounting rule, known as FASB 144".

Under this new rule banks and other financial institutions must account for the expected loss of interest income on non-performing loans when calculating their loan-loss provisions. Many banks still base their loan-loss reserve only upon their projected loss of principal from a troubled loan, not including the expected loss or delay in receiving interest payments. A similar problem arises when the term of the loan must be renegotiated to a longer payout schedule or the bank agrees to reduce or delay interest payments because the borrower can't successfully handle the originally negotiated term of the loan. Currently, many banks don't report lost interest if they expect eventual repayment of the entire principal of a troubled loan. Statement 144 requires banks to reduce the value of a loan on their books in order to reflect any reduction in expected interest payment as well as any loss of principal. While both secured and unsecured loans are covered, certain loans (such as credit cards and home mortgages) are exempt.

When the adjustment for loss of interest is made, the result is likely to be an increase in loan-loss provisions at those banks not already recognizing interest losses on their non-performing loans. In figuring the value of impaired loans, banks are required by the new FASB rules to measure the value of the bank loans by the present value of their expected future cash flows discounted at the loans' effective interest rate (which is the contractual loan rate adjusted for any deferred loan fee, costs, premiums, or discounts that prevailed when the loan was extended or acquired). Each quarter bankers must estimate when their troubled loans are likely to be repaid, if ever.

Chhetri, (2057) has provided connection of the NPA and its potential sources, implication of NPA in financial sector in the South East Asian Region. He has also given possible measure to contain NPA. "Loan and Advances of financial institution are meant 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 due, the loans become 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 Mr. 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.

Pyakuryal, (2001) has stated 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.

Neupane, (2058) said 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 than 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 nineteen-point 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 business 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 spectral 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 is 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 there on 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 bank and FIs.

### **2.7.2 Problem in Nepalese Financial Sector and NPLs**

Nepal remained fortunate 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.



Manandhar, (2055) opines that the prime reasons behind the less effects are (i) not opening up capital account and portfolio investment; and (ii) enough foreign currency reserve in the economy. Nevertheless, some sort of financial problems especially, in the banking sector have been noticed for the last few years. In this regard,

Basyal, (2059), 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 CBs.
- 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.

Paudel, (2059) adds some other factors like unnecessary influences of the employees union, weak corporate governance (lack of transparency, accountability, laws and bye-laws), lack of effective regulation and supervision caused to worsening the financial system. From the analysis above, it can be said that weak legal and regulatory Framework are the responsible factors for weakening the Nepalese financial system, which is, to some extent, similar to the factors that caused to worsen the East Asian financial sector in the late 1990s. Obviously, a distress financial system adversely hits the quality of the assets in the system. As such, the non-performing loans as a percentage of total loans in the banking sector was 14.3% in 2000 while it increased by over cent percentage point to 29.3% in 2001 and to 30.1% in 2002. However in the mid of Jan, 2003, NPLs declined marginally to 29.9% of total loans. Similarly, both the state-owned banks comprised over 50.00% of non-performing loans as at mid-jan 2003, which seems to be alarming. The basic reasons as reported by Pradhan, S.M (2058) for deteriorating assets quality are:

- The use of banking sector as instrument of policy lending under populist schemes.
- Projects financed in the pre-reform era, with high gearing, low promoters stake, with viability based on high tariffs and fiscal concessions.
- Large corporate mis-utilised the credits and delayed payments.
- Lack of vision in appraisal of loan proposals while sanctioning, reviewing or enhancing credits limits.
- Absence of risk management policies.
- Concentration of credits on few groups or sectors.
- Lack of initiatives to take timely action against willful defaulters.
- Labor oriented small sized old technology operations.
- Non-transparent accounting policies and poor auditing practices.
- Political patronage and pressure when sanctioning loans
- Aggressive lending.

Besides these, the reasons behind the rise in NPLs could be outlined as the inferior mortgages against the loans, lack of financial information of the loanees, extension of bank branches in the least feasible geographical areas, over staffing in the banks and so on.

Dungana, (2058) has tried to highlight one of the approach mainly Assets Management Company (AMC) for resolving the problem of NPL. As per him, AMC is a specialize financial intermediary to manage the non-performing and distress loans of banks and financial institutions who buy the NPL from financial institution and take necessary steps to recover the maximum value from the acquired assets. As per his view, if NPLs are not resolved in time there would be inherent direct or indirect costs to the economy. As stated by him NPL may arise due to the external factors like decrease in market value of collateral deterioration borrower's repayment capacity, economic slowdown, borrower's misconduct, improper credit appraisal system, lack of risk management practice, ineffective credit monitoring and supervision system. Hence he suggested that, NPL should be kept at minimum level and specialized institution such as AMCs should manage the distressed loans.

He says that both traditional approach and AMC are available to deal with NPL problem. Under traditional approach, bank handles the NPLs in its own way especially through recovery unit who focus on continuing negotiation with the borrower and give top priority to the loan recovery. As opined by the writer, this approach is useful in dealing with small business loans where personal touch is adopted but for big loan this approach does not work. "AMCs seem as the only realistic option when the financial sector recovery is the underlying objective in financial system where the institution fails to resolve the NPL problem through their own efforts." (Dungana, 2058:125). He stated that the main advantage of establishing AMC is that AMC is able to move in an expeditious manner removing the distraction of managing NPLs from the banking system and frees up resources within the financial institution allowing them to concentrate on their core activities.

He concludes, "Nepalese Financial System is largely dominated by the banking sector. The banking sector is severely affected by the NPL problem, it is estimated that the NPL of the Nepalese Banking system is around 16%. Therefore there is no doubt that it has serious implication on the economic performance of the country. It will be the eclipse in the development of financial soundness in the economy, if not controlled in time. However, traditional root can be practiced to get recovery from this sickness of the financial system".

Rawal, (2003), 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 arrangements, 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.

Sapkota (2004) has stated that the problem of NPL is seen less in private banks in comparison to public banks. The NPA of two big nationalized banks being about 60% if the total loans are very serious situation. He further mentioned that in order to improve this situation and to make healthy banking environment, financial reform program has been brought as its consequences, the management of two bog banks was handed to foreign company on a contract but the ratio of NPL was not reduced.

Even most of the privately owned banks has NPA within international standard, some privately owned bank's NPA is higher than international standard. As per international standard 5% NPA is acceptable. He also states that, Nepal's total NPA of banking sector is 30%, which is very high.

Regmi,(2062) 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 one of the main function of commercial bank is to management of Nonperforming loan. Main function of commercial bank and financial institution is accepting 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. NBL and RBB accounting have 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 Government hold banks NBL and RBB was 60.28% and other private commercial banks has 7.63. It reduces in 2060/061 to 56.01% and 5.74%. It indicates that bank is managing their NPL. The main causes of being loan become non perfuming loan are as follows

- |                                |                                       |
|--------------------------------|---------------------------------------|
| ) Lack of proper analysis      | ) Unsuccessful monopoly loan          |
| ) Lack of specific loan policy | ) Weak in consortium loan             |
| ) Lack of supervision          | ) Inadequate internal Control & Audit |
| ) Slump on aggregate economy   | ) Inadequate supervision of NRB       |

In this way NPA generate in bank and financial institution. Every Banking s system there is some level of Nonperforming loan. So it should be managed 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

## **2.8 Review of Related Thesis**

Pandey, (2002) has carried out study on Nepal Rastra Bank- Directives Their Implementation and Impact on the commercial Banks reference of HBL, with the objectives to find out the impact of change in NRB directives on the performance of the commercial banks and find out whether the directives were implemented or not.

"The directives if not properly addressed have potential to wreck the financial system of the country as they are the only tool of the NRB to supervise and monitor the financial institution. The directives in themselves are not that important unless properly implemented, the implementation part depends upon the commercial banks. In case commercial banks are making such huge profit with full compliance of NRB directives, then the commercial banks would deserve votes of praise because they would be instrumental in the economic development of the country". All the changes in NRB directive made impacts on the bank and the result are the followings:

- Increase in operational procedure of the bank, which increase the operational cost of the bank.
- A short term decreases in profitability, which result to lesser dividends to shareholder and lesser bonus to the employees.
- Reduction in the loan exposure of the bank, which decreases the interest income but increase the protection of the depositors' money.

- Increase protection to the money of the depositors' through increased capital adequacy ratios and more stringent loan related documents.
- Increase demand for shareholders' contribution in the banks by forgoing dividends for loan loss provisions and various other reserves to increase the core capital.

All the aforesaid results lead to one direction: the bank will be financially healthy and stronger in the future. HBL will be able to withstand tougher economic situation in the future with adequate capital and provision for losses. The tough time through which the bank is undergoing at present will prevail only for a couple of years but in the long run, it will be strong enough to attract more deposits and expose itself to more risk with capital cushion behind it. The quality of the assets of the banks will become better as banks will be careful creating credit. Ultimately, the changes in the directives will bring prosperity not only to the shareholders but also to the depositors, the employees & economy of the country as a whole".

Ojha,(2002) has stated over liquidity caused due to lack of good lending opportunities, risk arising due to the mismanagement of lending of portfolio, increasing non-performing assets etc is some of the problem that is facing by Nepalese banking sector. His main objective is to analyze the various aspects of banks lending quantity and quality.

He concludes "the highest growth rate, proportionately high volume of loans and advances, the best contribution in priority and agriculture sector and the high level of deposits mobilization of HBL has put this bank in the top position in the lending function, however the better activity ratio of SCBNL has proved this bank the best in managing the lending portfolio according to the demand of profit oriented business. The high volume of lending activities and high volume of productive sector loan of Nabil has put the bank in the top position in absolute term. The increasing provision on loan loss and high volume of non-performing assets in Nabil and HBL certainly attracts the high attention of any person interested with these banks. The high volume of NPA of HBL may have caused due to failure of industrial and agricultural sector. Nabil's increased NPA may have caused due to the accumulated bad debts that is kept behind the curtain to show the high efficiency of management".

Khadka, (2002) has stated with an objective to find out the relationship between deposits, investment, loans and advances and net profit. She has made the following conclusion while comparing the performance of NBL with Nabil, SCBNL and NIBL.

She expresses "NBL is comparatively less successful in on balance sheet as well as off-balance sheet operations than that of other CBs. It predicts that in the coming days if it could not mobilize and utilize its resources as efficiently as other CBs to maximize the returns, it would lag behind in the comparative market if banking-profitability positions of NBL is comparatively of shareholders, depositors and its all customers if it can't increase its volume even in future".

As the banks experience many difficulties in recovering the loans and advances and their large amount is being blocked as non-performing assets. She suggested that there is an urgent need to work out a suitable mechanism through which the overdue loan can be realized.

Shilpakar, (2003) aimed to analyze performance of finance company regarding lending quality and quantity and its contribution in profitability. As per her view, loan and advances is one of the main sources of income of finance companies. "Loan loss provision is like a byproduct of loans and advances, thus, with loans and advances, loan loss provision does increase in synchronize.

She recommended that loan and advances of finance companies are increasing and the non-performing loans and loan loss provision. Hence extra efforts should be enforced to control over NPL.

Shrestha, (2004) 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 leading to accumulation of non-performing 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 banking 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 is 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 unworthy borrowers, overvaluation of collateral are the major cause of mounting non-performing assets in government owed banks like NBL. Other factors leading 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 cautious 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.

Bhattarai, (2004) has analyzed the various aspects of NRB directives such as capital adequacy and loan classification and loan provisioning. In her view, the loan classification helps to the banks to monitor the quality of their loan and advances and to take step towards the remedial action in the credit quality of their loan and advances.

She concludes that the new provision of the banks will have its provision amount increasing in coming years and subsequently profitability of the banks will also come down. However, the true picture of the quality of the assets will be painted in the coming year.

She recommends, "The banks should be very careful while analyzing the paying capacity of its credit clients. With longer period of past due, the bank will end up increasing its provisions which will keep the bottom line low if the bank is not careful."

Khadka, (2004) stated 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) has stated main objective of his study are to find out the proportion of non-performing 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 slowdown, 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) 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 banks, four private banks were taken as sample using judgment sampling method, and they are Lumbini, 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 NPL 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 NPA in the performance of commercial banks.

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.

## **2.9 Research Gap**

From the review of various researches, it is clear that many research work have been done on the study of investment policy, financial performance and credit management through loan loss provision, non-performing 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 is trying to fill this gap by measuring the Non-performing assets of commercial banks of Nepal (With Special Reference to Kumari Bank Limited, Machhapuchchhre Bank Limited and NIC Bank Limited) by studying their non performing asset management system. Here non-performing asset is measured by using various financial and statistical tools and technique. This study also aims to find out the organizational structure of KBL, MBL and NIC 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. Always human nature is curious to learn, understand or investigate and want to know something new. Why did the things happen or do they happen? How did they happen or how do they happen? They are not satisfied till they solve the question and develop the form of their beliefs or judgment about those particular phenomena. For this, they gather the information and analyze them to achieve their goal. The method that applies during this knowledge gaining research is known as research methodology means the analysis of specific topic by using a proper method. In other words, research methodology is a systematic study of the research problem that solves them with some logical evidence.

#### **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." The plan mean now researcher investigators collect the data structure in term controlling the data in term of money and time.

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

### **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 29 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 Nepalese banking industry, Here Kumari Bank Limited (KBL), Machhapuchchhre Bank Limited (MBL) and Nepal Industrial and Commercial Bank Limited (NIC) have been selected as sample for the present study. The sample size is 10.34 % of the population. Likewise, financial statements of five years from 2005/06 to 2009/10 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. Data have been analyzed by applying different financial and statistical. In addition data have been presented in bar diagrams and graphs.

### **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." (Wild, Subramanyam and Halsey, 2003:13)

#### **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. (Pandey, 2000:108) 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 no 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:

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



## **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:

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

## **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:

$$\text{NPA to Total loan and Advances Ratio} = \frac{\text{Total NPL}}{\text{Total Loans \& Advances}}$$

## **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:

$$\text{Provision held to NPA} = \frac{\text{Total Provisions}}{\text{Total NPA}}$$

#### **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:

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

#### **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:

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

### **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:

Where,

$$\bar{X} = \text{Mean}$$

$\sum_{i=1}^n X_i$  = Sum of the observations  
 N = Number of observations

**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:

$$\sigma = \sqrt{\frac{\sum f_x Z \bar{x}^2}{n}}$$

where,

$\sigma$  = Standard deviation                      x = Observations  
 $\bar{x}$  = Average of observations                n = No. of years

**iii. Correlation Coefficient ( ... ):**

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

Formula,

$$r_{x_1x_2} = \frac{N \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{N \sum X_{12}^2 - (\sum X_1)^2} \sqrt{N \sum X_{12}^2 - (\sum X_2)^2}}$$

Whereas,

$\dots_{x_1x_2}$  = Correlation between  $X_1$  and  $X_2$

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

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

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

#### **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.

$$C.V = \frac{s}{\bar{X}} | 100\%$$

Where,

$s$  = Standard deviation

$\bar{X}$  = Average of the observation

#### **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:

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

Where,

$r$  = Correlation coefficient

$N$  = Number of pairs of observations

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

Regression Analysis

#### **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.

$$Y = a + bx$$

Here,

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

Where,

Y = Trend value

a = y intercept

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.

x = Time variable

#### **Regression Analysis**

Regression is the statistical tool which is used to determine the statistical relationship between two (or more) variables and make estimation (of prediction) of the variable on the basis of other variable(s). In other words, regression is that statistical tool with the help of which the unknown value of one variable can be estimated (or predicts) on the basis of known value of the other variable, assuming that the two variables are closely related. We can estimate the value of the one variable from the given value of another.

The analysis used to describe the average mathematical relationship between two variables is called "simple linear regression analysis". Analysis consists of the measurement of the relationship between the dependent variable and two or more independent variables is called multiple regression.

#### **vii. Diagrammatic and Graphical Representation:**

Picture speaks itself, no need to explain. It is also one of the tools that helps to interpretation of the data and present the findings of the study. The various bars, charts, and graphs are also used to present the data and data analysis in this study.

## CHAPTER - IV

### DATA PRESENTATION AND ANALYSIS

This chapter, efforts have been made to presents and analyzed the collected data. Data collected from various sources were classified and tabulated as required for the study and in accordance to the nature of collected data. Different arithmetical and statistical tools are used for analysis the data. Data are presented in the required figure also.

#### 4.1 Ratio Analysis

##### 4.1.1 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 is measures 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 yrs. The following table shows loan & advances to total assets of KBL, MBL and NIC.

**Table No 4.1**  
**Loan and advances to Total Assets**

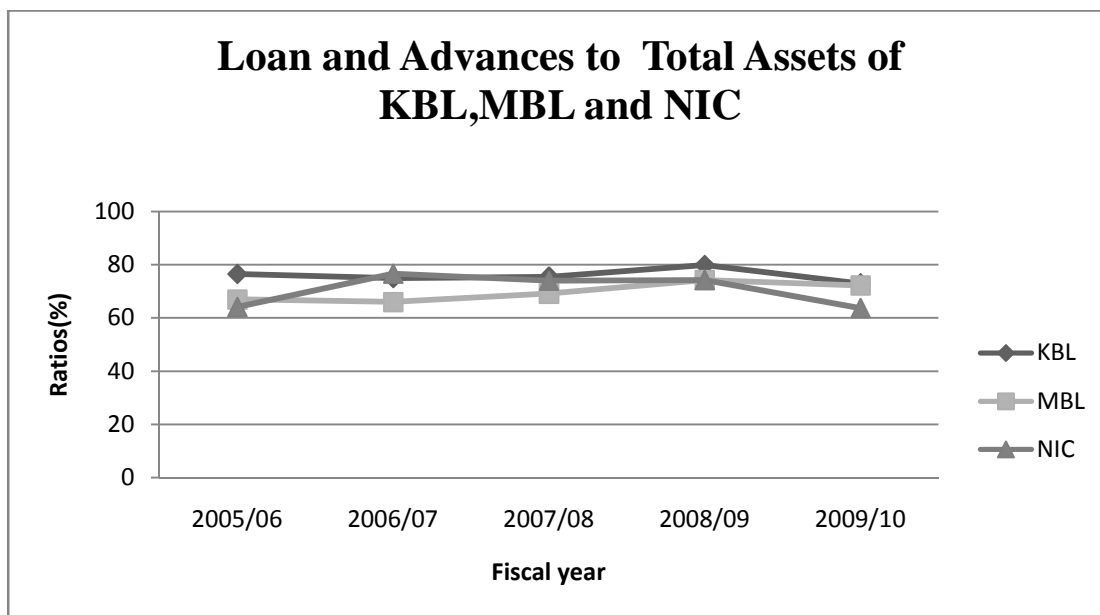
Years	KBL	MBL	NIC	Industry Norms		
				Mean	S.D.	C.V.
2005/06	76.49	66.91	64.1	69.17	6.50	0.09
2006/07	74.92	65.97	76.56	72.48	5.70	0.08
2007/08	75.43	69.15	73.92	72.83	3.28	0.05
2008/09	79.81	74.24	74.22	76.09	3.22	0.04
2009/10	72.93	72.19	63.66	69.59	5.15	0.07
<b>Mean</b>	<b>75.92</b>	<b>69.69</b>	<b>70.49</b>	<b>72.03</b>		
<b>S.D.</b>	<b>2.53</b>	<b>3.49</b>	<b>6.12</b>		<b>4.77</b>	
<b>C.V.</b>	<b>0.03</b>	<b>0.05</b>	<b>0.09</b>			<b>0.07</b>

[Source: Annex 1]

The table 4.1 shows the loan and advances to total assets ratio of KBL, MBL & NIC for last five consecutive years. The loan & advances to total assets ratio of KBL is in increasing trend except in F/Y 2006/07 and 2009/10, MBL is fluctuating trend during the study period, whereas NIC is in increasing trend except in F/Y 2007/08 and 2009/10. The loan and advances of the entire sample banks have lesser than its corresponding previous year. While observing the ratios, KBL has mobilized fund in loan and advances and it seems quite successful in generating higher ratio in each year in comparison to other sample banks.

The ratios of KBL are 76.49%, 74.92%, 75.43%, 79.81% and 72.93% in their respective year. The highest ratio is 79.81% in the year 2008/09 and the lowest ratio is 72.93% in year 2009/10. The ratios of MBL are 66.91%, 65.97%, 69.15%, 74.24% and 72.19% in their respective year. The highest ratio is 74.24% in the year 2008/09 and the lowest ratio is 65.97% year 2006/07. The ratios of NIC are 64.10%, 76.56%, 73.92%, 74.22% and 63.66 in their respective year. The highest ratio is 76.56% in the year 2006/07 and the lowest ratio is 63.66% in the year 2009/10. The mean of KBL, MBL and NIC are 75.92%, 69.69% and 70.49% respectively. It reveals that in total assets, KBL has high proportion of loan and advances. KBL has utilized its total assets more efficiently in the form of loan & advances while MBL and NIC have below the industry average of 72.03%.

**Figure No. 4.1**



The industry S.D. is 4.77 while the S.D. of KBL, MBL and NIC are 2.53, 3.49, and 6.12 respectively. It means, NIC has higher variability higher than the other sampled banks as well

as above the industry average S.D. Similarly the industry norm of C.V. reveals to 0.07 while the individual C.V. of KBL, MBL, and NIC are 0.03, 0.05, and 0.09 respectively. It means KBL and MBL have greater consistency than NIC which has greater variability than KBL, NIC and of course the industry norm of 0.07.

#### 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 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 for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies better utilization of total deposit of banks and higher earnings from that loan and advances with the higher risk. A higher ratio of loan & advances indicates better mobilization of deposits 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 considered suitable for the banks.

**Table No. 4.2**

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

Years	KBL	MBL	NIC	Industry Norms		
				Mean	S.D.	C.V.
2005/06	88.71	76.88	75.93	80.51	7.12	0.09
2006/07	84.58	75.25	88.81	82.88	6.94	0.08
2007/08	88.73	77.84	86.09	84.22	5.68	0.07
2008/09	94.17	83.25	85.69	87.70	5.73	0.07
2009/10	85.85	80.53	73.08	79.82	6.41	0.08
<b>Mean</b>	<b>88.41</b>	<b>78.75</b>	<b>81.92</b>	<b>83.03</b>		
<b>S.D.</b>	3.69	3.16	6.95		<b>6.38</b>	
<b>C.V.</b>	0.04	0.04	0.08			<b>0.076</b>

[Source: Annex 2]

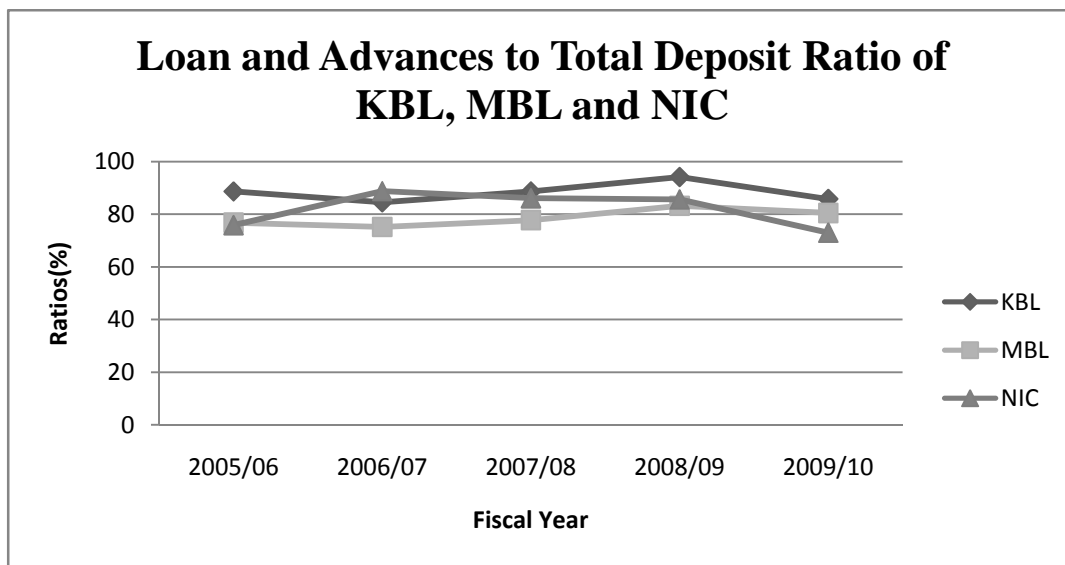
The above table shows that the loan & advances to total deposit ratio of KBL, MBL and NIC is in fluctuating trends. KBL has higher ratio than that of other sample banks in preceding years. The mean of KBL, MBL and NIC are 88.41%, 78.75% and 81.92% respectively. KBL



has higher mean ratio than industry average of 83.03% and other banks' as well. NIC and MBL have low CD ratio in comparison with the industry norm. It indicates KBL has mobilized the deposit better to provide loan and advances while MBL and NIC cannot seem good mobilization of deposits. Thus, it can be said that the management of MBL and NIC are risk averse as compared to KBL. The bank will be able mobilize deposit better if there is above 70% to 85% of loan and advances to total deposit according to NRB.

The above loan and advances to total Deposit ratio is presented in bar diagram as follows:

**Figure No. 4.2**



The S.D. of loan and advances to total deposits of KBL, MBL and NIC are 3.69, 3.16, 6.95 and the industry S.D. stands for 6.38. It means NIC has suffers from the variability of loan with its deposits. S.D. of KBL and MBL have comparatively low deviation and variability as compare to industry norm. The three sampled banks KBL, MBL and NIC have 0.04, 0.04 and 0.08 of C.V while the industry norm reveals to 0.076. It means NIC has greater degree of inconsistency because of higher C.V. than the industry norm and of KBL and MBL have same low consistency.

#### **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% of NPA is acceptable for healthy financial positions. The table (table no 4.3) exhibits the ratio of non-performing assets to loan and advances of KBL, MBL and NIC for five consecutive years. The table shows that the NIC has the highest ratio throughout the study period and also shows the decreasing trend of NPA. The MBL shows the least ratio however it is in increasing trend in succeeding year and KBL has moderate ratio and it is in fluctuating trend.

**Table no. 4.3**  
**Non- Performing Assets to Total Loan and Advance**

Years	KBL	MBL	NIC	Industry Norms		
				Mean	S.D.	C.V.
2005/06	0.93	0.28	2.7	1.30	1.25	0.96
2006/07	0.74	1.19	1.13	1.02	0.24	0.24
2007/08	1.35	1.08	0.87	1.10	0.24	0.22
2008/09	0.44	2.33	0.9	1.22	0.99	0.81
2009/10	0.51	2.32	0.7	1.18	0.99	0.85
<b>Mean</b>	<b>0.79</b>	<b>1.44</b>	<b>1.26</b>	<b>1.16</b>		
<b>S.D.</b>	<b>0.37</b>	<b>0.88</b>	<b>0.82</b>		<b>0.74</b>	
<b>C.V.</b>	<b>0.46</b>	<b>0.61</b>	<b>0.65</b>			<b>0.61</b>

*[Source: Annex 3]*

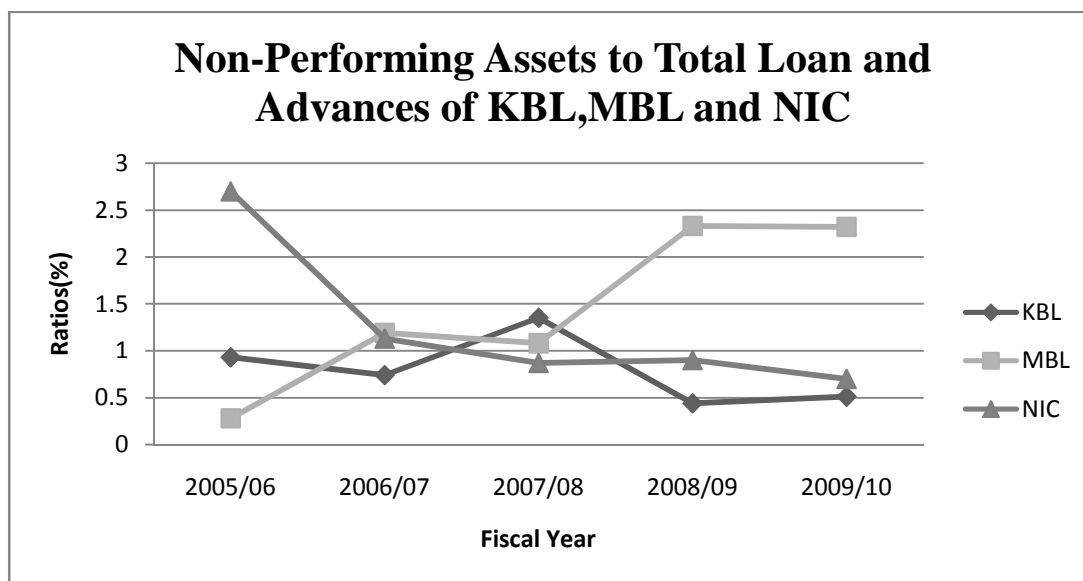
The above table presents the ratio of non-performing assets to total loan and advance of KBL, MBL and NIC. The ratios of KBL are 0.93, 0.74, 1.35, 0.44, 0.51, MBL are 0.28, 1.19, 1.08, 2.33, 2.32 and NIC are 2.70, 1.13, 0.87, and 0.90 0.70 in years 2005/06, 2006/07, 2007/08, 2008/09, and 2009/10 respectively. The average ratio of KBL, MBL and NIC are 0.79%, 1.44% and 1.26% respectively while the industry average stands for 1.16%. It means MBL and NIC carried greater degree of NPA than the industry norm. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances. The mean ratio of MBL and NIC are significantly high in comparison to KBL. It is noted that NIC has been doing best in succeeding years as it has decreased its NPA in the latest year.

KBL has lower degree of mean ratio of 0.79 % which is lesser than MBL, NIC and industry average as well. KBL has the lower degree of mean 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.

All the banks have met the NRB's sated standard below 5% of NPA criteria. It is accepted that one of the reasons of bank failure is high degree of NPA that the above non-performing assets to loan and advances ratio is presented in bar diagram as follows:

**Figure No. 4.3**



The industry S.D and C.V of the sampled banks is 0.74 and 0.61. Whereas S.D. of KBL, MBL and NIC are 0.37, 0.88, 0.82 and C.V. are 0.46, 0.61, 0.65 respectively. It indicates that MBL and NIC have greater degree of variability and KBL as very low degree of variability between NPA with total loan and advances. MBL has similar C.V with industry norm however KBL and NIC have comparatively low and high degree of consistencies as compared with industry norm.

#### **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. 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 safeguarding against future contingencies. Higher ratio indicates that the banks are safeguarding 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 4.4**  
**Provision Held to Non-Performing Assets Ratio:**

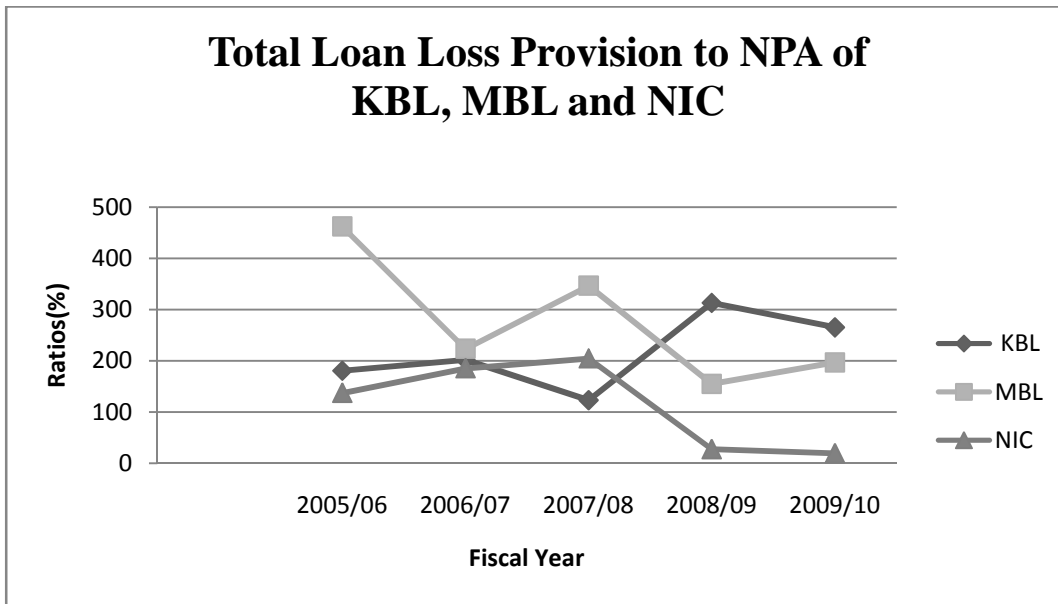
Years	KBL	MBL	NIC	Industry Norms		
				Mean	S.D.	C.V.
2005/06	180.16	461.88	137.1	259.71	176.40	0.68
2006/07	201.78	223.14	185.14	203.35	19.05	0.09
2007/08	122.83	346.27	204.4	224.50	113.07	0.50
2008/09	312.84	154.68	27.29	164.94	143.05	0.87
2009/10	265.07	196.43	19.18	160.23	126.88	0.79
<b>Mean</b>	<b>216.53</b>	<b>276.48</b>	<b>114.62</b>	<b>202.55</b>		
<b>S.D.</b>	<b>74.08</b>	<b>125.83</b>	<b>87.00</b>		<b>115.69</b>	
<b>C.V.</b>	<b>0.34</b>	<b>0.46</b>	<b>0.76</b>			<b>0.59</b>

*Source: annex-4*

The above table presents the ratio of provision held to total non-performing assets of KBL, MBL and NIC for 5 consecutive years. The ratios of KBL are 180.16%, 201.78% and 122.83%, 312.84 and 265.07 MBL are 461.88% 223.14% , 346.27% ,154.68 and 196.43 and NIC are 137.10%, 185.14%, 204.40% ,27.29% and 19.18% in fiscal year 2005/6, 2006/7 and 2007/8, 2008/9 and 2009/010 respectively. The average mean ratio of KBL, MBL and NIC are 169.08%, 313.71% and 151.47% respectively whereas the industry average belongs to 202.55. It means KBL and MBL have excessive mean ratio of provision held to non-performing assets but NIC has shown well performance than the others. NIC has the lowest ratio of 114.62% that indicates the smart credit recovery system than other sampled banks.

The ratio of MBL is significantly high in comparison to KBL and NIC banks and it does portray that MBL has adequate provision against non-performing loan. It means that MBL tries to maintain the higher ratio for the safeguard of loan loss against future contingencies that may create due to non-performing loan. On the other hand KBL has moderate safeguard of loan loss and NIC has least safeguard of loan losses against future contingencies that may create due to non-performing loan. The above provision held to non-performing assets ratio is presented in bar diagram also.

Figure No. 4.4



The S.D. of KBL, MBL and NIC are 74.08%, 125.83% and 87% respectively while the industry norm is 115.69. Total loan loss provision and NPA have inverse relationship with each other. So, KBL and MBL have greater degree of deviation over total loan loss provision over NPA. Likewise, the C.V. are 0.34, 0.46 and 0.76 respectively while the industry C.V. are 0.59. It shows that KBL and MBL have consistency level over total loan loss provision with NPA rather than NIC. Better recovery performance of the recent fiscal year of NIC reduces to keep less loan loss provision and because of the inverse relation of total loan loss provision to NPA it shows the high degree of inconsistency whether it has well performance.

#### 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 how much assets is non-performing or idle in the total assets of banks. Higher NPA to total assets ratio indicates the work performance, which reduces the profitability. Lower ratio indicates 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 4.5****Non-Performing Assets to Total Assets Ratio:***Source:  
annex-*

Years	KBL	MBL	NIC	Industry Norms		
				Mean	S.D.	C.V.
<b>2005/06</b>	0.71	0.19	1.73	0.88	0.78	0.89
<b>2006/07</b>	0.55	0.79	0.87	0.74	0.17	0.23
<b>2007/08</b>	1.01	0.74	0.64	0.80	0.19	0.24
<b>2008/09</b>	0.38	1.73	0.77	0.96	0.69	0.72
<b>2009/10</b>	0.39	1.68	0.45	0.84	0.73	0.87
<b>Mean</b>	<b>0.61</b>	<b>1.02</b>	<b>0.89</b>	<b>0.84</b>		
<b>S.D.</b>	<b>0.26</b>	<b>0.66</b>	<b>0.49</b>		<b>0.51</b>	
<b>C.V.</b>	<b>0.43</b>	<b>0.65</b>	<b>0.56</b>			<b>0.59</b>

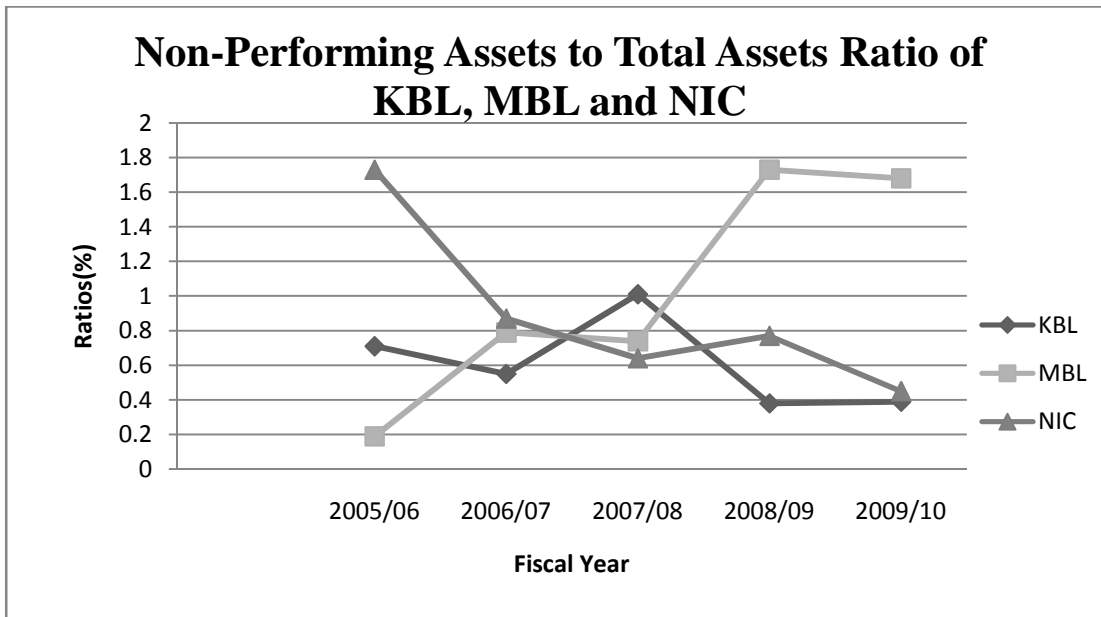
The  
(4.5)

table

presented above exhibits the non-performing assets to total assets ratio of KBL, MBL and NIC for five consecutive periods. The MBL has the approximately highest ratio than the other two banks. The ratio of nonperforming asset to total asset of KBL is 0.71, 0.55, 1.01, 0.38, 0.39 MBL is 0.19, 0.79, 0.74, 1.73, and 1.68 NIC is 1.73, 0.87, 0.64, 0.77 and 0.45 respectively in 2005/6, 2006/7, 2007/8, 2008/09 and 2009/10 consecutive year. The ratio of KBL and NIC is decreasing that indicates that bank has properly utilized and invested in assets. MBL has increasing trend in the latest year. The industry mean is 0.84. The average mean ratio of KBL is 0.61 which has highest ratio is 1.01 in 2007/8 and lower mean ratio of KBL is 0.38. The average mean ratio of MBL is 1.02. The highest ratio is 1.73 in fiscal year 2008/09 and lowest ratio is 0.19 in year 2005/6. The average mean ratio of NIC is 0.89. The highest ratio is 1.73 in year 2005/06 and lowest ratio is 0.45 in fiscal year 2009/10.

The above non-performing assets to total assets ratio is presented into a diagram.

Figure No. 4.5



The industry S.D and C.V. of the three sampled banks is 0.51 and 0.59. While KBL, MBL, NIC have 0.26, 0.66 and 0.49 of S.D. and 0.43, 0.65 and 0.56 of C.V. respectively. It shows that KBL has greater degree of variability and consistency of non- performing assets to total assets of 0.26% ratio than NIC and MBL. NIC occurs moderate level of variability and consistency but MBL has performed the greatest degree of variability and inconsistency amongst the three sampled banks. MBL may suffering from serious problem of credit recovery which may leads it to the greatest degree of variability and inconsistency among the all.

#### 4.2 Correlation Analysis and Trend Analysis

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.. If the two or more variables are so related that the change in the value of dependent variable then they are said to have correlation. The degree of relationship between two variables is known as simple correlation. Correlation analysis is defined as the statistical technique which measures the degree and direction of relationship between the variables.

#### 4.2.1 Correlation between LLP and loan & advances of KBL

The correlation between loan loss provision (LLP) and loan & advances show the degree of relationship between these two items. How a unit changes 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. Below table is created for computing the correlation of KBL, by taking five consecutive fiscal year.

**Table 4.6**  
**Correlation between LLP and Loan & Advances of KBL**

Year	Loan & Advances	Loan Loss Provision	Remark	
2005/06	6891.86	115.93	<b>Correlation</b>	<b>0.9588</b>
2006/07	8929.01	133.42		
2007/08	11335.1	187.29		
2008/09	14795.4	201.91		
2009/10	14966.1	200.16		
			<b>P.E</b>	<b>0.0243</b>
			<b>6PE</b>	<b>0.1461</b>
<b>Significant</b>				

The above table 4.8 explains the relationship between loan and advances and loan loss provision. Here, loan and advances is a independent variable and LLP is depended variable. The correlation coefficient, P.E. and 6PE of KBL are 0.9588, 0.0243 and 0.1461. The study shows that Correlation coefficient of KBL is greater than 6 P.E. Thus it can be concluded that there are positive relation between loan and advances with loan loss provision. Above table shows that loan loss provision is perfectly positive relation with loan and advances in the case of KBL. It means the rise and fall of independent variables may remarkably bring change to the depended variables. Therefore, Loan loss provision said to be correlated with loan and advances of KBL. When the change in the value of one results change in another one. If the portion of loan and advances, in the case of KBL, is increased it may certainly bring higher degree of LLP and vice versa.



#### 4.2.2 Correlation between LLP and Loan & Advances of MBL

The correlation between loan loss provision (LLP) and loan & advances of MBL show the degree of relationship as how a unit increment in loan and advances affect the loan loss provision of MBL. Here loan & advances is independent variable and loan loss provision is dependent variable.

**Table 4.7**  
**Correlation between LLP and Loan & Advances of MBL**

Year	Loan & Advances	Loan Loss Provision	Remark	
2005/06	6068.43	78.15	<b>Correlation</b>	0.9791
2006/07	7129.89	190.05		
2007/08	8642.32	321.75		
2008/09	12984.5	468.45		
2009/10	14927.5	682.74		
			<b>P.E</b>	0.0125
			<b>6PE</b>	0.0748
<b>Significant</b>				

The above table shows the positive relation between LLP and Loan loss provision. The correlation coefficient, P.E. and 6PE of MBL are 0.9791, 0.0125 and 0.0748 respectively. If the value of correlation is less than the probable error, there is no evidence of correlation. Correlation coefficient of MBL is greater than 6 P.E. thus correlation coefficient are said to be significant. That means there is a positive relation between loan and advances with LLP.

#### 4.2.3 Correlation between LLP and loan & advances of NIC

The correlation between loan loss provision (LLP) and loan & advances of NIC show the degree of relationship as how a unit increment in loan and advances affect the loan loss provision. The correlation stated in below shows the relationship between the loan & advances and LLP of NIC bank. Here, loan and advances is independent variables while LLP is dependent.

**Table 4.6**

**Correlation between LLP and loan & advances of NIC**

<b>Year</b>	<b>Loan &amp; Advances</b>	<b>Loan Loss Provision</b>	<b>Remark</b>	
<b>2005/06</b>	6902	246.2	<b>Correlation</b>	<b>-0.3157</b>
<b>2006/07</b>	9129	187.3		
<b>2007/08</b>	11465	200.7		
<b>2008/09</b>	13916	197.28		
<b>2009/10</b>	12929	236.45		
			<b>P.E</b>	<b>0.2718</b>
			<b>6PE</b>	<b>1.6306</b>
<b>Insignificant</b>				

The above table 4.10 explains the relationship between loan and advances to loan loss provision of NIC bank. The correlation coefficient, P.E. and 6P.E of NIC is -0.3157, 0.2718, and 1.6306 respectively. There is negative correlation between loan and advances to total deposit of the sampled bank. Correlation coefficient of NIC is small than 6 P.E. Thus correlation coefficient are said to be insignificant. As a whole above figures shows that loan and advances is highly negative with deposit. It means there is no any relation between loan and advances with LLP.

#### **4.2.4 Trend Analysis**

Trend analysis is the statistical tools for the analyzing the data of selected banks in suitable manners. Trend analysis plays an important role in the analysis and interpretation of financial statement. Trend in general terms, signifies a tendency. It helps in forecasting and planning future operation. Trend analysis is a statistical tool, which shows the previous trend of the financial performance and forecasts to the future financial results of the firms. Trend analysis of NPA using least square method helps to determine the future projection of NPA of forthcoming year. Let's see the future trend of NPA of the sampled bank respectively.

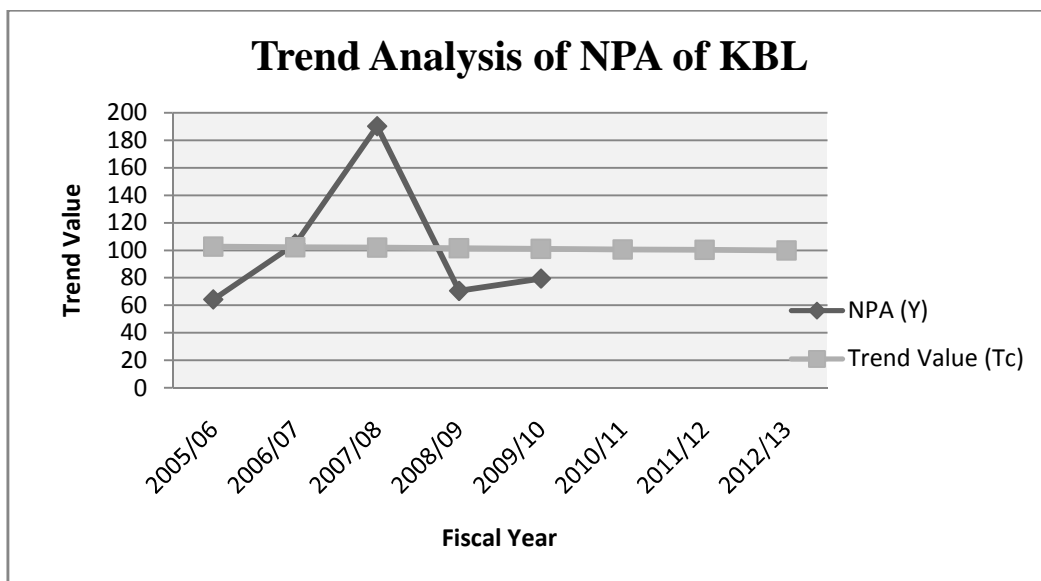
**Table 4.9**

**Trend Analysis of N P A of KBL**

Year (X)	NPA (Y)	$x = X - 2007/08$	$xY$	$x^2$	Trend Value (Tc)
2005/06	64.35	-2	-128.70	4	<b>102.66</b>
2006/07	104.73	-1	-104.73	1	<b>102.26</b>
2007/08	190.23	0	0	0	<b>101.86</b>
2008/09	70.54	1	70.54	1	<b>101.46</b>
2009/10	79.44	2	158.88	4	<b>101.06</b>
2010/11		3			<b>100.66</b>
2011/12		4			<b>100.25</b>
2012/13		5			<b>99.85</b>

The above computed trend value 102.66, 102.26, 101.86, 101.46, 101.06, 100.66, 100.25, 99.85 and actual NPA 64.35, 104.73, 190.23, 70.54 and 79.44 of KBL is presented in a diagram in order to view graphically.

**Figure 4.6**



The trend value of KBL has downward movement tendency. In 2005/06 year it has the trend value of 102.66 but gradually decreasing momentum leads to 99.85 in the coming fiscal year 2012/013. But the actual NPA of KBL is fluctuating from the early year of study.

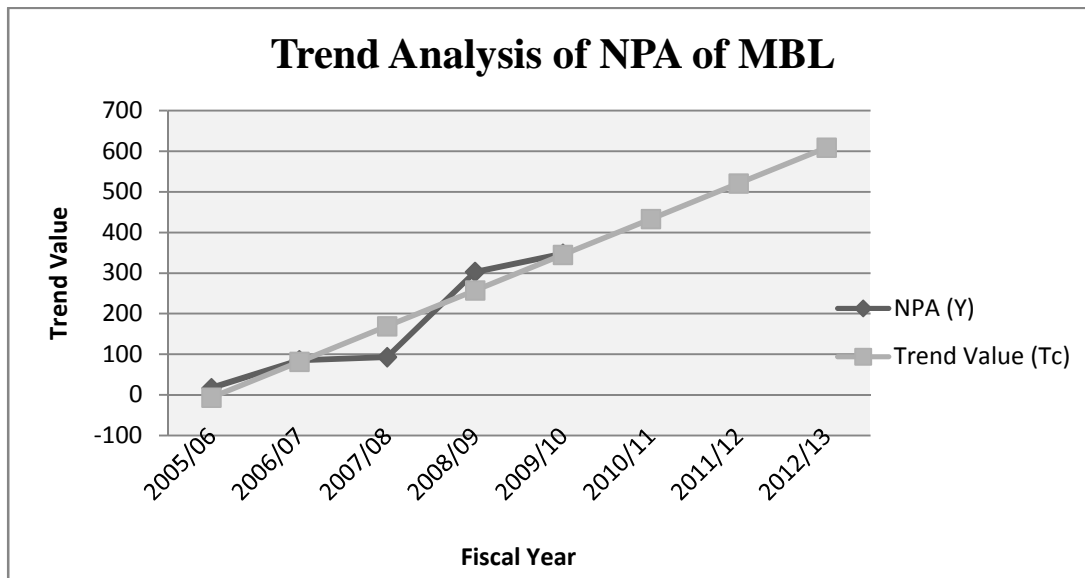
**Table 4.10**

**Trend analysis of NPA of MBL**

Year (X)	NPA (Y)	$x = X - 2007/08$	$xY$	$x^2$	Trend Value (Tc)
2005/06	16.92	-2	-33.84	4	<b>-6.71</b>
2006/07	85.17	-1	-85.17	1	<b>81.19</b>
2007/08	92.92	0	0	0	<b>169.08</b>
2008/09	302.83	1	302.83	1	<b>256.98</b>
2009/10	347.57	2	695.14	4	<b>344.87</b>
2010/11		3			<b>432.77</b>
2011/12		4			<b>520.67</b>
2012/13		5			<b>608.56</b>

The above computed trend value -0.71, 81.19, 169.08, 256.98, 344.87, 432.77, 520.67, 608.56 and actual NPA 16.92, 85.17, 92.92, 302.83, 347.57 of MBL is presented in a diagram in order to view graphically.

**Figure 4.7**



The trend value of MBL has upward movement. In 2005/06 year it has the trend value of -6.71 but gradually increasing momentum leads to 608.56 in the coming fiscal year 2012/013. The actual NPA of KBL is similar with the trend value from the early year of study.

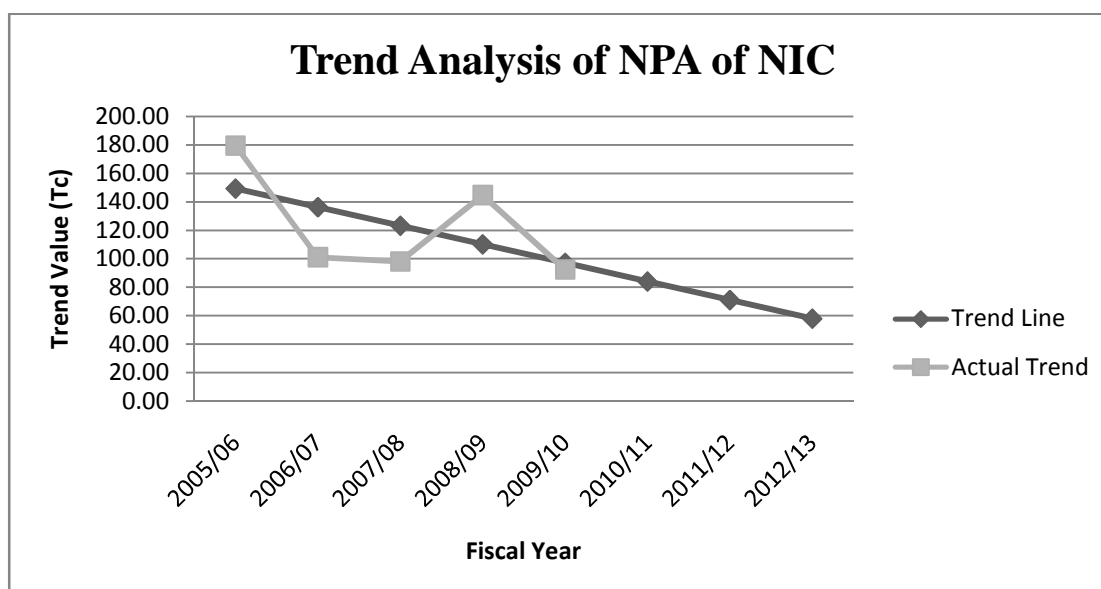
**Table-4.11**

**Trend Analysis of Non Performing Assets of NIC**

Year (X)	NPA (Y)	$x = X - 2007/08$	$xY$	$x^2$	Trend Value (Tc)
2005/06	179.55	-2	-359.1	4	<b>149.32</b>
2006/07	101.14	-1	-101.14	1	<b>136.27</b>
2007/08	98.17	0	0	0	<b>123.22</b>
2008/09	144.77	1	144.77	1	<b>110.18</b>
2009/10	92.49	2	184.98	4	<b>97.13</b>
2010/11		3			<b>84.08</b>
2011/12		4			<b>71.03</b>
2012/13		5			<b>57.98</b>

The above computed trend value 149.32, 136.27, 123.22, 110.18, 97.13, 84.08, 71.03, 57.98 and actual NPA 179.55, 101.14, 98.17, 144.77, 92.49 of NIC is presented in a diagram in order to view graphically.

**Figure – 4.8**



The trend value of NIC has downward movement. In 2005/06 year it has the trend value of 149.32 but remarkably decreasing momentum leads to 57.98 in the coming fiscal year 2012/013. The actual NPA of NIC is trying to be similar with the trend value.

### 4.3 Regression Analysis of ROE with ratio of NPA by Total Loan & Advances and Total Provisions by NPA

Regression is the statistical tool which is used to determine the statistical relationship between two (or more) variables and make estimation (of prediction) of the variable on the basis of other variable(s). In other words, regression is that statistical tool with the help of which the unknown value of one variable can be estimated (or predicts) on the basis of known value of the other variable, assuming that the two variables are closely related. We can estimate the value of the one variable from the given value of another. Analysis consists of the measurement of the relationship between the dependent variable and two or more independent variables are called multiple regressions.

#### Regression analysis

Where ROE= Dependent Variable

$$\frac{\text{Total NPA}}{\text{Total Loans \& Advances}} \text{ and } \frac{\text{Total Provisions}}{\text{Total NPA}} = \text{Independent Variable}$$

#### 4.3.1 Regression Equation of KBL

Table No. 4.12

	2005/06	2006/07	2007/08	2008/09	2009/10
ROE (X <sub>1</sub> )	16.59	22.7	16.35	22.04	24.24
$\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$ (X <sub>2</sub> )	0.93	0.74	1.35	0.44	0.51
$\frac{\text{Total Provisions}}{\text{Total NPA}}$ (X <sub>3</sub> )	180.16	201.78	122.83	312.84	265.07

$$X_1 = a + b_1X_2 + b_2X_3 \dots\dots\dots (1)$$

Where, a= point of intercept on Y-axis = The value of X<sub>1</sub> when X<sub>2</sub> = X<sub>3</sub> = 0

b<sub>1</sub>= Corresponding change in X<sub>1</sub> for each unit change in X<sub>2</sub> while X<sub>3</sub> is held constant

b<sub>2</sub>= Corresponding change in X<sub>1</sub> for each unit change in X<sub>3</sub> while X<sub>2</sub> is held constant

The value of constants a, b<sub>1</sub> and b<sub>2</sub> are determined by solving simultaneously following

three normal equations obtained by the method of least squares.

$$X_1 = na + b_1 X_2 + b_2 X_3 \dots\dots\dots (2)$$

$$X_1X_2 = a X_2 + b_1 X_2^2 + b_2 X_2X_3 \dots\dots\dots (3)$$

$$X_1X_3 = a X_3 + b_1 X_2X_3 + b_2 X_3^2 \dots\dots\dots (4)$$

Substituting the sum values in normal equations, we get

$$101.92=5a+3.97 b_1+ 1082.68 b_2 \dots\dots\dots(5)$$

$$76.36=3.97a+3.69b_1+755.52 b_2 \dots\dots\dots(6)$$

$$22897.82=1082.68a+755.52b_1+256390.97b_2 \dots\dots\dots(7)$$

Now, Multiplying eq<sup>n</sup> (6) by 1.26 and subtracting eq<sup>n</sup> (6) by eq<sup>n</sup> (5)

$$101.92=5a+3.97 b_1+ 1082.68 b_2$$

$$96.21=5a+4.65 b_1+951.95 b_2$$

- - - -

---


$$5.71= -0.68 b_1+130.73 b_2 \dots\dots\dots(8)$$

Again, Multiplying eq<sup>n</sup> (6) by 1082.68 eq<sup>n</sup>(7) by 3.97 and subtracting eq<sup>n</sup> (7) by eq<sup>n</sup> (6)

$$82673.44=4298.24a+3995.08 b_1+817986.39 b_2$$

$$90904.34=4298.24a+2999.41 b_1+1017872.15 b_2$$

- - - -

---


$$- 8230.9= 995.67 b_1- 199885.76 b_2 \dots\dots\dots(9)$$

Again, Multiplying eq<sup>n</sup> (8) by 1464.15, and subtracting eq<sup>n</sup> (9) by eq<sup>n</sup> (8)

$$8360.29= -995.67 b_1+191417.48 b_2$$

$$-8230.90= 995.67 b_1- 199885.76 b_2$$

- - - -

---


$$129.79= -8468.22b_2 \dots\dots\dots(10)$$

Or,  $b_2 = -0.015$

Substituting the value of  $b_2$  in eq<sup>n</sup> (8) we get

$$5.71= -0.68 b_1+130.73 x(-0.015)$$

$$5.71 = -0.68 b_1 - 1.96$$

$$b_1 = -11.28$$

Putting the value of  $b_1$  and  $b_2$  in the regression equation  $X_1 = a + b_1X_2 + b_2X_3$

We get,  $X_1 = a + (-11.28)X_2 + (-0.015)X_3$

Regression Analysis is used to estimate the value of dependent variable for the given values of independent variables. The partial regression coefficient of  $X_1$  i.e. ROE on  $X_2$  keeping  $X_3$  constant.

Thus we can conclude that each unit of ROE will affect with -11.28 unit(s) of change

in  $\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$  while keeping  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  as constant. And almost

ROE will be hardly change by the changes of  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  because regression coefficient is almost zero (Only -0.015 i.e. negligible) in a case of KBL.

### 4.3.2 Regression equation of MBL

**Table No. 4.13**

	2005/06	2006/07	2007/08	2008/09	2009/10
<b>ROE</b>	18.74	9.02	10.35	8.33	4.96
$\frac{\text{Total NPA}}{\text{Total Loans \& Advances}} (X_2)$	0.28	1.19	1.08	2.33	2.32
$\frac{\text{Total Provisions}}{\text{Total NPA}} (X_3)$	461.88	223.14	346.27	154.68	196.43

$$X_1 = a + b_1X_2 + b_2X_3 \dots\dots\dots (1)$$

Where,  $a$  = point of intercept on Y-axis = The value of  $X_1$  when  $X_2 = X_3 = 0$

$b_1$  = Corresponding change in  $X_1$  for each unit change in  $X_2$  while  $X_3$  is held constant

$b_2$  = Corresponding change in  $X_1$  for each unit change in  $X_3$  while  $X_2$  is held constant

The value of constants  $a$ ,  $b_1$  and  $b_2$  are determined by solving simultaneously following three normal equations obtained by the method of least squares.

$$X_1 = na + b_1 X_2 + b_2 X_3 \dots\dots\dots (2)$$



$$X_1 X_2 = a X_2 + b_1 X_2^2 + b_2 X_2 X_3 \dots\dots\dots (3)$$

$$X_1 X_3 = a X_3 + b_1 X_2 X_3 + b_2 X_3^2 \dots\dots\dots (4)$$

Substituting the sum values in normal equations, we get

$$51.4 = 5a + 7.2 b_1 + 1382.4 b_2 \dots\dots\dots (5)$$

$$58.07 = 7.2a + 13.47 b_1 + 1584.95 b_2 \dots\dots\dots (6)$$

$$16515.03 = 1382.4a + 1584.95 b_1 + 445538.15 b_2 \dots\dots\dots (7)$$

Likewise,

Corresponding change in  $X_1$  for each unit change in  $X_2$  while  $X_3$  is held constant ( $b_1$ )  
 = -5.08

Corresponding change in  $X_1$  for each unit change in  $X_3$  while  $X_2$  is held constant ( $b_2$ )  
 = 0.001

Putting the value of  $b_1$  and  $b_2$  in the regression equation of MBL  $X_1 = a + b_1 X_2 + b_2 X_3$

We get,  $X_1 = a + (-5.08)X_2 + (0.001)X_3$

We can conclude that each unit of ROE will affect with -5.08 unit(s) of change in

$\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$  while keeping  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  as constant. And almost

ROE will be almost constant by the changes of  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  because the partial value of regression coefficient is almost zero (Only 0.001 i.e. considered negligible)

keeping  $\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$  constant in a case of MBL.

### 4.3.3 Regression equation of NIC

**Table no. 4.14**

	2005/06	2006/07	2007/08	2008/09	2009/10
<b>ROE</b>	16.1	24.01	25.75	27.83	34.3
$\frac{\text{Total NPA}}{\text{Total Loans \& Advances}} (X_2)$	2.7	1.13	0.87	0.9	0.7
$\frac{\text{Total Provisions}}{\text{Total NPA}} (X_3)$	137.1	185.14	204.4	27.29	19.18

$$X_1 = a + b_1 X_2 + b_2 X_3 \dots\dots\dots (1)$$

Where, a= point of intercept on Y-axis = The value of  $X_1$  when  $X_2 = X_3 = 0$

$b_1$ = Corresponding change in  $X_1$  for each unit change in  $X_2$  while  $X_3$  is held constant

$b_2$ = Corresponding change in  $X_1$  for each unit change in  $X_3$  while  $X_2$  is held constant

The value of constants a,  $b_1$  and  $b_2$  are determined by solving simultaneously following three normal equations obtained by the method of least squares.

$$X_1 = na + b_1 X_2 + b_2 X_3 \dots\dots\dots (2)$$

$$X_1 X_2 = a X_2 + b_1 X_2^2 + b_2 X_2 X_3 \dots\dots\dots (3)$$

$$X_1 X_3 = a X_3 + b_1 X_2 X_3 + b_2 X_3^2 \dots\dots\dots (4)$$

Substituting the sum values in normal equations, we get

$$127.99=5a+6.3b_1 + 573.11b_2\dots\dots\dots(5)$$

$$142.06=6.3a+10.62b_1 +795.19b_2\dots\dots\dots(6)$$

$$13333.18=573.11a+795.19b_2+95965.21b_2 \dots\dots\dots(7)$$

We get the following value after computation

Corresponding change in  $X_1$  for each unit change in  $X_2$  while  $X_3$  is held constant

$$(b_1) = 0.72$$

Corresponding change in  $X_1$  for each unit change in  $X_3$  while  $X_2$  is held constant

$$(b_2) = 0.023$$

Putting the value of  $b_1$  and  $b_2$  in the regression equation of NIC,

$$X_1 = a + b_1 X_2 + b_2 X_3$$

$$\text{We get, } X_1 = a + (0.72)X_2 + (0.023)X_3$$

Therefore, each unit of ROE will affects with 0.72 unit(s) of change in  $\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$  while keeping  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  as constant. And ROE will affects with 0.023 from the changes of  $\frac{\text{Total Provisions}}{\text{Total NPA}}$  keeping  $\frac{\text{Total NPA}}{\text{Total Loans \& Advances}}$  constant.

#### 4.4 Major Findings of the Study:

The study is fully based on the secondary data. Major finding of the study are as follows:

- ) The main objective of commercial banks is to make profit through mobilization of funds. The average loan and advance to total assets ratio of KBL, MBL and NIC are found to be 75.92%, 69.69% and 70.49% respectively while the industry average is 72.03. It reveals that in total assets, KBL has high proportion of loan and advances than that of three. On the other hand KBL provides the higher loan but due to the ineffectiveness of loan and advances, then banks could not generate higher return. The returns on loan and advances ratio revealed that MBL seems to be a failure to earn return on loan and advances. The industry S.D. is 4.77 while the S.D. of KBL, MBL and NIC are 2.53, 3.49, and 6.12 respectively. NIC has higher variability than industry norm and the other sampled banks. Similarly the industry norm of C.V. found to be 0.07 while the individual C.V. of KBL, MBL, and NIC are 0.03, 0.05, and 0.09 respectively. It means KBL and MBL have greater consistency than NIC.
- ) The relatively low ratio of MBL is the indication of risk adverse attitude of the management or it has the policy of investing in low risky assets. MBL had got serious credit recovery problem with Avcho International Company, the former authorized Hundai car dealer for Nepal. MBL suffers from the heavy bad and doubtful debts. KBL has the highest ratio among them but issued loan and advances are not generating the target profit and MBL shows the weak policy to provide loan out of its total assets.
- ) The loan and advances to total deposit or CD Ratio shows how successfully the bank uses their collected fund in loan and advances. It means that it indicates the mobilization of resources. The mean of KBL, MBL and NIC are 88.41%, 78.75% and 81.92% respectively and industry mean stood to be 83.03. KBL has higher ratio than industry average and that of other sample banks as well. KBL has utilized its deposit more efficiently in the form of loan & advances in comparison with the sampled banks. Thus, it can be said that the management of KBL is risk taker as compare to KBL & MBL.
- ) The industry S.D is 6.38 and of KBL, MBL and NIC are 3.69, 3.16, and 6.95 respectively. That indicates NIC is suffering from the variability of loan with its deposits. S.D of KBL and MBL has shown comparatively low variability as compare

to industry norm. The three sampled banks KBL, MBL and NIC have 0.04, 0.04 and 0.08 of C.V while the industry norm stands for 0.076. It means NIC has greater degree of inconsistency because of higher C.V. than the industry norm and of KBL and MBL have same low degree of consistency.

- J) The average mean ratio of NPA to total loan and advances of KBL, MBL and NIC are 0.79%, 1.44% and 1.26% respectively. KBL has the lower mean 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 level at perfection. But the MBL has the high degree of NPL and NIC has moderate 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 MBL is significantly high in comparisons to other sampled banks. Only below 5% of NPA is applicable for healthy financial positions as per standard.
- J) The industry S.D of the sampled banks is 0.74 whereas S.D. of KBL, MBL and NIC are 0.37, 0.88 and 0.82 respectively. It indicates that MBL and NIC have greater degree of variability and KBL as very low degree of variability between NPA with total loan and advances. Similarly, the industry C.V is 0.61 whereas KBL, MBL and NIC have 0.46, 0.61, and 0.65 respectively. MBL has similar equal C.V of 0.61 with industry norm. It could be concluded that KBL is more consistency than MBL and NIC. KBL has more consistency in the above ratios.
- J) KBL has the lower mean 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 the MBL has the high degree of NPL and NIC has moderate 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 MBL is significantly high in comparisons to other sampled banks. It is noted that NIC has been doing best in succeeding years as it has decreased its NPA in the latest year.
- J) NPA is the one of the main causes that decreases the profit and in consequence will have to be allocated for provisioning. This may result in bank failure. Thus, MBL & NIC should give attention towards these matters as their ratios are in increasing trend.
- J) The average ratio of total provision to NPL of KBL, MBL and NIC are 216.53%, 276.48% and 114.62% respectively while the industry average stands for 202.55%. The ratio of MBL is significantly high in comparison to KBL and NIC banks and it

does portray that MBL has adequate provision against non-performing loan. It means that MBL tries to maintain the higher ratio for the safeguard of loan loss against future contingencies that may create due to non-performing loan. On the other hand KBL has moderate safeguard of loan loss and NIC has least safeguard of loan losses against future contingencies that may create due to non-performing loan.

- ) The average industry S.D and C.V of total provision held to non performing assets ratio of KBL, MBL and NIC are 115.69 and 0.59 respectively. Likewise S.D and C.V of KBL, MBL and NIC are 74.08, 125.83, 87 and 0.34, 0.46, 0.76 respectively.
- ) The NPA to total assets shows the proportion to non-performing assets and total assets of bank. It exhibits how much NPA are these in total Assets. The NPA to total assets ratio of KBL, MBL and NIC are 0.61%, 1.02% and 0.89% respectively. The study has revealed that industry average of mean is 0.84%. It indicates that MBL has high degree of bad and doubtful debts, NIC has moderate and KBL has the lower ratio of NPA to total assets. It is a reason of inferior investment of loan and advances, whereas MBL has highest degree of mean ratio of NPA to total assets. NIC has the moderate ratio among the sampled banks. In Nepalese context, below 5% of NPA is applicable to total assets.
- ) The industry S.D and C.V of NPA to total assets ratio of KBL, MBL and NIC are 0.51 and 0.59 respectively. Similarly S.D and C.V of the KBL, MBL and NIC are 0.26, 0.66, 0.49 and 0.43, 0.65, 0.56 respectively. According to the study KBL has low degree of variation and high degree of consistency which indicates healthy financial position in NPA to total assets. Likewise NIC has moderate level and MBL has high degree of variability and inconsistency.
- ) The correlation coefficient between loan and advances and loan loss provision of KBL, MBL and NIC are 0.9588, 0.9791 and -0.3157 respectively. There are positive correlation between loan loss provision loan and advances of two sampled banks, KBL and MBL. Correlation coefficient of KBL and MBL are greater than 6 P.E. Thus correlation coefficient are said to be significant between loan and advances and loan loss provision. But correlation coefficient of NIC is negative and less than 6 P.E. Thus correlation coefficient is said to be insignificant for NIC. That indicates there is not found any relationship loan and advances with loan loss provision of NIC. As a whole it seems MBL is some more significant and reliable than other two banks because it

has greater correlation coefficient than P.E. Loan loss provision is perfectly positive with loan and advances in the case of KBL and MBL.

) The trend analysis of NPA of the three sampled banks KBL, MBL and NIC have shown different tendencies. Trend line of KBL shows the fluctuating trend of NPA while MBL's trend line analysis shows the increasing trend in making NPA and NIC shows decreasing trend in making NPA. Study shows that NIC has continuously decrease its NPA level from early stage of the study.

) The relationship of ROE with the ratio of total provision and NPA in ROE of the three sampled banks is almost zero or very near to zero. It means there is no relationship of ROE with the ratio of total provision and NPA. But there is neat relationship of ROE with the ratio of NPA and loan and advances.

## CHAPTER - V

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary

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 Nepalese banks. 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 disburse loan as much as possible. However, the bank has to be careful about the safety of loan and advances. It means the bank has to be careful about the repayment of loan and interest before giving loan. If a bank is too timid it may fail to obtain the adequate return on the fund, which is confided to him for use. Similarly, if the bank is too liberal, it may easily impair its profits by bad debts. Therefore, banks should not forget the reality that most of the bank failures in the world due to shrinkage in the value of loan and advances.

Despite of being loan and advance more profitable than those other assets, it creates risk of non repayment for the bank. Such risk is known as credit risk or default risk. Therefore, like other assets the loan and advances are classified into performing and non performing on the basis of overdue aging schedule. If the dues in the form of principal and interest are not paid, by the borrower for a certain period is called non performing loan/assets. It means, NPAs could wreck banks profitability both through loss of interest income and write off the principal loan amount. Non performing loans are also known as non performing assets. Performing assets have multiple benefits to the company as well as to the society while non performing assets erode even existing capital of the bank.

Escalating level of NPAs has been becoming great problem in banking business in the world. In this context, Nepal cannot be run off from such situation. 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 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 and Nepal Bank Limited.

In Nepal the increase of NPA is especially due to the willful defaulters. Ironically big houses and big companies are the major source of NPA of commercial banks. They used to take loan misusing their reputation, connection to political parties and influence. The political instability and the political pressure influence for sanction of loan is also a major cause. Lack of proper law and the lack of willingness in the Government has been the main barrier in taking action against defaulters.

Nepal Rastra Bank has a set provision regarding lending's of Nepalese commercial bank. According to this provision, a bank should classify its outstanding loan into pass loan substandard loan, doubtful loan and loss loan on the basis of overdue aging schedule per NRB's directives. The pass loan is called performing and total of substandard, doubtful and loss loan is called Non Performing assets respectively. 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 non-performing 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 of the world. In this context Nepal cannot 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 day by day. We get to know 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 and Nepal Bank Ltd.(NBL).

This research has studied the non-performing assets of private commercial banks. For this purpose, descriptive and analytical research design was adopted. Three private banks out of 26 commercial banks were selected as sample using judgmental sampling method. They are KBL, MBL and NIC. Secondary data are used in this study. Besides this, newspaper, relevant



thesis, journals, articles, related website etc. are also referred for this research. The data collected from various sources were recorded systematically and presented in appropriate forms of table and charts with the application of appropriate mathematical, statistical, financial and graphical tools. The data of five consecutive years of selected banks have been analyzed to meet the objective of the study.

KBL has the highest proportion of loan and advances to total assets of bank. MBL has the lowest proportion of loan and advances during the study period. It indicates the risk adverse attitude of the management of MBL. NIC has just above of MBL ratio. KBL has higher degree of proportion than the industry norm of 72.03% and highest proportion amongst all. Same thing can be seen on the proportion of loan and advances to total deposit ratio. KBL has the highest proportion amongst all and higher degree of proportion than industry norm. Whereas MBL shows the lowest ratio and NIC has moderate level of proportion. KBL is the highest loan provider than MBL and NIC because of its highest credit to deposit ratio.

NPA in total loan and advances of the three sampled banks comes around 1.16% on an average. KBL has lower degree of mean ratio that is lesser than MBL, NIC and industry average which indicates better quality of assets of banks in the form of loan and advances. Generally, it can be concluded that KBL is performing well or maintaining their NPAs perfectly. The Second lowest NPA ratio with total loan and advances is of NIC but not very low than MBL. If we observe the latest data, NIC is in gradually decreasing its NPA. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances.

This study has revealed that MBL has made higher provision for loan loss to non-performing assets. NIC has the least provision to NPAs and KBL moderate provision to NPA during the study period.

NPA is the one of the main causes that decreases the profit and in consequence will have to be allocated for provisioning. This may result in bank failure. Thus, MBL & NIC should give attention towards these matters.

The ratio of MBL is significantly high in comparison to KBL and NIC banks and it does portray that MBL has adequate provision against non-performing loan. It means that MBL has to maintain the higher ratio for the safeguard of loan loss against future contingencies that may create due to non-performing loan. On the other hand KBL has moderate safeguard of

loan loss and NIC has least safeguard of loan losses against future contingencies that may create due to non-performing loan.

The study has revealed that industry average of NPA to total assets ratio is 0.84%. It indicates that MBL has high degree of bad and doubtful debts, NIC has moderate and KBL has the lower ratio of NPA to total assets. It is a reason of inferior investment of loan and advances, whereas MBL has highest degree of mean ratio of NPA to total assets. NIC has the moderate ratio among the sampled banks.

The correlation coefficient between loan and advances and loan loss provision of KBL, MBL and NIC are 0.9588, 0.9791 and -0.3157 respectively. There are positive correlation between loan loss provision loan and advances of two sampled banks, KBL and MBL. Correlation coefficient of KBL and MBL are greater than 6 P.E. Thus correlation coefficient are said to be significant between loan and advances and loan loss provision. But correlation coefficient of NIC is negative and less than 6 P.E. Thus correlation coefficient is said to be insignificant for NIC. That indicates there is not found any relationship loan and advances with loan loss provision of NIC. As a whole it seems MBL is some more significant and reliable than other two banks because it has greater correlation coefficient than P.E. Loan loss provision is perfectly positive with loan and advances in the case of KBL and MBL.

The trend analysis of NPA of the three sampled banks KBL, MBL and NIC have shown different tendencies. Trend line of KBL shows the fluctuating trend of NPA while MBL's trend line analysis shows the increasing trend in making NPA and NIC shows decreasing trend in making NPA. Study shows that NIC has continuously decrease its NPA level from early stage of the study.

## **5.2 Conclusion**

The non performing loan is a problem which cannot be eliminated. However, it can be controlled and managed to minimize it and to minimize its effect. The non performing loan has many negative effects to the organization. Some of them are as follows.

- Affects adversely on the profitability of the organization. It decreases the profit because the revenue decreases due to Non Performing Loans.
- Decrease the goodwill and reputation of the organization
- Decreases the investable fund.

Non performing loans epitomize bad investment. They misallocate credit from good projects, which do not receive funding, to failed projects. Bad investment ends up in misallocation of

capital. The Non Performing Assets is the double edged sword that will decrease the revenue and profitability of the bank in one hand and in other hand it decreases the investable fund due to the necessity to keep fund aside in the form of Loan Loss Provision. The NPA also decreases the efficiency of the bank. It decreases the goodwill and the reputation of the bank. It decreases the confidence level of shareholders as well as the customers. In the worst case the Bank can be bankrupted.

Since, the NPA has many unpredictable effects not only to the lending Bank but also to whole society and economy of the nation. The NPA germinate from the time of analysis period during the lending process. Hence to decrease the level of non performing assets the banks should be aware from the time of lending and the project should be analyzed carefully for its viability. The lending team should be given necessary training, full authority and should also be made responsible. Their morale should be raised. They should not be enforced or make them to sanction loan in pressure. The bank should also visit the customer regularly, analyze their performance, their status should be revised in periodic basis, and should also give financial guidance if necessary.

The Non Performing Assets consumes the capital and assets and destroys the whole system. The defaulters or the clients who do not repay the loan back should be punished. Recently a new bill was presented in the parliament for discussion, in which, there were provisions for punishment for defaulters, which is very good news for the bank. It is also a very positive and encouraging movement from the side of the Government. Willful defaulters should be banned by the society. Unfortunately, it comes in papers and news that such defaulters get shelter from political parties. These things should not happen. It's not a good signal for a developing country. The business houses should also follow its business ethics. In Nepal, Debt Recovery Tribunal is formed by the Government to recover the bad debts of the bank. It should be enacted and should be given full authority and power.

Finally, sample commercial banks of Nepal are found conscious regarding the Non Performing Assets. Their NPA is also within the international level. They have been giving full effort to decrease and minimize the level of NPA which have been accumulated for years. They have got significant achievement in this regard. Most of the banks have decreased the NPA. There is also special effort from Government and from private sector to minimize the NPA and recover the Bad loans.

Therefore, an NPA account not only reduces profitability of banks by provisioning in the profit and loss account, but their carrying cost is also increased which results in excess & avoidable management attention. Apart from this, a high level of NPA also puts strain on a

banks net worth because banks are under pressure to maintain a desired level of Capital Adequacy and in the absence of comfortable profit level, banks eventually look towards their internal financial strength to fulfill the norms thereby slowly eroding the net worth.

### **5.3 Recommendation**

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 the 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.

1. Corporate structure of bank plays key role in the effective management. Loan being a risky asset, efforts should be made to have proper control in every steps of loan management. The banks should establish separate department for credit appraisal, documentation, disbursement, inspection and recovery of loan which have possibility of finding mistakes of one department by the others creating system effectiveness.
2. Loan must be given only if the banker is satisfied that the borrower can repay money from the cash flow generated from operating activities. However, the banks want to ensure that their loan is repaid even in case of failure of business. The bank should take proper valuation of collateral so that it can at least recover its principal and interest amount in case of failure of the borrower to repay the loan.
3. Lack of proper financial analysis of the borrower by the banks, is one of the major cause behind increasing NPA of Nepalese commercial bank. Therefore, proper financial analysis should be performed before giving loan to the borrower. It is recommended to KBL and MBL take serious action to recovering the bad loan (NPA) and also should make remedial action for new loans in the latest years. 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.
4. Assisting the borrowers in developing his entrepreneurial skills will not only establish a good relation between the borrowers but also help the bankers to keep a track of their funds.
5. Another way to manage the NPAs by the banks is Compromise Settlement Schemes or One Time Settlement Schemes. However, under such schemes the banks keep the actual amount recovered secret. Under these circumstances, it is necessary to bring more transparency in such deals so that any flaw could be removed.

## BIBLIOGRAPHY

### BOOKS:

- Bajracharya, S. M. and Bhattarai R. (2007). *Corporate Financial Manangement*. Third edition. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.
- Bhattra, R. (2008). *Capital Structure Manangement*. Kathmandu: Dhaulagiri Books and Stationery.
- Dahal, B. (2002). *A Hand Book to Banking*. Kathmandu: Asmita Books & Stationery.
- Gautam, R. R. & Thapa K. (2008). *Capital Structure Manangement*. Kathmandu: Asmita Publication.
- Kothari, C. R. (1994). *Research Methodology, Methods and Techniques*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Gupta, S C. (1992). *Fundamental of Statistics*. Bombay: Himalyan Publishing House.
- Gupta, S.P. (1997). *Statistical Method*. New Delhi: Sultan Chand & Publishers.
- Johnson & Johnson (1940). *Commercial Bank Management*. New York: The Dryden Press.
- Joshi, P.R. (2001). *Research Methodology*. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.
- Kothari, C.R. (1984). *Quantitative Techniques*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Pandey, I.M. (1999). *Financial Management*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Pant, P. R. (1998). *Fieldwork Assignment and Report Writing*. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.
- Rashawami, M. & Vasudevan, S.V. (1984). *A Text Book of Banking (Law Practice & Theroy of Banking)*. New Delhi: S. Chand and Co. Pvt. Ltd.
- Shekher, K. C. and Shekher L. (1998). *Banking Theory and Practice*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Shrestha, S. & Silwal, D. P. (2002). *Statistical Methods in Management*. Kathmandu: Taleju Prakashan.
- Sthapit. Dr. A. B., Gautarn, J. P. R.. & Dangol. P. M. (2003). *Statistical Methods*. Kathmandu: Buddha Academic Publishers & Distributors Pvt. Ltd.
- Timilsina, Y. (1997). *Banking Business in Nepal*. Kathmadu: Ratna Pustak Bhandar.
- Vaidya, S. (1998). *Project Failures and Sickness in Nepal, Challenges to investors for investment Risk Management*. Kathmandu: Monitor Nepal.
- Weston, J. F & Copeland, T. E. (1990). *Managerial Finance*. New York: The Dryden Press.

Wild, J. J, Subramanyam, K. R. & Haskey, R. F. (2003). *Financial Statement Analysis*. USA: Mc Graw Hill International.

Wolff, Howard & Pant, P. R. (2002). *A Hand Book for Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Publisher and Distributor Pvt. Ltd.

#### **JOURNALS, ARTICLES/ OTHER PUBLICATIONS :**

Adhikari, M. (2062). *Nonperforming Loan and its Management*. Kathmandu: Nepal Rastra Bank, Samachar

Chhetri, D. B. (2057). *Non-Performing Assets: A Need for Rationalization*. Kathmandu: Nepal Rastra Bank, Samachar.

Dahal, S. (2060). *Problems in Nepalese Financial Sector & NPLs*. Kathmandu: Nepal Rastra Bank Samachar.

Dungana, B. R. (2058). *Why Assets Management is considered the best option o resolve the Non-Performing Loan Problem ?*. Banking Prabardhan.

Neupane, B. (2058). *NPA in Nepalese Institutions*. Kathmandu: The Kathmandu Post.

Pyakuryal, B. (2001). *Our Economy is in a Volatile Stage*. Kathmandu: Nepal News.com

Ragmi, Y. (2062). *Non-Performing Assets Management*. Kathmandu: Nepal Rastra Bank Samachar.

#### **UNPUBLISHED MASTER DEGREE THESIS:**

Bhattra, S. (2004). *Implementation of Directives Issued by Nepal Rastra Bank: A Comparative Study of Nepal SBI Bank Limited and Nepal Bangladesh Bank Limited*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.

Khadka, D. K. (2004). *Non-Performing Assets of Nepalese Commercial Banks*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.

Khadka, A. (2002). *A Comparative Study on Investment Policy of Commercial Banks*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.

Limbu, R. (2008). *Credit Management of NABIL Bank Limited*. Kathmandu: An Unpublished MBS Thesis, submitted to Shanker Dev Campus.

Ojha, L. P. (2002). *Lending Practices: A Study on Nabil Bank Limited, Standard Chartered Bank Nepal Limited and Himalayan Bank Limited*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.

- Pandev, S. (2002). *NRB Directives. Their Implementation and Impact on Commercial Banks: A Case Study of Himalayan Bank Limited*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Pradhan, K. (2006). *A study on non-performing Assets of Commercial Bank in Nepal*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Shilpakar, A. (2003). *A Study on Lending Practices of Finance Companies of Nepal*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Shrestha, N. (2004). *A Study on Non-Performing loan and Loan Loss Provisioning of Commercial Banks*. Kathmandu: An Unpublished Master Degree Thesis submitted to Faculty of Management, T.U.
- Shrestha, S. (2008) *"A study on the credit risk management of Nepalese Commercial Banks With Reference to Kumari Bank and Machhapuchre Bank*. Kathmandu: Unpublished MBS Thesis, submitted to Shanker Dev Campus.

**Websites :**

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

[www.nepalstock.com](http://www.nepalstock.com)

[www.kumaribank.com](http://www.kumaribank.com)

[www.machbank.com](http://www.machbank.com)

[www.nicbank.com.np](http://www.nicbank.com.np)

**Annex 1: Calculation of Loan & Advances to Total Assets of Selected Sample Banks**

*(Rs. in million)*

Year	KBL			MBL			NIC		
	Loan & Advance	Total Assets	Ratio (in %)	Loan & Advance	Total Assets	Ratio (in %)	Loan & Advance	Total Assets	Ratio (in %)
<b>2005/06</b>	6891.86	9010.28	<b>76.49</b>	6068.43	9069.83	<b>66.91</b>	6655.96	10383.6	<b>64.10</b>
<b>2006/07</b>	8929.01	11918.3	<b>74.92</b>	7129.89	10807.6	<b>65.97</b>	8941.4	11678.8	<b>76.56</b>
<b>2007/08</b>	11335.1	15026.6	<b>75.43</b>	8642.32	12498.6	<b>69.15</b>	11264.7	15238.7	<b>73.92</b>
<b>2008/09</b>	14795.4	18538.6	<b>79.81</b>	12984.5	17490.8	<b>74.24</b>	13916.2	18751.1	<b>74.22</b>
<b>2009/10</b>	14966.1	20522.5	<b>72.93</b>	14927.5	20678.8	<b>72.19</b>	12929.6	20309.2	<b>63.66</b>
<b>Mean</b>			<b>75.92</b>			<b>69.69</b>			<b>70.49</b>

Where,



$$\text{Loan \& Advance to Total Assets} = \frac{\text{Total Loan \& Advances}}{\text{Total Assets}}$$

$$\text{Mean} = \frac{\text{Sum of ratios}}{\text{No. of years}}$$

For the year 2005/06 of KBL

$$\text{Loan \& Advance to Total Assets} = \frac{6891.86}{9010.21}$$

= 76.49% and so on for others.

$$\text{Mean} = \frac{379.58}{5}$$

i.e 75.92 and so on for others.

For e.g:

**Annex 2: Calculation of Loan & Advances to Total Deposit of Selected Sample Banks**

(Rs. in million)

Year	KBL			MBL			NIC		
	Loan & advances	Total deposit	Ratio (in %)	Loan & advances	Total deposit	Ratio (in %)	Loan & advances	Total deposit	Ratio (in %)
2005/06	6891.86	7768.96	88.71	6068.43	7893.3	76.88	6655.96	8765.95	75.93
2006/07	8929.01	10557.4	84.58	7129.89	9475.45	75.25	8941.4	10068.2	88.81
2007/08	11335.1	12774.3	88.73	8642.32	11102.24	77.84	11264.7	13084.7	86.09
2008/09	14795.4	15710.4	94.17	12984.5	15596.79	83.25	13916.2	16240.3	85.69
2009/10	14966.1	17432.3	85.85	14927.5	18535.92	80.53	12929.6	17692.4	73.08
Mean			88.41			78.75			81.92

Where,

$$\text{Loan \& Advance to Total Deposit} = \frac{\text{Total Loan \& Advances}}{\text{Total Deposit}}$$

$$\text{Loan \& Advance to Total Assets} = \frac{6068.43}{7893.3}$$

= 76.88% and so on for others.

$$\text{Mean} = \frac{393.75}{5}$$

i.e 78.75 and so on for others.

For e.g:

For the year 2006/07 of MBL

**Annex 3: Calculation of Non-performing Assets to Total Loan and advances of Selected Sample Banks**

*(Rs. in million)*

Year	KBL			MBL			NIC		
	NPL	Loan & Advances	Ratio (in %)	NPL	Loan & Advances	Ratio (in %)	NPL	Loan & Advances	Ratio (in %)
<b>2005/06</b>	64.35	6891.86	<b>0.93</b>	16.92	6068.43	<b>0.28</b>	179.55	6655.96	<b>2.70</b>
<b>2006/07</b>	66.12	8929.01	<b>0.74</b>	85.17	7129.89	<b>1.19</b>	101.14	8941.4	<b>1.13</b>
<b>2007/08</b>	152.48	11335.09	<b>1.35</b>	92.92	8642.32	<b>1.08</b>	98.17	11264.68	<b>0.87</b>
<b>2008/09</b>	64.54	14795.4	<b>0.44</b>	30.25	12984.5	<b>2.33</b>	125.25	13916.2	<b>0.90</b>
<b>2009/10</b>	75.51	14966.1	<b>0.51</b>	34.73	14927.5	<b>2.32</b>	90.51	12929.6	<b>0.70</b>
<b>Mean</b>			<b>0.79</b>			<b>1.44</b>			<b>1.26</b>

Where,

$$\text{NPL to Total Loan \& Advances} = \frac{\text{Total NPL}}{\text{Total Loan \& Advances}}$$

**For e.g.:**

For the year 2007/08 of NIC

$$\begin{aligned}\text{NPL to Total Loan \& Advances} &= \frac{98.17}{11,264.68} \\ &= 0.87\% \text{ and so on for others.}\end{aligned}$$

**Calculation of Non-performing Assets to Total Loan and advances of  
Annex 4:  
Selected Sample Banks**

**NPL to Total Provision**

*(In Rs.Million)*

Year	KBL			MBL			NIC		
	Total provision	NPL	Ratio (in %)	Total provision	NPL	Ratio (in %)	Total provision	NPL	Ratio (in %)
<b>2005/06</b>	115.93	64.35	180.16	78.15	16.92	461.88	246.2	179.55	137.10
<b>2006/07</b>	133.42	66.12	201.78	190.05	85.17	223.14	187.3	101.14	185.14
<b>2007/08</b>	187.29	152.48	122.83	321.75	92.92	346.27	200.7	98.17	204.40
<b>2008/09</b>	201.91	64.54	312.84	468.45	302.85	154.68		144.77	27.29
<b>2009/10</b>	200.16	75.51	265.07	682.74	347.57	196.43		92.49	19.18
<b>Mean</b>			<b>16.08</b>			<b>313.71</b>			<b>151.47</b>

*Source: Annual Reports*

**Annex-5**

**Non-Performing Assets to Total Assets Ratio**

*(In Rs Million)*

Year	KBL			MBL			NIC		
	NPA	Total assets	Ratio (in %)	NPA	Total assets	Ratio (in %)	NPA	Total assets	Ratio (in %)
<b>2005/06</b>	64.35	9010.28	0.71	16.92	9069.83	0.19	179.55	10383.6	1.73
<b>2006/07</b>	104.73	11918.31	0.55	85.17	10807.62	0.79	101.14	11678.83	0.87
<b>2007/08</b>	190.23	15026.60	1.01	92.92	12498.55	0.74	98.17	15238.74	0.64
<b>2008/09</b>	70.54	18538.6	0.38	302.83	17490.8	1.73	144.77	18751.1	0.77
<b>2009/10</b>	79.44	20522.5	0.39	347.57	20678.8	1.68	92.49	20309.2	0.45
<b>Mean</b>			<b>0.61</b>			<b>1.02</b>			<b>0.89</b>

*Source: Annual Reports*

**Annex-6**

**Return on Total Loan and Advances**

*(In Rs. Million)*

Year	KBL			MBL			NIC		
	Net profit	Loan and advances	Ratio (in %)	Net profit	Loan and advances	Ratio (in %)	Net profit	Loan and advances	Ratio (in %)
<b>2005/06</b>	103.67	6891.86	1.5	134	6068.43	2.21	96.59	6655.96	1.45
<b>2006/07</b>	170.26	8929.01	1.91	74.09	7129.89	1.04	158.48	8941.4	1.77
<b>2007/08</b>	174.93	11335.09	1.54	85.02	8642.32	0.98	243.06	11264.68	2.16
<b>2008/09</b>	317	14795.4	2.14	123.3	12984.5	0.95	317	13916.2	2.28
<b>2009/10</b>	251	14966.1	1.68	7.33	14927.5	0.05	450	12929.6	3.48
<b>Mean</b>			<b>1.75</b>			<b>1.05</b>			<b>2.23</b>

Source: Annual  
Repors

**Annex 7**

**Calculation of the sum values of KBL**

<b>X<sub>1</sub></b>	<b>X<sub>2</sub></b>	<b>X<sub>3</sub></b>	<b>X<sub>1</sub>X<sub>2</sub></b>	<b>X<sub>2</sub>X<sub>3</sub></b>	<b>X<sub>3</sub>X<sub>1</sub></b>	<b>X<sub>1</sub><sup>2</sup></b>	<b>X<sub>2</sub><sup>2</sup></b>	<b>X<sub>3</sub><sup>2</sup></b>
16.59	0.93	180.16	15.43	167.55	2988.9	275.23	0.86	32457.6
22.7	0.74	201.78	16.8	149.32	4580.4	515.29	0.55	40715.2
16.35	1.35	122.83	22.07	165.82	2008.3	267.32	1.82	15087.2
22.04	0.44	312.84	9.7	137.65	6895	485.76	0.19	97868.9
24.24	0.51	265.07	12.36	135.19	6425.3	587.58	0.26	70262.1
<b>X<sub>1</sub> = 101.92</b>	<b>X<sub>2</sub> = 3.97</b>	<b>X<sub>3</sub> = 1082.68</b>	<b>X<sub>1</sub>X<sub>2</sub> =76.36</b>	<b>X<sub>2</sub>X<sub>3</sub> = 755.52</b>	<b>X<sub>3</sub>X<sub>1</sub> = 22897.82</b>	<b>X<sub>1</sub><sup>2</sup> = 2131.18</b>	<b>X<sub>2</sub><sup>2</sup> = 3.69</b>	<b>X<sub>3</sub><sup>2</sup> = 256390.97</b>

**Annex 8**

**Calculation of the sum values of MBL**

<b>X<sub>1</sub></b>	<b>X<sub>2</sub></b>	<b>X<sub>3</sub></b>	<b>X<sub>1</sub>X<sub>2</sub></b>	<b>X<sub>2</sub>X<sub>3</sub></b>	<b>X<sub>3</sub>X<sub>1</sub></b>	<b>X<sub>1</sub><sup>2</sup></b>	<b>X<sub>2</sub><sup>2</sup></b>	<b>X<sub>3</sub><sup>2</sup></b>
18.74	0.28	461.88	5.25	129.33	8655.63	351.19	0.08	213333.13
9.02	1.19	223.14	10.73	265.54	2012.72	81.36	1.42	49791.46
10.35	1.08	346.27	11.18	373.97	3583.90	107.12	1.17	119902.91
8.33	2.33	154.68	19.41	360.40	1288.48	69.39	5.43	23925.90
4.96	2.32	196.43	11.51	455.72	974.29	24.60	5.38	38584.75
<b>X<sub>1</sub> = 51.4</b>	<b>X<sub>2</sub> = 7.2</b>	<b>X<sub>3</sub> = 1382.4</b>	<b>X<sub>1</sub>X<sub>2</sub> = 58.07</b>	<b>X<sub>2</sub>X<sub>3</sub> = 1584.95</b>	<b>X<sub>3</sub>X<sub>1</sub> = 16515.03</b>	<b>X<sub>1</sub><sup>2</sup> = 633.66</b>	<b>X<sub>2</sub><sup>2</sup> = 13.47</b>	<b>X<sub>3</sub><sup>2</sup> = 445538.15</b>

**Annex 9**

**Calculation of the sum values of MBL**

<b>X<sub>1</sub></b>	<b>X<sub>2</sub></b>	<b>X<sub>3</sub></b>	<b>X<sub>1</sub>X<sub>2</sub></b>	<b>X<sub>2</sub>X<sub>3</sub></b>	<b>X<sub>3</sub>X<sub>1</sub></b>	<b>X<sub>1</sub><sup>2</sup></b>	<b>X<sub>2</sub><sup>2</sup></b>	<b>X<sub>3</sub><sup>2</sup></b>
16.10	2.70	137.10	43.47	370.17	2207.31	259.21	7.29	18796.41
24.01	1.13	185.14	27.13	209.21	4445.21	576.48	1.28	34276.82
25.75	0.87	204.40	22.40	177.83	5263.30	663.06	0.76	41779.36
27.83	0.90	27.29	25.05	24.56	759.48	774.51	0.81	744.74
34.30	0.70	19.18	24.01	13.43	657.87	1176.49	0.49	367.87
<b>X<sub>1</sub> = 127.99</b>	<b>X<sub>2</sub> = 6.30</b>	<b>X<sub>3</sub> = 573.11</b>	<b>X<sub>1</sub>X<sub>2</sub> = 142.06</b>	<b>X<sub>2</sub>X<sub>3</sub> = 795.19</b>	<b>X<sub>3</sub>X<sub>1</sub> =13333.18</b>	<b>X<sub>1</sub><sup>2</sup> =3449.75</b>	<b>X<sub>2</sub><sup>2</sup> =10.62</b>	<b>X<sub>3</sub><sup>2</sup> = 95965.21</b>