

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Banking sector has been playing significant role in the economic development of the country. Commercial banks are one of the vital aspects of this sector which deal in the process of channelizing the available resources in the needed sectors. It is the intermediary between the deficit groups and surplus groups of the financial resources. Financial system contains two components viz depository financial institutions and non-depository financial institutions. Commercial banks, development banks and finance companies are the examples of depository financial institutions whereas employee provident fund, insurance companies etc. are the examples of non depository financial institutions. All the economic activities are directly or indirectly channeled through these banks and financial institutions. People keep their surplus money as deposits in the bank and hence the bank provides such funds to finance on the industrial activities in the form of loans and advances.

Bank acts as an intermediary role between the surplus and deficit group. These institutions accept deposits and provide loans and advances to those who are in need. They make the flow of investment easier. Banks collect the money from the surplus unit (savers) and lend to deficit unit (users). Banks raises funds primarily by accepting deposits and these collected funds are used mainly to advance loans.

1.1.1 Commercial Banks

Commercial bank is also known as the *financial department store* because it satisfies the broadest range of financial service needs in the economy. Commercial bank deals with other people's money. They have to find ways of keeping their assets liquid so that they could meet the demands of their customers. Commercial Bank Act 1975 A.D. (2031 B.S.) defined, "A commercial bank is one which exchange money, deposits money, accepts

deposits, grant loans and performs. Commercial banking functions which are not a bank meant for co-operative, agriculture, industries or for such specific purpose.”

The main objective of the bank is to collect the idle fund, mobilize them into productive sectors and helps for the overall economic development of the country. Its main functions are accepts deposits and grants loan, exchange, and purchase and discount bill for promissory Notes, exchange foreign currency, to provide loan, agency function, overseas trading services, information and other services. Commercial banks earn profit by proper mobilization of their resources .Many commercial banks have been established to provide a suitable service, according to their customers. Therefore, we cannot deny the role of bank in developing an economy. It pools the funds scattered in the economy and mobilizes them to the productive sectors.

The return that the banks enjoys on deposit mobilization through loans and advances is very attractive which is up to 60-70% of its revenues but they do not come with free of cost and free of risk. There is a risk inherent in lending portfolio. Banking sector is exposed to number of risks like market risk, interest rate risk, liquidity risk, borrower’s risk etc. Among these many risks, the bank faces one of the most critical is the borrower’s risk—the risk of nonpayment of the disbursed loans and advances. As big portion of deposit fund is invested in the form of loans and advances, the banks are expected to support their legal communities with an adequate supply of credit for all business and consumer activities and to price them reasonably in line with competitively determined interest rate. Indeed, making loans is the principle economic function of banks to fund consumption and investment spending by business individuals and unit of government. In making loans, banks take almost care in analyzing the creditworthiness of the borrowing customers to ensure that the interest and the principle amount on loans are timely recovered without much trouble. In spite of bank’s precaution on providing loans and advances, banks do not recover a certain percentage of its loans and advances on maturity. These loans fall under the category of nonperforming assets (NPA).

NPA is defined as a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The nonperforming asset is therefore not yielding any income to the lender in the form of principal and interest payments. It is a loan asset whose recovery (principal and interest) has been difficult for the bank and financial institutions for whatever reasons. In other words, a loan from which repayment of principal or interest is

not forthcoming as per the facilities agreement at as demanded by the bank. In simple terms, NPA is defined as the bad debt which cannot generate productivity to the banks. NPA directly influences the financial position of any bank and financial institutions. NPA could wreck banks' profitability both through a loss of interest income and write off the principle loan amount. Performance in terms of profitability is a benchmark for any business enterprises including the banking industry. 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. Hence, it is important that a research to be done to study the impact of nonperforming assets.

Performing assets are those that duly repay principle and interest to the banks. These assets constitute the primary sources of income to the banks. Banks are willing to lend as much as possible but they have to be careful about the safety of such loans as loans are risky assets.

Nepal Rastra Bank (NRB) has directed all the commercial banks to classify their loans and advances into four categories based on aging. The four categories being:

1. Pass/ Good

Loans and advances whose principal amounts are not past due and past due for a period up to three months are included in this category. These are classified and defined as performing loans.

2. Substandard

All loans and advances that are past due for a period of three months to six months are includes in this category.

3. Doubtful

All loans and advances which are past due for a period of six months to one year are included in this category.

4. Loss/Bad

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

Loans 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 remind that most of the bank failures in the world due to shrinkage on the value of the loans and advance. Hence, loan is known as risky assets. Risk of non-repayment of loan is known as credit risk or default risk.

Credit risk is the likelihood that a debtor or financial instrument issuer is unwilling or unable to pay interest or repay the principal according to the terms specified in a credit agreement resulting in economic loss to the bank. Credit risk also refers the risk of negative effects on the financial result and capital of the bank caused by borrower's default on its obligations to the bank. Credit risk is the major risk that banks are exposed during the normal course of lending and credit underwriting. Credit risk arises from non-performance by a borrower. For most banks, loans are the largest and most obvious source of credit risk; however, credit risk could stem from activities both on and off balance sheet. It may arise from either an inability or an unwillingness to perform in the pre-committed contracted manner. In a bank's portfolio, losses arise from outright default due to inability or unwillingness of a customer or counter party to meet commitments in relation to lending, trading, settlement and other financial transactions. Performing loans have multiple benefits to the society while nonperforming loan erode even existing capital.

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

➤ **Relating to Collateral**

All collateral used to back loans and advances shall be adequate to cover up the principal and interest and shall also be legally secured. In the event of non- realization of principal and interest of loan there must be no difficulty in acquiring the title of the collateral asset.

➤ **Additional arrangement in respect of Pass Loan**

Loans and advances fully secured by gold, silver, FDR and non government securities or an NRB bond is placed as security of aging. Loans aging FDRs of other bank shall also qualify for inclusion under pass loan.

➤ **Additional Arrangement in Respect of Loss Loan**

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

- i. No security at all or security that is not in accordance with the borrower's agreement with the bank.
- ii. The borrower has been declared bankrupt.
- iii. The borrower is absconding or cannot be found.
- iv. Purchased or discounted bills are not realized within 90 days from the due date.
- v. The credit has been used for the purpose originally intended.
- vi. Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process under litigations.
- vii. Loan provided to the borrower included in the blacklisted and where the CIB blacklists the borrower.

➤ **Additional Arrangement in Respect of Term Loan**

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

In the event of conversion of contingent liabilities of the bank (e.g. letter of credit, immature guarantees) into the liability of the bank such amount becomes recoverable from the customers. Hence, such amounts shall also be classified as per the classification norms applicable to loans and advances and accordingly with requisite provisioning.

➤ **Loan Loss Provisioning**

Loan loss provision is the accumulated provision as a safeguard to cover possible losses. It means that it is accumulated provisioning fund which is used as safety fund to cover future losses. It is expected provision fund.

Loan loss provision set aside for performing loan is defined as "General loan loss

provision “and loan loss provision set aside for non performing loan is defined as “Specific loan loss provision” where the banks provide for loan loss provisioning in excess of the proportion as requires under the directives of NRB, the whole amount of such additional provision may be in the general loan loss provision under the supplementary.

The loan loss provisioning, on the basis of the outstanding loans and advances and bills purchases classified as per this directives, shall be provided as follows:

Classification of loan	Loan loss provision
Pass	1 percent
Substandard	25 percent
Doubtful	50 percent
Loss	100 percent

1.2 Focus of the Study

Loans and advances are the most profitable of all the assets of the banks. These assets constitutes primary source of income to banks. As a business institution, a bank aims at making huge profits and is willing to lend loans and advances for the certain predetermined fixed period or maturity period. While lending loans advances the bank has to be careful about the safety of such loans. The borrowers must repay the loans by the maturity periods or expiry date but there is no certainty that all the loans are recovered within the maturity date. Loans that cannot be recovered even after its maturity remain as non performing assets of the bank. In Nepal, increasing Nonperforming assets (NPA) is major problem faced by the Nepalese banks.

Credit Information Bureau (CIB) was established in 14th May, 1989 to function as an intermediary between banks and financial institutions for credit information whereby customers availing credit facility of rupees one million and above and not repaying the loans within the stipulated time or violating other terms and condition of the credit would be listed in the blacklist. On June 31, 2012, altogether 2,451 borrowers are blacklisted by CIB. These loans turn to NPA for the banks and financial institutions. Hence, in past few years, banks are facing the problem of increasing NPA due to default of the disbursed loan. Even two national commercial banks namely Nepal Bank Limited and Rastriya

Banijya Bank have nonperforming assets to the extent of more than 10%. Overall, NPAs of Nepalese banking system has been adversely affecting on their sound financial position.

Going through the old provision of directives, it was seen that the loans classification and provisioning norms direct the banks to classify the loans into six different categories. However, as the directives of Nepal Rastra Bank issued on October, 2001, the banks are required to categorize the loans into four different categories. Besides this, as per the old provision for loans to be bad, time period of the past due was five years but with the new directives, the past due of the loans to be bad, is three years or more. Similarly, the past due period of the loans to categorized under doubtful loans category has been reduced from one year to five years to one year to three years. This means that the previous categorized doubtful loans will now be a bad loans and with no change in the percentage of the provision to be made. Hence, there may be an increase in the provisioned amount. Subsequently, the profit might come down. Ultimately, the shareholder may end up getting lesser dividends or no dividend at all.

Increasing nonperforming assets is one of the emerging problems of Nepalese commercial banks. This study is mainly focused on nonperforming loans or assets of selected commercial banks. It studies the ratios like loans and advances to total assets, loans and advances to total deposit, nonperforming loans to total loans and advances, provision held to nonperforming assets, which indicates the performance and provides comparable forum on nonperforming assets. It also tries to shows the effects on profitability of commercial banks and related NRB directives, which is concerned towards the rendering loan and loan loss provision. The total NPA of Nepalese commercial banks are growing rapidly and it is the main cause to poor performance of banks. In this study, the NPA of commercial banks are presented, analyzed, summarized and stated findings and recommendation.

1.3 Statement of the Problem

Financial institutions assist in the economic development of the country. Being financial institution, commercial banks play significant role by collecting scattered surplus funds and deploy these funds in to the productive sectors as the investment. Economic development of the country is directly related to the volume of investment made and

return obtained through it by the banks. Investment problem has become very serious for the least developed country like Nepal because of lack of sound investment policy of commercial banks.

Many of the Nepalese commercial banks have not been formulated their investment policy in an organized manner. The implementation of policy is not effective. The credit extended by the commercial bank to agriculture and industrial sector is not satisfactory to meet the present growing need. Nepotism and political pressure also effects the investment decision of the commercial banks. Granting loan against insufficient deposit, overvaluation of goods pledged, land and building mortgaged, risk averting decisions regarding loan recovery and negligence in recovery of overdue loan are the results of unsound investment policy sighted in the banks.

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 improve the profitability as well as the overall financial performance of an organization by the help of the best utilization of resources.

Commercial bank's investment has been found to have lower productivity due to lack of supervision regarding whether there is proper utilization of their investment or not. Lack of farsightedness in policy formulation and absence of strong commitment towards it is also increases this problem. The rules and regulations are only the tools of NRB to supervise and monitor the financial institution.

Currently, the banking sector is facing various problems. One of them, the banking has been becoming a victim of increasing nonperforming assets (NPAs). NPAs are one of the serious problems faced by the commercial banks. Due to instable political condition, insecurity and other many factors, industries of 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 nonperforming assets (NPAs) and this issue is becoming more and more unmanageable. The main focus of the statement of the problem is related to the NPAs of the commercial banks.

This research has been conducted to find out the solution of following problem:

- i. How significant effect does NPA has on overall performance of the banks?
- ii. How significant effect does NPA has on profitability of the banks?
- iii. Are NRB directives of priority lending helping in increasing NPA of the commercial banks in Nepal?
- iv. Does auctioning NPA or creating it to NBA helps to solve NPA problem in banks? Does it improve financial status of banks?
- v. Is provisioning loan works as cushion for possible loss or is it an extra burden for banks?

1.4 Objectives of the Study

The major objective of this research is to examine the level of nonperforming assets (NPAs). The specific objectives are;

- To assess the level of NPA in different Nepalese Commercial banks, to analyze the impact of nonperforming assets in Nepalese Commercial Banks.
- To evaluate the proportion of nonperforming loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- To study the internal and external factors those influence the proper management of NPA.
- To find out whether the NPA guidelines are followed or not in making provision related to NPAs., to provide suggestions and recommendations to reduce the level of NPA

1.5 Significance of the Study

NPA is defined as a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The nonperforming asset is therefore not yielding any income to the lender in the form of principal and interest payments. It is a loan asset whose recovery (principal and interest) has been difficult for the banks and financial institutions for whatever reasons. In other words, a loan from which repayment of principal or interest is not forthcoming as per the facilities agreement at as demanded by the bank. In simple

terms, NPA is defined as the bad debt which cannot generate productivity to the banks. NPA directly influences the financial position of any bank and financial institutions. NPA could wreck banks' profitability both through a loss of interest income and write off the principle loan amount. Performance in terms of profitability is a benchmark for any business enterprises including the banking industry. As legally banks are not allowed to book income on such accounts and at the same time banks are forced to make provision on such assets. Hence, it is important that a research to be done to study the impact of nonperforming assets.

The success and prosperity of the bank heavily depends upon the successful implementation of their investment. Good investment policy of the bank has positive impact on economic development of the country and vice versa. Increasing nonperforming 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 the 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 know about the non-performing assets of selected Nepalese commercial banks such as Everest Bank Limited (EBL), Himalayan Bank Limited (HBL) and Nepal Investment Bank Limited (NIBL) and comparative study of nonperforming assets of selected commercial banks.

1.6 Profiles of the Selected Banks

➤ Everest Bank Limited (EBL)

Overview

Everest Bank Limited (EBL) was established in 18th October, 1994. It is the joint venture bank and is tied up with **Punjab National Bank (PNB), India** which holds 20% equity of the bank.

Corporate Vision

- To position it as a progressive & customer friendly bank providing financial and other related services.
- To cater to various segments of society using advanced technology.
- To be committed to excellence in corporate values.

Corporate Mission

- To provide excellent professional services & improve its position as a leader in the field of financial related services.
- To build & maintain a team of motivated and committed workforce with high work ethos.
- To use the latest technology aimed at customer satisfaction & act as an effective catalyst for socio-economic developments.

Networks

The bank has 47 Branches, 60 ATM Counters and 22 Revenue Collection Counters till mid of August, 2012 across the country till mid of August, 2012.

➤ **Himalayan Bank Limited (HBL)**

Overview

Himalayan Bank was established in January 18, 1993 in joint venture with **Habib Bank Limited, Pakistan.**

Corporate Vision:

Himalayan Bank Limited holds of a vision to become a **Leading Bank of the country** by providing premium products and services to the customers, thus ensuring attractive and substantial returns to the stakeholders of the Bank.

Corporate Mission:

The Bank's mission is to become preferred provider of quality financial services in the country. There are two components in the mission of the Bank; **Preferred Provider and Quality Financial Services**. HBL believes that the mission will be accomplished only by satisfying these two important components with the Customer at focus. The Bank always strives positioning itself in the hearts and minds of the customers.

The Bank's Objective:

To become the Bank of first choice is the main objective of the Bank.

Networks

The bank has 40 Branches till mid of August, 2012.

➤ **Nepal Investment Bank Limited (NIBL)**

Overview

Nepal Investment Bank Ltd. (NIBL), previously **Nepal Indosuez Bank Ltd.**, was established in 27th February, 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was **Credit Agricole Indosuez**, a subsidiary of one the largest banking group in the world. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

Corporate Vision

To be the most preferred provider of Financial Services in Nepal.

Corporate Mission

- To be the leading Nepali bank, delivering world class service through the blending of state-of-the-art technology and visionary management in partnership with competent and committed staff.
- To achieve sound financial health with sustainable value addition to all our stakeholders.
- Commitment to do this mission while ensuring the highest levels of ethical standards, professional integrity, corporate governance and regulatory compliance.

Networks

The bank has 41 Branches and 69 ATM Counters till mid of August, 2012.

1.7 Limitations of the Study

This study is about the analysis of nonperforming assets of Everest Bank Limited, Himalayan Bank Limited and Nepal Investment Bank Limited. Every research has its own limitation, which are as follows:

- The study is mainly based on secondary data collected from the banks
- Research based on secondary data may be far from accuracy due to its inherent character.
- A whole study is based on the data of five years period i.e. from fiscal year 2006/07 to 2010/11 and hence the conclusion drawn confines only to the above period.
- Only three banks are taken for the study i.e. Everest Bank Limited, Himalayan Bank Limited and Nepal Investment Bank Limited
- There are many factors that affect investment decision and valuation of the firm. However, this study concentrates on only those factors, which are Deposit, Loan and Advances, Non Performing Assets, Loan Loss Provision, Total Assets and Net Profit.

1.8 Organization of the Study

➤ Chapter -I Introduction

This chapter generally covers the general background regarding the impact of nonperforming assets of joint venture bank. And it includes focus of study, statement of problem, objectives of study, significance of the study and limitation of the study.

➤ Chapter – II Review Of Literature

It discovers what other research in the area of nonperforming assets has covered and left over in this regard. It avoids needless duplication of research effort. While reviewing literature, various experts, bankers and NRB rules and regulation are being considered.

➤ Chapter – III Research Methodology

Descriptive as well as analytical research methodology is being used to carry out this study. Since the study of impact of non-performing asset is a vague subject, appropriate methodology are adopted to analysis the achievement made so far in the two largest banks out of 32 commercial banks.

➤ Chapter – IV Data Presentation And Analysis

This chapter analyzed the impact of non-performing assets in quantitative approaches. Various financial tools like ration analysis and statistical tools like standard deviation mean and co-relation analysis have been used. Beside these, qualitative improvements, which cannot the quantified, are also the part of analysis.

➤ Chapter – V Summary, Conclusion and Recommendations

Based on above analysis, achievement in terms of quality will be traced after the analysis. The needful recommendation will be cited to get rid of any shortcomings and borrowings.

CHAPTER - II

REVIEW OF LITERATURE

Research is a continuous process and it is never ending. The procedures and the findings may change but research continues. So, for analyzing the data and to find something new a researcher must review and know if there are any studies ahead or not. The purpose of reviewing the literature is to develop some expertise in one's area, to see 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 importance of review of literature:

This chapter is related to examine and review some related to books, articles, published and unpublished different economic journals, bulletins, magazines, newspapers, and web sites.

This chapter is divided into following parts:

- i. Conceptual framework
- ii. Review of related studies
 - Review of related articles and journals
- iii. Research gap

2.1 Conceptual Framework

Tatan (2001) has pointed out some aspects regarding industrial sickness and their NPA. It is necessary for the banker to study the statement of accounts received from units so as to be able to notice the signs of sickness in advance. The banker should also keep a close watch over the operations in the accounts of the borrowers to notice any signal of sickness. In general, an industrial unit is considered sick if; it incurs cash loss for more than two years and likely to do so in the future; if a current ratio is less than 1:1 and there is an erosion of paid up capital; there are reasons to suspect that the industrial unit may become sick. If the unit is not likely to turn out to become profitable even after the infusion of more funds then the industrial unit is classified as sick. A close watch on the operations in the account of the industrial unit can also reveal the sign of industrial sickness. This can be noticed from frequent overdrawing from the account, return of bills

purchased or discounted, failure to route the sales of goods through the account, drawing of accommodation bills, delay in submission of stock statement, return of goods as defective indicates the sign of sickness and banker should be put on guard.

In his book, he has highlighted some guidelines to deal the industrial sickness. Once industrial sickness is noticed then there should be find out the clues to deal the sick units. This depends upon the analysis on the factors responsible for industrial sickness. The bank would revive the industrial sick units through an appropriate program provided to the bank. The banks are convinced in course of time that the industrial units are likely to be viable. Therefore, the bank should obtain technical, economic and financial feasibility reports prepared by experts. On the basis of their reports, an assessment can be made to find out whether the unit could be viable or not. If it seems technically feasible and economically viable then additional finance is provided to the unit. The bank can prepare plan to provide the necessary working capital or term finance to the unit either in its own or jointly with any financial institution. If it is found that the unit is otherwise viable in all respect but management is not competent, the bank may consist on a change of management or provide assistance to manage the unit. It is not always possible to revive all sick units. If the units have become insolvent or there is no chance of success, mere extra funds put into the units would not help. It would, therefore, be advisable to start recovery proceeding or to take the unit into liquidation. If unit are very large, sometimes the government may take over the management of such units or nationalize them. It may be advisable to grant some concessions to the units for their rehabilitation. The concession may be in the form of reduced margin requirements, concessional rate of interest, rescheduling of term loan installment and relaxation of usual norms for fresh working capital finance.

Vaidya (1998) stated about the early warning system for investment risk management. In this book, the author has also envisaged number of examples about crisis created by banks in the world. As per his view, banking sector cannot ignore any sector of the economy. There is vital role of financial institution in regards to bad accounts.

In this book, he has cited that “Nepalese financial institutions have made significant progress especially during this decade, although they are still far behind the development market. 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 the 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 that the collection of the loans, on the whole, private sector banks has lower nonperforming assets (NPA) than their public sector counterparts. NPAs are the loans that cannot be or have 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. With the growing number of financial institutions, market economy, economic liberalization etc. industrial sickness in Nepal has phenomenal proportions in the last few years. Much of the amounts of almost all leading financial institution are blocked in sick company which can be witnessed from the auction notice published regularly in newspaper. Credit risk is the first risk, which keeps the bank moving in the market. The loans provided against the securities result in losses that can eventually erode bank's capital. Because owner's capital is usually no more than ten percent of the volume of loans and risky securities, and often much less than that, it cannot absorb too many defaults on loans and securities before bank capital simply becomes inadequate to absorb further losses. At this point, the bank fails and will close unless the regulatory authorities elect to keep it afloat with government loans until a buyer can be found or until the bank becomes viable by reducing its nonperforming assets.”

“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 failures. The follow up machinery to enquire into the reasons for the default is generally slow in movement or maximum time would have already consumed when banks normally acknowledge the failure of the projects. The consequence is that by the time, lending institution is able to ascertain the causes for the first default, 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 arose from the project failure and sick units, that is, nonperforming loans, the government needs to do a number of things and fast, it must bring a broad rules for poor financial institution, transferring bad loans to bridge bank or loan recovery agency, remove, any

non performing loans from even healthier bank's balance sheets, beef up regulation, supervision and disclosure, improve ability to banks to sell the collateral that backs soured loans and recapitalize the banking system."

Shekher & Shekher (1998) have expressed different aspects of loan and advances. In their view, loan and advances are the most profitable banker's earnings are mainly derived from these assets.

"The item 'advance and loan' comes next in the order of liquidity. For all practical purposes, we may say that they are not shift able. Of course, this is the most profitable asset and the profit is mainly derived from these assets. As rule, a commercial banker will generally lead only for short-term commercial purposes and the bankers are reluctant to disburse long term loan. Such loans are provided by specialized agencies like industrial banks. The reason in support of this view is that in the case of long-term loans, the bankers 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. It provides the meaning of the quotation "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 the bankers are making loan and advances. Before granting a secured loan, they should carefully consider the margin of safety offered by the security, possibility of fluctuation in its values and shift ability. 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, are 'character, capacity, and capital of the customer.

Dahal & Dahal (2002) stressed 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 (CAMELS). Almost all the government banks are running at loss. 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 nonperforming assets (NPAs). Similarly, banks do not 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 implement its directives strictly so that other banks avert the fate of NBL.

"Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Though loans are risky assets, a bank invests most of its resources in granting loans and advances. If an individual bank has around 10% nonperforming 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 depositor's money and increase in the returns to the shareholders. Since the loan is a risky asset, there is inherent risk in every loan. However, the bank should not take risk above a certain degree irrespective of returns prospect."

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

2.1.1 Loan and Advances

The main function of the commercial banks is to collect the funds from the surplus group and utilize them by advancing loan to the deficit group. Making loan is the principal economic function of banks to fund consumption and investment spending by business, individuals and government. Loan is the most profitable assets of bank. Loans and advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loans 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, demand loan, discounting bill of exchange etc. Loan is granted against adequate security. The banks should have to take safeties on loans and advances at the time of lending but not only on profitability. At the time of lending the loan, the bank should have to study the lending sectors and make a sound policy for rendering loan. The policy should contain the credit deposit ratio (CDR) that the bank has predetermined with regard to NRB directives. CD ratio is very much influenced by the behaviors of bank's liabilities. The higher the volatile deposit's and volatile borrowing lower the volume of

loan and vice versa.

2.1.2 Performing loan

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

2.1.3 Non Performing Assets/Loan

One of the most emerging problems of the commercial banks is to the management of nonperforming assets/loan. In simple terms, NPA is defined as the bad debt which cannot generate productivity to the banks. NPA directly influences the financial position of any bank and financial institutions. NPA could wreck banks' profitability both through the loss of interest income and write off the principle loan amount. If any advances or credit facilities granted by bank to a borrower becomes nonperforming. Then the bank will have to treat all the advance/credit facilities granted to that borrower as nonperforming 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 payments are due. According to current banking Act, the banks have to make provision for bad and doubtful debts. After deducting the bad and doubtful debts from the nonperforming assets, net nonperforming assets can be achieved.

$NPA = (NPL + NBA + RNPL + SI + UA)$ 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) is 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 is not covered by the collateral after selling is known as non-banking assets (NBA). Nonperforming assets also includes the suspend interest. It is the interest which becomes receivable unutilized assets. Those investments which do not generate any cash or incomes to the bank are also nonperforming assets (NPAs).The proper management of those assets to generate income is known as management of nonperforming assets.

Increasing NPA is the emerging problem of the Nepalese commercial banks. In USA, more than 100 commercial banks were declared as unsuccessful (bankruptcy) from 1985 to 1990 and 27 banks from 1995 to 2001 due to higher NPAs. However, no Nepalese commercial banks face this type of problem till now but they have to take step towards it but Nepal Bikash Bank has liquidated due to inefficient management on recovering loan. For this, appropriate amount of bad and doubtful debts is made provision from their incomes/profits.

2.1.4 Factors Responsible for NPA

Since NPA is a serious problem for today's banking industry, it seems necessary to identify the factors that are responsible for it. The factors can be broadly classified into two aspects which are internal to the organization and external to the organization.

➤ Internal Factors

a) Management Inefficiency/Weakness

The following leads to management inefficiency and weakness:

- The major factor responsible for arising NPA is due to inexperience of over ambitious people
- There is faulty planning i.e. cost and time overruns
- Location error
- Lack of capital/equity
- Control of management in limited family/people group
- Wrong Credit analyst on cost of fund on deposits
- Faulty Marketing survey of clients
- Obsolete Technology

- The dishonest management of bank
- Conflict among Promoter
- Poor Industrial Relations
- The bank's attitude of dependence on few buyers
- The bank's policy like poor distribution network
- Due to high competition on Market (Inability to cope with cut throat competition)
- Long delivery at fixed prices

b) Financial Reasons

The other factors for arising NPA is financial reasons. The financial reasons may arise due to following points.

- Inflated valuation of the collateral
- Inadequate funds
- Unplanned expansion
- Diversion of funds
- Poor realization of book debts/receivable of the client
- Delay in recovering due to lack of prompt follow up
- Inability to identify loss/profit contributing product/areas/centers

c) Marketing Weakness

Other internal factors of arising NPA are due to marketing weakness of banks. There are certain factors of marketing weakness which are:

- Due to glut (excess supply/ availability) of fund in one area
- Due to excessive competition
- Due to demand recession-domestic and global
- Due to change in fashion and taste
- Due to weak marketing planning and strategy
- Because of the habit of Reactive-not proactive
- Inability to innovate the new product

➤ **External Factors**

a) **Government Policies And Actions**

The barriers arise by government policies are:

- Due to credit squeeze of government policies
- The government has implement the delayed decisions
- Due to regulated interest rates
- Because of priority/non-priority sector lending
- Withdrawal of subsidy
- Withdrawal of support price
- Government inaction-dumping of overseas product
- Foreign exchange control regulation
- Inconsistency in policies regarding capital investment/divestment

b) **Tax, Tariff, Custom Duties - Both Domestic and Foreign**

There are certain factors of tax, tariff and custom duties which are:

- Adverse change in tax, tariff, vat, custom duties
- Regional trade blocks
- Special duties e.g.; SAD(special additional duty)
- Quantity restriction etc by India

c) **Production Difficulties, Product Obsolescence**

The causes of NPA due to production obsolescence difficulties, product- obsolescence are:

- Irregular supply of raw material, power, fuel, water
- Natural calamities
- Lack of technological advancement
- Conflict of the borrower with the supplier/buyer
- Environmental regulations/Social responsibility
- Product obsolescence
- Change in custom, taste etc.

d) **Overall Non Conductive Industrial Environment/ Insecurity**

NPA due to non-conductive industrial environment / insecurity which are:

- Industrial unrest
- General insecurity
- War

e) **Unexpected Economic Downturn**

There is unexpected economic downturn like recession; drastically decrease in income of people etc.

2.1.5 Effect of NPA

NPA affects on the profitability, liquidity and competitive functioning of public and private sectors banks and finally the psychology of the bankers in respect of their disposition towards, credit delivery and credit expansion.

Increasing Nonperforming 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 Dass 2003:6**)

➤ **Internal Effect**

In the one hand, 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 due to which the profit of the bank decreases or may suffer losses. As a result, share capital also decreases and bank faces the problems of 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 their banking activities regarding the maintenance of capital adequacy ratio. For example, Nepal Development Bank Ltd has liquated. Likewise, Gorkha Bikash Bank Ltd., Nepal Share Markets Ltd. cannot take deposit from the customers.

When the nonperforming assets increase, the banks have to increase the amount of provision for doubtful debts and when the loan is repaid, that provision amount is added

to the profit. So, it has direct effect to the cash flow of bank. As a result, the profit of the bank has also affected.

➤ **External Effect**

The bank accepts deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with its interest, it becomes nonperforming assets and banks will not able to return the deposited amount to their customer. If the bank is unable to return the deposited amount, the bank has to take loan at a higher rate to pay deposits which reduces the profitability of bank. Also, it loses public faiths. Higher NPAs in banking sectors results negative effects on monetary system of the country.

A. Impact on Profitability

The NPAs has negative impacts on the profitability of the banks. Nonperforming assets are the idle assets of the banks which do not generate any return for the banks. Thus, NPAs reduce the profitability of the banks due to the becoming the idle resources. Due to this, it may result toward the loss of faith of customers.

B. Impact on the outlook of banker towards Credit Delivery

The psychology of the banks today is to insulate them with zero percent risk and turn lukewarm to fresh credit. This has affected adversely credit growth compared to growth of deposits, resulting a low C/D Ratio around 60% to 65% for the industry. It is evident that the existence of collateral security at best way to convert the credit extended to productive sectors into an investment against real estate but it will not prevent the account turning into NPA. Further, blocked assets and real estate represent the most non liquid security and NPA in such loans has the tendency to persist for a long duration.

C. 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 NPA would be forced to incur carrying costs on a non-income yielding assets. Other consequences would be

reduction in interest income, high level of provisioning, stress on profitability and capital adequacy, gradual decline in ability to meet steady increase in cost, increased pressure on net interest margin (NIM) thereby reducing competitiveness, steady erosion of capital resources and increased difficulty in augmenting capital resources. The lesser-appreciated implications are reputation risks arising out of greater disclosures on quantum and movement of NPAs, provisions etc. The non-quantifiable implications can be psychological like 'play safe" attitude and risk aversion, lower morale and disinclination to take decisions at all levels of staff in bank. Directive inputs and course direction came externally from NRB and Finance Ministry which were/are external to the day-to-day affairs and problems of the Nepalese banking industry. The system is not fully supporting promote initiative and talent, but bred corruption and nepotism. This is the scene of Nepalese banking which is struggling hard to transition from old primitive systems and values to modern professional business ethics and corporate good governance.

D. High Cost of Fund due to NPA

Genuine borrowers quite often 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 to be provided are come at a very high cost to compensate the lender's losses caused due to high level of NPAs. Therefore, corporate prefer to raise funds through commercial papers (CPs) where the interest rate on working capital charged by banks is higher.

E. Impact on Banks Scrip on Stock Exchange

In further of a report, the NRB has said that informational asymmetries arising from less onsite/off site inspection, declining performance and shooting NPAs weigh heavily on bank stocks. The NRB has 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."

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

i) Excess liquidity lending default

The banks in Nepal are faced with the problem of increasing liquidity in the system. Further, the Rastriya Banijya Bank (RBB) is increasing the liquidity in the system through various rate cuts.

Banks can get rid of its excess liquidity by increasing its lending but often inhibited 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 economic policy require for all banks to maintain minimum liquid and cash reserves. These are broadly classified into Cash Reserve Ratio (CRR) 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. As such, though in its 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 or obligor to 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 due to 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 accounting standard 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 leverage. This is because; high leverage is followed by high fixed interest charges, non- payment of which results into a default.

2.1.6 Loan Loss Provision

Every loan contains certain degree of risks. 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 is depended upon the level of NPAs and their quality. Increased portion of NPAs generate additional liability of resources to the financial institutions. In other word, higher the NPA higher will be the loan loss provision and vice versa. Low-grade loans needs 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 loan loss provision for different categories of loan as;

- Pass 1%
- Substandard 25%
- Doubtful 50%
- Loss loan 100%

2.1.7 Principles of Lending Loan and Advances

While disbursing loans, the banker has to operate within the principles of lending and at the same time the precautions should be taken. There are general principles to be born in mind by a banker while granting advances.

1. Liquidity

Liquidity implies the ability to produce cash on demand. A bank mainly utilizes its deposit for the purpose of advancing loans. These deposits are repayable on demand or on the expiry of a specific period. In either case, the banker must be ready to meet these liabilities whenever necessary.

2. Profitability

Banks are essentially commercial venture. It is true that excessive and unjustifiable profits can only be at the cost of the customers. Higher lending rates push up production costs of the borrower and in the ultimate analysis, adversely affects society in general. At the same time, the high net profits allow for allocation of income to capital and reserves which is essential for any bank to maintain its competitive viability and expand its lending operation. Also, the shareholders of the bank are entitled to reasonable dividend. All these indicate that there is sufficient profit in the lending operations.

3. Safety and Security

The banker should ensure that the borrower has the ability and willingness to repay the advances as per agreement. The banker should carefully consider the margin of safety if it seems unsecured. The repayment depends up on the creditworthiness of the borrower and guarantors. The banker should consider the character, capital, collateral, capacity and cash flow (popularly known as 5Cs) of the borrower and the guarantor.

4. Purposes

The banker has to carefully examine the purpose for which advance has been applied. The loan should be utilized in the same sector or area for which it is disbursed. There is always the possibility that the loan 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.

5. Social Responsibilities

Although the bank is profit venture, it should contribute to the society. The identification of priority sectors for the purpose of extending bank credit should be considered as a positive in the banking system. It shows effectively discharging its responsibility towards society. At the same time, this social responsibility should not deter the banks from paying adequate attention to the qualitative aspect of lending. Social responsibility increases bank's positive image toward the customers.

2.2 Review of Related Studies

2.2.1 Review of Articles /Journals

Chhetri (2057) stated that to provide connotation of the NPA and its potential sources, implication of NPA in financial sector in the South East Asian Resign. He has also given possible measure to contain NPA. "Loan and Advances of financial institution are mean to be serviced either part of principle of the interest of the amount borrowed in stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loans becomes non-performing assets. The book of the account with lending institution should be effectively operative by means of real transaction effected on the part of the debtor in order to remain loan performing".

As per his opinion, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as nonperforming only after it has been arrear for at least six 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 loanee. 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. The liability of credit institution does 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."

Tiwari (2004) stated that Nepal's financial sector is moving like a 'sinking boat'. According to him financial institution have failed in delivering beneficial services to needy people by developing credit giving centers in rural areas without which sustained economic growth is impossible. On the other hand, banks and financial institution have enough liquidity but they are finding it difficult to find suitable places for investment.

"Problem such as insecurity, lack of market research from banks, low investment opportunities, weak operational policies for carrying out financial transaction among others, have contributed to the problem of these sectors. Despite central bank's directives for regulating banks and financial institutions, private and government banks are functioning haphazardly. Nepal Bank Limited (NBL) and Rastriya Banijya Bank (RBB), the two largest banks occupy about 50 percent of the country's banking assets. An effective reform of these two is keys to improve performance of the whole sector. The process currently underway to reform these two institutions, despite paying huge amounts to foreign experts the expected result is not achieved. Besides, NBL and RBB, the nonperforming assets (NPA) of some private banks also very high. If the government and central bank allow the financial sector reforms to focus only on RBB and NBL, it might become a futile effort. The current management of RBB and NBL has not been able to

reduce their NPL even after two years which have crossed over 60%. Earlier the NPL was predicted at 30-35 percent. The central bank itself says that despite efforts NBL has high NPLs and negative capital of RS 9.75 billion”.

At last, he recommended that in order to create a well regulated, prudent, market oriented, competitive and strong financial system in Nepal, the government should look to build up on its indigenous strength to improve its efficiency.

Pradhan (2058) in his article '*NPA: Some suggestions to tackle them*' stated that unless the growth in NPA is kept in control, it has the potential to cause systematic crisis. He mentioned that a dream of globalization led to huge investment which unfortunately could not be utilized properly due to hesitant liberalization policies. Large corporate misused the credits and delayed payments and contributed indirectly for enhancing NPA ratio. He further argues that lack of vision in appraisal of proposal while loan sanctioning, reviewing or enhancing credit limits, absence of risk management policy of financing, concentration of credit in few group of parties and sectors, lack of coordination among various financiers. Indecision on existing out of bad loans for fear of investigating agencies like Special Police, CIAA and Public Accounts Committee of the Parliament have also contributed in what's ever measures to the worsening situation of NPA front. He further pointed out that most crucial reason for the increase in the NPA is the shabby and defaulter friendly legal system. Suggesting the remedy of NPA, he added that administrative system should strengthen, legal reforms should be made and assets Reconstruction Company should be formed. **Henderson (2003)** CEO of RBB, during his interview to new business age, agreed that the challenging target of RBB turnaround was restructuring and collection of NPA **Khadka, (2004)**, in his thesis entitled "Nonperforming assets of Nepalese Commercial Banks", has explained about the topic in which he had objectives to study and examine the level of NPA's in total assets, total deposits and total lending of commercial banks of the banking industry of Nepal. He also had studied whether the Nepalese commercial banks have been following the directives of NRB regarding loan loss provision for non-performing loans/assets or not. He had taken sample banks as Nepal SBI Bank Limited, Nepal Investment Bank Limited, Nepal Bangladesh Bank Limited, Bank of Kathmandu Limited, and NABIL Bank Limited. From his study, it was found that the limited seemed greater than all of the other banks. Similarly, Nepal SBI Bank and Bank of Katmandu stood at second and third position respectively. The position of NABIL Bank Limited seemed, to be quite satisfactory because, the bank had been reducing its NPA every year. NPA of Nepal Investment Bank stood at minimum

than that of all the other banks. From the study it was also found that none of the banks had been following the directives of NRB regarding the loan loss provision. Despite of high level of NPA the loan loss provision made by Nepal Bangladesh Bank seemed to be quite satisfactory than any of the other banks. Despite of the outstanding success in managing the NPA, the loan loss provision made by Nepal Investment Bank was not considerable. It meant the loan loss provision of Nepal Investment Bank is very less than the requirement.

Shrestha (2056), director of NRB has tried to highlight different aspects of credit risk management. As per his view, as the effective risk management is central to good banking, the tradeoff between risk and return is one of the prime concern of any investment decision whether long- term or short term. He concluded that “Effective credit risk management allows a bank to reduce risks and potential NPAs. Once a bank understands their risks and their costs, they will be determining their most profitable business and thus they can determine price of their products according the risk. Therefore, the bank must have an explicit credit risk strategy and support by organizational changes, risk management technique and fresh credit process and systems. There are some crucial areas that the management should focus on:

- Credit sanctioning and monitoring process
- Approach to collateral
- Credit risk arises from new business opportunities
- Credit exposures relative to capital or total advances concentrated on correlated risk factors.

Apart from these, the bank management should regularly review all assets quality issues including portfolio composition, big borrower exposures and development in credit management policy and process.” Improving risk management will not be easy or quick. However, Nepalese banker loves little choice. Hopefully, banks adopt good risk management practices and will be able to reap both Strategic and optional benefit.

The Kathmandu Post (2003, July 25 Page 6), in a title *Loan Loss Provision Rises Notably* the reporter had made an endeavor to highlight some facts and figures regarding loan loss provision of commercial banks. The banking sector is witnessing a huge surge in loan loss provisioning reserves lately. The increment is primarily a result of a directives issued by Nepal Rastra Bank (NRB) in 2001 that introduces stringent loan provisioning criteria for commercial banks. As per data recently released by the central

bank, that total loan loss provision in the country's banking sector increased from around Rs 8.75 billion in mid-April 2001 to Rs 13.18 billion in mid April 2003. The increment is over 51 percent. As per the latest NRB figures, a remarkable surge has been seen in loan provision of Nepal Bank Ltd (NBL). Against the provision of Rs 1.7million in April 2002, the loan provision amount surged to a whopping of Rs.7.33billion in a year" it further states that apart from the two technically insolvent government invested banks, loan provision of other joint venture private banks has also risen significantly and the notable increments seen in the loan loss provisioning amounts is due to the eight-point prudential directives that the central bank issued in mid 2001 to all commercial banks.

The reporter concluded that "The directives laid down stringent guide lines relating to loan loss provision to ensure a good health of the overall banking system. The directive requires loans to be provisioned to the extent of cent percent if payment is defaulted for one year. Likewise, the directives requires loans to be provisioned if the extent of 25 percent if payment is defaulted for over three months and 50 percent of the period default extent beyond six months. The earlier directive required progressive provisioning of loans, but allowed a maximum of three years, unlike the present system of just a year, for loans to be provisioned to the extent of cent percent."

The magazine named *The Boss* (2003), published with the title "***Unavailability of wider arrays or sophisticated banking product***" reported that Nepali banking sector is primarily focusing on plain vanilla banking product such as loans, deposits, letter of credits, guarantees, remittances, etc. There are value added products like funded-risk participation and private labeling in the trade finance areas, options and other derivative products in global market/treasury area and remittance securitization. In Nepal, most lucrative area is remittance. If our South Asian counterparts like Bangladesh, Pakistan, Shrilanka and India are aggressively using these products, there is no reason why we cannot replicate these products in Nepal.

Nepal does not have electronic clearing system for realization of cheques and drafts on a real time basis. On the treasury front, unavailability of dealing room at the central bank and electronic dealing screen at treasuries of banks can be considered another hindrance. Although few banks have offered internet banking services, we still have a long way to go. The report concludes the major problem that our banking sector is facing today, has been due to high percentage of nonperforming loans. The major cause for which is non

compliance of basic credit principles. Many other issues on non-compliance of corporate governance have come into light. Although, this sector is comparatively more professional and transparent than other sectors, still there are some major problems which we need to overcome.

A bank must be one-step further than its customers. It must collect all the relevant information that are required by the borrower for the establishment of a business and be rigid to give loan than to give his own money without any security. When a borrowing unit is not able to serve the debt from the source explored, the documentations are merely a decree to enforce legal action against him. Nevertheless, what gets realized when everything is lost. The bank should always keep in mind the formula Know Your Customers (KYC) before giving loans.

The security given by a borrower may be ample for the exposure. However, the borrower from other source of business may not be able to generate substantial earning to service the debt. Bank has the right to auction the property and liquidate the loan but in doing so realization from the auction of the property is always less than the value of the assets. This will serve neither the purpose of bank nor the borrower instead cause loss to both.

2.2.2 Review of Previous Studies

A study has done by *Bhattarai, (2006)* entitled with “*Nonperforming Assets (NPA) Management*”. According to him, a loan is a very easy term for a borrower when he has already taken and for a lender not availed. It is equally difficult for a borrower to avail and for lender to recover. From a banker’s view, it is just like a stone to roll down from the top of the hill while sanctioning but too difficult to roll back the same stone to the top of the hill while recovering. A loan not recovered within the given timeframe either in the form of interest servicing or principal repayment is called non-performing loan. There are other parameters as well to quantify a NPL. Security not to the extent of loan amount with specified safety margin, value of security not realizable, possession not as per the requirement of bank, conflict of charges are some of the reasons which cause difficulties while recovering the loan.

According to him, NPL of a bank is like a cancer in a human body, which will collapse the entire bank if not taken care in time. This is an important discipline in banking to

prevent the entire NPL or avoid situation for a loan to turn into NPL. Loan for banks is very essential to generate revenue for operational expenses as well as to provide return to the shareholders.

When a loan advanced from good money turns into a bad loan, the chances of shareholders return as well as the survival of the bank is at stake. Ailing banks cannot portray a better image in public. When a public loses the confidence on a bank and does not deposit, the bank will be in the verge of extinction. Therefore, deposits are the essence for a bank. A loan disbursed as good loan does not turn into bad overnight. It has certain course to turn into bad. An efficient bank management can recover the loan before turning it into bad and can save itself from the unwanted catastrophe

In conclusion, a borrowing may reflect one or all the above signals that may cause harm to the bank. There are few ways to protect bank from intentional defaulter but for those default caused by situations we can reschedule or restructure their facilities and help them to meet their debt obligation as per the cash flow they are having. Even an authentic loan that has been sanctioned with a good intention may turn into bad due to lack of proper management and carelessness. The bank will have to face heavy consequences in such a case. When a good loan, with all effort to protect it, turns into bad and the borrower's ability is not sufficient to repay it, he then tries to hide it from the bank and wants to be relieved temporarily. Such situations give some signals to the bank and these signals are called danger signals.

A study has done by *Mandala (2007)* in his thesis "*A Comparative Financial Performance Appraisal of Joint Venture Banks*" has studied primarily three joint venture banks i.e. NABIL, NGBL and Nepal Indosuez Bank Ltd. His main objectives is to find out the both banks, NGBL and NABIL have mobilized the debt funds in proper way for generating more return but Nepal Indosuez Bank (NIBL) could not mobilize as NABIL and NGBL. He has recommended that all the banks should provide their facilities in rural areas and encourage the small entrepreneur's development programs, play merchant role, mobilize the deposit funds in productive sectors and grant priority to the local manpower.

He has not attempted to show the investment policy and concentrated only on financial performance of JVBs, therefore it cannot represent the performance appraisal of JVBs. His study is comparative study of only three JVBs. His study period is up to FY 1997/98

and it cannot analyze the investment policy after this fiscal year.

A study done by *Silwal (2008)* entitled with “*Lending Policy of Commercial Banks in Nepal*” having following objectives:

- To analyze the role of commercial banks in its historical perspective
- To show the relationship between deposits and loan and advances
- To identify major weakness of lending policy of the commercial banks

The research was conducted mainly on the basis of secondary data. Findings of this research are summarized below:

- Effectiveness of lending policy is directly based upon a sound banking system. But due to geographical variation, transportation and other regional disparities, it is very difficult to expand branches in different rural areas. So, it can be said that commercial banks in Nepal are not playing an active role to utilize their sources collected from different sectors.
- By paying higher interest rate, the banks are increasing deposits, which in turn increase saving habits of the general people. Then the banks will be able to utilize these idle funds in productive channels. This type of business of commercial bank is really a necessary one in an agricultural country like Nepal, where public investment has limited capacity.

A study done by *Thapa (2009)* entitled “*Working Capital Policy of Manufacturing Public Enterprises in Nepal*” ought to sort out the problem of low economic performance and poor financial management in manufacturing public enterprises and examine whether or not there was any association between the various aspects of working capital policy in financial management and the poor financial management performance of manufacturing public enterprises and also the lack of appropriate assets mix policy in manufacturing public enterprises. There are following objectives;

- To operate with setting certain sales target.
- To make regular inspection to find out the excess or deficit of Current Assets

Major findings:

- i. Almost all selected manufacturing public enterprises had followed a moderate working capital approach. The holding of cash and receivables in relation to total asset was decreasing whereas the inventory was increasing.
- ii. The selected manufacturing public enterprises have sufficient liquidity.
- iii. Capacity utilization was the significant factor while sales, cash flow cycle and interest rate were not significant in working capital determinations.

A study has done by *Ghimire (2010)* entitled with “*Non Performing assets of commercial banks: Causes and effects*” in which he had the objectives to evaluate the impact of NPA on the profitability of the commercial banks. He also studied about the internal and external factors that affect the non performing assets to increase from the loan and advances. The internal factor influences on the effective management of the NPAs and its increment. The objective of his studies was also to find out very much important result from the survey. The study was able to find out the internal responsible factors that contribute turning good loan into bad loans, bad intention, weak monitoring and mismanagement were the most responsible factors. Similarly, weak legal provision and credit concentration were also found as the least preferred factors in turning good loans into bad loans. Some factors such as lack of portfolio analysis, not having effective credit policy and shortfall on security were identified as having average effect on NPA growth. In connection to the external factors, it had been found that recession, political and legal issues were more relevant factors in turning good loans into bad loan. Likewise, legal provisions for recovery as reasons for increment in NPA in Nepalese banks have been found as the factors having less impact. Supervision and monitoring system have been identified as average factors. It is therefore, can be generalized that economic and industrial recession and not having strong legal provision for loan recovery are the major external factors that have major contribution for the increment of NPA.

It has also been concluded in the study that Nepalese banks or financial companies gave much priority to trade sector for lending its resource. At the same time it was found that service sectors were not being given that much emphasis. Though these studies are found to be quite useful in their own side but the question of NPA and its cause as well as effect on various aspects in financial institutions is yet to be reviewed. This study has been based on the various contributing factors that increase NPA level in financial institutions in Nepalese perspective and its effect on profitability position of the financial institutions.

2.3 RESEARCH GAP

From the above study, it can be said that the NPA is one of the challenging problem of commercial bank in Nepal which is followed by increasing loan loss provisioning. It is found that some research in the related topic but no research was found in detail research and analysis on impact of nonperforming assets. This study will try to show the present issues, latest information on bank's NPA's and other ratios, data and real picture of loan advance of Nepalese Commercial Bank.

After reviewing the relevant literatures, the next chapter concentrates in the research methodology applied in the study.

CHAPTER - III

RESEARCH METHODOLOGY

Research is a systematic controlled empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomena. Research includes mainly two aspects; firstly, research investigations are sufficiently broad to a problem or creation of new knowledge; secondly, they explicitly recognize the systematic nature of the research process in which data are gathered recorded, analyzed and interpreted in an organized and systematic manner. The entire process based on the philosophies, principles and mechanism of research by which we attempt to solve problems or search for answers to questions are collectively known as the *research methodology*. The research methodology that is adopted for the present study is mentioned in this chapter which deals with research design, sources of data, data collection, processing and tabulating procedure and methodology. This research is a study about nonperforming assets of three leading commercial banks (Everest Bank Limited, Himalayan Bank Limited and Nepal Investment Bank Limited) of Nepal. It seeks to find out the facts about nonperforming assets and relationships by defining and redefining problems, formulating hypothesis, collecting, organizing and evaluating data, making deductions and conclusions to determine whether they fit the formulated hypothesis.

3.1 Research Design

A research design is an overall framework or plan for the collection and analysis of data. The research design serves as a framework for the study, guiding the collection and analysis of the data. The research design then focuses on the data collection methods, the research instruments utilized, and the sampling plan to be followed. Specifically research design describes the general plan for collecting, analyzing and evaluating data after identifying. A research design is a plan for the collection and analysis of data. It presents a series of guide posts to enable the researcher to progress in the right direction in order to achieve the goal. The design may be a specific presentation of the various steps in the problems, formulation of hypothesis, conceptual clarity, methodology, survey of literature and documentation, bibliography, data collection, testing of the hypothesis, interpretation, presentation and report writing. Generally, a common research design possesses the five basic elements viz., selection of problem, methodology, data gathering,

data analysis and, report writing. Present study follows the descriptive as well as exploratory design to meet the stated objectives of the study.

The basic objective of this study is to find out the effect of nonperforming asset in the commercial banks of Nepal. This study is an exploratory as well as descriptive study and is a kind of research. Extensive study of nonperforming loans, its effect in different aspect of bank, factor responsible for it, its scope and challenges has been carried out using a secondary data. Descriptive approach has been used to describe the concept of nonperforming assets. Analytical approach has been used to depict and to analyze the current situation. The data and information collected from the survey are rearranged, tabulated, analyzed and interpreted accordingly to the need of the study for attaining the stated objectives.

3.2 Population and Sample

The term 'population' for research means all the member of any well defined class of people, event or object. It means that the entire group of people, events or things of interest that a researcher wishes to investigate. On the other hand, sample is the representative part of population selected from it with the objective of investigating its properties. If some elements are selected with the intention of finding out something about the population from which they are taken then that group of element is called a sample. Thus, a sample is just a portion of the universe selected with a view to draw conclusions about the universe under study. It is a representative selection of a population which is examined to gain statistical information about the total. At present, the total number of object in the general topic deals with the commercial banks. There are all together 32 commercial banks in Nepal. Out of these total commercial banks, three banks are selected as samples which are Everest Bank Limited, Himalayan Bank Limited and Nepal Investment Bank.

Table 3.1 below clearly describes about total population, target population and sample drawn.

List of Commercial Banks in Nepal

Table 3.1

S. N.	Banks	Date of Establishment as Commercial Bank	Head Office
1	Nepal Bank Limited	11/15/1937	Kathmandu
2	Rastriya Banijya Bank Limited	1/23/1966	Kathmandu
3	NABIL Bank Limited	7/16/1984	Kathmandu
4	<i>Nepal Investment Bank Limited</i>	2/27/1986	Kathmandu
5	Standard Chartered Bank Nepal Limited	1/30/1987	Kathmandu
6	<i>Himalayan Bank Limited</i>	1/18/1993	Kathmandu
7	Nepal SBI Bank Limited	7/7/1993	Kathmandu
8	Nepal Bangladesh Bank Limited	6/5/1993	Kathmandu
9	<i>Everest Bank Limited</i>	10/18/1994	Kathmandu
10	Bank of Kathmandu Limited	3/12/1995	Kathmandu
11	Nepal Credit and Commerce Bank Limited	10/14/1996	Rupandehi
12	Lumbini Bank Limited	7/17/1998	Chitwan
13	Nepal Industrial & Commercial Bank Limited	7/21/1998	Biratnagar
14	Machhapuchchhre Bank Limited	10/3/2000	Pokhara, Kaski
15	Kumari Bank Limited	4/3/2001	Kathmandu
16	Laxmi Bank Limited	4/3/2002	Birgunj, Parsa
17	Siddhartha Bank Limited	12/24/2002	Kathmandu
18	Agriculture Development Bank Limited	3/16/2006	Kathmandu
19	Global IME Bank Limited	1/2/2007	Birgunj, Parsa
20	Citizens Bank International Limited	6/21/2007	Kathmandu
21	Prime Commercial Bank Limited	9/24/2007	Kathmandu
22	Sunrise Bank Limited	10/12/2007	Kathmandu
23	Bank of Asia Nepal Limited	10/12/2007	Kathmandu
24	Grand Bank Nepal Limited	5/25/2008	Kathmandu
25	NMB Bank Limited	6/2/2008	Kathmandu
26	Kist Bank Limited	5/7/2009	Kathmandu
27	Janata Bank Nepal Limited	4/5/2010	Kathmandu
28	Mega Bank Nepal Limited	7/23/2010	Kathmandu
29	Commerz & Trust Bank Nepal Limited	9/20/2010	Kathmandu
30	Civil Bank Limited	11/26/2010	Kathmandu
31	Century Commercial Bank Limited	3/10/2011	Kathmandu
32	Sanima Bank Limited	2/15/2012	Kathmandu

- i. *Sanima Bikash Bank Ltd.* was upgraded as commercial bank and changed the name as *Sanima Bank Ltd.* on 15 February, 2012.
- ii. *Development Credit Bank Ltd.* has changed its name as *Grand Bank Nepal Limited* on 13 April, 2012.

iii. *IME Financial Institution Ltd.* and *Lord Buddha Finance Ltd.* are merged with *Global Bank Ltd.* and changed the name as *Global IME Bank Ltd* on July 9, 2012.

The following are the banks which are taken as sample for the study:

- Everest Bank Limited
- Himalayan Bank Limited
- Nepal Investment Bank Limited

These banks are taken as sample because these banks are the top most leading commercial banks of Nepal and have been growing likely in all aspects of financial performance such as total assets, total deposits, total profit etc. These leading banks's analysis can help to depict the health of banking sectors in some extent.

3.3 Sources of Data

Making study more reliable and justifiable, secondary data has been used in this study. The annual reports of the subjected banks are the major sources of the data for the study. However, beside the annual reports of the respective banks, the following sources of data are also considered;

1. NRB reports
2. Various publications dealing in the subject matter of study
3. Various Articles published in the newspapers, magazines.
4. Different websites
5. Dissertation of central library of T.U. and library of Shanker Dev Campus.

Other sources like interviews, desertion, remarks by the specialist of the subject are capable in providing valuable data and conclusion should be considered in the study.

3.4 Data Processing Procedures and Analysis

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

3.4.1 Financial Tools

While adopting financial tools, ratio is used as a benchmark for evaluating the financial position and performance of any firm. “Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account” (Pandey, 2000: 108). “Financial analysis is the use of financial statements to analyze company’s financial position and performance and to assess future financial performance”, (Wild, Subramanyam and Halsey, 2003:13).

3.4.1.1 Ratio Analysis

Ratio analysis is the widely used tool of financial analysis. A ratio is simply a number expressed in terms of another and as such it expresses the numerical or quantitative relationship between two variables. Ratio analysis reflects the relative strengths and weakness of any organization. This also indicates the operating and financial growth of the organization. It summarizes the financial figures and makes 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 calculated here which are related to our subject matter.

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

The loan and advances to total assets ratio measures the amount of loan and advances in the total assets. This ratio 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 fund. In inverse, low degree of loan indicates that there is low use of fund and the most of the deposit remains idle. 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 consist the uncertainty. Thus, the loan and advances may or may not be recovered with its interest. This ratio can be calculated as follows:

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

- **Loan and Advances to Total Deposit Ratio (CD Ratio)**

The main objective of commercial banks is to collect deposits from the surplus groups who have excess of it and grants loan to the deficit groups who are in need of this. The loan and advance to deposit shows the relationship between the loan and advance and total deposit. This is also termed as credit deposit (CD) ratio. It shows how much fund of deposit is provided as loan and advance. This ratio is used to find out how successfully the bank are utilizing their deposit fund in credit or loan for profit generating purpose as loan and advances yield high rate of return. Higher CD ratio implies the better utilization of total deposits and better earning. However, much higher ratio creates liquidity risk to the bank and vice versa. Hence, 70% to 80% CD ratio is considered as more appropriate. NRB has prescribed 80% as base rate for CD ratio. This ratio can be calculated as follows:

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

- **Non Performing Assets to Total Loans and Advances Ratio**

This ratio determines the nonperforming assets in the total loan 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:

$$\text{NPA to Total Loans and Advances Ratio} = \frac{\text{Non Performing Assets (NPA)}}{\text{Total Loans and Advances}}$$

- **Provision Held to Non Performing Assets Ratio**

This ratio describes the proportion of provision held to nonperforming 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 safeguard against future contingencies that may create due to nonperforming assets. So, higher the ratio better is the financial strength of the bank and vice versa. This ratio is calculated as under:

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

- **Non Performing Assets to Total Assets**

This ratio indicates the ratio between the nonperforming assets and total assets. Higher NPA to total assets ratio implies the bad effect in banks performance and it decreases the profitability of the banks and vice versa. This ratio can be calculated as follows:

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

- **Provision Held to Loans and Advances**

This ratio indicates the ratio between provisions held and total loans and advances of the bank. It describes how much provision is held for a loan and what amount of loan in a bank can go bad. This ratio can be calculated as follows:

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

- **Return on Loan and Advances**

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

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

3.4.2. Statistical Tools

The statistical tool is 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 organizations. It helps to compare the performance, strength and weakness of the organization. It also helps to present the data, to show the relation and deviation of variables of organizations. In our study, the following statistical tools are used:

Arithmetic Mean

Arithmetic mean or simply a 'Mean' of a set of observation is the sum of all the observation divided by the number of observation (**Bajracharya, 1996:177**). It is the best value which represents to the whole group. Mean is the arithmetic average of the variables. Arithmetic mean of a series is given by:

$$\text{Mean } (\bar{X}) = \frac{\text{Sum of variables } X}{N}$$

Where, X = sum of the variable 'X' of which study is being done.
 N = Number of
observation

- **Standard Deviation(σ)**

The standard deviation is the absolute measures of dispersion in which the drawbacks present in other measures of dispersion are removed. It is said to be the best measure of dispersion as it satisfies most of the requisites of a good measure of dispersion (**Bajracharya, 1996:177**). Standard deviation is defined as the positive square root of the mean of square of the deviation taken from the arithmetic mean. It indicates the ranges of deviation 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 calculated as:

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}}$$

- **Coefficient of Variation (CV)**

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on the standard deviation is known as the coefficient of standard deviation (**Bajracharya, 1996:177**). It is independent of unit. So, two distributions can bitterly be compared with the help of CV for their variability and consistency. Lesser the CV more will be the uniformity; consistency; etc. and more the CV less will be the uniformity; consistency etc.

It is calculated as under:

$$\text{Coefficient of variation (CV)} = \frac{\sigma}{\bar{X}} \times 100$$

- **Correlation Coefficient (r)**

Correlation is a statistical device designed to measure the degree of relationship between two or more variables. The Correlation coefficient is defined as the degree of association between two or more variables. Correlation coefficient is the statistical measure of the linear relationship (correlation) between a dependent variable and an independent variable.

$$\text{Correlation Coefficient}(r) = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2] \times [N\sum Y^2 - (\sum Y)^2]}}$$

The **Karl Pearson's** Coefficient of Correlation always lies between -1 to +1. The value of correlation on coefficient in -1 signifies strong negative correlation and +1 signifies strong positive correlation coefficient. The following general rules are mentioned for interpreting the value of r.

- When $r = 1$, there is positive perfect correlation between the two variables.
- When $r = -1$, there is a negatively perfect correlation between the two variables.
- When $r = 0$, the variables are uncorrelated.

Near the value of r to +1, closer will be the relationship between two variables and nearer the value of r to 0, lesser will be the relationship.

- **Probable Error**

Probable error of the correlation coefficient denoted by PE is the measure of testing the reliability of the calculated value of r. If r be the calculated value of r and N be the number of paired observation, then PE is defined by,

$$PE = 0.6745 \times \frac{(1-r^2)}{\sqrt{N}}$$

Where, r = correlation coefficient and N= no of paired observation

It is used in interpretation whether calculated value of r is significant or not.

- i. If $|r| < PE$ then it is insignificant which implies there is no evidence of correlation.
- ii. If $|r| > 6*PE$ then there is significant relationship between the variables.
- iii. In other cases, nothing can be concluded.

The probable error of correlation coefficient is used to determine the limits within which the population correlation coefficient lies. Limits for population correlation coefficient are $r \pm P.E.$

- **Diagram and Graphical Representation**

Tables, diagrams and graphs are visual aids that give a bird eye view of a given set of numerical data. They represent the data in simple and real comprehensive form. Hence, in this study, various tables, bars diagrams, charts and graphs are used to present the data and data analysis is done through these data.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

In this chapter, raw form of data which were collected from various sources are processed and changed into an understandable presentation using financial as well as statistical tools supported by diagram and graphs as mentioned in the previous chapter. Similarly, the process of transforming of data is undertaken for the examination and interpretation of such data to draw conclusion. Therefore, this chapter is the heart of the study, as all the findings, conclusions and recommendation are going to be derived from the calculations and analysis is done in this section.

4.1 Ratio Analysis

4.1.1 Loans and Advances to Total Assets Ratio

Loans and advances of any commercial banks represent the major portion in the volume of Total Assets. The ratio of loans and advances to total assets measures the volume of loans and advances in the structure of total assets. The higher degree if this ratio indicates the good performance of banks in mobilizing its funds by way of lending function. However, in its reverse side, the high degree of this ratio is representative of low liquidity ratio either.

Disbursing the loans and advances always carries a certain degree of risk. Thus, this asset of banking business is regarded as risky asset. The low ratio shows low productivity and high degree of safety in liquidity and vice versa. The interaction between risk and return determine this ratio.

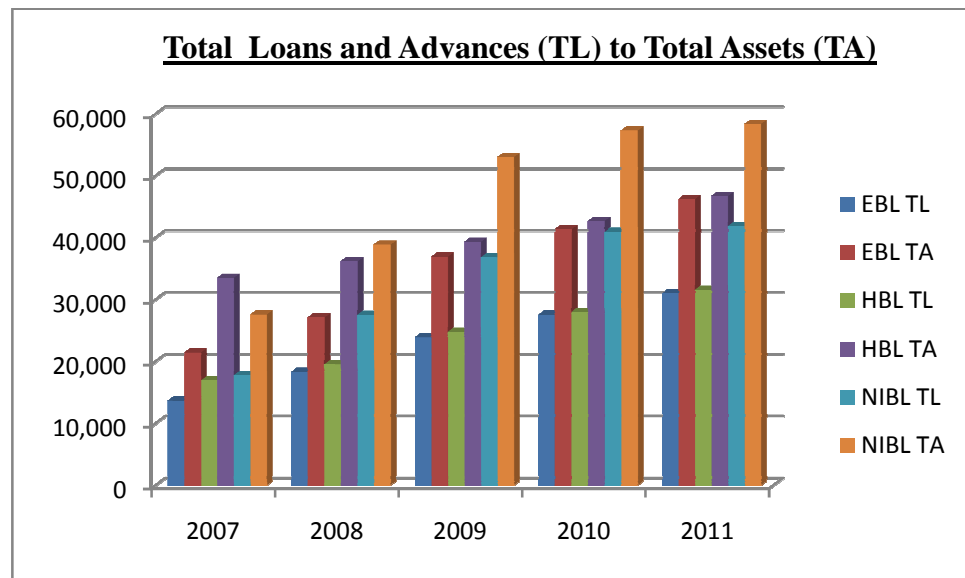
Table 4.1

Total Loan and Advances (TL) to Total Assets (TA)									
	EBL			HBL			NIBL		
	TL	TA	Ratio	TL	TA	Ratio	TL	TA	Ratio
2007	13,664	21,433	63.75	16,998	33,519	50.71	17,769	27,591	64.40
2008	18,339	27,149	67.55	19,498	36,176	53.90	27,529	38,873	70.82
2009	23,885	36,917	64.70	24,793	39,320	63.05	36,827	53,011	69.47
2010	27,556	41,383	66.59	27,981	42,717	65.50	40,948	57,305	71.46
2011	31,058	46,236	67.17	31,567	46,736	67.54	41,887	58,357	71.78
	Mean		65.95			60.14			69.58
	SD		1.47			6.63			2.71
	CV		2.23			11.02			3.89

Table 4.1 shows the loans and advances to total assets of three banks for five consecutive years. Here, ratios of HBL are in increasing trend but the ratio of EBL and NIBL have fluctuated in some years. The mean ratios of EBL, HBL and NIBL are 65.95%, 60.14% and 69.58% respectively. Among the three banks, NIBL has the highest mean ratio whereas HBL has the lowest. It indicates that NIBL is mobilizing its fund more satisfactorily than the other two banks. It can be interpreted that NIBL has highest degree of investment in risky assets and HBL has the lowest. The Standard Deviations of three banks are 1.47, 6.63 and 2.71 respectively and their CVs are 2.23%, 11.02% and 3.89% respectively. It can be interpreted that HBL has comparatively higher degree of both deviation and variation but EBL has lower deviation and variation.

The above table can also be presented in a bar diagram which is as follows:

Figure 4.1



From the figure 4.1, it can be interpreted that TA of EBL and NIBL have increased more than double amount from the last five year's TA. In comparison of EBL and NIBL, HBL has slow growth in its TA. Its TA has increased nearly about 1.5 times of last five year's TA. In the case of TL, there is significant growth in TL of all banks. NIBL has increased its TL rapidly in first three years and then increased with slow growth but EBL and HBL has equal growth ratio of their TL in these five years. Also, NIBL has the highest loans and advances to total assets mean ratio than other two banks while HBL has the least loan and advance to total mean ratio during the period of study.

4.1.2 Loans and Advances to Total Deposit Ratio (CD Ratio)

Loans and Advances to total deposit ratio is often called credit deposit ratio (CD ratio). The core banking function is to collect the funds from the various sectors of depositors and mobilize these funds to the borrowers who are in need of funds through which the bank can generate profit. CD ratio is the fundamental parameter to ascertain fund deployment efficiency of commercial bank. In other words, this ratio is calculated to find how successfully the banks are utilizing their total deposits on credit or loans and advances for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies the better utilization of total deposits and better earning, however, liquidity requirement also needs due consideration. Hence 70%-80% CD ratio is considered as appropriate. NRB has standardized 80% CD ratio. This ratio is calculated through dividing total credit or loans and advances by total deposit of bank.

Table 4.2

Total Loan and Advances (TL) to Total Deposit

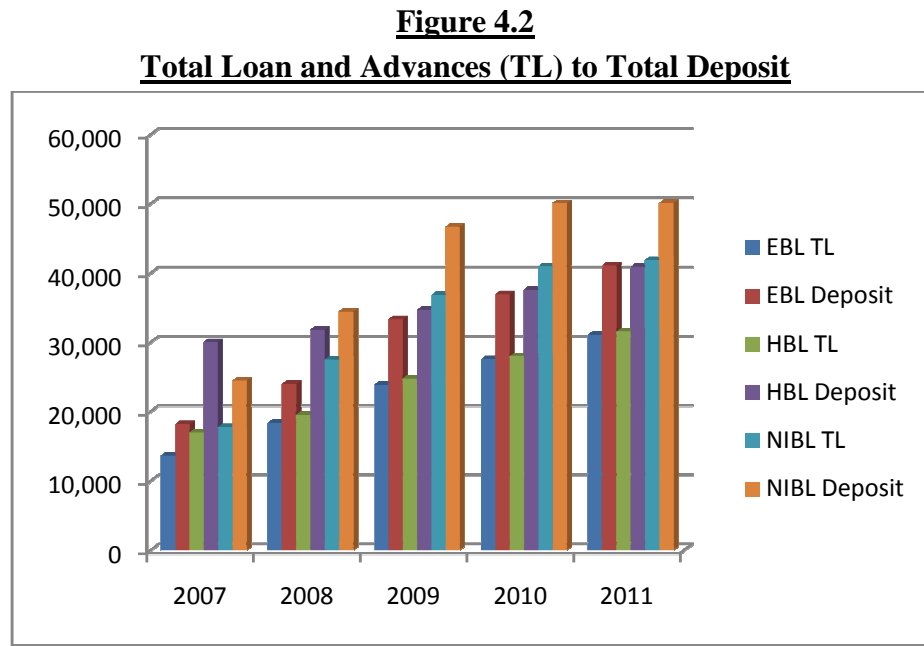
	EBL			HBL			NIBL		
	TL	Deposit	Ratio	TL	Deposit	Ratio	TL	Deposit	Ratio
2007	13,664	18,186	75.13	16,998	30,048	56.57	17,769	24,489	72.56
2008	18,339	23,976	76.49	19,498	31,843	61.23	27,529	34,451	79.91
2009	23,885	33,323	71.68	24,793	34,681	71.49	36,827	46,698	78.86
2010	27,556	36,932	74.61	27,981	37,611	74.39	40,948	50,094	81.74
2011	31,058	41,128	75.51	31,567	40,921	77.14	41,887	50,138	83.54
	Mean		74.69			68.16			79.32
	SD		1.62			7.91			3.74
	CV		2.17			11.60			4.71

The table 4.2 exhibits the loan and advances to total deposit ratio of three commercial banks for five consecutive years. The EBL and NIBL have some fluctuating ratio. The least CD ratio of EBL is 71.68% in 2009 and the highest ratio is 76.49% in 2008 where as the least CD ratio of NIBL is 72.56% and the highest ratio is 83.54% in 2011. The ratio of HBL is in increasing trend. The ratio of HBL has increased from 56.57% to 77.14% in five years. From the above, it shows that NIBL has better utilization of its deposited fund in loans and advances than other banks. However, it may faces liquidity crunch if there is no effective management occurs.

The mean ratios of EBL, HBL and NIBL are 74.69%, 68.16% and 79.32% respectively. Among all, NIBL has highest mean ratio which shows that the NIBL lends higher portion of deposit in the form of loan and advances. The HBL has the lower mean ratio among them. It advances lower portion in the form of loan. Thus, it can be said that the management of HBL is risk averse as compared to other two banks. The SDs of EBL, HBL and NIBL are 1.62, 7.91

and 3.74 respectively. So HBL's data has high variation from an average mean. Similarly, CV of HBL is also highest compare to other two banks which proves that its data have high degree of deviation and variations.

Total Loans and advances to total deposit can be presented in bar diagram also which is as follows:



From the figure 4.2, it can be interpreted that deposit amount of NIBL is highest in comparison with other two banks whereas deposit of EBL is lowest. There is more than double growth in total deposit and loans of EBL and NIBL whereas loans and advances of HBL has increased less than double growth in both loan and deposit in these five years. So, it can be concluded that NIBL has the highest ratio of total loans and advances to total deposit. So, NIBL lends higher amount in the form of loans in comparisons of others.

4.1.3 Loan Loss Provision to Total Loans and Advances Ratio

The ratio of loan loss provision to total loans and advances describes the quality of assets that the bank is holding. Nepal Rastra Bank has given directives to commercial banks to classify its loans and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal to make the provision of 1, 25, 50 and 100 percentages respectively.

Loan loss provision signifies the cushion against future contingency created by the default of the borrower in case of payment of loans. It ensures the continual solvency of the banks. Since high provision has to be made for nonperforming loan, higher provision for loan loss reflects increasing nonperforming loan in volume of total loans and advances. The low ratio

signifies the good quality of assets in the volume of loans and advances. It indicates how efficiently the bank manages loan and advances and makes efforts to cope with probable loan loss. Higher ratio implies, higher portion of NPL in the total loan portfolio.

Table 4.3

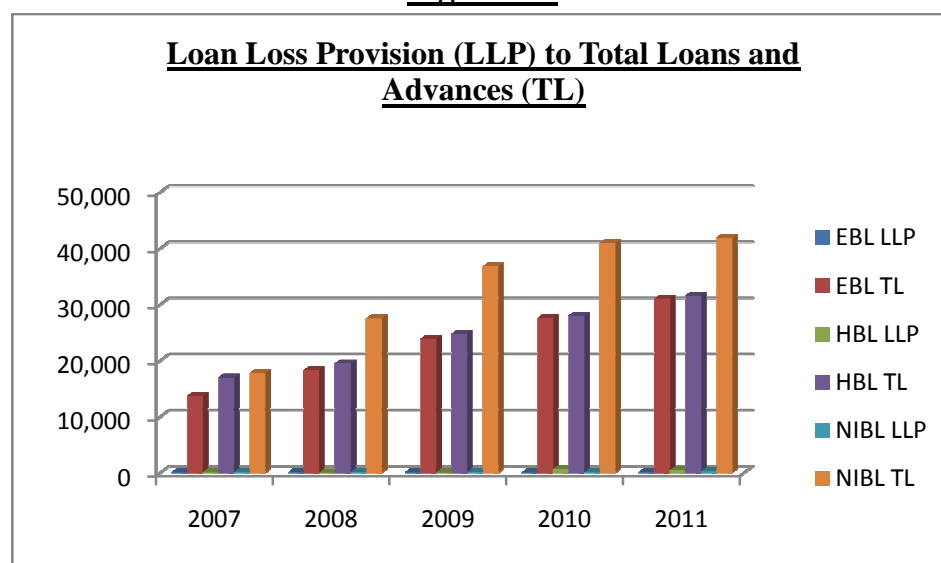
Loan Loss Provision(LLP) to Total Loan and Advances (TL)									
	EBL			HBL			NIBL		
	LLP	TL	Ratio	LLP	TL	Ratio	LLP	TL	Ratio
2007	90	13,664	0.66	91	16,998	0.53	130	17,769	0.73
2008	99	18,339	0.54	58	19,498	0.30	136	27,529	0.49
2009	93	23,885	0.39	69	24,793	0.28	166	36,827	0.45
2010	77	27,556	0.28	693	27,981	2.48	93	40,948	0.23
2011	98	31,058	0.32	472	31,567	1.49	267	41,887	0.64
	Mean		0.44			1.02			0.51
	SD		0.14			0.85			0.17
	CV		32.05			83.65			33.46

The table 4.3 exhibits the ratio of loan loss provision to loans and advances of three banks for the five consecutive years. The ratios of EBL and NIBL has decreased till 2010 and then increased in 2011. The ratio of HBL has decreased from 0.53% to 0.28% till 2009 and then increased significantly to 2.48% in 2010 and then decreased to 1.49% in 2011. Higher LLP is indicative of poor and ineffective credit policy and higher proportion on nonperforming assets. Hence, the greater ratios of HBL suggest that there are higher proportion of NPL in the total loans and advances.

The standard deviation of EBL, HBL and NIBL is 0.14, 0.85 and 0.17 and their CVs are 32.05%, 83.65% and 33.46% respectively. Here, it is clearly seen that HBL has higher deviation and higher variation during the study period.

This can also be interpreted in the diagram below:

Figure 4.3



The figure 4.3 clearly indicates that EBL has the lowest LLP and HBL has the highest amount of LLP. The TL of NIBL is highest among three banks where as EBL and HBL has almost equal loan and advances during the study period. So, the ratio of LLP to TL is highest in HBL than other two banks which signify that HBL has lesser good loans than other banks.

4.1.4 Non Performing assets to Total Loan and Advance Ratio

This ratio determines the proportion of nonperforming 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 nonperforming assets or loan. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances where as lower ratio implies the better quality of assets of banks in the form of loan and advances. Hence, lower ratio is preferable. As per international standard, only 5% NPAs is allowed. The table, presented below, exhibits the ratio of nonperforming assets to loan and advances of three banks EBL, HBL and NIBL for five consecutive years.

Table 4.4

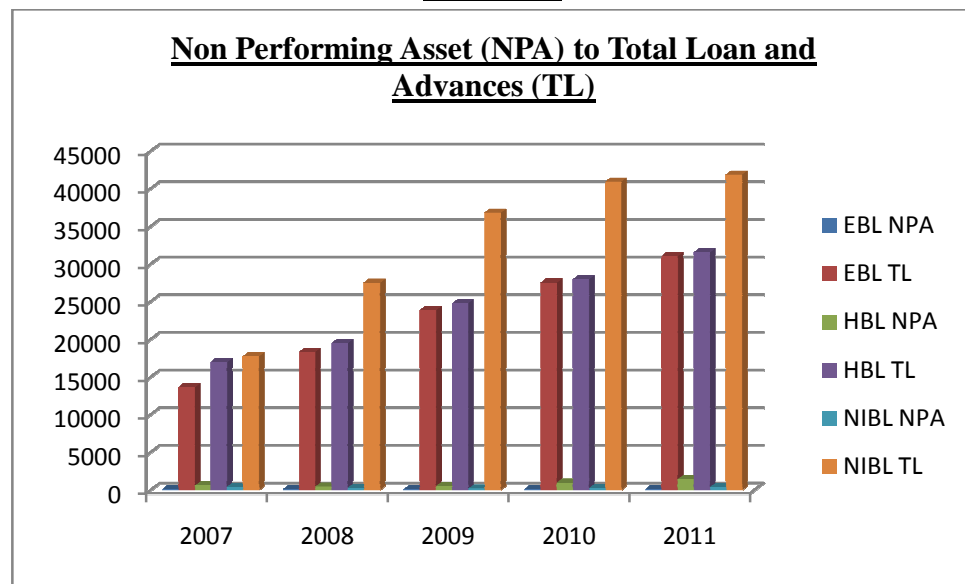
Non Performing Asset (NPA) to Total Loans and Advances (TL)									
	EBL			HBL			NIBL		
	NPA	TL	Ratio	NPA	TL	Ratio	NPA	TL	Ratio
2007	109	13,664	0.80	614	16,998	7.44	421	17,769	2.69
2008	125	18,339	0.68	460	19,498	6.60	308	27,529	2.07
2009	115	23,885	0.48	536	24,793	3.61	214	36,827	2.37
2010	121	27,556	0.44	985	27,981	2.35	254	40,948	1.13
2011	106	31,058	0.34	1427	31,567	2.16	394	41,887	0.82
	Mean		0.55			4.43			1.82
	SD		0.17			2.19			0.72
	CV		31.02			49.41			39.65

The table 4.4 exhibits the ratio of nonperforming assets to loans and advances of EBL, HBL and NIBL for five consecutive years. The table shows that all three banks have fluctuating level of NPA. Out of them, HBL has the highest level of NPA whereas EBL has the least level of NPA. Lower NPA shows effective credit management of bank and its effort of recovering bad debts through establishment of recovery cell. The mean ratios of EBL, HBL and NIBL are 0.55%, 4.43% and 1.82% respectively. It reveals that credit management in HBL is not as effective as of two other banks where as EBL is well managed among three banks in case of loan recovery.

SDs of EBL, HBL and NIBL are 0.17, 2.19 and 1.82 and their CVs are 31.02%, 49.41% and 39.65% respectively. These ratios signify that HBL has highest deviation and higher degree of variation among these three banks where as EBL has the lowest deviation and variability. Since NPA is one of the causes of banking crisis, bank should give serious attention to this matter.

This can also be interpreted with the help of the following diagram:

Figure 4.4



From the figure 4.4, it is seen that there is significant increment in TL of NIBL as compared to two other banks. The ratios of NPA to TL of all banks are in the decreasing trend during the study period. EBL has lowest mean NPA i.e. 0.55% whereas HBL has highest mean NPA i.e. 4.43%. So, we can conclude that EBL has effective credit management system than two other banks during the period of study.

4.1.5 Provision Held to Non Performing Assets Ratio

This ratio determines the proportion of provision held to nonperforming assets of the bank. Every bank should have to make provision for the loan to minimize the risk of not recovering the loan from the customer on time. So, this ratio measures up to what extent of risk inherent in NPA is covered by the total loan loss provision. Higher ratio signifies that the banks are safeguarded against future contingencies that may create due to non performing loan or in other words banks are cushion of provision to cope the problem that may be cause due to NPL. Hence, higher ratio shows the better financial position of the bank.

Table 4.5

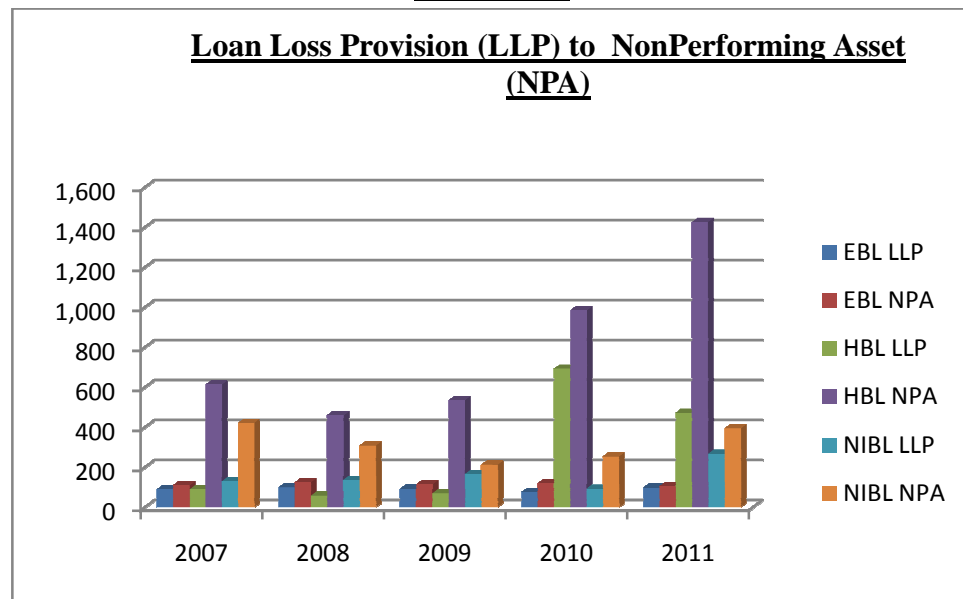
Loan Loss Provision(LLP) to Non Performing Asset (NPA)									
	EBL			HBL			NIBL		
	LLP	NPA	Ratio	LLP	NPA	Ratio	LLP	NPA	Ratio
2007	90	109	82.06	91	614	14.78	130	421	30.80
2008	99	125	79.66	58	460	12.70	136	308	44.11
2009	93	115	81.19	69	536	12.85	166	214	77.81
2010	77	121	63.51	693	985	70.32	93	254	36.63
2011	98	106	93.08	472	1427	33.06	267	394	67.90
	Mean		79.90			28.74			51.45
	SD		9.47			22.14			18.25
	CV		11.85			77.03			35.47

The table 4.5 exhibits the ratio of provision held to nonperforming asset of three banks for five consecutive years. Here, we can see that EBL has highest ratio i.e. 93.08% in 2011. HBL has least ratio as compared to other two banks. All three banks shows fluctuating trend in mean ratios. The mean ratios of EBL, HBL and NIBL are 79.90%, 28.74% and 51.45% respectively. Higher mean ratio indicates banks have adequate provision against non performing assets. From here we can conclude that EBL has better safeguard for future contingencies.

The standard deviations of EBL, HBL and NIBL are 9.47, 22.14 and 18.25 respectively. And their CVs are 11.85%, 77.03% and 35.47% respectively. Thus, it reveals that HBL's data have both more deviation and variation than other two banks. The EBL has lowest deviation and variation for that same period. Thus, EBL is safer against future contingencies that may create due to nonperforming loan in comparison of other two banks.

The above LLP and NPA can also be illustrated with the help of following diagram.

Figure 4.5



From the figure 4.5, we can see the EBL has the highest ratio in the year 2011. Its ratio has always remained higher than two other banks throughout the study period except in the year 2010. Among these three banks, HBL has the lowest mean ratio of LLP to NPA.

4.1.6 Non Performing Assets to Total Assets Ratio

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

Table 4.6

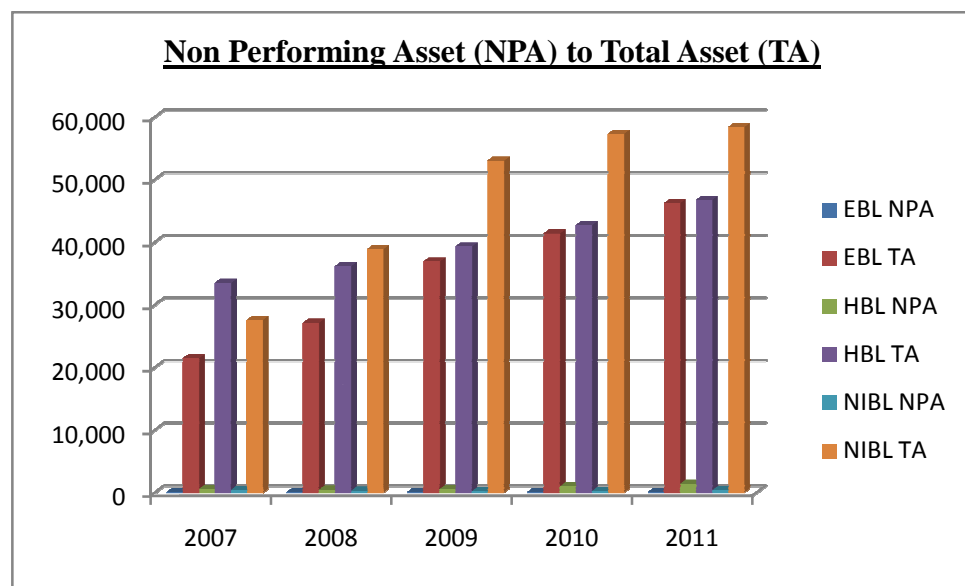
Non Performing Asset (NPA) to Total Asset (TA)									
	EBL			HBL			NIBL		
	NPA	TA	Ratio	NPA	TA	Ratio	NPA	TA	Ratio
2007	109	21,433	0.51	614	33,519	1.83	421	27,591	1.53
2008	125	27,149	0.46	460	36,176	1.27	308	38,873	0.79
2009	115	36,917	0.31	536	39,320	1.36	214	53,011	0.40
2010	121	41,383	0.29	985	42,717	2.31	254	57,305	0.44
2011	106	46,236	0.23	1427	46,736	3.05	394	58,357	0.67
	Mean		0.36			1.96			0.77
	SD		0.11			0.66			0.40
	CV		30.53			33.59			52.08

The table 4.6 presented above exhibits the ratio of provision held to total nonperforming assets of three banks for five consecutive years. HBL has the highest ratios and EBL has the lowest ratios throughout the study period. So, HBL contains the highest amount of idle assets in the bank. The ratios of EBL have been decreasing every year whereas ratios of HBL and NIBL are fluctuating

The mean ratio of EBL, HBL and NIBL are 0.36%, 1.96% and 0.77% respectively. The mean ratio of HBL is significantly higher in comparison with other two banks whereas EBL has comparatively lower NPA ratio. NIBL has moderate ratio among them. The SDs of EBL, HBL and NIBL are 0.11, 0.66 and 0.40 respectively and their CVs are 30.53%, 33.59% and 52.08% respectively. These signify that EBL has the lowest deviation and variation whereas HBL has the highest deviation and NIBL has the highest variation in their data for the study period.

The above ratio of nonperforming assets to total assets can be presented in bar diagram also, which is as follows;

Figure 4.6



From the figure 4.6, it is seen that NPA of HBL has increased drastically. Its NPA in 2011 is more than double amount of the year 2007 but its total asset is not increased in the same proportion. TAs of EBL and NIBL has increased more than double amount than their first year's TA of study period. TAs of NIBL is the highest in all years. NPA of EBL is the least and NPA of HBL is the highest which is seen in above figure.

4.1.7 Return on Loans and Advances

This ratio indicates that how efficiently the bank has employed its resources in the form of loans and advances. It also measures the earning capacity of its loans and advances. The ratio is calculated by dividing net profit (loss) by loans and advances. Net profit refers to that profit which is obtained after all types of deduction like employee bonus, tax, provision etc. Hence, this ratio measures bank's profitability with respect to loans and advances. Higher ratio shows better performance of the bank and vice versa.

Table 4.7

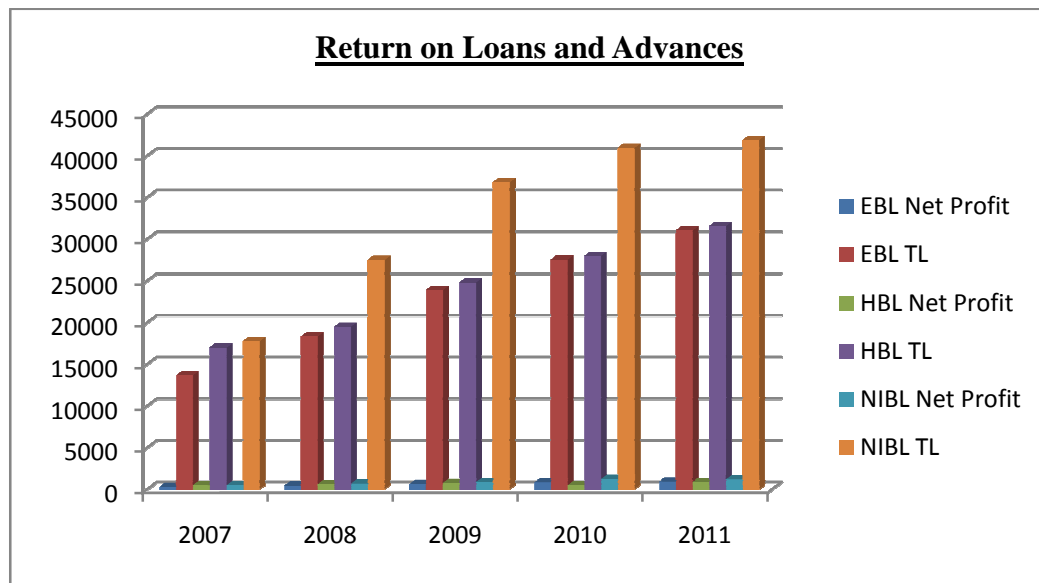
Return on Loans and Advances									
	EBL			HBL			NIBL		
	Net Profit	TL	Ratio	Net Profit	TL	Ratio	Net Profit	TL	Ratio
2007	296	13,664	2.17	492	16,998	2.89	501	17,769	2.82
2008	451	18,339	2.46	636	19,498	3.26	697	27,529	2.53
2009	639	23,885	2.67	753	24,793	3.04	901	36,827	2.45
2010	832	27,556	3.02	509	27,981	1.82	1,265	40,948	3.09
2011	931	31,058	3.00	893	31,567	2.83	1,176	41,887	2.81
	Mean		2.66			2.77			2.74
	SD		0.32			0.49			0.23
	CV		12.01			17.70			8.40

The above table 4.7 shows the ratio between return (Net Profit) and its total asset of the three banks in five consecutive years. All three banks have positive returns in all years. There is highest profit seen in 2010 of NIBL i.e. 1,265mio. NIBL has the highest profits throughout the period with comparisons of EBL and HBL. Its profit increases from 501mio to 1,176mio. Profit of EBL rises from 296mio to 931mio in these five years. HBL has also increased its profit from 492mio to 893mio. NIBL and EBL have increasing profit trend with decreasing rate but HBL has increased its profit in fluctuating rate. The ratio of return on loan and advances of all three banks are in fluctuating trend.

The mean ratios of EBL, HBL and NIBL are 2.66%, 2.77% and 2.74% respectively. Although NIBL has highest return in all year among three banks, its mean ratio is still lower than that of HBL it is because its increase in profit ratio is less than that of increase in loan and advances. The SDs EBL, HBL and NIBL are 0.32, 0.49 and 0.23 respectively and their CVs are 12.01%, 17.70% and 8.40% respectively. These signify that HBL has the highest deviation in data which has highest variation in ratios whereas NIBL has less deviation in data which has least variation in the ratios during the study period.

It can be presented in the bar diagram which can be seen as below figure:

Figure 4.7



From the figure 4.7, Total loans and net profits of NIBL are the highest in all year than other two banks. Its loans and net profits have been increased significantly in these five years. EBL and NIBL have increasing trend of both profit and loan at decreasing rate where as HBL has increased its loan at decreasing rate but its profit is decreased in 2010 than that of 2009.

4.2 Correlation Coefficient Analysis

4.2.1 Correlation between Loan Loss Provision and Loan and Advances

The correlation between loan loss provision (LLP) and total loans & advances (TL) measures the degree of relationship between these two variables. It depicts the impact of unit increase in loan and advances on the increase in volume of loan loss provision. Here, loan & advances is independent variable and loan loss provision is dependent variable.

Table 4.8
Correlation between LLP and Loan and Advances (TL)

Banks	Correlation Coefficient(r)	Probable Error(PE)	6× PE
EBL	-0.135	0.296	1.777
HBL	0.757	0.129	0.772
NIBL	0.381	0.258	1.547

Table 4.9 shows the relationship between loans and LLP. The correlation coefficient of EBL is -0.135 which shows that LLP and total loans and advances have low degree of negative correlation. HBL has high degree of positive correlation (i.e. 0.757) between LLP and TL whereas NIBL has low degree of positive correlation i.e. 0.381. For all three banks, the values of correlations are less than six times of their PEs which signifies that there is no evidence of correlation between LLP and TL. That means there is no proportionate increase in LLP in respect with increase in total loan (TL) amount.

4.2.2 Correlation between Loan Loss Provision and Non Performing Assets

The correlation between LLP and NPA describes the degree of relationship between these two variables. It measures impact of unit change in NPA on the LLP. In this case, nonperforming asset represents independent variable and LLP is dependent variable. As mentioned earlier, NPAs are the loan falling on the category of pass, substandard, Doubtful and loss and the respective provisioning requirement are 1%, 25%, 50%, and 100% respectively. Higher the nonperforming loan higher will be the provisioning amount.

Table 4.9
Correlation between LLP and Non Performing Assets(NPA)

Banks	Correlation Coefficient(r)	Probable Error(PE)	6× PE
EBL	-0.239	0.284	1.706
HBL	0.778	0.119	0.715
NIBL	0.378	0.258	1.551

Table 4.10 explains the relationship between LLP and NPA. The correlation coefficient of EBL is negative (i.e.-0.239) which states that as NPA increases LLP decreases with a small proportion and vice versa. HBL has high degree of positive correlation i.e. 0.778 where as NIBL has low degree of positive correlation i.e. 0.378. These show that the LLP of HBL increases in larger proportion as increase in NPA but LLP of NIBL increases in small ratio as increase in NPA and vice versa. For all three banks, the values of correlation are less than six times of their PEs which signifies that there is no evidence of correlation between LLP and NPA. That means there is no proportionate increase in LLP in respect with increase in nonperforming assets (NPA).

4.2.3 Correlation between Nonperforming assets and loan and advances

This correlation coefficient shows the degree of relationship between the NPA and loan & advance (TL). The loan & advance is independent variable and NPA is dependent variable. It

measures impact of unit change of loan & advance on the NPA. It means this explains effects on NPA due to the change (increase or decrease) in loan and advance of banks.

Table 4.10

Correlation between NPA and Loans & Advance (TL)

Banks	Correlation Coefficient(r)	Probable Error(PE)	6× PE
EBL	-0.178	0.292	1.752
HBL	0.842	0.088	0.525
NIBL	-0.483	0.231	1.387

In the above table 4.11, NPAs and loans and advances are negatively correlated in case of EBL and NIBL whereas positively correlated in case of HBL. The values of correlation coefficient of EBL, HBL and NIBL are -0.178, 0.842 and -0.483 respectively. These signify that the NPA increases as increase in total loan and vice versa in case of HBL but NPA decreases as increase in total loan and vice versa incase of HBL and NIBL. The correlation coefficient of HBL is greater than six times of its PE which shows that there is significant and reliable relation between NPA and TL. But in case EBL and NIBL, the values of correlation are less than six times of their PEs which results there is no significant correlation between NPAs and TLs of EBL and NIBL.

4.3 Comparative Analysis of NPAs in Nepalese Commercial Banks

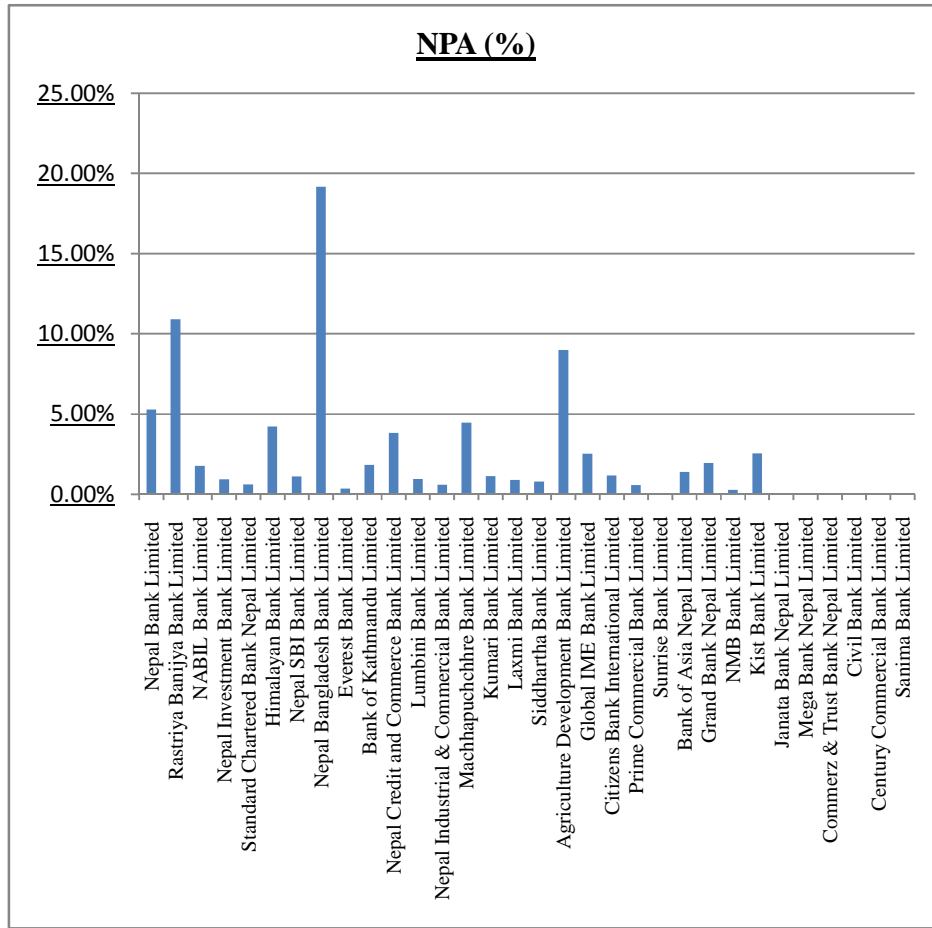
(Mid July, 2011)

Table 4.11

S. N.	Banks	NPA (%)
1	Nepal Bank Limited	5.28%
2	Rastriya Banijya Bank Limited	10.92%
3	NABIL Bank Limited	1.77%
4	<i>Nepal Investment Bank Limited</i>	0.94%
5	Standard Chartered Bank Nepal Limited	0.62%
6	<i>Himalayan Bank Limited</i>	4.52%
7	Nepal SBI Bank Limited	1.10%
8	Nepal Bangladesh Bank Limited	19.18%
9	<i>Everest Bank Limited</i>	0.34%
10	Bank of Kathmandu Limited	1.82%
11	Nepal Credit and Commerce Bank Limited	3.82%
12	Lumbini Bank Limited	0.96%
13	Nepal Industrial & Commercial Bank Limited	0.60%
14	Machhapuchchhre Bank Limited	4.46%
15	Kumari Bank Limited	1.12%
16	Laxmi Bank Limited	0.90%
17	Siddhartha Bank Limited	0.79%
18	Agriculture Development Bank Limited	8.99%
19	Global IME Bank Limited	2.52%
20	Citizens Bank International Limited	1.17%
21	Prime Commercial Bank Limited	0.57%
22	Sunrise Bank Limited	0.04%
23	Bank of Asia Nepal Limited	1.40%
24	Grand Bank Nepal Limited	1.95%
25	NMB Bank Limited	0.27%
26	Kist Bank Limited	2.54%
27	Janata Bank Nepal Limited	0.00%
28	Mega Bank Nepal Limited	0.00%
29	Commerz & Trust Bank Nepal Limited	0.00%
30	Civil Bank Limited	0.00%
31	Century Commercial Bank Limited	0.00%
32	Sanima Bank Limited	0.00%

Figure 4.8

Comparative analysis of NPA in Nepalese Commercial Banks



4.4 Comparative Analysis of Total Loans and Advances in Nepalese Commercial Banks

(Mid July, 2011)

Table 4.13

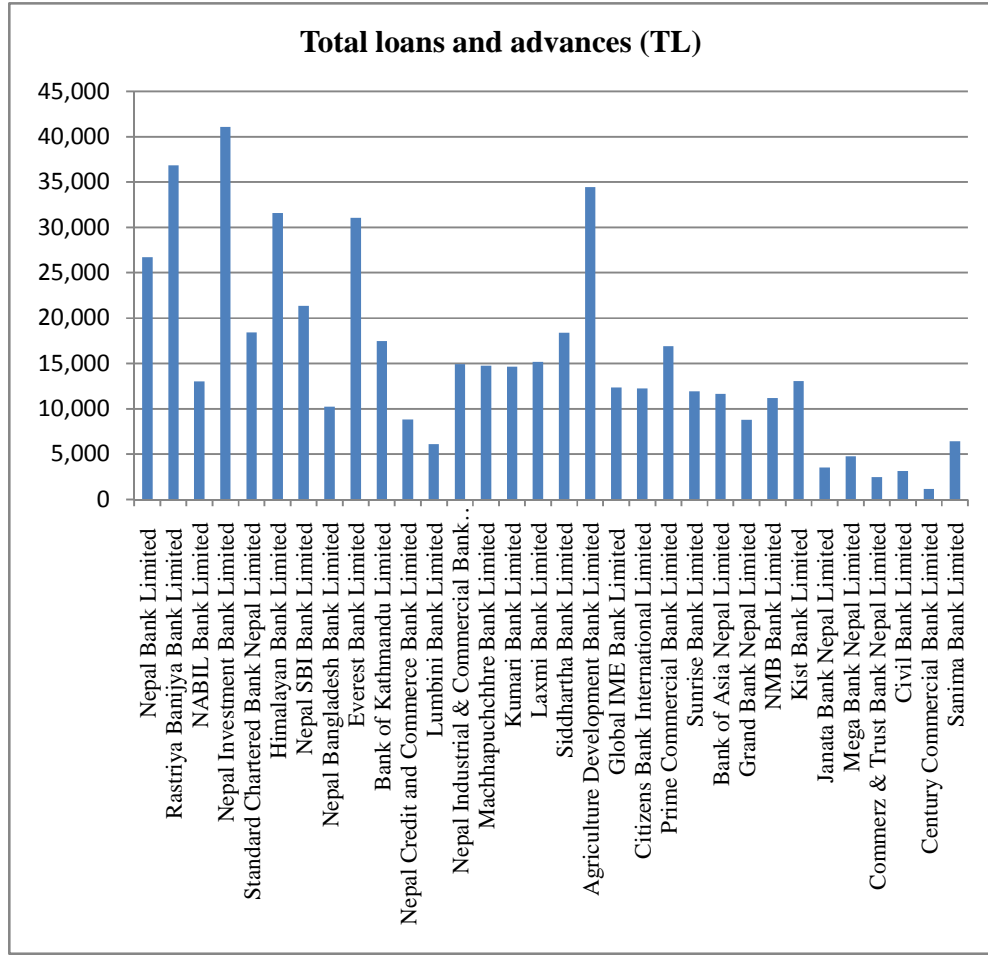
Comparisons of Total Loans and Advances

(Rs in millions)

S. N.	Banks	Total loans and advances (TL)
1	Nepal Bank Limited	26,710
2	Rastriya Banijya Bank Limited	36,866
3	NABIL Bank Limited	13,003
4	Nepal Investment Bank Limited	41,096
5	Standard Chartered Bank Nepal Limited	18,427
6	Himalayan Bank Limited	31,567
7	Nepal SBI Bank Limited	21,366
8	Nepal Bangladesh Bank Limited	10,237
9	Everest Bank Limited	31,058
10	Bank of Kathmandu Limited	17,468
11	Nepal Credit and Commerce Bank Limited	8,835
12	Lumbini Bank Limited	6,112
13	Nepal Industrial & Commercial Bank Limited	14,934
14	Machhapuchchhre Bank Limited	14,731
15	Kumari Bank Limited	14,626
16	Laxmi Bank Limited	15,200
17	Siddhartha Bank Limited	18,384
18	Agriculture Development Bank Limited	34,460
19	Global IME Bank Limited	12,372
20	Citizens Bank International Limited	12,272
21	Prime Commercial Bank Limited	16,895
22	Sunrise Bank Limited	11,910
23	Bank of Asia Nepal Limited	11,639
24	Grand Bank Nepal Limited	8,798
25	NMB Bank Limited	11,209
26	Kist Bank Limited	13,043
27	Janata Bank Nepal Limited	3,541
28	Mega Bank Nepal Limited	4,768
29	Commerz & Trust Bank Nepal Limited	2,466
30	Civil Bank Limited	3,124
31	Century Commercial Bank Limited	1,175
32	Sanima Bank Limited	6,436

Figure 4.9

Comparative Analysis of Loans and advances in Nepalese Commercial Banks



4.5 Concluding Remarks

As per the analysis of data, following major findings have been obtained.

Financial Ratios:

- The average loans and advances to total asset ratio of EBL, HBL and NIBL during the study period are 65.95%, 60.14% and 69.58% respectively. The relatively low ratio of HBL is the indication of risk adverse attitude of the management or in other words we can say that they are investing low in the risky assets. It has higher proportion of investment on risk free of nominally asset like Treasury bills; National saving Bonds etc. The data show that NIBL has highest ratio in term of loans and advances flow with respect to total assets. HBL has both the highest deviation and highest variation from the mean values. This signifies that NIBL has highest level of utilization of its assets in the form of loans and advance whereas HBL is unable to use its assets in comparison of other two banks. The management of NIBL in regard of disbursing loan is effective which increases the main operating of the bank.
- Loans and advances to total deposit ratio indicates how successfully the banks are utilizing their total deposits on credit or loans and advances for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies the better utilization of total deposits and better earning, however, liquidity requirement also needs due consideration. The average ratio of EBL, HBL, and NIBL are 74.69%, 68.16% and 79.32% respectively. Here, NIBL has the highest ratio in comparison to EBL and HBL. HBL has lowest ratio and EBL has moderate ratio. In case of deviation and variation, HBL leads in both of them with the highest values where as EBL has the lowest deviation and variation. The data imply that NIBL has highest utilization of its assets in the form of loans and advances in comparison of other two banks. As NRB has prescribed 80% CD ratio as a standard, along with NIBL, all three banks are within the limit. In contrast of NIBL, HBL has lowest use of its assets. That means it generates less income from advancing loans and also holds excess amount of idle cash.
- Loan loss provision to total loans and advance ratio describes the quality of assets that the bank is holding. Higher ratio is an indication of higher non performing loan in the total loans and advances. The data reveal that HBL has the highest mean ratio which is 1.02% where as mean ratios of NIBL and EBL are 0.51% and 0.44% respectively. HBL contains higher ratio which is the result of higher proportion of NPL in the total loan. EBL has the least ratio in comparison to other two banks. EBL has the least both deviation and variation whereas HBL has more deviation and variation in LLP from its mean value. The data imply that HBL contains more amount of nonperforming loan or low quality of loan. Its management is unable to decrease such type of loan so the provision for loan loss has been decreased in the past five years. Its

loan loss provision has been increased significantly. In contrary of this, NIBL and EBL has lower portion of low quality loan. The management of EBL and NIBL are succeeding to decrease such type of loan by which the amount of loan loss are in their control.

- The analysis of nonperforming assets to total loans reveals average NPAs of EBL, HBL and NIBL. The mean ratios of NPAs for EBL, HBL and NIBL are 0.55%, 4.43% and 1.82% respectively. Here, HBL has significantly higher proportion of the nonperforming assets in the total loans portfolio which exhibits there are more bad loans which are defaulted. EBL and NIBL have very low proportion of NPA as compared to HBL. All these banks should have effective credit management and should make effort in recovering bad debt through the establishment of recovery cell. During the study period, HBL has highest deviation and the highest variation whereas EBL has the lowest deviation and the lowest variation in NPAs from its mean value. The above data reveal that credit recovery management of HBL is unable to reduce its NPA in comparison of others. The higher level of its NPA may cause serious financial problem for it. In contrast of it, EBL and NIBL have been managing their NPA with their effective credit management. They have been reducing the level of NPA as though increase in loan and advances significantly.
- The average ratio of provision held to nonperforming assets measures up to what extent of risk inherent in NPA is covered by the total loan loss provision. The mean ratios of EBL, HBL and NIBL are 79.90%, 28.74% and 51.45% respectively. The data reveal that EBL has the highest ratio among the three banks which shows that the bank has adequate provision against nonperforming loan whereas the mean ratio of provision to NPA of HBL is the lowest and ratio of NIBL is moderate. In case of deviation and variation in data, the HBL has the highest whereas EBL has the lowest. The above data show that EBL is more cautious to safeguard against future contingency arises due to non performing loan where as HBL is less cautious in regard of this. As more NPA is holding by HBL and less caution on it may result HBL liquidity problem, lower profit etc.
- As being a business venture, the main objective of a commercial bank is to maximizing profit through mobilization of funds. Higher ratio indicates that the bank is generating profit through higher utilization of its funds. The mean ratios of net profit to loans of EBL, HBL and NIBL are 2.66%, 2.77% and 2.74% respectively. Despite having higher LLP and NPA, HBL has the highest profit ratio in comparison of EBL and NIBL. This is because HBL lower total loans and advance in comparison of NIBL. So, even though, having the highest profit in figure, NIBL has only 2.74% profit ratio. Though HBL has highest mean profit ratio, its profit has been fluctuated. So, its deviation and variation are the highest in comparison of other two

banks. In contrary of this, despite having the lowest profit ratio EBL has less deviation and variation as due to its consistent increase in profit. Due to lower level of NPA and increasing level of CD ratio, profit of EBL has been increasing consistently. NIBL has the highest amount of profit level as it has been disbursing highest level of loans and advance in comparison of other two banks. Due to higher increased level of NPA, HBL has increased its profit in decreased rate.

Correlation Coefficients and Probable Error Test:

- The correlation coefficients between LLP and loans and advances of EBL, HBL and NIBL are -0.135, 0.757 and 0.381 respectively. The data show that there is positive correlation between the LLP and total loans and advance of HBL and NIBL as LLP increases with increase in loans and advance. In contrary of this, EBL has negative correlation between these two variables as their LLP decrease with increase in loans and advances. The values of correlation coefficients of all three banks are less than six times of their PEs. These signify that the correlation between these two variables is insignificant and there is no evidence of correlation between them. That means there is no proportionate increase in LLP in respect with increase in total loan amount. The management of HBL has not been recovering its loan effectively in comparison of other two banks.
- The correlation coefficients (r) between LLP and NPA of EBL, HBL and NIBL are -0.239, 0.778 and 0.378 respectively. There is low degree of negative correlation between LLP and NPA in case of EBL. In contrary of this, HBL has high degree of positive correlation where as NIBL has low degree of positive correlation. The values of correlation coefficients are greater than six times of its PE in case of HBL whereas correlation coefficients of EBL and NIBL are less than six times of their PEs. These signify that there is significant relation of two variables in case of HBL but there is no significant relation of LLP and NPA in case of EBL and NIBL. EBL and NIBL have been managed their loan and reduced their NPA effectively.
- The correlation between NPA and loans and advances shows the effects on NPA due to change (increase or decrease) in loan and advance of banks. The data reveal that the correlation coefficients of EBL, HBL and NIBL are -0.178, 0.842 and -0.483 respectively. There is negative correlation between these two variables in case of EBL and NIBL whereas HBL has positive correlation. In the error test for EBL and NIBL, the correlation coefficients are less than six times of their PEs whereas in case of HBL, the coefficient is greater than six times of its PE. These signify that there is no reliable evidence of relationship between NPA and loans and advances of EBL and NIBL but HBL has significant relationships between these two variables. That means as the loans and advances has been increased of HBL; its NPA has also

been increased. This signifies that HBL has been disbursing its loan in the unproductive sector so that they may have been failed to recover. But EBL and NIBL have been able to reduce their non performing loan though they have been increasing their loans and advances significantly.

CHAPTER -V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter the whole study and findings are summarized with conclusion and suggest some recommendation based on the result of the analysis of data.

5.1 Summary

Financial institutions are the backbone of the economic development of the country. In other words, national development of any country depends upon the economic development of that country and economic development is supported by financial infrastructure. The main objective of the bank is to collect the idle fund, mobilize them into productive sectors and helps for the overall economic development of the country.

The assets of commercial bank indicate the manner in which the fund entrusted to the bank is employed. The successful working of the bank depends on ability of the management to distribute the fund among the various kinds of investments known as loan and advances. Loans and advances are the most profitable assets of a bank. These assets constitute primary sources of income to the bank. As being a business institution, a bank aims to increase its profit. Since loan and advance are more profitable assets than any other assets that the banks are willing to lend as more as possible. But bank has to be careful about the safety of such loan and advances. It means that the bank has to be careful about the repayment of loan and interest before disbursing the loan. If a bank management is risk averter then it may fail to obtain the adequate return on the funds. Similarly, if the bank management is too liberal, it may easily impair its profit by bad debts. Therefore, bank should not forget the reality that most of the banks failures in the world are due to shrinkage in the value of the loan and advances

As we know the loans and advances are more profitable than the other assets, it creates risk of non-repayment for the bank and such risk is known as credit risk or default risk. Therefore, like other assets the loan and advances are classified into performing and nonperforming on the basis of overdue aging schedule. If the due in the form of principal and interest are not paid by the borrower for a certain period is called nonperforming loan or assets. It is a loan asset whose recovery (principal and interest) has been difficult for the bank and financial institutions for whatever reasons. In other words, a loan from

which repayment of principal or interest is not forthcoming as per the facilities agreement at as demanded by the bank. It means NPAs could wreck banks profitability both through loss of interest income and write off the principal loan amount. Nonperforming loan are also known as nonperforming assets (NPAs). Performing assets are those that duly repay principle and interest to the banks. These assets constitute the primary sources of income to the banks. Banks are willing to lend as much as possible but they have to be careful about the safety of such loans as loans are risky assets. Performing assets have multiple benefits to the company as well as to the society while nonperforming assets erode even existing capital of the banks. NPAs have been becoming great problem in banking business. The level of NPA in Nepalese banking business is increasing. It is well known fact that the banks and financial institutions in Nepal have been facing the problem of swelling nonperforming assets (NPAs) and the issue is becoming more and more unmanageable day by day. Recently, a development bank is in verge of liquidation because of NPA problem. So, the impact of NPA cannot be ignored.

This research is aimed of studying the nonperforming assets of private commercial banks. For this purpose, descriptive and analytical research design was adopted out of total population of 32 commercial banks, three private banks were taken as sample using judgment sampling method, and they are EBL, HBL and NIBL. 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 the appropriate forms of table and charts. Also, appropriate mathematical, statistical, financial and graphical tools have been applied to analyze the collected data in suitable manner. The data of five consecutive years of the three banks have been analyzed to meet the objective of the study.

NIBL has highest proportion of loan and advances to total assets of bank but HBL has the lowest proportion of loan and advances during the study period. It indicates that the risk adverse attitude of the management of HBL. EBL has moderate ratio. Similarly, in case of loans and advances to total deposit (CD) ratio, NIBL has the highest proportion among three banks whereas HBL has the lowest mean CD ratio. So, we can say NIBL utilizes its funds taking higher risks with comparison of the other two banks whereas HBL disburses lesser loans in comparison of EBL and NIBL.

HBL has the highest LLP as compared to other two banks. From this, we can say that nonperforming loan of HBL is higher than EBL and NIBL. Higher LLP is indicative of poor and ineffective credit policy and higher proportion on nonperforming assets. So,

HBL has made higher provision for loan loss. Moreover, there is higher NPA in total loan and advances of HBL which comes around 1.02% on average. EBL and NIBL have 0.44% and 0.51% of NPA. The credit management of HBL is unable to reduce their LLP in comparison of other two banks.

On the basis of NPA to total loans and advances ratio, HBL has the highest NPA whereas EBL has the lowest throughout the study years. NPAs of HBL have been significantly increased in the later years. The mean ratios of EBL, HBL and NIBL are 0.55%, 4.43% and 1.82% respectively. It reveals that credit management of HBL is not as effective as of two other banks where as EBL is well managed among three banks in case of loan recovery.

Analysis of loan loss provision with respect to non performing assets shows that EBL has the highest mean ratios whereas HBL has the lowest. The mean ratios of EBL, HBL and NIBL are 79.90%, 28.74% and 51.45% respectively. Higher mean ratio indicates banks have adequate provision against non performing assets. From here we can conclude that EBL has better safeguard for future contingencies but HBL is comparatively unable to recover its loan and its NPA has increased during the study years. Analysis of NPA in respect to total assets also reveals the same results as HBL has the highest mean ratio of NPA to total assets whereas EBL shows lower ratio. The quality of loan in EBL is good as compared to other two banks.

Seeing the results obtained from the relation of net profit to total loans and advances, though having higher amount of NPA in comparison of other banks HBL has the highest profit ratio than that of NIBL. This is because NIBL has higher amount of loans and advances than that of HBL. However, NIBL has the highest amount of profit in all years than the profits of other two banks.

While analyzing correlation between loans and deposits, it has been found that all banks have positive correlation between loans and advances and deposits. This result shows that as deposit increases then loans and advance also increases and vice versa for all three banks. The values of correlation (r) in all banks are more than six times of their PEs. These signify that the correlation between these two variables is certain and significant for all three banks.

Analysis of correlation between loan loss provision and total loans and advances reveals that they are positively correlated in case of HBL and NIBL but in case of EBL they are

negatively correlated to each others. For all three banks, the values of correlations are less than six times of their PEs which signifies that there is no evidence of correlation between LLP and TL. That means there is no proportionate increase in LLP in respect with increase in total loan (TL) amount.

Correlation between loan loss provision and non performing assets measures the impact of unit change in NPA on the LLP. The data reveal that they are positively correlated in case of HBL and NIBL but in case of EBL they are negatively correlated to each others. For all three banks, the values of correlation are less than six times of their PEs which signifies that there is no evidence of correlation between LLP and NPA. That means there is no proportionate increase in LLP in respect with increase in nonperforming assets (NPA).

Correlation between nonperforming assets and total loans and advances measures impact of unit change of loan & advance on the NPA. It means this explains effects on NPA due to the change (increase or decrease) in loan and advance of banks. The data reveal that NPAs and loans and advances are negatively correlated in case of EBL and NIBL whereas positively correlated in case of HBL. These signify that the NPA increases as increase in total loan and vice versa in case of HBL but NPA decreases as increase in total loan and vice versa incase of HBL and NIBL. The correlation coefficient of HBL is greater than six times of its PE which shows that there is significant and reliable relation between NPA and TL. But in case EBL and NIBL, the values of correlation are less than six times of their PEs which results there is no significant correlation between NPAs and TLs of EBL and NIBL.

Trend analysis is a statistical tool which helps to forecast the future values of different variables on the basis of past tendencies of variables. Under this heading the trend values of variables are forecasted for future years based on the tendencies of past years. In case of LLP, it will be decreased with rate of 0.52 in the coming five years. But The LLP of both HBL and NIBL increases with the rate of 139.63 and 23.22 respectively. It implies that EBL has made its credit management for recovery of loan effectively than other two banks.

The HBL has increasing rate of NPA and its NPA increases with the rate of 215.12 from the mean values in the following years. But EBL and NIBL have decreasing rate of NPA and the expected trend values of these two banks decreases with the rate of 1.09 and 10.92 respectively. HBL has significantly high increase rate in NPA in the coming five years. The management of EBL and NIBL will be successful in decreasing their NPAs in coming years. In contrary of this, NPA of HBL will increase tremendously which shows

the ineffective credit management for recovering of loan.

The trend values of net profits shows that the average net profits of EBL, HBL and NIBL are 629.89mio, 656.56mio and 908.00mio respectively. The NIBL has significantly higher average profit than two other banks. All banks have increasing rate of net profit and their net profit increase with the rate of 165.03, 67.55 and 191.80 for EBL, HBL and NIBL respectively. We can drive the conclusion that management of EBL and NIBL will be successful in increasing their profit with high rate in comparisons of HBL. This may be due to their fewer amounts of LLP and NPA in EBL and NIBL coming years. But in case of HBL, profit will be increase with lesser rate as its LLP and NPA comprises more amounts which will reduce the net profit. These data show management of NIBL is more effective to increase its profit in the future.

Nepalese banking is highly affected by the increasing amount of NPAs in the banks and financial institutions. The major factors leading to non performing assets are : improper credit appraisal system, ineffective credit monitoring and supervision system, economic depression, borrower's misconduct, overvaluation of collateral, political pressure to lend creditworthy parties etc. setting up recovery cell, hiring assets management company, introducing effective laws to recover the bad loans etc. are some measures to resolve the problem of NPA. Proper loan classification and loan loss provisioning also helps to confront the problems of NPA. The latest directives regarding loan classification and loan loss provisioning is very important for maintaining sound financial health of the banks.

5.2 Conclusion

The banking sector is facing various problems. One of them, the banking has been becoming huge victim of huge nonperforming assets (NPAs). NPAs are one of the serious problems faced by commercial banks.

The main objective of commercial banks is to collect the idle funds from public and mobilize it into productive sector, which will cause the overall economic development. The banks should have to take in consideration the interest of depositors, shareholders, and society. Lending is the one of the main function of commercial banks which is the most income generating assets. As saying "high risk, high return", it gives high return bearing high level of risk. To minimize this risk banks should have to make loan loss

provision for safety. If lending is high then high amount of loan loss provision is required as per NRB directives.

Nepalese banks have to remain focused in their efforts to recover their bad loans or nonperforming assets, to sustain the positive trend of improving assets quality. Better risk management techniques, compliance with core principles for effective banking supervision skill building and training and transparency in transaction could be the solution. Due to instable political condition, insecurity, ineffective credit policy and political pressure to lend non viable project, overvaluation of collateral and even without collateral disbursement are the major factors causing of mounting nonperforming assets in banks mainly in government owned banks. Commercial banks investment has been found lower productivity due to the lack of supervision regarding whether there is proper utilization of their investment or not. In recent years, banks and financial institutions have been disbursing in the real state. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has also caused many problems to commercial banks. Proper classification and close review of loans enable banks to monitor loan portfolio and take remedial step to safe guard deterioration of its credit quality. Furthermore, establishment of proper rules and laws are also essential to solve the problem on NPL. The guidelines in themselves are not important unless properly implemented. The rules and regulation are only the tools of NRB to supervise and monitor the financial institution. NRB need to monitor the concerned authorities in order to ensure that they are being followed.

It is found that NIBL has the highest amount of loans and advances but HBL has the highest NPA and LLP during the study period while EBL has the lowest among three banks. Comparing these three banks, we can say that EBL and NIBL have better performance than HBL in the study period. Performance of EBL and NIBL are very good. Performance of HBL is also good but its NPA and LLP have been increased which shows some negative effects on its financial position. Deposits of all banks have been increasing consistently.

From this study we can also conclude that there is positive correlation between NPA and LLP of HBL and NIBL but EBL has negative correlation between them. It is because of the good management of EBL. The bank is able to reduce its LLP and NPA in later years. From all the study, we can clearly see that when there is proper credit management in bank, then its overall performance will increase which will result in increase of its net profit.

5.3 Recommendations

Based on the above findings and conclusion the following recommendations have been forwarded.

During the study period, in comparison of other two banks HBL has high rate of nonperforming assets loan accompanied by higher provision. The bank has fluctuated net profit in the year 2010 due to NPA and thereby LLP. NPA should be decreased by taking remedial action such as implementation of proper laws, to recover the bad loans especially by big and willful defaulter, hiring assets Management Company to break the vicious circle of nonperforming loan.

It has been observed that the size of loan and advance of all three banks are increasing. The investment affects the performance of banks in long run. Therefore, these banks should focus on recovery of bad loans but should also find out the new areas of investment to explore resources which may ultimately increase the performance of the bank and which will support the national development as well.

The bank has to offer training programs with related subject like NPA, the art of dealing with people, influencing them, winning them and finally retaining them.

The establishment of asset management committee (AMC) which helps the commercial banks in collecting their debts and improving their credit rating efficiency should be initiated. It is high time for the bank to undertake systematic and effective approach to mitigate the burden of NPA. In Nepalese context, following points are recommended for reducing the volume of NPA.

- A Good credit policy is the key to the success of a loan function of a bank. The root cause for a loan to turn bad is a bad credit appraisal from the bank. Thus a sound credit appraisal has to be done especially by the credit department.

Internationally used models like CAMPARI model and 5Cs Model can be used.

The CAMPARI Model

This model identifies the major areas to be analyzed before disbursing loans to a borrower. The areas being:

C	-	character	:	Integrity and credibility of the borrower.
A	-	ability	:	Borrower's ability to manage business.
M	-	Margin	:	Is the return reasonable for risk?
P	-	purpose	:	What is the money needed for?
A	-	amount	:	How much is needed?
R	-	repayment	:	How and when will we get the money back?
I	-	insurance	:	Are we insured?

The 5Cs Model

C = Character

C = Capacity

C = Capital

C = Conditions

C = Collateral

- During the credit analysis, the major focus should be on the 'character' of the client and the purpose of him to request for the loan, rather than the collateral, he is supposed to pledge/mortgage. The loan officer must be convinced that the customer has a will defined purpose for requesting bank credit and a serious intention repay. Once the purpose is known, the officer must determine if it is consistent with the bank's current loan policy. Responsibility, truthfulness, serious purpose, and serious intention to repay all monies owed make up what a loan office calls character.

The mindset of the bankers that starts analyzing a client's request by finding as many possibilities as possible of the client not paying back the loan should be changed.

- Effective and regular follow up of the end user of fund sanction is required to ascertain any embezzlement or diversion of fund. This process can be undertaken every quarter so that any account converting NPA can be properly ascertained.
- In developed countries, they have well functioned Asset Recovery/Reconstruction Company where NPA are sold upon agreed price. In Nepal, there is absence of such mechanism. So, such mechanism must be developed where even if the assets goes bad, banks and financial institution have no problem in disposing it.
- Timely decision on genuine requirement of a genuine client should be done and the

bank should be willing to help the client explore his business.

- The trend of disbursing a loan merely on the recommendations from the higher management staff and political influences should be stopped.
- The constant counseling and training to the credit analysis and staff have to be done.
- Depending on the situation reliable and creditworthy clients can be given appropriate incentives that help them settle the loan.

- Almost care should be taken the financial analysis of the client. Cash flow rather than profit is what should be concerned the bank.
- Since banking is also a business, customer satisfaction should always be the first concern for the bank.
- The accounting policies must be transparent and must be best auditing practices.
- Every person means the bank staff must know their responsibility of their work rather than their selfishness. They must have strong commitment and support the rule and regulations.
- Must take timely action against willful defaulter.
- Internal and external undue influence should be eradicated.
- Prompt action to recover loan must be taken.

The banks should have to diversify their investment in different sectors. The accumulation of real estate investment should be gradually decreased and they should find out the new sectors for the investment. Regular monitoring on the granted loan should be done effectively to decrease the NPA.

The ethical policy of “giving life is better than killing “should not be forgotten. In other words, recovering loan is better than auction should be kept in mind

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APPENDIX 1

Total Loan and advances (TL) To Total Assets (TA) Ratio:

Let X_1 , X_2 and X_3 denote the ratio EBL, HBL and NIBL respectively.

Year	X_1	X_2	X_3	$(X_1 - \bar{X}_1)^2$	$(X_2 - \bar{X}_2)^2$	$(X_3 - \bar{X}_3)^2$
2007	63.75	50.71	64.40	4.83	88.93	26.87
2008	67.55	53.90	70.82	2.55	38.99	1.52
2009	64.70	63.05	69.47	1.57	8.48	0.01
2010	66.59	65.50	71.46	0.41	28.74	3.50
2011	67.17	67.54	71.78	1.49	54.78	4.81
Total	329.76	300.71	347.92	10.85	219.92	36.71

$$\bar{X}_1 = \frac{329.76}{5} = 65.95 \%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{10.85}{5}} = 1.47$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{1.47}{65.95} \times 100 = 2.23 \%$$

$$\bar{X}_2 = \frac{300.71}{5} = 60.14 \%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{219.92}{5}} = 6.63$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{6.63}{60.14} \times 100 = 11.02 \%$$

$$\bar{X}_3 = \frac{347.92}{5} = 69.58\%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{36.71}{5}} = 2.71$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{2.71}{69.58} \times 100 = 3.89\%$$

APPENDIX 2

Loan and Advances (TL) to Total Deposit Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₃ - \bar{X}_3) ²	(X ₃ - X ₃) ²
2007	75.13	56.57	72.56	0.20	134.47	45.75
2008	76.49	61.23	79.91	3.25	48.08	0.34
2009	71.68	71.49	78.86	9.05	11.05	0.21
2010	74.61	74.39	81.74	0.01	38.81	5.85
2011	75.51	77.14	83.54	0.69	80.59	17.81
Total	373.43	340.82	396.61	13.20	313.00	69.97

$$\bar{X}_1 = \frac{373.43}{5} = 74.69\%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{13.20}{5}} = 1.62$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{1.62}{74.69} \times 100 = 2.17\%$$

$$\bar{X}_2 = \frac{340.82}{5} = 68.16\%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{313.00}{5}} = 7.91$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{7.91}{68.16} \times 100 = 11.60 \%$$

$$\bar{X}_3 = \frac{396.61}{5} = 79.32 \%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{69.97}{5}} = 3.74$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{3.74}{79.32} \times 100 = 4.71 \%$$

APPENDIX 3

Loan Loss Provision (LLP) to Loans and Advances (TL) Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₃ - \bar{X}_3) ²	(X ₃ - X ₃) ²
2007	0.66	0.53	0.73	0.05	0.23	0.05
2008	0.54	0.30	0.49	0.01	0.51	0.00
2009	0.39	0.28	0.45	0.00	0.55	0.00
2010	0.28	2.48	0.23	0.02	2.13	0.08
2011	0.32	1.49	0.64	0.01	0.23	0.02
Total	2.18	5.08	2.54	0.10	3.65	0.15

$$\bar{X}_1 = \frac{2.18}{5} = 0.44 \%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{0.10}{5}} = 0.14$$

$$CV = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.14}{0.44} \times 100 = 32.05 \%$$

$$\bar{X}_2 = \frac{5.08}{5} = 1.02 \%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{3.65}{5}} = 0.85$$

$$CV = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.85}{1.02} \times 100 = 83.65 \%$$

$$\bar{X}_3 = \frac{2.54}{5} = 0.51 \%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{0.15}{5}} = 0.17$$

$$CV = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.17}{0.51} \times 100 = 33.46 \%$$

APPENDIX 4

Non Performing assets (NPA) to Total loan and advance (TL) Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₂ - \bar{X}_2) ²	(X ₃ - \bar{X}_3) ²
2007	0.80	7.44	2.69	0.06	9.05	0.76
2008	0.68	6.60	2.07	0.02	4.70	0.06
2009	0.48	3.61	2.37	0.00	0.68	0.31
2010	0.44	2.35	1.13	0.01	4.33	0.47
2011	0.34	2.16	0.82	0.04	5.16	0.99
Total	2.74	22.16	9.08	0.14	23.92	2.60

$$\bar{X}_1 = \frac{2.74}{5} = 0.55 \%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{0.14}{5}} = 0.17$$

$$CV = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.17}{0.55} \times 100 = 31.02 \%$$

$$\bar{X}_2 = \frac{22.16}{5} = 4.43 \%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{23.92}{5}} = 2.19$$

$$CV = \frac{\sigma}{\bar{X}} \times 100 = \frac{2.19}{4.43} \times 100 = 49.41 \%$$

$$\bar{X}_3 = \frac{9.08}{5} = 1.82 \%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{2.60}{5}} = 0.72$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.72}{1.82} \times 100 = 39.65\%$$

APPENDIX 5

Provision Hold (LLP) to Non Performing Assets (NPA) Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₃ - \bar{X}_3) ²	(X ₃ - X ₃) ²
2007	82.06	14.78	30.80	4.66	194.98	426.26
2008	79.66	12.70	44.11	0.06	257.41	53.92
2009	81.19	12.85	77.81	1.66	252.61	694.85
2010	63.51	70.32	36.63	268.50	1,729.07	219.55
2011	93.08	33.06	67.90	173.73	18.65	270.49
Total	399.50	143.71	257.25	448.60	2,452.72	1,665.07

$$\bar{X}_1 = \frac{399.50}{5} = 79.90\%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{448.60}{5}} = 9.47$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{9.47}{79.90} \times 100 = 11.85\%$$

$$\bar{X}_2 = \frac{143.71}{5} = 28.74\%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{2,452.72}{5}} = 22.14$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{22.14}{28.74} \times 100 = 77.03\%$$

$$\bar{X}_3 = \frac{257.25}{5} = 51.45\%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{1,665.07}{5}} = 18.25$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{18.25}{51.45} \times 100 = 35.47\%$$

APPENDIX 6

Non Performing Assets (NPA) to Total Assets (TA) Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₃ - \bar{X}_3) ²	(X ₃ - X ₃) ²
2007	0.51	1.83	1.53	0.02	0.02	0.57
2008	0.46	1.27	0.79	0.01	0.48	0.00
2009	0.31	1.36	0.40	0.00	0.36	0.13
2010	0.29	2.31	0.44	0.00	0.12	0.11
2011	0.23	3.05	0.67	0.02	1.18	0.01
Total	1.80	9.82	3.84	0.06	2.16	0.82

$$\bar{X}_1 = \frac{1.80}{5} = 0.36\%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{0.06}{5}} = 0.11$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.11}{0.36} \times 100 = 30.53\%$$

$$\bar{X}_2 = \frac{9.82}{5} = 1.96 \%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{2.16}{5}} = 0.66$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.66}{1.96} \times 100 = 33.59 \%$$

$$\bar{X}_3 = \frac{3.84}{5} = 0.77 \%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{0.82}{5}} = 0.40$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.40}{0.77} \times 100 = 52.08 \%$$

APPENDIX 7

Return on Loans and Advances (TL) Ratio:

Year	X ₁	X ₂	X ₃	(X ₁ - \bar{X}_1) ²	(X ₃ - \bar{X}_3) ²	(X ₃ -X ₃) ²
2007	2.17	2.89	2.82	0.24	0.02	0.01
2008	2.46	3.26	2.53	0.04	0.24	0.04
2009	2.67	3.04	2.45	0.00	0.07	0.09
2010	3.02	1.82	3.09	0.13	0.90	0.12
2011	3.00	2.83	2.81	0.11	0.00	0.00
Total	13.32	13.84	13.69	0.52	1.24	0.26

$$\bar{X}_1 = \frac{13.32}{5} = 2.66 \%$$

$$SD = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}} = \sqrt{\frac{0.52}{5}} = 0.32$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.32}{2.66} \times 100 = 12.01 \%$$

$$\bar{X}_2 = \frac{13.84}{5} = 2.77 \%$$

$$SD = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}} = \sqrt{\frac{1.24}{5}} = 0.49$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.49}{2.77} \times 100 = 17.70 \%$$

$$\bar{X}_3 = \frac{13.69}{5} = 2.74 \%$$

$$SD = \sqrt{\frac{\sum (X_3 - \bar{X}_3)^2}{N}} = \sqrt{\frac{0.26}{5}} = 0.23$$

$$CV = \frac{\sigma}{X} \times 100 = \frac{0.23}{2.74} \times 100 = 8.40 \%$$

APPENDIX 8

Correlation between Deposit and Loan and Advances (TL):

Let X_1 , X_2 and X_3 denote deposits and Y_1 , Y_2 and Y_3 be the total loan and advances of three banks EBL, HBL and NIBL respectively.

For EBL,

Year	X_1	Y_1	X_1Y_1	X_1^2	Y_1^2
2007	18,186	13,664	248,498,375	330,739,689	186,707,082
2008	23,976	18,339	439,703,340	574,862,482	336,322,222
2009	33,323	23,885	795,907,664	1,110,418,997	570,477,461
2010	36,932	27,556	1,017,720,030	1,363,995,522	759,352,976
2011	41,128	31,058	1,277,337,879	1,691,504,981	964,580,108
Total	153,546	114,502	3,779,167,288	5,071,521,671	2,817,439,850

For HBL,

Year	X_2	Y_2	X_2Y_2	X_2^2	Y_2^2
2007	30,048	16,998	510,762,916	902,907,410	288,931,904
2008	31,843	19,498	620,855,438	1,013,963,234	380,153,305
2009	34,681	24,793	859,860,011	1,202,795,703	614,700,598
2010	37,611	27,981	1,052,385,088	1,414,602,536	782,915,586
2011	40,921	31,567	1,291,740,482	1,674,497,717	996,474,021
Total	175,104	120,836	4,335,603,935	6,208,766,600	3,063,175,414

For NIBL,

Year	X_3	Y_3	X_3Y_3	X_3^2	Y_3^2
2007	24,489	17,769	435,145,041	599,711,121	315,737,361
2008	34,451	27,529	948,401,579	1,186,871,401	757,845,841
2009	46,698	36,827	1,719,750,931	2,180,712,550	1,356,227,929
2010	50,094	40,948	2,051,249,112	2,509,408,836	1,676,738,704
2011	50,138	41,887	2,100,130,406	2,513,819,044	1,754,520,769
Total	205,870	164,960	7,254,677,069	8,990,522,952	5,861,070,604

APPENDIX 9

Correlation between Loan Loss Provision (LLP) and Loan Loans and advances (TL):

Let X_1 , X_2 and X_3 denote loan loss provision and Y_1 , Y_2 and Y_3 be the total loan and advances of three banks EBL, HBL and NIBL respectively

For EBL,

Year	X_1	Y_1	X_1Y_1	X_1^2	Y_1^2
2007	90	13,664	1,229,760	8,100	186,704,896
2008	99	18,339	1,815,561	9,801	336,318,921
2009	93	23,885	2,221,305	8,649	570,493,225
2010	77	27,556	2,121,812	5,929	759,333,136
2011	98	31,058	3,043,684	9,604	964,599,364
Total	457	114,502	10,432,122	42,083	2,817,449,542

For HBL,

Year	X_2	Y_2	X_2Y_2	X_2^2	Y_2^2
2007	91	16,998	1,546,818	8,281	288,932,004
2008	58	19,498	1,130,884	3,364	380,172,004
2009	69	24,793	1,710,717	4,761	614,692,849
2010	693	27,981	19,390,833	480,249	782,936,361
2011	472	31,567	14,899,624	222,784	996,475,489
Total	1,383	120,837	38,678,876	719,439	3,063,208,707

For NIBL,

Year	X_3	Y_3	X_3Y_3	X_3^2	Y_3^2
2007	130	17,769	2,309,970	16,900	315,737,361
2008	136	27,529	3,743,944	18,496	757,845,841
2009	166	36,827	6,113,282	27,556	1,356,227,929
2010	93	40,948	3,808,164	8,649	1,676,738,704
2011	267	41,887	11,183,829	71,289	1,754,520,769
Total	792	164,960	27,159,189	142,890	5,861,070,604

APPENDIX 10

Correlation between Loan Loss Provision (LLP) and Nonperforming Assets (NPA):

Let X_1 , X_2 and X_3 denote loan loss provision and Y_1 , Y_2 and Y_3 be the non performing assets of three banks EBL, HBL and NIBL respectively.

For EBL,

Year	X_1	Y_1	X_1Y_1	X_1^2	Y_1^2
2007	90	109	9,805	8,046	11,949
2008	99	125	12,388	9,868	15,552
2009	93	115	10,671	8,664	13,144
2010	77	121	9,337	5,931	14,701
2011	98	106	10,379	9,661	11,151
Total	457	576	52,581	42,170	66,496

For HBL,

Year	X_2	Y_2	X_2Y_2	X_2^2	Y_2^2
2007	91	614	55,649	8,224	376,539
2008	58	460	26,887	3,414	211,730
2009	69	536	36,850	4,735	286,795
2010	693	985	682,194	479,750	970,064
2011	472	1,427	673,076	222,528	2,035,836
Total	1,382	4,021	1,474,655	718,652	3,880,964

For NIBL,

Year	X_3	Y_3	X_3Y_3	X_3^2	Y_3^2
2007	130	421	54,628	16,827	177,347
2008	136	308	41,929	18,493	95,064
2009	166	214	35,500	27,622	45,625
2010	93	254	23,611	8,649	64,454
2011	267	394	105,258	71,465	155,029
Total	792	1,591	260,926	143,057	537,519

APPENDIX 11

Correlation between Nonperforming Assets (NPA) and Total Loan (TL):

Let X_1 , X_2 and X_3 denote nonperforming assets and Y_1 , Y_2 and Y_3 be total loan and advances of three banks EBL, HBL and NIBL respectively.

For EBL,

Year	X_1	Y_1	X_1Y_1	X_1^2	Y_1^2
2007	109	13,664	1,493,657	11,949	186,707,082
2008	125	18,339	2,286,991	15,552	336,322,222
2009	115	23,885	2,738,292	13,144	570,477,461
2010	121	27,556	3,341,153	14,701	759,352,976
2011	106	31,058	3,279,572	11,151	964,580,108
Total	576	114,502	13,139,665	66,496	2,817,439,850

For HBL,

Year	X_2	Y_2	X_2Y_2	X_2^2	Y_2^2
2007	614	16,998	10,430,442	376,539	288,931,904
2008	460	19,498	8,971,618	211,730	380,153,305
2009	536	24,793	13,277,533	286,795	614,700,598
2010	985	27,981	27,558,629	970,064	782,915,586
2011	1,427	31,567	45,040,626	2,035,836	996,474,021
Total	4,021	120,836	105,278,847	3,880,964	3,063,175,414

For NIBL,

Year	X_3	Y_3	X_3Y_3	X_3^2	Y_3^2
2007	421	17,769	7,482,975	177,347	315,737,361
2008	308	27,529	8,487,873	95,064	757,845,841
2009	214	36,827	7,866,247	45,625	1,356,227,929
2010	254	40,948	10,395,780	64,454	1,676,738,704
2011	394	41,887	16,492,495	155,029	1,754,520,769
Total	1,591	164,960	50,725,371	537,519	5,861,070,604