## CHAPTER-1

## INTRODUCTION

### 1.1 Background of the Study

Nepal is an under development country. The development of the country highly depends upon its economic condition and there is a need for additional capital investment to earn higher rate of economic growth. Domestic saving and foreign capital are two principal sources of capital available for the investment. Among them, domestic saving is the most important and stable sources of capital.

It is obvious the economic development is impossible without the development of difference sectors like industries, trade so on. So development of these sectors needs a regular supply of financial resources. In development countries there is always shortage of the capital for the development activities. It is not possible to handle and development all the sectors by the Government alone at a time. Private People also cannot undertake large business because per capita income of the people is very low while there propensity to consume is very high. Due to low income their saving is very low and capital formation is very low. Their saving is not sufficient for carrying on development works

Capital formation is one of the important factors in economic development. The capital formation leads to increase in the size of the national output, income, and employment. Solving the problem of inflation and balance of payment and making the economy free from the burden of foreign debt. Domestic capital formation helps in making a country self - sustainable profit made by business community constituted the major parts of the saving of the community and what was assumed to be invests.

The issue of development always rests upon the mobilization of the resources. Banks function of lending ensured required volumes of the capital to resources mobilization. Thus, the foundation of resources mobilization is pillared on the bank function of lending. The primary issue of the economic development, production, income, government revenue, international trade etc. What role of bank can play to assist the
worldwide today? The liberalization of economy has posed more responsibility and challenges on Commercial banks. This has created new area of probability and posed high degree of competition risks. The existence of bank has its root in economic development and the banks have a big role to play in fund mobilization to increase the pace of development .The liberalization of financial sector in Nepal has opened a new horizon of expectancy in banking industry. But the liberalization is not easy game to drive given rise to a chaos and exploitation in economy.

Lending is the most fundamental function of commercial bank as well as financial companies, development bank so on. It is not only the most important function; it also determines the futures of financial institutions. The quality of loan, the quality of borrower and the quality of security determines the health of any financial institution. It is very sensitive subjective that what sort of credit policy a bank should have. So it should pay more attention to the loans and advances that it providers.

Banking sector plays an important role in the economic development of the country. Commercial banks are one to the vital aspects of this sector, which deals in the process of channeling the available resources in the needed sector. It is the intermediary between the deficit and surplus of financial resources in the needed sector. It is the intermediary between the deficit and surplus of financial resources. Financial institutions like banks are a necessity to collect scattered saving and put them into productive channels. In the absence of such institutions it is possible that the saving will not be safely and profitably utilized within the economy. It will be diverted abroad of channeled into unproductive conspicuous consumption including real estate speculation.

Loan is essential aspect of commercial bank. "First, income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in the community strengthens the community - bank relationship. Third, lending money spurs business development and supports a growing economy" credit being the most important function of commercial banks, affects overall development of the country. So far as pace of economic development is considered, it is directly related to the quality and quantity of the credit, which is derived from various financial institutions, especially commercial banks in Nepal.

Lending operation of commercial banks is very risky one. For this commercial banks have to pay due consideration while formulating lending Policy. A healthy development of any commercial bank depends upon its Lending Policy. A good Lending Policy attracts of borrowers and lenders, which help to increase the volume and quality of deposits, loans and investment.

### 1.2 Statement of the problems

Lending is one of the major terms of investment policy. So every financial institution should concentrate on lending as a major means of investment. But the sufficient return cannot have been fount to be earned as well as stable and appropriate investment policy has not been followed by these commercial banks. Most of the commercial banks performance in the field of lending is found to be bad

None of the commercial banks can survive without implementing its lending functions efficiently. For better sustain of any business entity, its market availability is a must. In present situation liquidity with public is quite high and banks are not getting promising lending opportunities properly. They are collecting adequate amount from the mass, however they couldn't find new lending sectors to mobilize funds on the changing context of Nepal. Increasing rate of liquidity has caused a downward trend in investment sector. It has ensured bad impact on interest rate to the depositors, lower dividend to the shareholders, lower market values of shares, lower contribution to national revenue etc.

Lending portfolio position of the banks is not satisfactory. They are not following a sound diversification principle. At one time commercial banks landing had invested a large proportion of their loan to garment, hotel, carpet industries but these sectors became sick and banks are in trouble of their loan repayment. Commercial banks in Nepal has been facing several challenges, some of them arising from lack of smooth functioning of economy, some of them arising due to confused policies and many of them arising due to default of the borrowers. Thus, in this scenario of Nepalese commercial banking sector, this study has been mainly concentrated on the following specific problems of commercial banks:-

Lending on priority sectors
Lack of sustainable lending environment.
(- How aggressively is the commercial banks lending.
(T) Over liquidity caused by lack of good lending opportunities.

To Increasing deposits without increasing in the lending sectors.
(G) What steps should be taken to improve the lending policy of the commercial banks

### 1.3 Objective of the study

The main objective of the study is to analyze the various aspects of the commercial banks lending in various sector of economy. The main objective of the study can be clearly explained as follows:

- To analyze status of non - performing loans.
© To analyze the portfolio behavior of lending.
(G) To measure the commercial banks lending strength.
(G) To identify major weakness of lending policy of the commercial banks.

To To know the volume of contribution made by commercial banks in lending.
(7) To measure the growth rate of contribution made by commercial banks in lending.

To To measure the growth rate and propensity of growth bases on trend analysis.
$\rightarrow$ To measure the lending performance in quality, efficiency and it's contributed in total profitability and Income.

### 1.4 Importance of the study

Lending is one essential and main function where the whole banking business is rested upon. In the context of Nepal there are less availability of research work, journals and articles in the lending policy of commercial bank. These are only few researches in commercial banks especially on their lending practices. Few books dealing with theses aspects can be found but they are not sufficient. Lending is one of the essential and main functions and main functions where the whole financial business is rested upon. As it is being well known fact that the financial institutions can affect the economic condition of the whole country the effort is made to highlight
the lending practices of the commercial banks expecting that the study can fill the research gap on the lending practices of finance companies. As well it is believed that this study would carry grate significance to the shareholders of the commercial banks, to the professionals related to finance, to the students and teaches of the banking and commerce.

Since this study has purposes to measures the efficiency of commercial banks of their lending and investing behaviors putting their in the same footing, it deserve the great importance to all the people interested. The study is the first in its quality in comparing commercial banks to other commercial banks. So that its add new idea and finding related to those commercial banks and add the substantial knowledge in management literature.

The main importance of the study is to highlight the lending polices of commercial banks expecting that the study can be bridge the gap between deposits and lending policies. On the other hand, the study would provide information to management of the bank that would help them to the take collective action. Further from the study, the shareholders would get information to make decision while making investment on shares of various banks. As this study will provide a useful feedback for academic institution, bank employee, trainees and investor and also for financial person, policy maker bodies and other persons concerned with commercial banks. This study will serve to be a guide to the management of banks, financial institution, related parties, shareholders, and general public.

### 1.5 Limitation of the study

This study attempts to evaluate the lending policy and its practices of commercial banks. In fast changing word it is difficult to cope with the place of changes. Due to the arrival of unforeseen difficulty, every study or research is always accompanied by some limitation. Some commonly attributed limitations of the study are as follows :

[^0](a) This study concentrates only on those factors that are related with lending.

To The study mainly based on secondary data collection from bank. In some aspect of the study primary data also collected.
(6) The study is done only on the basic of the published financial documents like Balance sheets, Profit and Loss Account, and other related journals.
(r) Some of the statistical and financial tools are used in the study. Hence the drawback and weaknesses of these tools may affect the result of the study.
$\sigma$ All the analysis in the study has been conducted based on the data as of end of fiscal year i.e. mid July of respective years; any abnormality in this data may affect the conclusion of the study.

### 1.6 Plan of the study

## Chapter 1: Introduction

The first chapter of the study is introduction, which highlighted the basic information of the research area, various problems, objectives, importance, limitations and organization of the study.

## Chapter 2: Review of Literature

The second chapter of the study assures readers that they are familiar with important research that has been carried out in similar areas by earlier scholars in related areas. It also established that the study as link a chain of research that is developing and emerging knowledge about concerned field.

## Chapter 3: Research Methodology

The third chapter refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. It describes the various research methods, sources of data, data collection techniques, data collection method and period of study.

## Chapter 4: Presentation and Analysis of Data

The developed information has finished in required from in fourth chapter. Information is presented and analyzed by using various financial and statistical tools in specified form to meet the stated objective of the study.

## Chapter 5: Summary, Conclusions and Recommendations

On the basis of the results from data analysis, the researcher concluded about the research work. Besides, it also gives important suggestion to the concerned organization for better improvement.

## CHAPTER - II

## REVIEW OF LITERATURE

### 2.1 Conceptual Framework of Commercial Bank

### 2.1.1 Meaning and Definition of Commercial Bank

Commercial bank is a business organization that receives and holds deposits of funds from others, makes loans of extend credit and transfer funds by written orders of depositors. Actually modern banks perform all the required financial function and provide its service to every needy.

The commercial banks are established under the rules and legislation of the central bank of the country. It has to move as per the directives given by the central banks. Though banks are established for mobilization of the saved funds central banks makes certain rules so that the public or the customer of the banks may not under gone on loss of their hard earned money by the disinvestments procedures if the banks. Thus, commercial banks have to interest as well. Good lending policy ensures maximum amount of investment to all sector with proper utilization.

Commercial banks Act 2031 B.S. of Nepal has defined that "A commercial banks is one which exchanges money, deposits money, accept deposits, grant loans and performs commercial banking function and which is not a bank means for cooperative, agriculture, and industries of for such specific purpose."

### 2.1.2 Development of Commercial Bank in Nepal

In ancient time, there was also a lending business in Nepal. During those days people use to borrow money from moneylenders paying some interest. There was no accurate interest rate. Moneylenders determined interest rate. So there was monopoly in interest rate. Moneylenders are like shaumahajans, Jamindar, relatives. Friends and few information organizations limited to ethnic group such as guthi. The borrowing from the other people and the informal organization was limited and based on
personal understanding. At that time people deposit their gold, silver and valuable goods for the sake of security, thus, the private moneylender can be taken as forerunner of the concept of financial institution.

In this regarding prof. Ojha said "But it is impossible to give correct chronological history in view of the fact that no authentic historical record are available in respect to banking. It can be inferred form the history of Nepal regarding the rebuilding of kathamandu in 723 A.D by Gunakam Dev, the king of the karhmandu and that of shankhadharl's (a merchant) action of introduction Nepal Sambat' some fifty seven years thereafter to make lending has been prevalent long before that".

Thus the above statement shows that lending system was introduced very long before 723 A.D. But there is no recorded document about lending. Then in $14^{\text {th }}$ century during the rule of Mall King Jayasthiti Malla working occupation was divided in 64 categories. Among them "Tanka Dhari" was one. The main occupation of Tanka Dhari" was lending money. It also shows that lending process was prevailing during the malla rule in Nepal.

During the period of Rana Prime minister, Ranodip Singh a government institution called "Tejarath" was established. In this regarding Ojha states" Ranodip Singh, a Rana prime minister for 8 years ( 1877 to 1885) got interested in this problem an took concrete stops by establishing a government financial institution know as "Tejarath". The Tejarath helped the public by supplying easy and cheap credit at 5 percent interest on the security of gold and silver ornaments.

The function of Tejarath was it supplies credit as 5 percent interest rate per annum. It had benefited to government official. There was no business of collecting deposit in Tejarath. So, it was not actually a banking institution. From 1901 to 1929 A.D. Tejarath opened same limited branches to extend the credit facilities. Before establishment of NB, Tejarath did not granted to general people. It was limited only for government officials. Tejarath was regarded as the new area in history of banking development in Nepal.

Tejarath could not fulfill the credit needs of the whole society. It was a government institution that benefited government official only. So the general people had to depend on moneylenders. The moneylenders exploited the ruler people in different ways. On the other hand there was need of trade and industries development programs. To take the free ruler people from the grips of lenders and to develop trade and industries in the country the need for a commercial bank was realized in the country. So the Nepal bank limited was established in 1973 A.D. (1994 B.S.), which is first commercial bank in Nepal. It was established under the Nepal Bank Act of 1963 A.D. at the beginning $49 \%$ of the ownership belong to the promoters as well as general public and $51 \%$ belongs to government. It also acted as central bank for more than three decades. "Nepal Rastra Bank" established in Baisakh 14, 2013 B.S.(1956) under Nepal Bank Act 2012 B.S. as the Central Bank of Nepal. The main objective of the central bank is to maintain internal and external stability. It is totally owned by government. Besides the commercial banking functions, NRB is heavily assisting for the development of whole economy. It is giving timely directives to all financial institutions operate and conducted in all over the country.

After a long period, the second commercial Bank named "Rastriya Banijya Bank" has been established in 2022 B.S. with cent percent government ownership. This bank has been established under the Rastriya Banijya Bank Act 2021 B.S. both Nepal Bank ltd and Rastriya Banijya Bank have made a remarkable contribution by providing reliable banking service to the Nepalese people.

The government introduced commercial Bank Act in Nepal in 2033 B.S. to cover the vast field of financial sector. According to the act, this act has helped to emerge number of commercial bank with to maintain the economic interest in comfort of the public in general facilitated to provided loan for agriculture, industries and trade and make a available banking service to the country and people. Along vacuum in the banking in the banking sector got some rays of hope only when the government forwarded the economic liberalization policy in 2039 B.S. and decided to allow foreign banks to operate their activities began to grow and many commercial banks are established in Nepal.

Table: - 2.1
List of Commercial banks in Nepal
(Rs. in million)

| S.N | Name of Commercial Banks | Operation <br> Date(A.D.) | Authorize <br> Capital | Issue <br> Capital | Paid-up <br> Capital |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 01 | Nepal Bank Limited | $1937-11-15$ | $* * * *$ | $* * * *$ | 380.40 |
| 02 | Rastriya Banijya Bank | $1966-01-23$ | 1557.60 | ------ | 1172.30 |
| 03 | Nabil Bank Limited | $1984-07-16$ | 500.00 | 491.6544 | 491.6544 |
| 04 | Nepal Investment bank Limited | $1986-02-27$ | 1000.00 | 590.586 | 590.586 |
| 05 | Standard Chartered Bank (Nepal) Limited | $1987-01-30$ | 1000.00 | 500.00 | 374.6404 |
| 06 | Himalayan Bank Limited | $1993-01-18$ | 1000.00 | 772.20 | 772.20 |
| 07 | Nepal Bangladesh Bank Limited | $1993-06-05$ | 1000.00 | 1000.00 | 719.90 |
| 08 | Nepal SBI Bank Limited | $1993-07-07$ | 1000.00 | 650.00 | 640.2361 |
| 09 | Everest Bank Limited | $1994-10-18$ | 600.00 | 529.80 | 518.00 |
| 10 | Bank of Kathmandu Limited | $1995-03-12$ | 1000.00 | 500.00 | 463.5809 |
| 11 | Nepal Credit and Commercial Bank Limited | $1996-10-14$ | 1000.00 | 1000.00 | 698.415 |
| 12 | Lumbini Bank Limited | $1998-07-17$ | 1000.00 | 500.00 | 500.00 |
| 13 | Nepal Industrial and Commercial Bank Limited | $1998-07-21$ | 1000.00 | 600.00 | 600.00 |
| 14 | Machhapuchhare Bank limited | $2000-10-03$ | 1000.00 | 715.00 | 715.00 |
| 15 | Kumari Bank Limited | $2001-04-03$ | 1000.00 | 625.00 | 625.00 |
| 16 | Laxmi Bank Limited | $2002-12-24$ | 1000.00 | 500.00 | 500.00 |
| 17 | Siddhartha Bank Limited | $2002-12-24$ | 1000.00 | 500.00 | 500.00 |
| 18 | Agriculture Development Bank Limited | $2006-03-16$ | $* * * *$ | -------- | 647.8005 |
| 19 | Global Bank Limited | $2007-01-15$ | 2000.00 | 1000.00 | 1000.00 |
| 20 | Citizen Bank of International Limited | $2007-07-01$ | 2000.00 | 1000.00 | 1000.00 |
| 21 | Prime Commercial Bank Limited | $2007-09-28$ | 2000.00 | 1000.00 | 1000.00 |
| 22 | Sunrise Commercial Bank Limited | $2007-10-12$ | 2000.00 | 1000.00 | 1000.00 |
| 23 | Bank of Asia | $2007-10-12$ | 2000.00 | 1000.00 | 1000.00 |
| 24 | Development Credit Bank Limited | $2001-01-23$ | 2000.00 | 1661.00 | 1655.00 |
| 25 | NMB Bank Limited | $1996-11-26$ | 2000.00 | 1100.00 | 1100.00 |
| 26 | Kist Bank Limited | $2009-05-07$ | 5000.00 | 2000.00 | 2000.00 |
|  |  |  |  |  |  |

The number of commercial bank branches operating in the country in mid-January 2009 totaled 617. The regional distribution of these bank branches seemed to be much skewed. Of the total bank branches, 302 branches are being operated in the central
development region, followed by western development region (120) and eastern development region (119). Only 48 and 28 branches are being operated in the midwestern development region and far-western development region respectively. There are six joint venture commercial banks in Nepal.

Table No:-2.2

## List of Joint Venture commercial Banks in Nepal

(August 2008)
(Rs. In Million)

| SN | Bank | Issued <br> Capital | Foreign <br> Share | Foreign Bank |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Nepal SBI Bank Limited. | 650.00 | $50 \%$ | State Bank Of India; India |
| 2 | Everest Bank Limited | 529.80 | $20 \%$ | Punjab National Bank; India |
| 3 | Standard Chartered Bank Nepal | 500.00 | $75 \%$ | Standard Chartered Grind Lays <br> Bank limited; Australia and UK |
| 4 | Nabil Bank Limited | 491.65 | $50 \%$ | National Bank Limited; <br> Bangladesh |
| 5 | Nepal Bangladesh Bank Limited | 1000.00 | $25 \%$ | IFIC Bank; Bangladesh |
| 6 | Himalayan Bank Limited | 772.20 | $20 \%$ | Habib Bank Limited; Pakistan |

### 2.2 Review of Lending/ Loan

### 2.2.1 Meaning of Lending/Loan.

A dictionary meaning of lending would say something like: that to lend is to allow another person the of something, in the expectation that it will be returned its original owner. Lending combines the sciences if obtaining and analyzing the facts of a loan request and act of making judgments about that information, feasibility of the business, and credibility of the borrower. It goes without saying that lender always expects that the money that is lend out will be return. However if not always likes this occasionally this loan turns into a "bad dept".

Loan defined as a thing that lend, especially a sum of money. Like wise debt means a sum of money owned to somebody. However, in financial terms loan of debt means principle of interest availed to the borrowers against the security. Debt means money
that bank owes of will lend to individual of person. Likewise, the term loan defined as lending. Delivery by one party and receipt by another party, a sum of money upon agreement expressed or implied, to repay it with or without interest. Any thing furnished for temporary use to a person at his request, on that condition, it shall be return of its equivalent in kind, with of without compensation for its use. Loan including:
(T) The certain of debt by the lender's payment of or agreement to pay money to the debtor or to a third party for his of the debtor.
(1) The creation of debt by credit to an account with the lender upon which the debtor is entitled to draw immediately

To The creation of debt pursuant to a lender card of similar arrangement
(G) The forbearance of debt arising from a loan

Further debt mans "principle and Interest" provided to debtor by banks of financial institutions, with the pledge of immovable of movable property of other securities or guarantee of without guarantee and the word also means over dues of the transaction beyond balance of fees, commission and interest incurred in that relation. The supreme court of India has defined the debt during the decision of the case. In the case in hand, there cannot be any dispute that the expression "debt" has to be given the widest amplitude to means any liability which is alleged as dues from any person by a bank during the course of any business activities undertaken by the bank either in cash of otherwise, whether secured or unsecured, whether payable under a decree of order of any court of otherwise and legally recoverable on the date of the application.

### 2.2.2 Types of loan

Banks make a wide variety of loans to wide variety of customers for many different purposes. For customers, the cause of loan purchasing may be investment in business, purchasing automobiles, take dream vacations, pursuing college education, constructing home and office building so on. On the basis of loan purposes, bank loans can be dividing into seven Broad following categories:

### 2.2.2.1 Agricultural loans

Agriculture loans are the credit extended to support farm and branch operations. Agriculture loans loan is extended to assist in planting and harvesting crops, storing crops and marketing them. Agriculture loans also support the feeding and care of livestock.

### 2.2.2.2 Commercial and industrial loans

Commercial and industrial loans are extending to business firms to support the production, selling and distribution of their products and services. It is granted business to cover such expenses as purchasing inventories, paying taxes, and meeting payrolls so on.

### 2.2.2.3 Financial Institution Loans

It is the credit extended to banks and other financial service providers. Mostly, finance companies, insurance companies, credit banks, co - operative firms, saving credit firms, money changers, money transfer firms are the customers of financial institution loan provided by banks.

### 2.2.2.4 Individual Loans

An individual loan is the loan extended to private individuals for private and household's purpose. Generally, individual loans are extended to finance the purchase of automobiles, appliances TV, Computer set, furniture, Multimedia player, Washing machine, Refrigerators etc. Customer can also use individual loans for medical care personal expenses.

### 2.2.2.5 Leasing Financial Receivables

Banks can lend physical equipments to the customer, in additional to money lending. People do not buy the heavy and costly equipment that is seldom needed for them. For example crosser machine, pressing machines and other plants used for constructions etc. they prefer to get them on pledge. Banks buy such equipment and vehicles and provide on lease to customers.

### 2.2.2.6 Real Estate Loans

It is the credit extended to purchase of improves real property, such as land and buildings. Real property-land buildings and other structure secure such loans. Real
estate loans include longer-term loan to finance the purchase of farmland, house, apartments, commercial structure and foreign properties.

### 2.2.2.7 Miscellaneous Loans

Banks are providing so many loans in different sectors. All those loans not classified above are included in this category. Higher education loans, Marriage loans, Dreams tours loans can be included in miscellaneous loans.

### 2.2.3 Criteria for providing loans

A bank has to set some criteria for providing loan. Persons who come to a bank for the purpose of demanding loan, the bank should not provide loan random choice, not by examining and investigating. If a loan is provided without proper investigations it will lose the principle and interest. Therefore, bank always has to follow some criteria for providing loans. These are as follows:

### 2.2.3.1 Personal Character

Before providing loan, a bank should make an inquiry and examination of a person who comes to the bank with proposal of loan. Though it is very difficult to find out true character of person, it must be checked out. The banks should study whether the person has good character with intention to pay the loan of not. Whether a creditor has filed a petition against his in the court for recovery of debt or not. If the person is doubtful in nature, character and the banks have uneasiness to trust him, if so, it should not accept the proposal of loan. If he possess good character and other criteria are satisfactory to the bank, it should accept the proposal.

### 2.2.3.2 Capacity or Competency

First of all is should be checked out whether the person is a person capable under low to make contract with bank or not, i.e. according to the contact Act 2056 (1999), if he is (capable) a competent person, there after the bank should know what kind of qualifications the proposal makes does have and in which subject or business he related with. Whether he has competency or skill in that business or not. Under the heading the bank should carefully examine all things, which are related to capacity of borrower.

### 2.2.3.3 Capital

If any person of businessman comes to make a proposal for a loan in commercial banks, economic condition should be examined. His demand for money should be matched with the status of his household condition, how much the sum of money he wants to invest in his business. If the economic condition of the proponent is poor of less to the amount for loan, the commercial banks should reject his proposal. In brief, the quality of amount of proponent financial condition of capital should be stronger then the quality of amount demanded.

### 2.2.3.4 Security/Collaterals

A bank is a legal person. It doesn't provide the loan without securities of collaterals. It always studies and analyses whether the securities of collaterals recovers the banks principle and interest of the loan. Inspired by the same concept, it classifies the security. A security means property, which is pledge able under the existing low while giving loan, document relating there to, of any other security acceptable to the bank. However, the Nepalese banking low has not defined collateral. But the collateral falls under the security, itself. If a bank is satisfied on the basis of primary security, it does not require collateral, if the borrower can't give collateral, then the bank does not provide loan to him.

### 2.2.3.5 Credit information

The bank should find out the credit information of the person of businessman who comes to request for a loan. Credit information such as the loan proponent's character, the securities given to the bank, the details of the property and the reality, a bank can get all information about loan proponent and the businessmen. It can be a great help to the bank. It is difficult for a bank to find out the real condition of the loan proponent.

### 2.2.3.6 External Environment

Before providing loan, a bank always should evaluate the external condition of environment of the industry, business shown by the loan proponent, whether the business shown by the proponent is saleable of useable in the market of not, the proposal of loan proponent should not be approved, through the above mentioned five grounds are financial position whose may deteriorate. Therefore, while providing
loan, it should study the external environment too. In the business communities, an external environment can be taken as an essential factor.

### 2.2.4 Steps of Lending Process

Commercial banks follows several steps o disburse loan to the borrowers. The lending policies might be difference from one commercial bank to another commercial bank. From the viewpoint of principle and practice, commercial banks lending process has the following steps:

### 2.2.4.1 Evaluation of Loan Proposal

After a person and institution submit a proposal, project bank makes a deep study and analyses from different angles on the proposal. Before approving the loan proposal, the banks evaluated all necessary documents for providing loan. In the case of person of businessmen the study of such documents are different. It will be accepted or rejected depending on the will of the bank. If the bank feels the loan proposal satisfactory, it can approve the loan accordingly.

### 2.2.4.2 Type of Loan

After accepting the proposal of a borrower, the bank discusses on these subjects, what types of loan the projector or the person wants. Surely, the nature of the loan differentiates from loan proposal of the proponent. In this way, it becomes the division of the loan. Generally, there are many types of loan likes social loan, business loan, primary sector loan, industrial loan, hire purchase loan etc. The loan can be classified in another way too like secured loan and unsecured loan. The bank wants to keep their loans safe and secured. So, he banks can classify loan in this way. Yet, it does not classify loan in unnatural way. The loan can be classified in the process of approving the loan.

### 2.2.4.3 Loan Interview

Once a customer decides to require a loan, an interview with a loan officer usually follows right away, giving the customer the opportunity to explain he of her why they credit needs. That interview is particularly important because if provides an opportunity for the bank's loan officer to assess the customer's character and sincerity of purpose. If the customer appears to lack sincerity in acknowledging the need to
follow to the terms of a loan, this must be recorded as a strong factor evaluating against approval of the loan request.

### 2.2.4.4 Site Visit

If a business of mortgage loan is applied for, an officer of the bank usually makes a site visit to assess the customer's location and the condition of the property. Site visit helps to verify the accuracy of the information provided by the applicant. It also reveals the degree of customer's sincerity and character.

### 2.2.4.5 Reference Check

The loan officer may contact other creditors, who have previously loaned money to his customer to see what their experience has been. Did the customer fully adhere to previous loan agreement and keep satisfactory deposit balance? This payment record often reveals much about the customer's character, sincerity of purpose, and sense of responsibility in making use of bank's loan.

### 2.2.4.6 Preparation of Necessary documentation

If every thing up to this point is favorable, the customer is, then, asked to submit several crucial documents in order it fully evaluate the loan request, including complete financial statements. In case of a corporation, the applicant is also asked for board of director's resolutions authorizing the negotiation of a loan with the bank. Such documents are:-
(T) The statement of income and expenditure
(G) The certificate or income tax registration
(G) Scheme of the institution or the business

To The memorandum of understanding
(-) Certificate of registered institution
Tower of attorney or authorized letter

- Citizenship certificate

The certificate of renewal
(G) Any contract of agreement
(G) Documents relating to insurance
(r) Other necessary documents

### 2.2.4.7 Credit Analysis

Once all documents are on the file, the credit analysis division of the bank conducts a thorough financial analysis of them aimed at determining whether the customer has sufficient cash flow and backup assets to repay the loan. The credit analysis division then prepares a brief summary and recommendation. This recommendation goes to the loan committee for approval. In case of larger loans, member of the credit analysis division gives an oral presentation, and discussion will ensure between staff analysis and the loan committee over the strong and weak points of loan proposal.

### 2.2.4.8 Loan Amount

The bank may of my not give the amount, which proponent he has demanded. It is the matter depended on the will of the bank. Yet in determination of loan quality is made by paying attention to the need of the customer, evaluation of the securities and the sate and position of the business.

### 2.2.4.9 Perfecting Collateral

When the loan committee approves the customer's loan request, the loan officer of the credit committee will usually check on the property to be pledged as collateral or can acquire title to the property involved in case the loan agreement is defaulted. This often referred to as perfecting the bank's claim to collateral. Once the loan officer and the bank's loan committee are satisfied that both the loan collaterals are sound, the note and other documents are made up for a loan agreement. Then all parties to the agreement sing on loan deal.

Commercial banks are valuation the subjected securities are made by recognized engineering consultancy. the following way. For example, current market price of the property is Rs 100000 and government price of the same property is Rs 90000 . The distress value of the property is calculated as follows
$50 \%$ of current market price (Rs 100000 X 50\%) Rs 50000
$50 \%$ of government valuation price (Rs $90000 \times 50 \%$ ) Rs 45000

Total valuation of property by commercial Banks
Rs 95000
From the total valuation of property, commercial banks provide upto $60 \%-80 \%$ of loan to borrower.

### 2.2.4.10 Loan Acceptance Charge

After completing all processes, the bank decides to provide loan to the bank proponent. According to this decision, the proposed loan in it. According to the provision of the loan document, borrower can withdraw the money from the bank. However, sometimes, such a situation may be created that the borrower doesn't take the loan after the bank accepts the loan. In such condition, the bank can't withdraw that amount until the period is not ended. The cash remains in unproductive from in the bank. Therefore, the bank takes that charges for accepting that loan.

### 2.2.1.11 Monitoring

After advancing loan and advance to the customer, it seems to be the end of lending process. Actually, it is the beginning of lending process. Can the loan officer put the signed loan agreement the shelf and forget about it? Hardly! The new agreement must be monitored continuously to ensure that the terms and conditions are being followed and the required payments of principle and interest are being made as promised. For larger commercial credit, loan officer will be visit regularly to the customer's firm periodically to check on the firm's progress and to see what other services the customers may need.

### 2.2.5 Features of Sound Lending Policy

The income and profit of the commercial banks depend upon its lending procedure. The grater the credit created by the bank, the higher wills the profitability. A sound lending policy is not only pre-requisite for commercial banks profitability, but also crucially significant for the promotion of commercial saving of backward country like Nepal. Some features of sound lending policy are considered as under:

### 2.2.5.1 Safety

Safety is the most important principle of good lending. When a banker lends, he must certain that the advance is safe; that is, the money will definitely come back. For example, if borrower invests the money in an unproductive of speculative venture, of if the borrower himself is dishonest, the advance wound be in jeopardy. Similarly, if the borrower suffers losses in his business due to his incompetence, the recovery of the money may become difficult. The banker ensure that the money advanced by him
goes at the time of lending but will remain so through, and after serving a useful purpose in the trade of industries where it is employed, is repaid with interest.

### 2.2.5.2 Liquidity

It is not enough that the money will come bank, it is also necessary that it mist come bank on demand or in accordance with agreed terms of payment. The borrower must be in apposition to repay within a reasonable time after a demand of repayment is made. This cab be possible only of the money is employed by borrower for shortterm requirement and not locked up in acquiring fixed assets of in schemes, which take a long time to pay their way. The source of repayment must also be definite. The reason why bankers attach as much importance to "liquidity" as to "safety" of their funds is that a bulk of their deposits is repayable on demand or at short notice.

### 2.2.5.3 Purpose

The purpose should be productive so that the money not only remains safe but also provide a definite source of repayment. The banker must closely scrutinize the purpose for which the money is required, and ensure, as for as he can, that the borrower applies the money borrowed for a particular purpose accordingly.

### 2.2.5.4 Profitability

Equally important is the principle of 'profitability' in bank advances. Like other commercial institution, banks must make profit. They have to pay interest on deposits received by them. They have to incur expenses on establishment, rent, stationary, salary and other operating expenses so on. They have to make provision for depreciation of their fixed assets, and also for possible bad of doubtful debts. After meeting all these items of expenditure which enter the running cost if banks, a reasonable profit must be made otherwise, it will not be possible to carry anything to the reserve of pay dividend to shareholders. It is after considering all factors that a bank decides upon its lending rate.

### 2.2.5.5 Collateral/Security

It has been the practice of banks not to lend as for as possible except against security. Security can be considered as insurance. Security may be generally classified as personal and tangible, as well as primary and collateral. The banker carefully
scrutinizes all the different aspects of an advance before grating it. At the same time, he provides for an unexpected change in circumstance, which may affect the safety or liquidity of advance.

### 2.2.5.6 Legality

Illegal securities will bring out many problems for the investor. Commercial banks must follow the rules and regulation as well as different directions issued by Nepal Rastra Bank, Ministry of Finance and other while mobilizing its funds.

### 2.2.5.7 Spread

Another important principle of good lending is the diversification of advances. An element of risk is always present in every advance, however secure it might appear to be. In fact, the entire banking business is one of taking calculated risks and successful banker is an expert in assessing such risks. He is keen on spreading the risks involved in lending. Over a large number of borrowers, over a large number of industries and areas, and over different type of securities.

### 2.2.5.8 National Interest

Even when an advance satisfies all the aforesaid principles, it may still $n$ be suitable. The advance may run counter to national interest. It in the changing concept of banking factors such as purpose of the advance, viability of the proposal and national interest are assuming grater importance then security, small borrowers and exportoriented industries.

### 2.2.6 Basis Elements for the Effective Lending Policy

A lending policy should contain an outline of the scope and allocation of commercial bank's loan facilities and manner in which a lending portfolio is managed i.e. how loans are oriented, serviced, supervised and collected. A good lending policy is not overly restrictive but allows for the presentation of loans to the board that officers believe are worthy of consideration but which do not fall within the parameters of changing conditions in a commercial banks earning asset mix and market environments. Consideration that from the basic elements for the effective lending polices including the following things:-

### 2.2.6.1 Credit Concentrations

A lending policy should stimulated portfolio diversification and strikes a balance between maximum yield and minimum risk. Concentration limits usually refer to maximum permitted exposure to a single client, connected group and sector of economic activities. This is especially important for small, regionally oriented of specialized banks. Lending policy should also require all concentrations be reviewed and reported on frequent basis.

### 2.2.6.2 Limit on total outstanding loans

A limit on the total loan portfolio is usually expressed relative to deposit, capital of total assets. In setting such a limit, factors such as credit demand, the volatility of deposits and credit risks should be considered.

### 2.2.6.3 Geographic Limits

These limits ate usually a dilemma. If a bank lacks understanding of its diverse market and does not have quality managements, geographic diversification may become a reason for bad loan problems. On the other hand, the imposition of strict geographical limits can also create problems, particularly in the case of regions with narrow economies. In any case, a bank's business market should be clearly delineated and commensurate with its market knowledge, managerial and staff experience. Bank's officers should be fully aware of specific geographical limitations for lending purpose, an aspect that is particularly relevant for new banks.

### 2.2.6.4 Maturity

A lending policy should establish the maximum maturity for each type of credit and loans should be granted with a realistic repayment schedule. Maturity scheduling should be determined in relation to the anticipated sources of repayment, the purpose of the loan and the useful life of the collateral.

### 2.2.6.5 Types of Loans:

A lending policy should specify the types of loans and other credit instruments that the bank intends to offer to clients and should provide guidelines for specific loans. Decisions about types of credit instruments should be based on the expertise of
lending officers, the deposit structure of the bank and anticipated credit demand. Types of credit that have resulted in an abnormal loss should be controlled by senior management of avoided completely.

### 2.2.6.6 Distribution by category

Limitations based on aggregated percentage of total loans in commercial. Real estate, consumer of other credit categories are common. Policies related to such limitations should allow for deviations that are approved by the board.

### 2.2.6.7 Loan Pricing

Rate of various loan types must be sufficient to cover the cost of funds. Loan supervision, administration (including general overhead) and probable losses. At the same times, they should provide the reasonable margin of profit. Rates should be periodically reviewed and adjusted to reflect changes in costs or competitive factors. Rate differentials may be deliberately maintained either to encourage some types of borrowers to seek credit elsewhere of to attract a specific type of borrower. Guidelines for other relevant procedures, such as the determination of fees on commitments of penalty interest rates are also elements of pricing policy.

### 2.2.6.8. Lending authority

Lending authority is often determined by size of the bank. In smaller banks, it is typically centralized. In order to avoid delays in the lending process, larger banks tend to decentralize according to geographical area, lending products and types of customers. A lending policy should establish limits for all lending officers. If polices are clearly established and enforced, individual limitations may be somewhat higher then would normally be expected, depending on the officer's experience and tenure with the bank. Lending limits could also be based on group authority, which would allow a committee to approved large loans. Reporting procedures and the frequency of committee meetings should be specified.

### 2.2.6.9 Appraisal Process

A lending policy should outline where the responsibility for appraisal lies should define formal, standard appraisal procedures, including reference to reappraisals of renewals or extensions. Acceptable type and limits on the amount of appraisal should
be outlined for each type of credit facility. Circumstances requiring appraisals by qualified independent appraisers should also be described. The ratio of the amount to the loan to the appraised value of both the project and collateral, as well as the method of valuation and differences among various types of lending instruments should be detailed. A lending policy should also contain a schedule of down payment requirements, where applicable.

### 2.2.6.10 Maximum ratio of loan amount to the market value of pledged securities

A lending policy should set forth margin requirements for all types of securities that are accepted as collateral. Margin requirements should be related to the marketability of securities. A lending policy should also assign responsibility and establish a timetable for periodic pricing collateral.

### 2.2.6.11 Recognition

A bank should recognize a loan, whether original or purchased, in its balance sheet. This should occur as soon as the bank becomes the party to the contractual provisions that apply to the loan. A bank should initially carry the loan at cost.

### 2.2.6.12 Impairment

A bank should identity and recognized the impairment of a loan or a collectively assessed group of loans. This should be done whenever it is neither probable nor assured that a bank will be able to collect the amounts due according to the contractual terms of a loan agreement. Impairment can be recognized by reducing the carrying amount of the loan to its estimated realizable value through an allowance of charge-off, or by attributing changes to an income statement during the period in which the impairment occurs.

### 2.2.6.13 Collections

A lending policy should define delinquent obligations of all types and specify the appropriate report to be submitted to the board. Theses reports should included sufficient details to allow for the determination of the risk factor, loss potential and alternative courses of action. The policy should require a follow-up collection procedure that is systematic and progressively stronger. Guideline should be established to ensure that all accounts are presented to and reviewed by board.

### 2.2.6.14 Financial information

A lending policy should define the financial statement requirements for business and individuals at various borrowing levels and should included appropriate guidelines for audited, non-audited, internal, cash flow and other statements. It should included external credit checks required at the time of periodic updates. If the loan maturity is longer then one year, the policy should require that the bank's officers prepare financial projections with horizon equivalent that the bank's loan maturity, to ensure that the loan can be repaid from cash flow. The assumptions for the projections should be clearly outlined. All requirement should be defined is such a manner that any negative credit data would clearly violate the bank's lending policy.

### 2.2.7 Method and Mechanism of Project Proposal Appraisal for Lending

After the loan proposal is submitted by a project, a bank makes a deep study and analysis on the proposal. Such study can do in two ways. In first term, it is study after the loan proposal produced and in the second term, it is the study after the loan proposal accepted. Before accepting the loan proposal, the bank, to appraise and study the project proposal, studies the actual condition of the projects related to the securities, its management aspect and organization, economic aspect, financial aspect including technical aspect. The picture of the project becomes clear from such study. The bank uses the following method and mechanism to accept or not the project proposal.

### 2.2.7.1) The First Aspects "Technical Feasibility"

The bank studies the project proposal from viewpoint of the technical feasibility. Or, before accepting the loan, the banks appraises, whether it is right or not, from the side of technical aspect. It appraises of tests and analyses the positive and negative aspects of the project, from which the present and future of the project can be known. Experts on the project do such appraisal of project. From this, the real fact related to project comes before the bank. The study of technical feasibility can be done according to the following methods:

## a) Location of project

The technical expert should pay special attention to the establishment of the project, whether the place the project is established is right or not, is there peace or not? Whether necessary things like water, electricity, means of communications and means of transportation are in place of not? Whether the market is easily accessible of not? Can raw material and the labor facility are easily available or not? Such divergent aspects are studied in it.

## b) Technology

A bank studies technological aspect too of a project. How and what type of technology the project is using or what is the proposal? Is such technology easily available in the market? Is the technology good or bad? What is the value of technology cheap or dear? Is the technology suitable for the projection of not? The bank studies all these things.

## c) Efficiency of Plant and Equipment

The commercial bank should examine the efficiency of plant and equipment used in the project. What is the price of such plant and equipment in the market? What is the condition of plant and equipment? Of the plant and equipment easily be available in the market or not? Is there possibility of repairing the damaged pant and equipment again of not? Banks should examine ownership aspect of such plant and equipment too.

## d) Technical Competence

A bank should examine the efficiency of plant and equipment used in the projection. What is the price of such equipment in the market? What is the condition? Of the equipment of the project, has used at present? Can such equipment easily be available in the marker of not? Is there possibility of repairing the damaged equipment again of not? The bank should examine ownership aspect of such equipment too.

## e) Legal Aspect

A bank should study from the viewpoint of legal aspect as well, whether the proposal project presented to the bank is restricted of prohibited by the government of not, should be studied. Apart from it, the legal provision for facility of obstacles to project too is studies in it. The project must be good from the legal point of view.

### 2.2.7.2 The Second Aspect "Financial Feasibility"

Generally, a bank flows a loan only for a project, which earns profit. It invests money in the industries of business only with the objective of gaining profit. If only the business and industries gains profit by running project, they pay the loan. Because the recovery of the loan depends on the income generated from the project, the bank doesn't invest in project, which doesn't earn profit. Banks studies the financial feasibility by the following mediums:

## a) Cost of the Project

A bank should check how much amount is to be spent in the project proposed to the bank? If is new project, the estimate of expenses of the project? The sources of the finance of the project should be studied. The bank should examine the condition of the share capital of the project and its source of the income. It should estimate how much running capital is necessary to arrange furniture, raw material, wages, salary, fuel for the project of how much movable capital is necessary. The total amount of both the fixed asset and the running capital is called the total project expense. The bank should carefully check all these things.

## b) Cash flow statement

a bank should study cash flow statement of a project. How much cash the project is flowing? Is it enough of not? The commercial bank can find out profit, saving and loss from it. It facilitates the bank to make to a decision as to whether the loan proposal of the project to be accepted of not. Such things can found from the balance sheet of the project.

## c) Production and Profit

The bank should study the productive capacity and profitable condition of the project. Whether the project has productive capacity of not? Is the project gaining profit or not? It should think possibility (condition) of earning profit in the future or not? It should think these aspects too. If a bank invests a great deal of amount in a project in the absence of productivity if the project, its loan may fail. The proposal can't be run, if an amount of less money then if requires is spent in the project.

### 2.2.7.3 The Third Aspect "C ommercial Feasibility"

The commercial feasibility is the third way of the appraising the proposal of the project by a bank. It should appraise and analysis the present and the future of the project. It will not provide loan, if it does not see the project's future bright. It decides to gives or not to give loan after studying the commercial viability of the project. It studies the commercial aspect of a project on the following grounds.

## a) Legal Aspect

The bank should study such thing as whether the law or regulation has imposed restrictions of the proposed project of not? Is there need if any law? Is the present legal provision reasonable to start the project/ is there immunity of tax and other government charges of not? Whether have the law provided concession facilities of not.

## b) Competition

A bank should study in such aspects, is the proposed project new of old? Is the project competitive in the market or not? Can it survive or not in the condition of competition and the condition without competition?

## c) Attraction of the Project

Before providing loan to the project, a bank should see the attraction of the project in the market too. If the attraction is good, it is sure that, the project can run easily. Otherwise, it is difficult to run. Besides above given aspects, there are other many commercial aspects to which the bank should pay its attention. Brief a bank should flow loan also to the projection, which is better from the viewpoint of commercial
feasibility. The project, which is not better from the feasibility study, should not be provided loan to the project by the bank.

### 2.2.7.4 The Fourth A spect "M anagement F easibility"

Certainly, it is known to all that, in the lack of cleat vision and systematic management, a project of the business can't be run well. A commercial bank should keep its eyes on the management aspect too when it is going to provide loan to a project. If the management is good, the project may be successful. So, the commercial bank should analysis the project proposed for the loan. In the absence of good management and organization, project can't be successful. Generally, the functions of the management are to selects the able and component employees according to the nature of project, to divided sections and department of the project, to divide rights and duty, and to arrange special programmed and evaluation for development of project. The component management is necessary for a successful project. A successful project should have the following characteristics:-

## a) Competence

For a successful management, persons who are in the management committee should be able (competent). In the lack of competent (able) persons, it can't run the management. Able management can move the project to the right way.

## b) Experience

Persons involved in management should be experienced. Management can't be competent without experienced persons. Such experience persons run the project related to their sector, the project can surely get success.

## c) Honesty

Persons involved in management should be honest. They should display their honesty towards the project. In the lack of honest, project can't be run for a loan time.

## d) Qualification

The persons in the management of a project should be educated, experience and qualified. Only the educated and qualified persons can make the project healthy. Their influence may fall on the management aspect because the persons who have got
higher education, experience and specializing in different subject do have special knowledge and qualification.

Thus, before accepting a proposal about loan proposal for any project, a bank should appraise and analyze the above-mentioned four sectors and if it finds them necessary, satisfactory, it should help the project by providing loan. If it does not find satisfactory, it should not provide loan. It may cause loss to the bank. After providing loan it should inspect from time to know whether the loan is used properly or not.

### 2.2.8 The Ten Commandments of Lending Policy Guide

In each and every commercial bank, they have their lending policy. Within the policy, they have strong guidelines for the staffs working in investment division. To guide such staffs for discipline, the management issues an internal directive called "Ten Commandments. "For the smooth and system running of an organization and to make honest the employees in the organization, there are good non-low rules within the systems that are strictly followed by the credit personnel as known TenCommandments:
(l) You shall place a high priority on the quality of bank's credit exposure. New relationship must meet bank's lending criteria and existing portfolio should be under continuing review to improve ris positions. Bank's preference is for regulating and self-liquidating loans geared to borrower's ability to repay.
(l. You shall constantly be mindful of bank's urgent need for earnings from bank's existing and new credit exposures. Every profit opportunity should be explored and negotiation skills fully employed. Innovation employment of the bank's resources to increase return on assets must be encouraged.
(a) You shall be constantly alert for profitable new business opportunities that increase the size of bank's customer base. You must not under any circumstances rest on bank's existing base of customers nor director all bank's efforts on their behalf. Growth through enlargement of bank's base is far more attractive in the long run. In our search for new customers, the stress should be on desirable ongoing relationships rather then on marginal performers.

Risk dispersion is basic to sound lending principles and policies. You should be careful about large and under concentrations of lending by industries, 'one obligor' or any risk factors bearing on a group of borrowers. However, bank must not diversify itself into an unwanted of unnecessary problem just for the sake of diversification.
(G) You shall constantly be aware of the expense burden in bank's lending operation. Is there a less costly means of accomplishing the bank's mission? Increase in customer base must be weighted against cost in term of expense, time and lasting both for the bank and for borrower.

To Lending decisions must consciously focus on optimizing the use of the bank's capital funds. The benefits so gained must be quantifiable, adequate and lasting both for the bank and for borrower.
(6) You shall use every effort to reduce and contain the size of bank's criticized loan portfolio. This is time killer and the very root of bank's losses.

Credit 'quality' is heavily impact by the structure of the credit. The risk of trouble along the line are increased materially as bank erodes basic protections which are designed the enable a timely and comfortable payback within the borrower's ability.
(o) You shall endeavor to improve both the bank's external and internal communications to limit unnecessary time and effort amongst the bank's customers and associates. Clear, concise and summary type communication should be emphasized and utilized where necessary.
(o) You shall endeavor to make a contribution to all matters that involve your approval, concurrence or other actions. On the other hand, you shall not lend your name merely to see it in print. You shall avoid all temptations, which can jeopardize of compromise the bank's risk assets.

### 2.2.9 Loan Review

Loan review is the examinations of outstanding loans to make sure borrowers are adhering to their credit agreement and the bank is following its own loan polities. After the borrower and the bank have endorsed loan, what should the bank do with the loan files? Should the bank keep the loan file in the shelf and forgotten, until the loan falls due? Obviously not. After advance of loan, bank should maintain continuous relationship with the borrower until principle and interest are fully recovered. For this purpose, bank should conduct loan review of all borrowers. As we know that time, conduction affects the borrower's financial condition and his of her ability to repay a loan. Fluctuations in the economy weaken some business and increase the credit needs. In case of individual loan, people may lose their jobs and serious health problems imperiling their ability to repay any outstanding loans. The bank's loan department must be sensitive to these developments. So the bank should periodically review all loans until they are fully recovered. There are some certain general principles that should be followed by bank while conducting the loan review. The most common principles are:

## Regular

There must be regular loan review especially for all types of loans. It is important especially for large and criticized loan. Loan review should be carried out on periodic basis such as monthly, quarterly, half yearly or yearly.

## Large loans

In the case of large loans, the more frequently loan review is essential, because default on these loan agreement can seriously affect the bank's own financial condition.

## Troubled loans:

Even adequate carefulness and precautions the bank has taken, some may fall into trouble due to uncontrolled environmental circumstances. Such trouble loans should be reviewed more frequently.

## Deflation:

If the economy shows down or if the industries are which the bank has made a substantial portion of its loans develop significant problem, the frequency of loan review should be increased to safeguard the bank from unexpected risks.

## Structuring:

To make the loan review perfect, it should be structured carefully to ensure allimportant aspects of loans and borrowers are checked properly. The loan review should be able to check the following aspects of loan:-

To The quality and condition of any collateral pledge behind the loan.
(-7 The record of borrower payments, to ensure that the customer is not falling behind the planned repayment schedule.
(1) An evaluation of whether the borrower's financial condition and forecasts have changed which may have increased of decreased the borrower's need for bank loan.
(1.) An assessment for whether the loan conforms to the banks lending polices and to the standards applied to its loan portfolio by examiners from the regulatory agencies.
(7. The completeness of loan documentation, to make sure the bank has access to any collateral pledge and possesses the full legal authority to take action against the borrower in the courts if needed.

Loan review is not a luxury, but a necessity for a sound bank-lending program. It not only helps management spot loan-problem more quickly, but also acts as a continuing check on whether loan officers are adhering to the bank's loan policy. For this reason, and to promote objectivity in the loan review process, many of the largest banks separate their loan review personnel from the loan department itself. Loan reviews also aid senior management and the commercial bank's board if directors in assessing the bank's overall exposure to risk and its possible need for more capital in the future.

Separate loan review divisions of department also helps to detect any mishaps and under influences in the lending process.

### 2.2.10 The Management for Loan Recovery

After loan is provided, there is a mechanism to recovery interest and the principal. it is very necessary to know all functions wise method which are to be followed after the grant of loan. It is really important subject matter. The bank wishes that all the debtors could utilize the loan proper places. It is beneficial to both the bank and the debtor. The following processes are continued:

### 2.2.10.1 Recovery of Interest on loan

After a loan is provided, the borrower should pay his interest in the time written in the deed of loan. It is the liability of borrower. The term and conditions are written in the deed of loan. The date if the recovery of the interest and principle of the loan is fixed according to the nature of the business and industry. The borrower should go on paying the interest and principle from time to time, written in deed of loan and in the time given by the bank goes on adding interest according to bank's rule. It begins to take the interest of interest if the borrower doesn't pay the interest and loan in the fixed time.

### 2.2.10.2 Hand Over of Securities

If the borrower pays the interest and principle in the time fixed in the loan deed of the time fixed of accepted by the bank, the bank must return the moveable and immovable assets taken by it as securities from borrower, of the property of third person taken as securities in the form of guarantee. The bank should hand over all securities as under its hold to the debtor of the surety after the loan is recovered.

### 2.2.10.3 Maintenance of Date

The loan administration department should prepare a report by keeping data to show picture of the act and activities from the day of lowing loan until the day of recovery of the loans. From it, the real progressive statement of the loan investment can be known. It can be a guideline for the bank and new management can be get help in future.

### 2.2.10.4 Process of Recovering the Date Expired Loan

Of a borrower breaches the terms and conditions of the loan deed by not paying the interest and principal, the bank starts the legal process under the law. The commercial Bank Act 2031 (1974), states various types of legal provisions for the recovery of principle and interest. After recovering the loan, according the rest of cash from the sale of the property or the securities should be return to the borrower. There are many examples and cases in which the borrower has not paid his loan to the bank. The date expired loan is classified as good, acceptable, low quality, doubtable by the NRB

### 2.2.10.5 Loan Recovery Process

The bank recovers the loan provided by it on the basis of terms and conditions fixed in the deed of loan. If it is written in the loan deed to recovery loan on installments basis of a fixed lump sum basis, it should be paid accordingly. It recovers the loan accordingly can be extended, if he makes another agreement keeps the rights to recover the loan according to the loan recovery process written in the deed.

### 2.2.10.6 Audit of Credit

A bank wants his debtor to use the loan into proper, after it provides loan, as far as possible. Which the intention of his objective, the bank performs audit of the loan. A bank studies as these things, whether the bank loan is properly utilized of not, what is the state the financial condition. The objective of such audit is to be in direct connection with the borrower until the loan is recovered. From such link, the economic condition of the debtor, the proper use of the loan and the statement of the loss and gain can be known. Thus, the audit is done from time to time by the bank, in addition to other function to find out a picture about loan utilization, is called audit.

### 2.2.11 Non-Performance Loan

Non-performance assets are those not generating income. Loans are normally considered to be non-performing when principle of interest on them is due and left unpaid 90 days of more (this period may vary by jurisdiction). It is an internal standard. The introduction of asset classification that entails provisioning requirements is costly to the banking sector. The delinquency period for non-
performing assets is therefore typically introduced at 180 days and then tightened to 90 days after a period of time.

Commercial bank are suffering from problems in credit management and also some obstacles beyond the area of credit management those are contribution to raise the level of NPL. For the purpose of this analysis the factors contribution to have a high level. NPL have been classified into two groups.

## Internal Factors:

The first is the internal factor which mainly comprise of weakness of the particular bank or financial institution in credit management and oversight deficiencies in the regarded. If preventive measure is applied at the institutional level, the problem of NPL can resolve by bank them selves to some extend. Causes of Non performing loan from internal factors are:
(ou) Poor accounting and auditing capabilities
(T) Insider abuse and fraud in lending and recovery.
(a) Poor recovery efforts even the loan is categorized under bad.

To Significant NPL in the system due to poorly managed few banks.
Lack of Lending policy guidelines and loan write off policies in the past
Limited supervision by the bank itself and weak internal controls in the banks

## External Factors:

Another aspect related with the external factors, which are beyond the control of the banks and financial institution. While analyzing the causes of the outstanding level of NPL, we can point out some of the components as follow.
(7) Lack of financial discipline within borrowers
(T) Security problems and conflicts in the economy.

Lack of judicial support to the banks in recovery

- Poor regulative and supervisory capacity of the central bank in the past.

Deterioration in economic growth rates and activities since last few years
L- Lack of supportive institutions helping to reduce the Non performing Loans of commercials banks.
> (8) Poor legislative regime in the system specially governing financial system and poor implementation issues. Fragmented legal environment and lack of bankruptcy law.

### 2.2.12 Regulation and Supervision of Lending

Central Bank is the supreme monitory and banking system of the country, which regulates monitors and supervises all activities of commercial banks. The supervisor should pay special attention in the lending aspect of banks, lending is the most risky business among all. There is no risk in collection of deposits. But only small careless or mistake in the loan portfolio and procedure can shock the bank profitability and survival, when bank is unable to recover the loans with interest. So there should be well managed regulations lending aspect of bank. Such regulations should follow while evaluation the loan proposal and providing loans.

The loan portfolio of any bank is heavily influenced by regulations. The quality of bank's loan portfolio has more to do with risk and safety then any other aspect of the banking business. Law for banks restricts some loans. For example, generally, banks must get collaterals to provide loans to customers. The authority must evaluate the loan proposal to conform the loan safety. In most country, banks are prohibited from making loans collateralized by their own stock. Real estate loans granted by a bank can't exceed the bank's capital and surplus or 70percents of deposits whichever is greater. A loan to a single customer normally cannot exceed $15 \%$ of bank's capital and surplus. The main objective of supervision and followed up is to ensure the fund have been properly utilized according to plan so that result may obtained as envisaged which may enable timely repayment of loan. The tools for supervision and regulation are:
(G) Site Inspection

Cash flow Statement
Profitability Statement
(o) Performance Statement

Stock Turnover Statement
Balance Sheet and Profit and Loss Statement

The regulation and supervision by the use of above mentioned tools provides the following information.

Is the security in order?
Are there any adverse signals?

- Are the company properly managed?
(8) Have the terms and conditions of sanctions observed?

Are the loan invested according to the original purpose?
Have there been any changes in the ownership and management?

### 2.2.13 Warning signs of weak loan and poor bank lending policy

The manual given to commercial bank examiners by the Federal Deposit Insurance Corporations of united stated discusses several indicators of problem loans and poor bank lending policies:

Table:- 2.3
Warning signs of weak loan and poor bank lending policy

| Indicators of weak of Troubled Loan | Indicators of inadequate of poor bank <br> lending policy |
| :--- | :--- |
| Irregular or delinquent loan payment | Poor selection of risks amount borrowing <br> customers |
| Frequently alteration in loan terms | Lending money contingent of possible <br> future |
| Poor loan renewal record(with little <br> reduction of principle each time the loan <br> is renewed) | Lending money because a customer <br> promises a large deposit |
| Unusually high loan rate(perhaps an <br> attempt to compensate the bank for a high <br> risk loan) | Failure to specify a plan for the |
| liquidation of each loan |  |


| Rising debt-to-worth ratio | Incomplete credit files |
| :--- | :--- |
| Missing documentation(especially <br> missing customer financial statements) | Substantial self-dealing credits(loans to <br> insiders-employees, directors or <br> stockholders) |
| Poor quality collateral | Tendency to overreact to <br> competition(making poor loans to keep <br> customers from going to other banks) |
| Reliance or reappraisals of assets to <br> increase the borrowing customer's net <br> worth | Lending money to support speculative <br> purchases |
| Absence of cash flow statement or <br> projections | Lack of sensitivity to changing economic <br> conditions |

### 2.2.14 Right of Commercial Banks against Breach of Lending Agreement

A commercial bank reaches a decision as to whether it should provide loan and advances of not. After many discussion between the person of the businessmen who comes with a proposal of loan to the commercial bank and bank while carrying out any banking transaction, the bank and customer should follow the law, policy and instructions. The concerning law means, the Nepal Rastra bank Act 2058(2002) Commercial Banks Act 2031(1974) so on. Under section 47. A of the commercial Bank Act 2031(1974) the bank has been following rights and power to recover the loan:-

The bank may write to the appropriate office for registration of transfer, in accordance with prevailing law of the assets auctioned by it pursuant to this section in the name of the person whose bid has been approved.

To The concerned office shall do the registration of transfer if it receives such written request from any commercial bank for registration or transfer of assets pursuant to sub-section (5) of section 47 A. of the Commercial Bank Act 2031(1974).
(7) In case no one offers a bid in an auction held by the bank pursuant to this action, the bank may take over the ownership of such assets, and in such situation.

Government offices must register of transfer those assets in their records as notified by the bank.

T- If any person, institution of industry fails to comply with the terms of agreement or any terms regarding loans and advances, with the bank, of fails to repay loans to the commercial bank within the time limit stipulated in the documents, of incase the bank finds through investigation that any person, institution or industries concerned has not invested the amount of the loan and advance for the concerned purpose, or has misappropriated in the documents or notwithstanding anything mentioned in prevailing law the bank may auction or otherwise dispose of any property to it, or the security deposited with it, and thus recover the principle and interest.
(1) If the borrowing person, institution, or industry concern relinquishes in any manner title to the property pledge to the commercial bank as collateral, or in case the value of such collateral declines due to any other reason, the commercial bank may, not with outstanding anything mentioned in prevailing law, ask the concern to furnish additional collateral within a period specified by it. In case the concerned person, institution, or industry concern fails to furnish additional collateral within the specified time limit, the commercial bank may recover its pledged to it.

* If principal and interest can't be recovered through the auction sale of the collateral pledge to the bank pursuant to subsection (1) and (2) section 47. A of the Commercial Bank Act 2031 (1974), the bank may recover the balance by auctioning the other assets of the concerned person, institution or industries concern.
(T. The amount of principal and interest, and expanses incurred in auction, or in other kind of disposal shall be deducted from the amount raised through the auction or disposal otherwise of assets pursuant to this section and the balance shall be refunded to the concerned person, institution, or industry concern.
(6) In case a complaint is field to the effect that the person who is required to relinquish the assets after their transfer under sub - section (6) and (7) of section

47. A of Commercial Bank Act 2031(1974) of the has created any obstacle or used force while the concerned person or the commercial Bank Act 2031 (1974) bank itself seeks to utilized such assets, action shall be taken according to prevailing law to have possession in the assets.

### 2.3 Review of Related Studies

### 2.3.1 Review of Books

Singh (1983) the credit policies of bank are condition to great extend by national polity frame work, every banker has to apply his own judgment for arriving at a credit decision. Keeping of course, his banker's credit policy also in mind. The further state, the field of credit is more challenging as it offers relatively greater scope to banker for judgment and discretion in selection their loan portfolio. But this higher degree of freedom in the field of credit management is also accompanies greater risk. Particularly during recent years, the credit function has become more complex.

Cheney and Edward (1988) said that the lending objectives are to increase systematically the individual wealth, defined as asset, minus liabilities. The higher the level of desired wealth the higher must be received. An investor seeking higher return must be willing to face higher level of risk.

Bhattacharya in this book "Banking Strategy, Credit Appraisal and Lending Decisions" has put the recommendation of Tendon Committee from the report submitted this committee. The committee has prepared this report submitted this committee. The committee has prepared this report in 1975, however these recommendation still deserve great significance in the sector of credit appraisal and lending. Breaking away from the traditional methods of credit appraisal, the system proposed by the Committee enjoined upon the banker:

To assess the need based credit of borrower on a rational basis.
(G) To develop healthy banker-borrower relationship.

To To improve the financial discipline of the borrower.
(a) To ensure proper end-use of bank credit by keeping a closer watch on the borrower's business and thus to ensure safety of the banks funds.

The committee examined the examined the exiting system if lending and recommended the following broad change in the lending system:
(8) Bank credit only be supplementary to the borrowers resources and not in replacement of them, banks not to finance 100 percent of borrower's requirement.

Borrowers are required to hold inventory and receivables according to norms prescribed by the Reserve bank of India from time to time.

* In order to facilitate a close watch on the operations of borrowers, they are required to summit, at regular intervals, data regarding their business and financial operations, both for the past and future period.

To The credit needs of borrowers be assessed on the basis of their business plans.

Cross(1963), has mentioned in his book "Management Policy for Commercial Banks", that lending is the essence of commercial banking, consequently the formulation an implementation of sound lending policies are among the most import responsibilities of bank directors and management. Well-conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit. Before formulation a lending policy, many factors have to be taken into consideration because banks are not the real owners of deposits but rather the custodians of money. Crosse has further pointed out the various factors to be considered before planning for sound lending policy. The factors include community's need of money, determining the size of the loan portfolio and the character of loan payment, purpose and protection. Other factors for consideration for sound lending policy include credit worthiness, assets pledged to secure borrowing, interest rate policy etc. Cross strictly point out that the lending policy must be will spread. It should be of short-tern character, repayable on demand, profitable and it should be with adequate securities.

Baidhya (1996) has given his view on sound credit policy. He has said that, a sound credit policy of a bank is such that its funds are distributed on different types of assets with good profitability on the one hand and provides maximum safety and security to depositors and bank on the other hand, moreover risk in banking sector trends to be concentrated in the loan portfolio. When a bank gets into serious financial trouble its
problem usually spring from significant amounts of loan that have become uncollectible due to mismanagement, illegal manipulation of loan misguided lending policy or unexpected economic downturn. Therefore the banks credit policy must be such that it is sound and prudent in order to protect public funds.

Frank (1999) defines, an credit may be define as current commitment of funds for a period of time to derive future flows that will compensate the investing units for the time the funds are committed, for the expected rate of inflection and also for the uncertainty involved in the future flow of the funds.

Loan management of the bank is guided by the credit policy adopted by the bank. The credit policy of the bank helps the lending operation of the bank to be efficient and profitable by minimizing the inherent risk.

### 2.3.2 Review of Articles

In this section, effort been made to examine and review of some related articles and journals published in different economic journals, which among the various reviews of various journals pertaining to the study, the major and mostly contributing to the study has been outlined below.

Dr. shrestha (2055), in her article "Lending operation of commercial banks of Nepal and its impacts on gross domestic product" has presented with the objectives to make an analysis of contribution of commercial banks lending to the gross domestic product of Nepal. She has set hypothesis that there is a positive impact of lending of commercial banks to the gross domestic product as the dependent variable and various sectors of lending viz. agriculture individual, commercial services, general and social sector as independent variable. A multiple regression technique has been analyzed in the contribution. The multiple regression analysis has shown that all the variables expect service sector lending have a positive on the gross domestic product.

Mr. Ghimire in his article title "Credit sector reform and NRB" has tried to highlight the effects of change or amendment in NRB directives regarding loan classification and loan loss provisioning. "Although the circumstances lending to financial problem
of crisis in many Nepali banks differ in many respects, what are common acres of most of the banks for increased size of non-performing assets? To resolve the problem of the losses of likely losses of this nature facing the industries NRB as the central bank, amended several old directives and issued many new circulars in the recent years." As opined at present falls under substandard, doubtful and even loss categories, loan loss provisions new compared to precious arrangement would be dramatically higher.

In the conclusions he has mentioned that in the recent years, Nepal Rastra Bank has worked for management and reforms of credit of the financial institution more seriously and Nepal Rastra Bank has adopted reforms aimed not just at dealing with problem banks but also at strengthening banking supervision to reduce the like hood of future crisis. "All prudential directives of Nepal Rastra Bank in connection of credit sector reform have been made revised on after April 2001. To adopt such changes there can be some difficulties and for a better and harmonized reform NRB should continue to be supportive proactive and also participative to take opinions of bankers for a change in regulation policy taking place in the future.

Mr. Moris in his article entitled "Latin America's banking system" in the 1980's has concluded with most of the banks concentrated on compliance with bank rules on reserve requirement, credit allocation and interest rates, while analyzing loan portfolio quality, sound investment policy, operating efficiency has largely been overlooked. In developing countries, there are huge losses found in the bank's portfolio due to poor quality of their oversight investment function. He further adds that poor management of financial institution has involved inadequate and over optimistic loan appraisal, tax, loan recovery, high risk diversification of lending and investments, high risk concentration connected and insider lending, loan mismatching." This has lead many banks in developing countries to the failure in 1980's.

Mr. Chetri In his article "Non-Performing Assets: A need for Rationalization." The writer has attempted to provide connation of the term non performing loan and its potential sources, implication of non performing loan in financial sector in the South East Asian region. He had also given possible measures to be contain non performing loan. "loans and advances of the amount borrowed in stipulated time as agreed by the
parties at the time of Loan settlement. Since the data becomes past dues, the loan 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 stated by the writer, the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been area for at least 6 months. Similarly, it is after three months, in India. Loans thus defaulted are classified into different categories having their differing implication on the asset management of financial institution.

He also stated that non performing assets 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 non performing assets depends solely on the length of the time the assets has been in the form on none obliged by the loanee. The more time it has elapsed the worse condition of assets is being perceived and such assets are treated according. As per Mr. Chhetri's view, failure of business which loan was used, defective and below standard credit appraisal system, credit program sponsored by government, slowdown in economy/recession, diversion of fund is some of the factors lending to accumulation of non-performing assets.

Charles and Chirstopher. (2002), "Do Banks provide Financial slack?" in their main hypothesis is that the banks have the ability to accurately price financial claims thus including a preference for undervalued firms to choose bank debts as their marginal financial sources. They refer to this expect that this information benefit will be weighted against a variety of contracting costs in an firm's ultimate financing choice. In particular, they find that firms who exhibit small pronouncement stock price urnups and those with high stock return volatility are relatively more likely to announce new bank loans. Since they expect that these firms are the most likely to be undervalued, these finding are consist dent with the presence of an information benefit to bank debt finance. For identify the firms weighted those information benefits of bank finance against other contracting costs, they examine the variation. In the sensitivity of the bank loan likelihoods to their variables measuring potential under valuation. They find that firms with public debt outstanding tend to exhibit a relatively that firm weights the information benefits of bank debt against the contracting costs. The results suggest that for firms with public securities market for
the firms to cross the threshold where the information benefits of bank debt finance out weight the relatives contracting costs.

Mr. Pradhan (2004) in his article "The Importance of Loan Information Center and its Activities" published in NRB Annual publication says that the loan information center was established to fulfill the necessity of a company working in relation to information related to loan. He further adds that the negative trends like delaying the payment of principle and interest, deficient loan approval procedures, lack of constant inspection of projects, lack of coordination between bank and finance companies have aided in the increase of non-performing loans ultimately affecting the national economy negatively. The author recommends the banks and finance companies to help the loan information obtained from the center so that positive changes can be witnessed.

Mr. Shrestha (2002), in his article title "Modus Operandi of Risk Appraisal in Bank Lending" 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 trade off between risk and return is one of the prime concerns of any investment decision whether long term or short-term. He concludes, "Effective credit risk management allows a bank to reduce risk and potential and performing assets. It also offers other benefits". Once banks understand their risk and their costs, they will be able to determine their most profitable business, thus, price products according the risk. Therefore, the banks must have an explicit and fresh credit process And systems. There are five crucial areas that management should focus on:
(Gredit sanctioning and monitoring process
T Approach to collateral
Credit risk arises from new business opportunities
Credit exposures relative to capital or total advances.
Concentration on correlated risk factors.

Apart from these, the bank management should regularly review all quality issues including portfolio composition, bi borrower exposures, and development in credit
management policy and process. He is hopeful that the banks adopt good risk management practices and will be able to reap both strategic and operational benefit.

Mr. shrestha (2055) in his articles" A study on deposit and credits of commercial banks in Nepal" concluded that the credit deposit ratio would be $51.30 \%$ other things remaining the same in 2004 AD , which was the lowest under period review. So he had strongly recommended that the commercial bank should try to give more credit entering new field as far as possible. Other wise they not be able to absorb even its total expenses.

### 2.3.3 Review of Previous Thesis

Many researchers have published their article about the lending policy in Nepal. There are many thesis that have been conducted by students regarding the several of commercial banks and financial institutions in order to achieve their goal effectively. Some of these as supposed to relevant for the study are presented below.

Mr. Khadka (2002) has carried out research on "A comparative Study on Investment Policy of Commercial Banks" with objective to find out the relationship between deposits investment, loans and advances and net profit. She has made the following conclusion while comparing the performance of NBL with NABIL, SCBNL and NBL. She concludes," ${ }^{\prime}$ NBL is comparatively less successful is on balance sheet as well as off-balance sheet operations then that of other CBs. It predicts that in the coming days if it could not mobilize and utilize its resources as effectively as other CBs to maximize the returns, it would lag behind in the competitive marker of banking. Profitability positions of NBL are comparatively worse then that of other CBs. Its all customers if it cannot increase its volume even in future". As the bank experience many difficulties in recovering the loans and advances and their large amount is being blocked as non - performing assets. She suggested that there is an urgent needs to workout a suitable mechanism through which the overdue loan can be realized.

Mr. Gautam (2002) conduct a study "Lending Practices and Procurers of NBBL" has outlined his major finding as follows: not concentrating only in big cities and large
groups, he has suggested NBBL to expand branches in rural areas. Banks should invest in productive sector, develop the concept of micro financing and group financing should maintain the balance in its loan portfolio and current requirement of the customers. Banks should give preferences to the short term lending. Banks should provide the consortium loan for those projects under government guarantee and security thereby uplifting the economic condition of the country.

Mr. Ghimire (2005) explored in his research "Non Performing Assets of Commercial Banks: Cause and Effect" and found that Nepalese banking sectors in recent days are facing several problems with increasing number of problems. With the level of increasing NPA profitability performing assets increment with commercial banks basis of loan floating procedure follow up practice carried out by the bank for the recovery of overdue loan outstanding, internal responsibility factor causing NPA growth have been tried to sort out. Analysis shows that relationships of borrowers with top management as the adopted basis for floating loan in Nepalese commercial banks. Similarly respondent identified portfolio management consideration the second basis for floating loan in the certain sectors. Monitoring and control, security offered and financial strength were given average emphasis. It was found that commercial banks are giving least weight on personal integrity of the borrower while giving loan.

In regarding to the internal responsible factor that contributes turning good loan into bad loan. It was found that bad intension, week monitoring and miss management are the most responsible factor for non performing assets. Similarly weak legal provision and credit concentration are found as the least preferred factor in turning good loan into bad. Some factors such as lack of portfolio analysis not having effective credit policy and shortfall on security were identified as having average effect on non performing assets growth. In connection to the external factors, it has been found that recession political and legal issues more relevant factors in turning good loan into bad loan in Nepalese banks was found the factor having least impact. Supervision and monitoring system have been identified as average factor. 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 increasing level of NPA.

Mr. Laudari (2001) has conducted his study entitled "A study on investment policy of Nepal Indosuez Bank Ltd, In comparison to Nepal State Bank of India Bank Limited". The researcher's main objective of the study was to examine the quality assets management and profitability position and investment policy of NIBL in comparison to BSBI to study the growth ratio of loan and advances and investment to total deposits and net profit of NIBL in comparison to NSBI. Through his research Mr. Shib Raj Laudari has found that the NSBI and NIBL banks current assets have exceeded the current liability therefore the ratio is consider satisfactory. Bur there cash reserve ratios have fluctuated in high degree. However NIBL has maintained both current ratio and cash reserve ratio better then of BSBI. As per Mr. Laudari the assets management ratios shows deposit utilization of NIBL is less effective then NSBI. He study that NIBL has invested lesser amount on government securities and share and debenture then that of NIBI.

Mr. Dhungana (2002), in his thesis the "Investment Policy of Nepal Bangladesh Bank Ltd. And Other Joint Venture Banks" summarizes that the mushrooming of Joint venture banks is present situation of Nepalese financial system. There is a high flow of money in the marker but less viable and able project. Few commercial banks are continuously making profit and satisfying their shareholders and returning them adequate profit. This has attracted the potential customer to pour their money into banks, as there very few sectors to make a profitable investment and investors are always reluctant to risk. Bur lack of sound investment policy is one the reasons for commercial banks not to utilize properly its deposits in profitable projects. He recommends Nepal Bangladesh Bank Ltd, to implement a sound collection policy. The policy should ensure rapid identification of delinquent loans, immediate contact with borrower and continual follow-up until a loan is recovered.

Mrs. Bhattarai in her thesis paper outlined, "Lending Policy of Commercial Banks in Nepal" has tried to examine the lending policy of the commercial banks. She has concluded that efficient utilization of resources is more important then collection of the same Lower investment means lower capital formation that hampers economic development of the people and the country. Therefore, she recommended that bank should give emphasis on efficient utilization of resources.

Mr. Tamang (2005) conduct a thesis, "A comparative Study on Credit Management in Himalayan Bank and NABIL Bank Ltd." has found out that the credit practices of NABIL in terms of loans and advances to deposit ratio was found relatively low means score then HBL. It indicates that NABIL has been strong to mobilize its total deposit as loan and advances in comparison to HBL. Efficiently in terms of loan and advances to current asset ratio was found higher in NABIL (i.e. 3.2251>2.1426) in which indicates that short term lending practices of NABIL Bank was found relatively good position. HBL has best performance to generate interest income from loan and advances in comparison to NABIL (i.e. 839.42>781.66). lending Policy of NABIL Bank in terms of loan loss Provision to total loan and advances was found relatively better then that of HBL because the mean score of the result was relatively low (i.e. $0.0451<0.0777)$. Lending Policy of NABIL Bank with regard to non-performing loan to total loan and advances was found relatively better in comparison to HBL because the means scores of the result was found relatively greater (i.e. $1.077>1.044$ and $003278>0.0220$ ) respectively.

The finding also showed meaningful that the quality of management in both banks was found to be good because the means score of the component management quality scored above the average (i.e. 4.6527). because all the items designed for study scored above the average and that resulted relatively high level of management quality. But in comparison, the means score of NABIL Bank was higher then the mean score of HBL (i.e.4.7143>4.5979). It means that the employees of NBL perceived relatively higher- level management quality then HBL. The finding also showed that result was not significant at 0.01 levels of significance.

Mr. Karmacharya is his thesis paper, "A study on the deposit mobilization by the Nepal Bank Ltd." Has concluded that the utilization side of NBL. Is weak as compares to the collection resources. Karmacharya has mentioned that the bank has successfully maintained its liquid asset position but could not mobilize its resources efficiently. Kanrmacharya has suggestion to set up more banking branches to increase the deposit collection and long-term as well as short term credit. Kanmacharya has recommended not to consider security factor only bur to provide loan to genuine projects without security.

Mr. Sharma (2002), in his study about "Priority Sector Investment of Commercial Banks in Nepal.", with the objective of highlighting the priority sector investment and repayment state of commercial banks in Nepal through intensive banking programmed and to show the repayment position of the sector has concluded, "All the three commercial bank covered in this study have contributed to the credit to priority sector. But the efforts made by different banks are not in the same proportion. NABIL has contributed higher amount of credit to agriculture and cottage industry. NBBL has contributed highest amount to services sectors. So for the loan repayment from priority sector is concerned NABIL has very satisfactory performance where as NBBL has very low performance or loss repayment overdue loan have been observed more in agriculture."

He has further suggested that, commercial banks should improve the repayment loan by generation the income of rural farmers. Reinvestment and right utilization of bank loan are the cost of the commercial banks since there is a need to increase assets by better arrangement of institution and organization, the manager and loan staff of the branches should be provided with adequate training so that they could identify right borrowers, right project and ensure correct project appraisal. Reinvestment is the available source to increase the paying capacity of the borrowers.

Miss Ojha (1997) has drawn her conclusion in her thesis "A study on priority sector investment in commercial bank with special reference to Rastriya Banijya Bank" that the bank was unable to meet the requirement of $12 \%$ lending on the priority sector set under NRB directives. During her study period, she further found low interest rate in priority sector but increasing trend of overdue and its miss utilization. She has recommended improving supervisions; evaluating borrower's paying capacity and reducing the over due through integrated program of priority sector loan.

Mr. shrestha (2002), study regarding the "investment Practices of Joint Venture Banks in Nepal." Has figured out that the commercial banks are more emphasized to be making loan o short-term basis against moveable merchandise. Commercial banks have a lot of deposits but very little investment opportunity. They are even discouraging people by offering very low interest rates and minimum threshold balances. Commercial banks invest their funds in limited areas to achieve higher
amount of profit. This is regarded as a very risk step, which may lead to the loss of profit as well as the principle. The credit extended by commercial banks to agricultural and industrial sector is not satisfactory to meet the growing need of the present.

Mr. Joshi (1982) in his thesis paper outline "Lending Policy of Commercial Banks in Nepal" concluded that commercial banks have collected many resources from people but they are far behind in their utilization. Commercial banks in Nepal are still lazy to pay an active role to utilize their resources collected from different sector in accordance with the need of the economy.

### 2.4 Review of NRB Directives

NRB is the apex institution in the money and capital market. Being the national central bank, it directs, supervises and controls the functions of the commercial banks and other financial institutions. Nepal Rastra Bank has issued directives to all commercial banks and financial institution ensuring transparency during loan disbursement. As per provision, all commercial banks as well as financial institution are now required to disclose the name of loan defaulters in every six months. Until now there was no such legal system of disclosing the loan defaulter's name. the new directives have also barred the financial institutions from lending any amount to the blacklisted defaulter and his family members. The credit information Bureau (CIB) can blacklist the firm, company or clear the debt within the stipulated period. As per the set criteria for blacklisting the CIB would monitor those individuals and companies that have the principle loans of above Rs. one million. If the creditor fails to clear the amount within time of is found mission the loans among others, the creditor can be blacklisted.

NRB has issued various directives in order to develop a healthy, competitive and secured banking and economic system to ensure national development. The new updated and comprehensive set of directive has been issued on 2062.03.29 and is effective from 2062.04.01. while some of them are collections of existing directives, some other is new additions. It can be safely assumed that with the updated and comprehensive set of directive, the functioning of commercial banks would be more
transparent and systematic. The new and updated directive which is related with lending are briefly discussed below:

## Capital Structure of Banks:

The current regulation of NRB prescribes that all the new commercial banks are to be established in kathmandu at national level should have minimum paid up capital Rs. 2000 million by the end of FY 2065/66 BS. For this purpose and objective all the commercial banks have furnished their plans to enhance the level of capital accordingly. With effect from fiscal year 2062/63, the commercial banks need to have minimum of capital adequacy as below:

Table: - 2.4
Maintenance Minimum Capital Fund

| Time Table | Required Capital on the basis of Risk <br> weighted assets |  |
| :---: | :---: | :---: |
|  | Core Capital | Capital Fund |
| For FY 2061/62 | $5.5 \%$ | $11 \%$ |
| For FY2062/63 | $6 \%$ | $12 \%$ |
| For FY 2063/2064 | $5 \%$ | $11 \%$ |

It is to be noted that capital fund comprises of both primary capital and supplementary capital. Similarly the risk-weighted assets will include both on-balance sheet items and off- balance sheet items. Standard format and weighted percentage is given in the directive itself and commercial bank need just to fill the columns to see whether required percentage is maintained or not.

## General Loan Loss Provision

Under this head provision made only against the pass loan should be included. The amount should be limited up to $1.25 \%$ of the total risk weighted assets. However, loan loss provision on sub standard and doubtful loans should available for inclusion under the supplementary capital during the period as follows.

Table:- 2.5
General Loan Loss Provision

| Time Period | Loan Loss provision available for supplementary capital |
| :--- | :--- |
| For FY 2058/59 | Pass, Sub- Standard and Doubtful |
| For FY 2059/60 | Pass, Sub-Standard |
| For FY 2060/61 | Pass (Up to $1.25 \%$ of risk weighted assets) |
| For FY 2061/62 | Pass (Up to $1.25 \%$ of total risk weighted assets) |
| For FY 2062/2063 | Pass (Up to $1.25 \%$ of total risk weighted assets) |

## Classification of outstanding loan and advances on the basis of aging

From the effective fiscal year 2058/59, banks should classify outstanding amount of Loans and Advances on the basis of aging. Loan and advantages should be classified into the following four categories:

## 1. Pass Loans

Loans and advance whose principle amount not due and past due for a period up to 3 month shall be included in this category. These are classified as performing Loans.

## 2. Sub - Standard Loans

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

## 3. Doubtful Loans

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

## 4. Loss Loans

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

## Provision for good loan

Loan and advances fully secured by gold, silver, fixed deposits receipts and Nepal Government securities should be included under "pass" category. Where collateral of fixed deposit receipt or Nepal government securities of NRB bonds is placed as securities against loan for other purposes, such loan is classified on the basis of aging.

## Additional arrangement for "L oss" L oan Provision

Even if the loan is not due, loans having any of all the following discrepancies shall be classified as "Loss"
(6) The borrower has been declared bankrupt.
(G) The credit has not been used for the purpose originally intend.

T- The borrower is absconding or cannot be found
(o) Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation
(G) Loans provided to the borrowers included in the blacklist and where the credit information bureau blacklists the borrower

To Non-security at all or security that is not in accordance with the borrower's agreement with the bank
(T) Purchased of discounted bills are not realized within 90 days from the due date

## 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.

## Loan Loss Provision Policy

NRB has issued the directives which commercial banks should make provision against the loan disbursed them. The loan loss provision on the basis of the outstanding loans and advances classified as per NRB Directives should be provides as follows:

Table:- 2.6
Loan Loss Provision Policy

| S.N. | Classification of <br> Loans | Define as | Age | Loans Loss <br> Provision |
| :---: | :--- | :--- | :--- | :---: |
| 01 | Pass or Good | Performing Loan | Principle not overdue up <br> to 3 months | $1 \%$ |
| 02 | Sub-Standard | Non-Performing Loan | Principle overdue by <br> more then 3 months | $25 \%$ |
| 03 | doubtful | Non-Performing Loan | Principle overdue by <br> more 6 month to 12 <br> months | $50 \%$ |
| 04 | Loss or Bad | Non-Performing Loan | Principle overdue by <br> more then12 months | $100 \%$ |

## Additional Provisioning for Personal Guarantee Loans

Where the loan is extended only against personal guarantee, a statement of the asset, equivalent to the personal guarantee amount not claimable by any other shall be obtained. Such loans shall be classified as per above and where the loans fall under the category of pass, Substandard and Doubtful in addition to the normal loan loss provision applicable for the category, an additional provision by $20 \%$ pointy shall be provided. Classification of such loans and advances shall be prepared separately. Hence the loan loss provision required against the personal guarantee loan will be $21 \%, 45 \%$, and $70 \%$ for pass, standard and Doubtful category respectively.

## Rescheduling and Restructuring of Loan

In respect of loans and advances falling under the category of standard, doubtful or Loss, banks may reschedule of restructure such loans only receipt of a written plan of action from the borrower citing the following reasons:
(ox Evidence of exiting of adequate loan documentation
(G) The internal and external cause contribution to deterioration of the quality of loan.

The reduced or risk inherent to borrower/enterprise determined by analyzing its balance sheet and profit and loss account in order to estimate recent cash flows and to project future ones, in addition to assessing market conditions.
(l) An evaluation of the borrower/enterprise's management with particular emphasis on efficiency, commitment and high standards of business ethics.

## Loan Loss Provision in respect of rescheduled, restructured of swapped loan

(T) Expect for priority sector, in respect of all types of rescheduling or restructured or swapped loan, if such credit falls under pass category according to Nepal Rastra Bank directives, loan loss provision shall be provided at minimum 12.50\%
(I) case of rescheduling of restructuring of swapping of insured of insured or guaranteed priority sector credit, the loan loss provisioning shall be provided at one fourth of the percentage.

In respect of swapped loans, the bank accepting the loans in swapping has to provide loan loss provision classifying the loan is swapping shall obtain certification from the concerned bank of financial institution as the existing classification.

## Loss Loan Provision for Priority Sector Lending

Full provision as per normal loan loss provision shall be made against the uninsured priority and deprived sector loans. However in respect of insured loans the requisite provisioning shall be $25 \%$ of the percentage normal loan loss provisioning. The required provisioning in the case of insured priority/deprived sector credit is as follows:

Table:- 2.7
Loss Loan Provision for Priority Sector Lending

| Classification of Loans | Loans Loss Provision for <br> Priority/deprived sector lending |
| :---: | :---: |
| Pass or Good | $0.25 \%$ |
| Sub- Standard | $5.00 \%$ |
| Doubtful | $12.50 \%$ |
| Loss or Bad | $25.00 \%$ |

## CHAPTER - III

## RESEARCH METHODOLOGY

The research methodology is the systematic was of solving research problems. Research methodology refers to the overall research processes, which a researcher conducts during his/her study. It included all the procedures from theoretical foundation to the collection and analysis of data. As most of the data are quantitative, the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect, on basis of historical data. Research is systematic and organization effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well through out activities of gathering, recording and analyzing and interpreting the data with the purpose of finding answer to the problem. Research methodology describes the methods and purpose applied in entire study. It is preferable to call this study an in depth analysis of the lending policy of commercial bank. To accomplish the goal, the follows the research methodology describe in this chapter

### 3.1 Research Design

Research design is the plan, structure and strategy of investigations conceived so as to obtain answer to research questions and to control variances. Research design is the arrangement of conditions for collection and analysis of data. To achieve the objective the objective of this study, descriptive and analytical research design has been used. Some financial and statistical tools have been applied to examine facts and descriptive techniques have adopted to evaluate lending of commercial banks.

### 3.2 Sources of data and data collection procedures

### 3.2.1 Sources of Data

Secondary sources of data have been collected in order to achieve the real and fact date as for as available. The major sources of data are as follows:

### 3.2.1.1 Secondary data

The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. The major sources of secondary data are as follows:
T. NRB Directives and Reports

Nepal Rastra Bank Sama
$\square$ Books related to loan portfolio
(v) Annual General Reports of the Bank

Economic Survey, HMG, Ministry of Finance
National Newspaper, Journals, Websites and Magazines

### 3.2.2 Data collection Procedures

This study is mainly based on secondary data, obtained from various sources mentioned above. Nepal Rastra Bank publication such as quarterly economic bulletins, banking and financial statistics, economy report so on have been collected by the personal visit of concerned departments of Nepal Rastra Bank at Baluwatar. The data on same aspects of bank has also been obtained from the publications and websites. Most of data are taken from each and every commercial banks website. Some supplementary data and information and literature review have been collected from the Shankar Dev Campus Library, NRB Library, different journal and magazines.

### 3.3 Populations and Sample

In statistics, population means whole. The populations refer to the industries of the same nature and its service and product in general. The sample means the part of the whole. Sample refers to the part chosen from the population. Thus, the total commercial banks constitute the population of the data and the bank under study constitutions the sample for the study. We are totally ignore the role of Global bank, Citizen bank of international, Prime commercial bank, Bank of Asia and Sunrise commercial bank because it is running after July 2008. So that we are unable to gets their data and other information.

### 3.4 Period of Study

The study covers five fiscal years from 2004 to 2008 mid July.

### 3.5 Method of Analysis

To achieve the objective of the study, various financial, statistical and counting tools have used in this study. The analysis of data will be done according to pattern of data available. The various calculated results obtained through financial, accounting and statistic tools are tabulated under different heading. Then they are compared with each other to interpret the results. Various tools applied in this study are presented as follows:

### 3.5.1 Financial Ratio

Financial analysis is the process of identify the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account. A ratio is simply one number expressed in term of another and such it expresses the quantities relationship between any two numbers. Ratio can express in terms percentage and proportion. Different kinds of char are the graphic forms of expressing a ratio. Financial ratio is the mathematical relationship between two accounting figures. Ratio analysis is a part of the whole process of analysis of financial statements of any business is used to compare a firm's financial performance and status to that of the other firms of to it overtime. Even through there are ratios to analyze and interpret the financial statement, only those ratios that are related to lending operation have been covered in the study.

### 3.5.2 Statistical Tools

Some important statistical tools are used to achieve the objective of the study. In this study statistical tools such Trend Analysis, Correlation of coefficient and regression analysis have been used.

### 3.5.2.1 Trend Analysis

When a series of data pertaining to a series of continuing periods be studied it characteristics and its future direction is the best estimated by the time series. Time
series analysis a series of data keeping in minds the various short term and long term fluctuations.

### 3.5.2.2 Mean (Average)

Mean is the sum of all the observation divided by the number of observations. The arithmetic mean can be computed as:

$$
\text { Mean }(\text { average })=\sum_{n}^{\sum X}
$$

### 3.5.2.3 Correlation Coefficient

Correlation is the statistical tool that we can use to describe the degree to which one variable are linearly related to another. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Person's method is applied in the study. The results coefficient of correlation is always been +1 , when $r=+1$, is means there is perfect relationship between two variables and vice versa. When $r=0$, it means there is no relationship between two variables.

$$
\mathrm{r}=\begin{gathered}
\mathrm{n} \sum x y-\sum x \sum^{y} \\
\sqrt{n \sum x^{2}}-\left(\sum x\right)^{2} \sqrt{n \sum y^{2}}-\left(\sum y^{2}\right)
\end{gathered}
$$

## Coefficient of Determination

Coefficient of determination is the square of correlation. It denotes the extend of charges in dependent variable that can be explained by independent variable.

Coefficient of determination $\left(\mathrm{r}^{2}\right)=\mathrm{rxr}$

## Probable error (P. Er.)

With correlation coefficient, probable error is calculated to measures the extent of dependent variable that can be explained by the independent variable.

Probable error (P. Er. $)=0.6745 \quad$ X $1-r^{2}$

$$
\sqrt{n}
$$

### 3.5.2.6 Regression Analysis

Regression Analysis is used to estimate the likely value of one variable from the known value of the other variable i.e. regression analysis we established a kind of average irreversible functional relationship between the two variables. The cause and effect relationship is clearly indicated through regression analysis then by correlation. Regression analysis has been developed to study and measure the statistical relationship between two variable only then the process is known as the simple regression analysis. Regression lines express in term of mathematical relations are known a regression equations. It is the line which gives the best estimates for the values of Y for any specified value of X .

Regression equation of Y on X is given by

$$
Y=a+b
$$

Where,
$\mathrm{Y}=$ Dependent Variable
$a=$ Intercept of the line
$\mathrm{X}=$ Independent Variable
$\mathrm{b}=$ Slope of the line

The values of the constants ' $a$ ' and ' $b$ ' can be determined by solving two normal equations (applying principle of method of least square)
$\sum \mathrm{y}=\mathrm{na}+\mathrm{b} \sum \mathrm{x}$
$\sum \mathrm{xy}=\mathrm{a} \sum \mathrm{x}+\mathrm{b} \sum \mathrm{x}^{2}$

## CHAPTER- IV

## PRESENTATION AND ANALYSIS OF DATA

Lending is one of the most important factors that have been developed to facilitate effective performance of commercial bank management. Lending policy is the formal expression of the commercial banks goals and objectives stated in financial term for specific future period. Loan and advances is the basic indicator for determining profit, performance, efficiency and strength of commercial banks.

This chapter is concerned with the presentation and analysis of data collected. In this chapter, the data collected from various sources have been presented and analyzed to measure the various dimensions of the problems of the study. In this process numerical data, tables charts are used to researcher has been conducted. Presentation and analysis of data part help to draw the result and inference and thereby make conclusion and recommendation.

### 4.1 M easuring the commercial bank's lending strength

The relationship between various assets and liability of the balance sheet has been established to show the lending strength of lending of commercial banks comparatively. An attempt is made to determine the lending the lending strength in absolute figure of each commercial bank.

### 4.1.1 Loan and Advance to Total Deposit Ratio

Commercial banks can collect deposit only ten times more then their authorized capital. Commercial bank cannot provide all deposit for loan and advance. Investment so on. According to NRB directives, commercial bank can provide only up to $88 \%$ of loan from fixed deposit, $50 \%$ from saving deposit and call deposit. However, they can not provide loan from current deposit. Commercial bank must deposit two or five percentage of their total deposit in NRB account. This percentage is fixed by their type of deposit.

The main sources of bank's lending are its deposit. Thus, loans and advances to total deposits ratio actually measures how successfully the commercials bank are able to mobilize their total deposits on loans and advances fro the purpose profit generation and fund mobilization power. Higher the ratio indicates the better mobilization of total deposits, but too high ratio is not being better from its liquidity point of view. Lower ratio indicates the idle amount of deposit. So that higher ratio is favorable. Total loan and advances to total deposit ratio is calculated by total loan and advances divided by total deposit.

Table:- 4.1 show the five year average loan and advances to total deposit ratio commercial banks.

Table:- 4.1
Loan and advance to total deposit ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $50.5 \%$ | NSBIB | $76.2 \%$ | NIC | $77.3 \%$ |
| RBB | $66.9 \%$ | NBBL | $77.2 \%$ | MBL | $83.2 \%$ |
| NABIL | $63.1 \%$ | EBL | $75.3 \%$ | KBL | $86.0 \%$ |
| NIB | $68.9 \%$ | BOK | $76.2 \%$ | LAXMI | $96.6 \%$ |
| SCBL | $36.4 \%$ | NCCB | $82.6 \%$ | SBL | $107.9 \%$ |
| HBL | $55.1 \%$ | LBL | $89.4 \%$ | ADB | $36.9 \%$ |

Five years average loan and advance to total deposit ratio of whole commercial banks

$$
=60.93 \%
$$

(Appendix:- 17)

Average five years loan and advances to total deposit ratio of whole commercial banks was $60.93 \%$. BNBL, SCBL, HBL, and ADB ratio was below then the average commercial bank ratio i.e. $60.93 \%$. It means, they have so many idle amount of deposit and it increases their deposits expenses which decrease their profit. They are unable to utilize their deposit for the profit generating purpose in effective way. Remaining banks have satisfaction ratio, which are above $60.93 \%$. The first commercial bank NBL has $50.8 \%$ ratio, where as lastly establish SBL ha $107.9 \%$ ratio. SBL is able to mobilize their deposit in right way and get more profit but in other side SBL have to face liquidity problem in the future because his lending is
$7.9 \%$ mere then total deposit collection. SDB has the highest ratio where as ADB and SCBNL has lowest ratio.

## Figure: - 4.1

## Loan and advance and total deposit

(Appendix:- 1 and 5)

Figure:-4.1 show the each year loan and advances and total deposit of whole commercial banks and their ratio. Each and every year the volume of loan and advances and total deposit was increasing trend but the ratio was in decreasing trend. In the year 2004 commercial banks loan and advances to total deposit ratio was 0.613. Next two year it was going to decrease and reach to 0.599 . After that, it was in increasing and decreasing trend. In the last five years, the ratio was decreasing by 0.008 and reach to 0.595 in the year 2008.

Lastly, it can be concluded that the newly established banks ratios are strongest then oldest banks. SCB and HBL are unable to maintain their ratio. They are in weak position. Remaining banks are able to maintain their ratio. They are in strong or in better position regarding mobilization of total deposit on loan and advances and
acquiring higher profit. Higher ratio is not good from the view point of liquidity as the loans and advances are not liquid as cash and bank balance.

### 4.1.2 Non interest bearing deposit to total deposit ratio

The cost of deposits is the major expenses of commercial banks. Banks cannot avoid costly deposits at all but they can maintain the certain proportion between interest bearing deposits and non-interest bearing deposits by administering the interest structure. Current deposit bearing deposits in total deposits. In practices interestbearing deposits has always been playing a significant role in the mix of deposit liability. This ratio is calculated by non interest bearing deposit by total deposit. Higher ratio is favorable because in this type deposit banks did not pay any interest.

Table:-4.2 explain the ratio of five year average non interest bearing deposit to total deposit ratio

Table:-4.2
NIBD to Total Deposit Ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $15.4 \%$ | NSBIB | $18.7 \%$ | NIC | $5.3 \%$ |
| RBB | $13.9 \%$ | NBBL | $8.75 \%$ | MBL | $3.0 \%$ |
| NABIL | $18.5 \%$ | EBL | $9.0 \%$ | KBL | $4.9 \%$ |
| NIB | $11.8 \%$ | BOK | $13.9 \%$ | LAXMI | $7.9 \%$ |
| SCBL | $24.9 \%$ | NCCB | $6.7 \%$ | SBL | $3.4 \%$ |
| HBL | $18.2 \%$ | LBL | $4.3 \%$ | ADB | $6.7 \%$ |

Five year average NIBL to total deposit ratio of whole commercial bank $=13.63 \%$
(Appendix:-22)

The five year average non interest bearing deposit to total ratio of whole commercial bank is $13.63 \%$. NBB, RBB, NABIL, SCBL, HBL, NSBIB and BOK have the higher ratio then $13.63 \%$. This indicates that they are the most successful in collecting cheapest fund. Which decrease their interest expenses and they are able to get higher profit. Remaining banks have lowest ratio. They are unable to collected non interest bearing deposit. That means they have mostly interest bearing deposit which increase
their deposit expenses. Their interest expenses will high which affect their interest income in negatively i.e. lower ratio decrease their profit. It found that oldest bank are successful to collected non interest bearing deposit then newly establish banks.

Figure:-4.2
NIBD and total deposit

| 0.131 | 0.142 | 0.144 | 0.137 | 0.129 |
| :--- | :--- | :--- | :--- | :--- |

(Appendix :- 1 and 2 )
Figure:-4.2 show the per year non interest bearing deposit and total deposit of whole commercial banks and their ratio. Volume of total deposit and non interest bearing deposit both are in increasing each and every year. That was quite satisfaction for commercial banks. In the year 2004, Non Interest Bearing Deposit to Total deposit ratio was 0.131 and it was increase by 0.013 and reached to 0.144 in the year 2006. After that, it was in decreased by 0.015 and reached to 0.129 in 2008. In the last five year this ratio was decrease by 0.002 .

### 4.1.3 Loan and advances to total assets

Loan and advances is the major components of the total assets, which indicate the ability of banks to utilize its deposits in the form of loans and advances to earn high return. It is an appropriate level to generate profit. The high degree of this ratio indicates the good performance of the commercial banks in mobilizing its funds by
way of lending function. However, its reverse side, the high degree of this ratio is representative of low liquidity ratio either.

Granting the loan and advances always carries a certain degree of risk, this asset of banking business is regarding as risk assets. This ratio also measures the management attitudes towards risk assets. The low ratio is indicative of low productivity and high degree of safety in liquidity and vice versa. The interaction between risk and return determines this ratio. This ratio is calculated by dividing loan and advances by total assets.

Table:-4.3 show the five year average loan and advances to total assets ratio of commercial banks.

## Table:-4.3

Loan and advance to total assets ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $28.4 \%$ | NSBIB | $61.3 \%$ | NIC | $19.7 \%$ |
| RBB | $34.3 \%$ | NBBL | $61.2 \%$ | MBL | $43.2 \%$ |
| NABIL | $48.9 \%$ | EBL | $58.4 \%$ | KBL | $70.6 \%$ |
| NIB | $58.7 \%$ | BOK | $62.4 \%$ | LAXMI | $70.9 \%$ |
| SCBL | $30.8 \%$ | NCCB | $63.1 \%$ | SBL | $79.7 \%$ |
| HBL | $47.1 \%$ | LBL | $67.9 \%$ | ADB | $31.5 \%$ |

Five year average loan \& advances to total asset ratio of commercial banks $=40.38 \%$
(Appeddix:-20)

The average loan and advances to total asset ratio of whole commercial bank was $40.38 \%$. NBL, RBB, SCBL, NIC, and ADB have the lower ratio then average commercial banks ratio. They have lower credit risk. So that, they are unable to maximize their profit. They are unable to utilize their total assets as loan and advances, SBL, LAXMI, KBL have the highest ratio so that they have maximum risk in loan and advance but in other side they are success to mobilize their total assets and get more profit. Remaining commercial banks are in quite satisfaction, which have average risk and average return.

Figure:-4.3 show per year loan and advance and total assets of whole commercial banks from 2004 to 2008 and their ratio. Volume of both total loan and advance and total deposit are increasing per year but total loan and advances to total assets ratio was in decreasing per year. In the year, 2004 when this ratio was 0.412 it was decreases by 0.08 and reached to 0.404 in year 2008. The overall ratios have been in decreasing trend.

Figure:-4.3
Total loan and advance to total assets

$$
\begin{array}{lllll} 
& & 0.412 & 0.388 & 0.404 \\
0.412 & 0.408 & & &
\end{array}
$$

(Appendix:- 3 and 5 )

### 4.1.4 Loan and advances and investment to total deposit ratio

Loans and advances and investment are the major area of fund mobilization of commercial banks. Loan and advances is first type of application of funds, which has mere risk as compare to investment and gives more return. Investment is cushion against the liquidity risk and at the same time, it gives return. The investing activity of commercial banks has low level of risk and low level of return. Loan and advances and investment to total deposit ratio indicates the firm's fund mobilization power. The main sources of bank's lending and investment is its deposits. The ratio measures the ability of bank in generating income from bank's deposit liability. This ratio is
calculating by loan and advances, investment dividing by total deposit. This is favorable when it is $75 \%$ or higher.

Table:- 4.4 show the five year average loan and advances, investment to total deposit ratio of commercial banks.

Table:-4.4
Loan and advance, investment to total deposit ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $82.2 \%$ | NSBIB | $101.5 \%$ | NIC | $99.8 \%$ |
| RBB | $79.7 \%$ | NBBL | $94.85 \%$ | MBL | $89.6 \%$ |
| NABIL | $84.7 \%$ | EBL | $100.8 \%$ | KBL | $100.5 \%$ |
| NIB | $81.3 \%$ | BOK | $100.0 \%$ | LAXMI | $109.0 \%$ |
| SCBL | $73.4 \%$ | NCCB | $89.4 \%$ | SBL | $116.8 \%$ |
| HBL | $72.6 \%$ | LBL | $98.8 \%$ | ADB | $36.9 \%$ |

Five year average loan and advances, investment to total deposit ratio of whole commercial bank $=76.65 \%$
(Appendex:-19)

The five year average loan and advances, investment to total deposit ratio of whole commercial bank is higher then $75 \%$. That means this ratio of commercial bank is in satisfaction mode. SCBL, HBL and ADB ratio was below the average of whole commercial banks ratio. That means these three commercial banks are unable to utilize their deposit in effective way. Their ratio indicates that these three commercial banks have very poor mobilization power according to other commercial banks. Remaining commercial bank ratio is higher then $75 \%$. They are able to mobilize their deposit in the form of loan and advances and investment. Show that they are able to generate higher profit then other banks. They have lowest deposit expenses then SCBL, HBL and ADB. SBL as the best performer in utilization its deposit in the form of loan and advances and investment and ADB is unable to utilize its deposit. ADB is the worst performance among the all commercial banks.

Figure:-4.4 show the whole commercial bank per year loan and advances, investment and total deposit and their ratio. Each and every year the volume of the whole
commercial bank loan and advances, investment and total deposit ratio is above standard each and every year. Whole commercial bank loan and advances, investment and total deposit ratio was 0.77 in the year 2004 and it was increasing by 0.06 in the year 2010 and reach to 0.83 in the year 2007. After that, it was reach to 0.79 at 2008 mid July.

Figure:-4.4
Loan and advances, investment and total deposit

$$
\begin{array}{lll}
0.78 & 0.83 & 0.7
\end{array}
$$

$0.77 \quad 0.80$
(Appendix;- 5 and 6)

### 4.1.5 Cash and bank balance to total deposit ratio

Cash and bank balance are assets that constitute the commercial banks first live of defense and consist of cash in hand, foreign cash on hand, cheques and other cash items defense and consist of cash in hand, foreign cash on hand, cheques and other cash items balance with domestic commercial banks, financial institution and balance held in abroad. Cash and bank balance to total deposit ratio measures the proportion of most liquidity assets i.e. cash and bank balance among the total current assets of bank.

This ratio is calculated cash and bank balance divided by total deposit. Higher ratio shows the banks ability to meet demand for cash another way higher ratio also show idle of cash in bank. However, high ratio is unfit as capital will be tied up and
opportunity cast will be higher. Minimum $12 \%$ of this ratio was to be maintained by every commercial bank.

Table:-4.5 show the five year average cash and bank balance to total ratio of every commercial banks.

Table:-4.5
Cash and Bank Balance to Total Deposit Ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $16.1 \%$ | NSBIB | $11.6 \%$ | NIC | $11.1 \%$ |
| RBB | $23.1 \%$ | NBBL | $12.6 \%$ | MBL | $12.5 \%$ |
| NABIL | $5.5 \%$ | EBL | $11.6 \%$ | KBL | $8.6 \%$ |
| NIB | $13.6 \%$ | BOK | $9.3 \%$ | LAXMI | $13.9 \%$ |
| SCBL | $6.9 \%$ | NCCB | $17.0 \%$ | SBL | $4.9 \%$ |
| HBL | $7.4 \%$ | LBL | $11.8 \%$ | ADB | $9.9 \%$ |

Five year average Cash and bank balance to total deposit ratio of whole commercial

$$
\text { banks }=13.12 \%
$$

(Appendix:-21)

Five year average cash and bank balance to total deposit ratio of whole commercial banks is $13.12 \%$. In an average commercial banks are able to maintain their ratio. RBB, NBL, NIB, NBBL, NCCB, MBL and LAXMI are able to maintain their ratio above the average. They are able to meet their customer daily requirement for cash. But in other side, they are unable to utilize their fund successfully. Remaining banks are unable to maintain their ratio. There cash and bank balance to total deposit ratio was below the average. Among of them SBL and NABIL banks have lowest cash and bank balance to total deposit ratio. This is cause by they are utilized their funds in productivity way.

Figure:-4.5 show per year cash and bank balance to total deposit of whole from the year 2004 to 2008. The volume of total deposit was in increasing way per year but the cash and bank balance was in running quite smoothly. But it was in exactly in decreasing trend. The higher ratio was in the year 2004. In the year 2004, the ratio was 0.198 in it was decreased by 0.089 in the year 2008 and reached to 0.109 . This
declined of ratio of commercial bank has caused due to higher degree of increases in lending and investment.

Figure:-4.5
Cash and Bank Balance and Total Deposit

| 0.198 | 0.131 | 0.134 | 0.106 | 0.09 |
| :--- | :--- | :--- | :--- | :--- |

( Appendix;- 1 and 13 )

### 4.2 Measuring the Lending Performance in Quality, Efficiency and its

 Contributed in Total Profitability.In this section, the lending efficiency in term of its quality and turnover is measured. For this purpose the relationship of different variable of balance sheet and profit and loss account are established.

### 4.2.1 Loan Loss Provision to total loan and advances ratio

It is occurred when the debtors fail to pay their loan. Loss of loan is not only the default of debtors but it is because of the failure of recovery of loan by the commercial bank. Negligence in its part makes a negative impact on the earning and capital of a bank very badly. Greater loan loss provision is made in income statement if high loss is expected. However, this will lead to low profit and possible losses and product low increase of decrease capital.

The loan loss provision to total loan and advances ratio shows how efficiently the commercial bank manages their loan and advances and makes efforts for timely recovery of loan and advances. Lower ratio signifies the good quality of assets in the
total volume of loan and advances. This ratio is calculated dividing loan loss provision by total loan and advances.

Table:-4.6 show the five year average total loan loss provision to total loan and advances ratio of each and every commercial bank.

Table:-4.6
Loan Loss Provision to Loan and Advances Ratio

| Banks | Ratio | Banks | Ratio | Banks | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NBL | $1.18 \%$ | NSBIB | $0.88 \%$ | NIC | $0.83 \%$ |
| RBB | $1.86 \%$ | NBBL | $1.50 \%$ | MBL | $0.33 \%$ |
| NABIL | $0.32 \%$ | EBL | $0.67 \%$ | KBL | $0.86 \%$ |
| NIB | $0.43 \%$ | BOK | $1.28 \%$ | LAXMI | $0.38 \%$ |
| SCBL | $0.34 \%$ | NCCB | $1.93 \%$ | SBL | $0.76 \%$ |
| HBL | $0.04 \%$ | LBL | $7.44 \%$ | ADB |  |
| Five year average whole commercial bank Loan Loss provision to loan and advances |  |  |  |  |  |
| ratio $=1.09 \%$ |  |  |  |  |  |

(Appendix:-28)

The whole commercial bank five year average loan provision to loan and advances ration is $1.09 \%$. LBL, NBL, RBB, NBBL BOK, NCCB have higher ration then $1.09 \%$. So that they are unable to manage their loan and advances and makes effort for timely recover loan. Their loan loss provision to loan and advance ration is highest. Highest ration increase expenses and it also decreases the profit. Remaining banks are able to manage their loan loss provision below the average i.e. their ration was the less then $1.09 \%$. They are able to utilize their loan and advance and get return from their loan. Among all of them BNL is success to manage his loan and LBL have the worst ration among all of the banks.

### 4.2.2 Interest Expenses of Deposit to Total Deposit

Commercial bank should be give priority to collect the cheaper deposit from various sources. The commercial banks performance depends upon its ability to generate cheaper funds. More the cheaper fund will be the profitability in generating loan and
advances and vice versa. The high interest expenses of deposit to total deposit ration indicates of costly deposit collection and this adversely affects its running cost and lending performance of banks. This ration is calculated interest expenses of deposit divided by total deposit. Table:- 4.7 show the five year average total interest expense of deposit to total deposit ration of each and every commercial banks.

Table:-4.7
Interest Expenses of Deposit to Total Deposit

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $1.81 \%$ | NSBIB | $3.48 \%$ | NIC | $2.82 \%$ |
| RBB | $1.18 \%$ | NBBL | $4.68 \%$ | MBL | $3.75 \%$ |
| NABIL | $1.90 \%$ | EBL | $3.68 \%$ | KBL | $3.91 \%$ |
| NIB | $2.34 \%$ | BOK | $3.17 \%$ | LAXMI | $3.92 \%$ |
| SCBL | $1.37 \%$ | NCCB | $5.17 \%$ | SBL | $3.75 \%$ |
| HBL | $1.95 \%$ | LBL | $4.29 \%$ |  |  |

Five years average interest expenses of deposit to
Total deposit ration $=2.07 \%$
(Appendix:23)

Five years average interest expenses of deposit to total ration of whole commercial banks are $2.07 \%$. RBB, NBL, NABIL, SCBL and HBL were only able to manage their deposit in lower cost. So that they can use their deposit in efficiency way and get more profit. Remaining commercial bank has higher cost of deposit. Higher ration increases their running cost. It decreases their lending performances, efficiency and profit. NCCB, NBBL, LBL have costly deposit fund. They have higher running cost. Their ratio is more then $4 \%$

Oldest commercial banks are able to handle lowest cost for deposit then newly establish bank. RBB was able to manage their deposit for lowest cost among all the commercial banks and NCCB and LBL have the highest costly deposit expenses.

Figure:- 4.6
Per year Interest Expenses of Deposit to Total Deposit

## $\begin{array}{lll}2.13 & 2.31 & 2.27\end{array}$ 2.29

1.09
(Appendix:- 1 and 7 )

Figure:-4.6 shoe the whole commercial banks per year interest expenses of deposit to total deposit ratio from last five year. This ratio was not flow in same way. In the last five year commercial banks are able to collected deposit in lowest rate in 2004. in the year 2004, this ratio was 1.09 percentages, which was increase by $1.22 \%$ in the year 2006 and reach to 2.31 . Then it was decline per year and reached to $2.29 \%$ in the year 2008. The highest ration was bearing by commercial bank in the year 2006. Then they are able to manage their cost of deposit in lower rate.

### 4.2.3 Total interest expenses to total asset

Total interest expenses to total assets ratio measures the percentage of total interest expenses against total assets. This ration was calculated by dividing total interest expenses by total assets. Higher ratio indicated the higher interest expenses on total assets and vice versa. Table:-4.8 show the five years average total interest expenses of deposit to total deposit ration ratio of each and every commercial banks.

Five year average total interest expenses to total assets ratio of whole commercial bank is $1.40 \%$. NBL, RBB, SCBL, NIC banks are able to mobilize their assets with lower expenses. Their ratio is lower then $1.40 \%$. Therefore, they are success to generate more profit. Remaining banks have higher ratio then average bank ratio
$1.40 \%$. Among of them, NCCB, KBL, LBL NBBL and FBL have higher ratio. They have to minimize their expenses. It can be concluded that oldest commercial banks are in better position from payment of interest point of view. It seems to be successful to collect its assets from less expensive sources in comparisons to newly established commercial banks.

Table:-4.8
Total interest expenses to total asset ratio

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $1.05 \%$ | NSBIB | $2.81 \%$ | NIC | $0.72 \%$ |
| RBB | $0.6 \%$ | NBBL | $3.72 \%$ | MBL | $1.95 \%$ |
| NABIL | $1.49 \%$ | EBL | $3.04 \%$ | KBL | $3.43 \%$ |
| NIB | $2.03 \%$ | BOK | $2.65 \%$ | LAXMI | $2.95 \%$ |
| SCBL | $1.13 \%$ | NCCB | $3.95 \%$ | SBL | $2.76 \%$ |
| HBL | $1.67 \%$ | LBL | $3.27 \%$ |  |  |

Five years average total interest expenses to total
Assets ratio of whole commercial bank= 1.40\%
(Appendix:-26)
Figure:-4.7 Show the whole commercial banks total expense to total assets ratio from the year 2006 to 2008

Figure :-4.7
Per year total interest expenses to total asset ratio
1.60
1.60
1.42
1.41
0.73
( Appendix:- 3 and 8)

In the year 2004 commercial banks, bear lowest expenses ration that is only $0.73 \%$. After that ratio was in increasing to and reached to $1.60 \%$ in the year 2004. Commercial banks ratio was decrease in 2007 and increased in year 2008. Day by day commercial banks expenses volume is increasing trend.

### 4.3.4 Total interest income from loan and advances to total interest income

Loan and advances plays a big role in interest income. This ratio measures the contribution made by interest from loan and advances to total interest income. Commercial bank main sources of income was generate from loan and advances. This ratio measures how efficiently the banks have employed their fund in lending. This ration calculated by dividing interest income from loan and advances by total interest income. Higher ratios indicate the higher profit from loan and advances.

Table:-4.9 show the five year average total interest income from loan and advance to total interest income ratio of commercial banks.

Table:-4.9
Total interest income from loan and advance to total interest income ratio

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $74.0 \%$ | NSBIB | $88.4 \%$ | NIC | $83.1 \%$ |
| RBB | $85.1 \%$ | NBBL | $91.9 \%$ | MBL | $93.9 \%$ |
| NABIL | $75.1 \%$ | EBL | $81.1 \%$ | KBL | $86.5 \%$ |
| NIB | $88.3 \%$ | BOK | $83.3 \%$ | LAXMI | $91.3 \%$ |
| SCBL | $53.8 \%$ | NCCB | $96.4 \%$ | SBL | $91.4 \%$ |
| HBL | $74.8 \%$ | LBL | $93.8 \%$ |  |  |

Five years average loan and advance to total interest income ratio of whole

$$
\text { commercial bank= } 80.45 \%
$$

(Appendix:-26)

Loan and advance is the main sources for commercial bank's profit. More then $80 \%$ profit commercial banks was generating from loan and advances. The five years average loan and advance to total interest income ration of whole commercial banks is $80.45 \%$. NBL, NABIL, HBL and SCBL have the lowest ratio. They are unable to get
more income from their lending. SCBL only get $53.80 \%$ interest income from loan and advances. LBL, LAXMIN, NCCB, MBL, SBL, NBBL were earned more then $90 \%$ interest from loan and advances. They are success to utilize their lending for generating profit. Remaining commercial banks have satisfaction ratio.

Figure:4.8
Total interest income from loan and advance and total interest income

$$
0.827 \quad 0.782
$$

0.814
0.797
0.810
( Appendix:- 9 and 10)

Figure:-4.8 show the total interest income from loan and advances and interest income and their ration of whole commercials banks. Each and every year loan and advances and total interest income volume of commercial banks was in increasing trend. Both are in highly increased. In the year 2004, total interest income from loan and advance to total interest income ratio was 0.810 and decrease by 0.013 and reach to 0.797 in the year 2005. After that year it was increase in the year 2006 and 2007 and reach to 0.827 in the year 2007. Then it is decrease by 0.045 in year 2008. Interest income from investment is increasing trend which was the cause of decreasing total interest income from loan and advances and total interest income ratio. However, in average interest income from loan and advances in satisfaction situation of commercial banks.

### 4.2.5 Capital Risk Ratio

The capital risk ratio indicates how much assets value may decline by bank before the position deposition and other creditors. Therefore, a bank needs to maintain sufficient capital in relation to be nature and condition of its assets, its deposits liability and other corporate responsibilities. This ratio measures ability of bank to attract deposits and inter bank funds. It also determines the level of profit. A bank can earn if a bank chose to take high capital risk. Capital fund include the reserve, share premium, paid up capital, return earning so no. capital risk ratio is calculated capital fund dividing by risky weighted assets.

Table:-4.10 show the four year average capital risk ratio of each and every commercial bank.

Table:-4.10
Four years Average Capital Risk Ratio

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $(25.61)$ | NSBIB | 12.13 | NIC | 14.88 |
| RBB | $(44.61)$ | NBBL | 5.46 | MBL | 10.24 |
| NABIL | 13.53 | EBL | 12.46 | KBL | 13.02 |
| NIB | 11.24 | BOK | 12.54 | LAXMI | 25.65 |
| SCBL | 16.42 | NCCB | 5.17 | SBL | 22.49 |
| HBL | 11.46 | LBL | 3.29 |  |  |

(Source: Apendix:-15)

NBL, RBB have negative capital risk ratios. This indicates that they are unable to utilize their capital fund and they have large size of negative capital fund so that they are unable to get profit. SBL and LAXMI bank have higher ratio. That means they are success to mobilize their capital fund and they have higher capital ratio risk. So that, they have lower capital risk. So that they are able to get high return from their capital fund. LBL, NBBL, NCCB banks have lowest capital risk ratio. That means they have higher capital risk. Therefore they are getting lowest income. Remaining banks were also having satisfaction ratio.

Figure:-4.9

## Per year capital ratio of whole commercial banks

## ( Appendix:- 15)

Figure:- 4.9 show the whole commercial banks capital risk ratio from year 2005 to 2008. Two largest banks NBL and RBB have a huge negative capital fund each and every year, which makes the whole commercial banks capital risk ratio negative each and every year. The capital risk ratio is in decreasing trend. Capital risk ratio of whole commercial banks was $(12.04 \%)$ in the year 2005 but it was going to decrease and reach $(5.30 \%)$ in the year 2008 .

### 4.2.6 Return on loan and advances ratio

Return on loan and advances ratio measure the earning capital of banks on its deposit mobilized on loan and advances. Mostly loan and advances indicates loan cash credit, overdraft bills purchased and discounted. In other words, this ratio indicates how efficiently the banks have employed its resources in the firm of loan and advances. Return on loan and advances ratio calculated by dividing interest income from loan and advance by loan and advances. High ratio indicates a high success to mobilize fund as loan and advances and vice versa.

Table:-4.11 show the five year average return on loan and advances ratio of each and every commercial bank.

Table:-4.11
Return on loan and advance ratio

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $6.55 \%$ | NSBIB | $7.27 \%$ | NIC | $5.30 \%$ |
| RBB | $3.78 \%$ | NBBL | $9.87 \%$ | MBL | $7.73 \%$ |
| NABIL | $6.95 \%$ | EBL | $8.37 \%$ | KBL | $7.69 \%$ |
| NIB | $7.20 \%$ | BOK | $7.29 \%$ | LAXMI | $6.82 \%$ |
| SCBL | $7.58 \%$ | NCCB | $10.37 \%$ | SBL | $6.91 \%$ |
| HBL | $6.56 \%$ | LBL | $7.28 \%$ |  |  |
| The whole commercial banks five year average return on loan and advances ratio $=6.22 \%$ |  |  |  |  |  |

(Appendex:-29)

The average return on loan and advances of whole commercial banks is $6.22 \%$. RBB and NIC banks have the lower return from their loan. Their return is below the average ratio of commercial bank i.e. $6.22 \%$. Other commercial banks get more return from their loan then average commercial bank ratio. NCCB and NBBL are getting higher return from their total loan then other banks. Remaining bank has quite satisfaction return on their return on their loan.

Figure:-10
Return on loan and advances ratio of whole commercial bank
$0.073 \quad 0.074$
0.067
0.06
0.025
(Appendix:- 5 and 10)

Figure:-4.10 show the whole commercial banks return on loan and advances ratio. Each and every year interest income from loan and advances is in increasing trend. In the year 2005 this ratio was highly increased after that, its increasing trend is smoothly. In year 2004 this ratio was 0.025 after that it was increase by 0.049 in the last five year and reach to 0.074 in the year 2008.

### 4.2.7 Return o total assets ratio

The commercial bank has to earn to satisfactory return on total assets. Commercial banks have to well manage their assets, efficiently utilize of their assets to get higher return from their assets. Return on total assets ratio measures the profit earning capacity by mobilizing their available total assets. Return on total assets ratio was calculated net profit divided by total assets. Higher ratio is preferable because higher ratio indicates the higher return from the total assets and lower ratio indicates the bad performance of total assets.

Table:- 4.12 show the five year average return on total assets of each and every commercial bank.

Table:-4.12
Return on total assets ratio banks

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | $0.10 \%$ | NSBIB | $0.67 \%$ | NIC | $0.30 \%$ |
| RBB | $(1.94 \%)$ | NBBL | $(0.89 \%)$ | MBL | $0.65 \%$ |
| NABIL | $2.32 \%$ | EBL | $1.06 \%$ | KBL | $0.91 \%$ |
| NIB | $1.36 \%$ | BOK | $1.18 \%$ | LAXMI | $(2.57 \%)$ |
| SCBL | $2.35 \%$ | NCCB | $(2.49 \%)$ | SBL | $0.94 \%$ |
| HBL | $1.13 \%$ | LBL | $(4.15 \%)$ |  |  |

Five year average whole commercial bank return to Total assets ratio $=(0.03 \%)$
(Appendix:-31)

The return on total assets of whole commercial banks from 2004 to 2008 is negative $0.03 \%$. That is the causes of more then five commercial bank of Nepal were running in loss at that time 2004 and 2005 and their cumulative profit from the 2004 to 2008 was still negative. RBB, LBL, NCCB, NBBL, LAXMI banks return is still negative.

RBB and LAXMI return on assets will be positive in near future because they are running in profit from last 3 year. Remaining banks are able to mobilize their assets effectively and they are able to got profit. SCBL and NABIL return on assets higher then other commercial bank.

Commercial bank return on assets was going positively from last 3 years. In the year, 2004 and 2005 commercial banks return on assets was negative. That is the cause of more then five commercial banks of Nepal are running in loss at time. After that, return on assets was positive. Return on assets was increasing from 2006 and reached to $1.86 \%$ in 2008

Figure:-4.11
Return on Assets
$1.09 \quad 1.27$
-1.09

## (Appendix:- 3 and 16 )

### 4.2.8 Net Profit of Commercial Banks

Profit is the main elements that make commercial bank to survive in long run. Net profit after all types of deduction such a bonus to employees, taxes and provision has been used in this analysis. The volume of net profit measures the success of a firm in every aspect of its efficiency. Table:-4.13 show the five year average net profit of each and every bank.

Table:-4.13
Net Profit of Commercial Banks

| Banks | Ratios | Banks | Ratios | Banks | Ratios |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NBL | 64.95 | NSBIB | 64.86 | NIC | 62.36 |
| RBB | $(1572.41)$ | NBBL | $(129.96)$ | MBL | 47.67 |
| NABIL | 459.71 | EBL | 120.41 | KBL | 50.07 |
| NIB | 181.86 | BOK | 112.41 | LAXMI | $(69.71)$ |
| SCBL | 544.35 | NCCB | $(177.37)$ | SBL | 20.64 |
| HBL | 300.40 | LBL | $(198.77)$ |  |  |
| Commercial banks five year average net profit = (118.74) |  |  |  |  |  |

(Appendix:-18)

The whole commercial banks five year average net profit is negative. That is Rs. 118.74 million. In the study period 2004 and 2005 was the worst period for commercial banks. At that time RBB, LAXMI, NCCB, MBL, SBL and NBL was suffering for huge loss. After the year 2005, banks are able to get large profit. But their cumulative effective of their net profit show whole commercial banks profit negative. Now, only LBL, NBBL, NCCB are running I lost from last two year. They are unable to generate profit from their lending and other activity. SCBL, NABIL and HBL are able to get highest profit in the study period. Remaining banks is also running in positive.

Figure:-4.12 show the per year profit commercial banks. The banking system was experiencing a continuous losses trend during 2003 to 2005. Then after successful restructuring of two big commercial banks result I better performance of whole banking system. But it turned to post a net profit of Rs. 3707 million in 2007. the figure of the net profit of the whole commercial banking system is Rs. 7983.5 million in 2008 mid July.

Figure:-4.12
Net profit of whole commercial Banks (graph)
(Source: Banking and financial Statistic mid July 2008)

### 4.3 Portfolio Behaviors of Lending

There are various types of borrowers and economy sector. It invests fund in various sector lending was classify into five sectors. They are agriculture, machine, and import domestic industries, service and power sectors. The Table:-4.14 show the loan and advances provide by commercial banks in priority sector. Commercial banks give priority to services sector. From last three year, it is in increasing trend. However, it was decrease in year 2008. Machine and import sector lending was decreasing trend in per year. Power sector lending was increasing per year. Lending in agriculture is the lowest condition and its trend is decreasing.

### 4.3.1. Priority sector leading

Commercial banks give leading in some priority sector. Priority sector leading was classified into five sectors. They are agriculture, machine and import domestic industries. Services and power sectors. The Table:- 4.14 show the loan and advances
provide by commercial banks in priority sector. Commercial banks gives priority to services sector, from last three year, it is in increasing trend. However, it was decrease in year 2008. Machine and sector leading was decreasing trend in per year. Power sector leading was increasing per year. Leading in agriculture in the lowest condition and its trend is decreasing.

Table:-4.14
Priority sector lending of commercial banks
(Rs. In million)

| Year | Agriculture | Domestic <br> Industries | Services | Power <br> Sector | Machine <br> and Import |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | 1297.99 | 2031.89 | 3308.18 | 474.10 | 27.54 |
| 2006 | 487.36 | 1489.26 | 4340.39 | 503.48 | 15.60 |
| 2007 | 1914.20 | 3109.36 | 5336.75 | 965.55 | 11.9 |
| 2008 | 1206.8 | 1813.5 | 4025.1 | 1000.5 | 11.8 |

(Sources: Banking and Financial Statistics 2005 to mid July 2008)

The figure:- 4.13 show four year average priority sector of loan and advances of commercial banks. Most important share of the loan portfolio of the commercial banking system was circulated to service sector and domestic industries sector. Lending to production sector alone stand at $50.97 \%$ if total loan and advances and to domestic industries was $25.30 \%$ in last four year. Agriculture sector was able to knock only $12 \%$ of total loan and advances. Other major loan and advances distributed sectors included power sector $8.82 \%$ and machine and import sector included only $0.20 \%$ of total loan and advances.

Figure:-4.13
Four year average priority sector lending of commercial banks

Domestic \& industries
25.30\%

Agriculture
Services
14.70\%
50.97\%

Machine \& import
0.20\%

Power sector 8.82\%
(Source: Table 4.14)

### 4.3.2 Sector wise Loan and Advance

There are six sector wise loan and advances of commercial banks. Which are Production, Construction, Service industries, Wholesaler and retailer, finance and insurance and consumable loan is the main sectors wise lending area.

From the Table:-4.15 we can see that, form last four year lending in these different sectors.

Form the last four years production sectors alone held the dominant position on other sector wise loan. All loan and advances was in increasing trend. However, a services industry was in increasing from year 2005 to 2007. After that year it was decrease in the year 2008.

Table:-4.15
Sector wise loan and advance of commercial banks
(Rs. In Million)

| Year | Production | Consumption | Services <br> Industries | Wholesaler <br> and <br> Retailer | Finance <br> and <br> Insurance | Consumable <br> loan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2005 | 41671 | 2789 | 12151.4 | 25422.5 | 4117.0 | 3322.5 |
| 2006 | 44622.3 | 3688 | 12472.5 | 27073.9 | 4383.1 | 3554.4 |
| 2007 | 53743.5 | 8722.7 | 14984.6 | 34412.3 | 6390.0 | 3587.6 |
| 2008 | 56432.2 | 13398 | 14062.6 | 35073.6 | 10024.0 | 5839.4 |

(Sources: Banking and financial statistics 2003 to mid July 2006)

The figure:-4.14 show the four year portion of loan and advances provide in different sectors. Major portion of the loan portfolio of the commercial banking system was distributed to production sector and wholesale and retail business sector. Lending to production sector alone stood at $44 \%$ of total loan and advances and lending to wholesale and retailer was $28 \%$ in last four year. Services industries were able to tap $12 \%$ of total loan and advances. Other major loan and advances distributed sectors included consumable loan $4 \%$, finance and insurances $6 \%$ construction sector $6 \%$ in the last four year.

Figure:- 4.14
Four year average sector wise loan and advance

### 4.3.3 Securities wise loan and advances

Commercial banks are also classified their loan and advances according to securities. There are mostly seven sectors in securities wise loan and advances. Such as gold, silver, government and non government securities, fixed assets receipts, guarantee, credit card and others.

Table:-1.16
Securities wise loan and advances of commercial banks.

| Year | Gold/Silver | Government <br> Securities | Non- <br> Government <br> Securities | Fixed <br> assets <br> Receipt | Guarantee | Credit <br> card | Other |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2005 | 2284.2 | 1789.5 | 838.7 | 2375 | 97045.4 | 43.1 | 11795 |
| 2006 | 1286.5 | 4274.5 | 905.7 | 2519 | 111204.2 | 28.8 | 7522.4 |
| 2007 | 1435.4 | 3077.4 | 1007 | 2674.5 | 142052.6 | 127.6 | 8948.4 |
| 2008 | 1820.8 | 3118.2 | 1324.4 | 8027.6 | 1533566.2 | 5.6 | 8357.2 |

(Sources:-Banking and Financial Statistics 2005 to mid July 2008)

The table:- 4.16 show the commercial bank lending in different kinds of securities. Lending in gold and silver was decreasing one year then it is in increasing trends. Government securities are also increasing from year 2007. Non government securities are also increasing per year. Guarantee included different types of guarantee. Such as assets guarantee, bills guarantee and guarantee in other securities. These guarantees are in increasing trend per year because commercial banks are lending and maximum of their amount in land and building, agricultural and non agricultural product. Vehicles so on. Lending in credit card was maximum in 2007, compare with other year. Lending in others securities was in increasing per year but it was decrease in 2008.

Figure:- 4.15
Securities wise loan and advance of commercial Banks

According the figure:-4.15, shows the last four year average securities wise loan and advances. Main portion of the loan portfolio of the commercial banking system was distributed to guarantee to securities. Lending to guarantee of securities alone stood at $87 \%$ of total loan and advance s. fixed account receipt was cover only $3 \%$ of total loan. Government securities and non government securities were able to tap only $1 \%$ and $2 \%$ of total loan and advances respectively. Other major loan and advances distributed securities included others $6 \%$, credit card $1.00 \%$ and gold silver $1 \%$ in the last four year.

### 4.3.4 Loan and advances in different sectors

Commercial banks provide loan and advances in different sector. Such as government enterprises, private sector, for bills purchase and discount, and foreign A.B.C. table:- 4.17 show the commercial bank lending in different sectors.

Table :-4.17
Loan and advances in different sectors
(Rs. in million)

| Year | Government Enterprises | Private Sector | For Bills P and D | Foreign A.B.C. |
| :---: | :---: | :---: | :---: | :---: |
| 2004 | 2651.1 | 109043.3 | 1322.2 | 158 |
| 2005 | 2867.7 | 120343.4 | 1143.8 | 167.5 |
| 2006 | 2519.4 | 136403.5 | 1050.4 | 58.2 |
| 2007 | 2442.5 | 157198.9 | ------------- | ----------- |
| 2008 | 4988.8 | 168394.7 | -------------- | ----- |
| Total | 15469.5 | 691383.8 | 3516.4 | 383.7 |

(Sources: Banking and Financial statistics 2005 to mid July 2008)

Each and every year lending in private sector is in increasing trend. In the last five year it was increase by 59351.4 million. Government enterprises lending increase in 2005 and decreased in 2006. as a whole from 2005 to 2008 lending in government enterprise was also in increasing trend. It was also increase by 2337.70 million in last five year. Commercial bank's lending in for bills purchase and discount and foreign A.B.C. was continuing in 2005. After 2006 commercial banks totally stop lending in bills purchase and discount and foreign A.B.C sector.

From the figure:- 4.16 we can see the proportion of commercial bank and advances in different sectors. In the study period, private sectors occupied $97.27 \%$ of whole lending.

Private sector was able to dominate the other sectors. After that government enterprises occupied $2.18 \%$ of commercial bank lending. For bills purchase and discount capture $0.49 \%$ and foreign A.B.C capture only $1.05 \%$ of whole commercial bank lending in last five year. These two sectors have the very low proportions of lending with the compare of other sector lending.

Figure:- 4.16
Loan and advance in different sectors
(Source: Table 4.17)

### 4.4 Non performing loan status of commercial banks

The loans falling under category of substandard, doubtful and loss loan are regarded as non performing loan. The bank should try to decreases non- performing loan so that profitability of the banks can be strength. The effective loan management decreases the percentage of non performing loan.

As per international standard only $5 \%$ below non performing loan allow but the context of Nepal maximum $10 \%$ or below non performing loan may be acceptable. The higher ratio of non performing loan is the system is an indicator or financial crisis and it should be resolved as soon as possible. Hence, the lower ratio of non performing loan to total gross loan is preferred.

Table:- 18 shows the last four year average non- performing loan in percentage of individual commercial banks.

Table:-4. 18
Four years average NOL of commercial Banks

| International standard 5\% |  |  |  | Below standard |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Banks | NPL | Banks | NPL | Banks | NPL | Banks | NPL |
| LAXMI | 0.47 | NIB | 2.36 | BOK | 5.71 | LBL | 16.53 |
| MBL | 0.93 | NABIL | 2.87 | NSBIB | 7.71 | ADB | 21.23 |
| KBL | 1.08 | NIC | 4.24 | NCCB | 13.27 | RBB | 54.03 |
| SBI | 1.38 | SCBL | 3.18 | HBL | 8.14 | NBL | 47.21 |
| EBL | 1.69 |  |  | NBBL | 13.71 |  |  |

(Appendix:- 11)

LAXMI bank was able to maintenance its NPL among the all commercial banks. Nine commercial bank are able to maintenance their NPL ratio as international standard which is $5 \%$. Remaining nine banks are unable to maintenance their ratio. Their ratio was more then international standard $5 \%$. The oldest and biggest bank RBB and NBB are badly suffering from non performing loan. Their around the half of total loan was suffering from NPL and it effect their loan recovery and its profit.

Table:-4. 19
NPL to total Gross Loan(Rs In Million)

| Year | Gross Loan | NPL | Ratio |
| :---: | :---: | :---: | :---: |
| 2005 | 111900.59 | 32226.66 | $28.80 \%$ |
| 2006 | 127065.40 | 28933.41 | $22.80 \%$ |
| 2007 | 147065.40 | 27877.84 | $18.94 \%$ |
| 2008 | 188308.81 | 26770.42 | $14.22 \%$ |

(sources: Banking and finance statistic 2008 mid July)

The table:-4.19 show the whole commercial banks non performing loan from the year 2005 to 2008 mid July. The level of whole commercial banks non performing loan $28.80 \%$ in 2005 and is continuously decreasing thereafter with the implication of financial sector reform program. It has decrease to $18.94 \%$ in 2007 and $14.22 \%$ in 2008. The decreasing trend of non performing loan was indicating the commercial banks are quite successful to manage their loan. However, non performing loan was still over then international standard.

## Gross Loan to NPL of Commercial Banks

## ( Sources: Banking and financial statistic mid July 2008)

So that the level of Non Performing loan of commercial banks have not come down to an acceptable level. The efforts to data succeeded only to reduce the Non Performing Loan to some extend but it is still sufficient to maintain the sound health of the system to desired level.

## Non Performing Loan and Profitability

Non performing loan keeps importance in determination of profitability of the banks. The banks should always try to decrease non performing loan so that profitability of the bank can be strengthened.

Table:-20 show the non performing loan and net profit and its trend. Each and every year as a whole commercial banks non performing loan is going to decreasing trend. Whole commercial banks net profit was negative in the year 2005, after that it was in increasing trend per year. When the non performing loan is decreasing at that time commercial banks not profit is in increasing trend. So that, to increase the net profit of commercial banks, they have to manage their loan and advances and try decrease their non performing loan.

Table:-4.20
Non performing loan to profitability
(Rs. In million)

| Year | Non Performing Loan |  | Net Profit |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | Incremental | Amount | Incremental |
| 2005 | 32226.66 | $\ldots \ldots .$. | $(3317)$ | $\ldots .$. |
| 2006 | 28933.41 | $(10.22 \%)$ | 3707 | $(211.76 \%)$ |
| 2007 | 27877.84 | $(-3.65 \%)$ | 5205 | $40.41 \%$ |
| 2008 | 26770.42 | $(-3.97 \%)$ | 7983.51 | $53.38 \%$ |

(Sources: Banking and Finance Statistical 2008 mid July)

### 4.5 Volume Contributions by Commercial Bank in Lending

The Nepalese financial sector is composed of banking sector and non banking sector. Banking sector comprise Nepal Rastra Bank and commercial banks. The non banking sector includes the development banks, micro- credit development banks, finance companies, co - operative, saving and credit, financial institutions, non government organizations (NGO) performing limited banking activities. Other financial institutions comprise of insurances companies, employee's provident fund, citizen investment trust, postal saving offices so on.

There is a tremendous growth in the number of financial institution in Nepal. At the beginning of the 1980s when financial sector was not liberalized, there were only two commercial banks and two development banks performing banking activities in Nepal. After the liberalized there are so many banking sector and non banking sector are established. Such as 23 commercial banks, 36 development banks, 72 financial companies, 11 micro - credit development banks and 19 saving and credit cooperatives, and 47 NGOs.

Table:-2.21 show the deposit collection by commercial banks and other financial and non financial institution.

Table:-4.21
Total Deposit collection by Financial and Non Financial institutes

| Year | Commercial <br> Banks | Finance <br> Companies | Development <br> Banks | Micro Credit <br> Development <br> Banks | Others | Total <br> (Rs. In illion) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | $90.30 \%$ | $6.60 \%$ | $2.40 \%$ | ----- | ---- | 205135.30 |
| 2005 | $89.10 \%$ | $7.20 \%$ | $2.80 \%$ | $0.70 \%$ | $0.70 \%$ | 228736.40 |
| 2006 | $90.40 \%$ | $7.50 \%$ | $1.50 \%$ | $0.70 \%$ | $0.30 \%$ | 258742.30 |
| 2007 | $88.80 \%$ | $7.90 \%$ | $2.40 \%$ | $0.80 \%$ | $0.30 \%$ | 284115.20 |
| 2008 | $88.80 \%$ | $8.34 \%$ | $1.80 \%$ | $0.68 \%$ | $0.15 \%$ | 327995.18 |

(Sources: Banking and Financial Statistics mid July 2008)
Total deposits collection by commercial banks is in decreasing trend. In the last five year this ratio was decrease by $1.5 \%$. But in the other way, we can found that the volume of total deposit was in increasing trend per year. More then $88 \%$ deposit was collection by commercial banks. Deposit is main sources of lending. So that more deposit collection will help the commercial banks for providing loan and advances in different sectors. Commercial banks are success to mobilize their deposit for loan and advance and they can generate profit. Other financial and non financial institutions are collected less then $12 \%$ deposits.

From the Figure;-4.18, we can see that the deposit collection by commercial bank in last five year in whole financial institutes and non financial institution. In an average $89.50 \%$ of deposit was collection by commercial banks. Commercial banks alone still held the dominant position on financial system.

Figure:- 4.18
Average deposit collection by different financial and non financial institutes

From the Table:- -22 show the main proportion of loan and advances was providing by commercial bank and other financial and non-financial institute. Commercial banks loan and advances are in decreasing trend however, the total volume amount was in increasing trend. Lending percentage was decreasing but the amount was increasing each and every year. In the year 2007 commercial banks provided highest loan and advances. Therefore, the commercial banks deposit and lending percentage is in decreasing trend.

Table:-4.22
Lending volume of financial and non financial institution

| Year | Commercial <br> Banks | Finance <br> Companies | Development <br> Banks | Micro Credit <br> Development <br> Banks | Others | Total <br> (Rs. In <br> million) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | $76.30 \%$ | $8.10 \%$ | $14.70 \%$ | ----- | $0.90 \%$ | 148290.70 |
| 2005 | $75.40 \%$ | $8.80 \%$ | $14.90 \%$ | $1.50 \%$ | $0.90 \%$ | 165119.10 |
| 2006 | $75.90 \%$ | $9.50 \%$ | $13.80 \%$ | $1.50 \%$ | $0.70 \%$ | 184389.10 |
| 2007 | $78.30 \%$ | 10.205 | $9.20 \%$ | $1.70 \%$ | $0.70 \%$ | 209053.00 |
| 2008 | $76.17 \%$ | $11.75 \%$ | $8.76 \%$ | $1.87 \%$ | $0.91 \%$ | 230509.04 |

(Sources: Banking and Finance Statistics mid July 2008)
From the figure:-4.19, we can see the last five year average volume contribution by commercial bank in lending. In whole financial institutes, commercial banks occupied $76 \%$ of lending. Finance companies and development banks are also providing loan and advances. Nevertheless, their ratio was very low. Commercial banks alone still held the dominant position on financial system.

Figure:- 4.19
Average lending proportion of different financial and non financial institutes

## Trend analysis and Projection for nest five years

In this chapter we shall examines the trend analysis of topic total deposit, loan and advances, net profit, non-performing loan and interest income from loan and advances and forecasted for next five year. The measures of trend analysis exhibits the behaviors of given variables in series of time. The performance of any commercial banks does not carry consistency overall, the period and several factors cause the increase or decrease in the volume of various items of commercial bank operation. The projections are based on following assumptions:
T. The bank will run in the present position
(G) The economy will be remain in the present stage

TRB will change its guidelines to commercial banks
The main assumption it that other things will remain unchanged
(6. The forecast will be true only when the limitation of least square method is carried out.

### 4.6.1 Trend Analysis of Total Deposit

Deposit is one very sensitive liability of commercial banks. Its trend and behavior are determined by various seasonal and cyclical factors. Here the trend values of total deposit of commercial banks have calculated for five year from 2004 to 2008. The forecast for next five year up to 2013 have done.

Table: - $\mathbf{4 . 2 3}$
Trend value of total deposit
(Res. In milliun)

| Years | Total <br> Deposit | Gruwth <br> Rate |
| :---: | :--- | :---: |
| 2004 | 181151.7 | $\ldots \ldots \ldots$ |
| 2005 | 2072249 | $14.39 \%$ |
| 2006 | 233298.1 | $12.58 \%$ |
| 2007 | 259371.3 | $11.18 \%$ |
| 2068 | 285444.5 | $10.05 \%$ |
| 20099 | $3115: 7.7$ | $9.13 \%$ |
| 2010 | 337590.9 | $8.37 \%$ |
| 2011 | 363664.2 | $7.32 \%$ |
| 2012 | 389737.4 | $7.17 \%$ |
| 2013 | 415810.6 | $6.69 \%$ |

Figure: -4.20
Trend line of totail deposir and growth rate

(Apperilix:-32)

The table:-4.23 show the trend value of total deposit from 2004 mid July to 2013 mid July. The trend value of deposit of commercial banks is in increasing trend. In average it is increase Rs 21318.86 million per year. With the comparison today, if other things remain same, the total deposit of commercial bank will be increase by Rs. 106939 million and reach to Rs. 385845.86 million in years 2013. in other side, growth rate of total deposit is going to decrease each and every year. Figure:- 4.20 show the trend line of trend value and growth rate of total deposit. Trend line of value is increasing but the growth rate line is decreasing per year.

### 4.6.2 Trend analysis of Loan and Advances

Here the trend value of loan and advances of commercial banks have calculated from 2004 to 2008. Then forecast for next five year up to 2013 have done. The trend lines represent the lending behaviors of commercial banks.

Table: -4.24
Trend value of loan and advance Trend line of Loan and advances and Growth rate
(R.s. In milition)

| Years | Loan and <br> Advances | Growth <br> Rate |
| :---: | :---: | :---: |
| 2004 | 118061.56 | $\cdots$ |
| 2005 | 130885.60 | $10.86 \%$ |
| 2006 | 143709.64 | $9.80 \%$ |
| 2007 | 156533.67 | $8.92 \%$ |
| 2008 | 169357.71 | $8.19 \%$ |
| 2009 | 182181.74 | $7.57 \%$ |
| 2010 | 195005.78 | $7.04 \%$ |
| 2011 | 207829.81 | $6.58 \%$ |
| 2012 | 220653.85 | $6.17 \%$ |
| 2013 | 233477.89 | $5.81 \%$ |

Figure: -4.21


Appendix-331

The Table:- -24 show the trend value and advances of commercial banks have been in increasing trend. If other things remain same, total loan and advances of commercial bank will be increase by Rs. 12824.04 million per year and reach Rs. 233477.89 million commercial banks are able to generate more profit from their lending activity. However, the growth rate is decreasing per year and will be reaching $5.81 \%$ in the year 2013. The figure:- 4.21 show the decreasing trend of growth rate and increasing trend line of total loan and advances.

### 4.6.3 Trend Analysis of Non- Performing Loan

Trend value Non performing Loan of commercial banks has calculated of from 2005 to 2008. then forecast for next five year up to 2013 have done. The trend line represents the Non Performing Loan behavior of commercial banks. The decreasing trend line is favorable for commercial banks. Decreasing trend show the managing of loan and advances. The Table:4.25 show the trend value and growth rate of non performing loan of commercial banks.

Jable:-4.25
Trend value NPL

| Years | (Rs, In million |  |
| :---: | :---: | :---: |
|  | NPL | Sirowth <br> Rate |
| 2005 | 20753.41 | ---. |
| 2006 | 28952.08 | 39.51\% |
| 2007 | 37150.74 | 28.32\% |
| 2008 | 45349.41 | 22.07\% |
| 2009 | 53548.09 | 18.08\% |
| 2010 | 6.746 .76 | 15.31\% |
| 2011 | 69945.43 | 13.28\% |
| 2012 | 78144.10 | 11.72\% |
| 2013 | 86342.77 | 10.49\% |

(Aprenalis:-74)

Figure:-4.22
Trend line of Non Performing I oan


The value of Non Performing loan is in increasing trend. This is the cause of increasing of loan and advances each year. In other side, the growth rate of Non Performing loan is in decreasing trend. In year 2006, the growth rate was $39.51 \%$ and which will be decrease by $29.02 \%$ and reaches to $10.49 \%$ in year 2013. This decreasing trend of growth rate of non-performing loan is very well significant for the commercial banks. This will increase their profit and mobilization their assets efficiently. The Figure:- 4.22 show the growth rate of NPL was in decreasing per year and volume of NPL is increasing per year. 4

### 4.6.4 Trend Analysis of Net Profit

Trend values of net profit of commercial banks have calculated from 2004 to 2008. Then it was forecasted for next five year up to 2013 have been done. The trend value line represents the net profit behaviors of commercial banks

The Table:- 2.26 show the trend value of net profit of commercial banks. From the year 2004 to 2005 the whole commercial bank was running in loss. After that, commercial banks are able to earn profit. Then their profit is positive. In the year, 2007 commercial banks are able to earn $271.47 \%$ more profit then year 2006. Commercial banks profit volume is going in increasing trend per year after year 2005. each and every year growth rate of net profit is decreasing trend. Figure:-4.23 show the decreasing trend line of growth rate and increasing trend line of total volume of net profit.

Table:-4.26
Trend Value of Net Profit
(Re. in millien)

| Years | Net Profit | Growth <br> Ratio |
| :--- | ---: | ---: |
| 2004 | -7072.3 | - |
| 2005 | -2737.8 | $-61.29 \%$ |
| 2006 | 1596.7 | $-158.32 \%$ |
| 2007 | 5931.2 | $271.47 \%$ |
| 2008 | 10265.7 | $73.08 \%$ |
| 2009 | 14600.2 | $42.22 \%$ |
| 2010 | 18934.7 | $29.69 \%$ |
| 2011 | 23269.2 | $22.89 \%$ |
| 2012 | 27603.7 | $18.63 \%$ |
| 2013 | 31938.2 | $15.70 \%$ |

Figure:-4.23
Trend line of Net Profit and Growth Rate


### 4.6.5 Trend Analysis of Interest Income from Loan and Advances

The trend value of interest income from loan and advances of commercial banks have calculated from 2004 to 2008. Then forecast for next five year up to 2013 have done. The trend line represents the interest income from loan and advances behaviors of commercial banks.

Table:-4.27
Interest income from LA
(Rs. In million)

| Years | Interest income From LA | Growth <br> Rate |
| :---: | :---: | :---: |
| 2004 | 4009.64 | - - |
| 2005 | 6418.49 | 60.07647 |
| 2006 | 8827.34 | 37.52986 |
| 2007 | 11236.19 | 27.288.51 |
| 2008 | 13645.04 | 21.43832 |
| 20019 | 16053.89 | 17.65367 |
| 2010 | 18462.74 | 1500477 |
| 2011 | 20871.59 | 13.04709 |
| 2012 | 23280.44 | 11.54129 |
| 2013 | 25689.29 | 10.3471 |

Figure:-4.24
Trend line of Interest income and growth rate


The Table:- -27 show the trend value of interest income from loan and advances. The volume of interest income is increasing each year. In the year 2004, the interest income was Rs. 4009.64 million. It is increasing by Rs. 21679.65 million and it will be reach to Rs. 25689.29 million in the year 2013. In other side, the growth rate of interest income is decreasing per year. The highest growth rate is $60.07 \%$ in the year 2004 but it will be going to decreasing trend and reach to 10.35 in the year 2013. the above Figure:-4.24 the trend line of Interest income volume and growth rate.

### 4.7 Coefficient of Correlation Analysis

Karl Pearson coefficient of correlation used to find out the relationship between different variables. We used direct method to calculate for the Karl Pearson coefficient of correlation. The Karl Pearson coefficient of correlation always falls between -1 to +1 . The value of Karl Pearson coefficient of correlation in minus signifies the negative correlation and in plus signifies the positives correlation. The coefficient of correlation shall be interpreted based on probable error (P.Er.). If the value of correlation coefficient is greater then six times the value of probable error, the correlation coefficient is deemed as significant and reliable. If the value of
correlation coefficient is less then probable error, the correlation coefficients is said to be insignificant and there is no evidence of correlation.

### 4.7.1 Coefficient of Correlation between deposit and loan and advances

it measures the intensity, magnitudes, or degree of relationship between the two variables. In the analysis, deposit is independent variable and loan and advances is dependent variable. The main purpose of computing coefficient of correlation ${ }^{\circledR}$ between two variables are to justify whether deposit significantly used as loan and advances or not. The Table:- 4.28 show the value of ' $r$ ', ' $r$ ' ', P.Er. between total deposit loan and advances.

Table:-4.28
Correlation between deposit and loan and advances

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . \mathrm{Er}$ |
| 0.988951 | 0.978023 | 0.006629 | 0.03977 |

(Apendix:-37)

From the Table:-4.28 we found that coefficient of correlation(r) between total deposit and loan and advance is 0.988951 , which show the high degree of positive relationship between these two variable. The value of coefficient of determination $\left(\mathrm{r}^{2}\right)$, it is 0.978023 , which means $97.80 \%$ of variable in the dependent variable (loan and advances), has explained by independent variable(total deposit). Similarly, considering the value of 'r 'i.e. 0.988951 and comparing it with 6P.Er. i.e. 0.03977, we can find, it is greater then the value of 6P.Er. i.e. $0.988951>0.03977$, which the value of ' $r$ ' is significant. On the other hand, we say that there is significant relation between total deposit and loan and advance.

### 4.7.2 Coefficient of correlation between loan and advances to interest income from loan and advances

The correlation between total loan and advances and interest income from loan and advances measures the degree of relationship between these two variables. Loan and advances is independent variable ( x ) and interest income from loan and advances is dependent variable (y). The relationship between loan and advance and net income.

The Table:-4.29 show the value of ' $r$ ' , ' $r$ ' , P. Er., and 6P.Er. between loan and advances and interest income from loan and advances of banks.

Table:-4.29
Correlation between loan and advances and interest income from loan and advances

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . \mathrm{Er}$ |
| 0.952881 | 0.907983 | 0.027756 | 0.166539 |

(Apendix:-38)

The coefficient of correlation ' $r$ ' between loan and advances and interest from loan and advances in case of commercial bank is 0.952881 , which indicates positive relationship between these variables. The coefficient of determination $\left(r^{2}\right)$ is 0.907983 , which states that $90.97 \%$ of the variation of the dependent variables has been explained by independent variable, similarly, considering the value of ' $r$ ' is greater then the value of 6 P.Er. i.e. $0.952881>0.166539$, so it is significant relationship between these variables. That means if the loan and advances is increase then interest income from loan and advances also increase in same way.

### 4.7.3 Coefficient of correlation deposit and net profit

The coefficient of correlation between deposit and net profit measures the degree of relationship between these two variables. Here deposit (x) is independent variable and net profit (y) is dependent variable. The main objectives of computing between deposit and net profit are to justify whether net profit is significantly correlated with deposit or not.

The Table:-4.30 show the value of ' $r$ ', ' $r$ ' ', P.Er. and 6P.Er. between total deposit and net profit of commercial banks.

Table:-4.30
Correlation between total deposit and net profit

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . E r$ |
| .0980244 | 0.960877 | 0.129698 | 0.77819 |

(Apendix:-40)

From the Table;-4.30, it has found that the coefficient of correlation between deposit and net profit is 0.980244 , which indicate the positive relationship between these variables. The coefficient of determination ( $\mathrm{r}^{2}$ ) is 0.960877 , which indicates 96.085 of the variable of the dependent variable has explained by the independent variable has explained by independent variable. Similarly, the value of 6P.Er. is lesser then the value of ' $r$ ' i.e. $0.129698<0.980244$, which means that there exists a significant relationship between total deposit and net profit.

### 4.7.4 Coefficient of Correlation between Total Assets and Net Profit

The coefficient of correlation between the total asset and net profit measures the degree of relationship between them. Here a total asset was taken as independent variable ( x ) and net profit is taken as dependent variable ( y ). The main purpose of calculating coefficient of correlation between these two variable is to justify where total assets are significantly used to generate profit or in other words, whether these variables are significantly correlated or not.

The Table:-4.31 show the value of ' $r$ ' , ' $r$ ' ', P.Er. and 6P.Er. between total assets and net profit of commercial banks.

Table:-4.31
Correlation between total assets and net profit of commercial banks

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . \mathrm{Er}$ |
| 0.93277 | 0.87006 | 0.12994 | 0.77964 |

(Apendix:-39)

The coefficient of correlation ' $r$ ' between total assets and net profit in case of commercial bank is 0.93277 , which indicates positive relationship between these variables. The coefficient of determination $\left(r^{2}\right)$ is 0.87006 , which state that $87.00 \%$ of the variable of the dependent variables has explained by independent variable. Similarly, considering the value of ' $r$ ' is greater then the value of 6P.Er. so it is significant relationship between these variables.

### 4.7.5 Coefficient of Correlation between Loan and Advances to Net Profit

The coefficient of correlation between total loan and advances to net profit measures the degree of relationship between those two variables. Loans and advances is independent variable ( x ) and total net profit is dependent variable (y). The relationship between these two variables describes the degree of relationship between loan and advances and net income.

The Table:-4.32 show the value of ' $r$ ' , ' $r^{2}$ ', P.Er. and 6P. Er. between loan and advances and net profit of commercial banks.

Table:-4.32
Correlation between total loan and advances to net profit

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . \mathrm{Er}$ |
| 0.949113 | 0.900815 | 0.029918 | 0.179512 |

(Appendex:-41)

The coefficient of correlation ' $r$ ' between loan and advances and net profit in case of commercial bank is 0.9949133 , which indicates the positive relationship between these variables. The coefficient of determination $\left(\mathrm{r}^{2}\right)$ is 0.900815 , which states that $90.00 \%$ of the variation of the dependent variables has explained by independent variable. Similarly, considering the value of ' $r$ ' is greater then the value of 6 P .Er. so it is significant relationship between these variables.

### 4.7.6 Coefficient of correlation between deposit and interest income

The coefficient of correlation between deposit and interest income measured the relationship between these two variables. Deposit is independent variable (x) and interest income id dependent variable ( $y$ ). The objective of calculating $r$ between these two variables is to justify to whether deposit is significantly used to interest income or not.

The Table:- 4.33 show the value of ' r ', r2', P Er between total deposit and interest income of commercial banks.

Table :- 4.33
correlation between total deposit and interest income

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | P.Er. | $6 \mathrm{P} . \mathrm{Er}$ |
| 0.949145 | 0.900876 | 0.0299 | 0.1794 |

(Appendix-42)

The coefficient of correlation (r) between deposit and interest and interest income of commercial banks is 0.949145 , which indicates a positive relationship between these variables. When deposits increase the interest income subsequently increased but when it is fall. the interest income also fell. The coefficient of determination ( $r^{2}$ ) is 0.0900876 , which indicate that $90.08 \%$ of the variation of dependent variable has explained by independent variable Similarly, considering the value of 'r' and comparing with 6P.Er. it has found that the value of ' $r$ ' is greater than the value of 6P.Er. This show that is has significant relationship between deposit and interest income.

### 4.7.7 Coefficient of correlation between loan and advances and NPL

This Correlation measures the degree of relationship between loan and non performing loan. Loan and advances is independent variable (y) and non performing loan is dependent (x) variable. The objective of computing coefficient of correlation between loan and advances and non performing loan is to find out whether non performing loan is significantly correlated with loan and advances or not..

The Table :- 4.43 shows the value of 'r' 'r2', P.Er, and between Loan and advance and non performing loan of commercial banks.

$$
\text { Table :- } 4.34
$$

Correlation between Loan and advances and Non-performing Loan

| Evaluation Criterions |  |  |  |
| :---: | :---: | :---: | :---: |
| R | $\mathrm{r}^{2}$ | $\mathrm{P} . E r$ | $6 \mathrm{p} . \mathrm{Er}$ |
| 0.9520664 | 0.906431 | 0.031556 | 0.1893368 |

(Appendex:-43)

The coefficient of correlation (r) between loan and advance and non performing loan of commercial banks is 0.9520664 , which indicates a positive relationship between these variables. The coefficient of determination $\left(\mathrm{r}^{2}\right)$ is 0.906431 , which indicate that $90.64 \%$ of the variation of dependent variable has explained by independent variable. Similarly. Considering that value of ' r ' and comparing with 6 p. Er it has found that the value of ' $r$ ' greater than value of $6 p$. Er

### 4.8 Regression equation and analysis

Regression is the statistical tool, which is used to determine the statistical relationship between two or more variables and makes estimate of one variable on the basis of the other variable. Regression is the line, which gives the best estimate of one variable for any given value of the other variable. The regression line of Y o X estimate the most probable values of Y for given values of $\mathrm{X} . \mathrm{X}$ independent and Y is dependent The regression equation of $Y$ on $X$ expressed as $Y=a+b x$ Where $a$ and $b$ parameters of the line. To find out the exact relationship between different variable simple regressions analysis has done and results of the analysis have been table.

### 4.8.1 Regression equation between loan and advances on total deposit

The Table:-4.35 show the regression equation of loan and advances on total deposit of commercial banks. Where total deposit is independent variable ( X ) and loan and advances is dependent variable (Y)

Table: - 4.35
Regression equation between total deposit and loan and advances

| Regression equation of loan and advances on <br> total deposit | Value of <br> constant a | Regression <br> coefficient b |
| :--- | :---: | :---: |
| $\mathrm{Y}=5139.696+0.58728 \mathrm{X}$ | $\mathrm{a}=5139.696$ | $\mathrm{~b}=0.58728$ |
| (Appendix:44) |  |  |

From the Table :- 4.35, regression equation of loan and advances on total deposit $\mathrm{Y}=$ $5139.696+0.58728 \mathrm{X}$ is positive. If one million is increase in deposit, then loan and advances be also increase by Rs. 0.58728 million. Therefore, they have positive of favorable relationship. Deposit is able to increase the loan and advances.

### 4.8.2 Regression equation between total interest expenses on Loan and advances.

The Table:- 4.36 show the regression equation of total interest expenses on Loan and advances of commercial banks. Negative relation between these two variables. will be favorable of this case. Where loan and advances is independent variable (X) and total interest expenses is dependent variable ( Y )

Table :- 4.36
Regression equation between total interest expenses on Loan and advances

| Regression equation of total interest expenses on <br> loan and advances | Value of <br> constant a | Regression <br> coefficient b |
| :--- | :---: | :---: |
| $\mathrm{Y}=4123.4348+0.005432 \mathrm{X}$ | $\mathrm{a}=4123.4348$ | $\mathrm{~b}=0.005432$ |

(Appendx:-45)

According to the Table:- 4.36 regression equation of total interest expenses on Loan and advances $\mathrm{Y}=4123.4348+0.005432 \mathrm{X}$, This indicates the positive relationship between total interest expenses and Loan and advances. It means one million increases in loan and advances will also increase interest expenses by Rs. 0.005432 million total interest expenses.

### 4.8.3 Regression equation between interest income from Loan and advances on loan and advances

The table: 4.37 show the regression equation of interest income from Loan and advances on loan and advances of commercial banks. Where the interest income from loan and advances is dependent variable ( Y ) and loan and advances is independent variable (X)

Table: - 4.37
Regression equation between interest income form Loan and advances on loan and advances

| Regression equation of interest income form loan <br> and advances on loan and advances | Value of constant <br> a | Regression <br> coefficient b |
| :--- | :--- | :--- |
| $\mathrm{Y}=7414.8482+0.01 \mathrm{X}$ | $\mathrm{a}=7414.8482$ | $\mathrm{~b}=0.01$ |

(Appendix:- 46)

According to the table :- 4.437, regression equation of the above table show the regression equation of interest income form Loan and advances on loan and advances of commercial banks $\mathrm{Y}=7414.8482+0.01 \mathrm{X}$. The interest incomes form loan and advances and loan and advances variables have a positive relationship. The positive relationship between these two variables interest income form Loan and advances and loan and advances indicates that the one million increases in the loan and advances will also increasing average about Rs. 0.01 million of interest income from loan and advances.

### 4.8.4 Regression equation between Non- performing Loan on Loan and advances.

The Table:- 4.38 show the regression equation of non- performing Loan on loan and advances of commercial banks. Where loan and advances is independent variables ( Y ) and Non performing loan is dependent variables (X). The negative relationship of these two variables in favorable.

$$
\text { Table :- } 4.38
$$

Regression equation between Non-performing Loan on and advances.

| Regression equation of NPL on loan and <br> ad advances | Value of constant a | Regression <br> coefficient b |
| :--- | :--- | :--- |
| $\mathrm{Y}=43891.6-0.01 \mathrm{X}$ | $\mathrm{a}=43891.61$ | $\mathrm{~b}=0.01$ |

According to the Table:-4.38 regression equation of non-performing loan on loan and advances $\mathrm{Y}=43891.6-0.01 \mathrm{X}$ is negative. If loan and advances will increase by one million then non performing loan will be decrease by Rs. 0.01 million. According to the above table, regression equation of non-performing loan on loan and advances of commercial banks in negative which revels the negative relationship between these two variables. These negative relationship show the commercial banks are able to mange their loan and advances in effectively way.

### 4.9 Major finding of the study

After the completion of the general and some specific analysis policy and other financial as well as statistical tolls related to it now we can conclude the study by
pinpointing the major findings of the study which will be followed by a suggestive framework for further improvement. This would be meaningful to the top management of bank to initiate action and achieve the desired result. The objective to the researcher is not only to point mistake but also to give directions of further better growth and improvement. The major findings of the study that are derived on the basis of financial data analysis of commercial banks are presented below.
(T) Total loan and advances to total deposit ratio of whole commercial banks was in decreasing trend form last five year but the volume of loan and advances and deposit was increasing per year. Average per year ratio was $60.93 \%$ SDB has the highest ratio were a SCBNL has lowest ratio, Only SCBL, HBL, ADB, and NBL were having the lowest ratio.
(6) NIBD to total deposit ratio was $13.63 \%$ of whole commercial bank. SCBL, HBL and NSBIB have highest ration and SDB and MBL have the lower ratio. It found that oldest bank are successful to collected non interest bearing deposit than newly establish banks which decrease their deposit cost.

Lo Loan and advances to total assets ratio of commercial bank is $40.38 \% \mathrm{KBL}$, SBL and LAXMI bank have the higher ratio where as NBL and NIC have the lower ratio. Higher ration generates the more opportunity of profit.
(T) Loan and advances and investment to total deposit ration of commercial bank was $75.65 \%$. Higher ratio indicates the fund mobilization power, KBL, SBL and LAXMI bank have the higher ration where as ADB have the lower ratio.
(o) Cash and bank balance to total deposit ratio of whole commercial banks was $13.12 \%$ RRB, NBL and NCCB have higher ratio. It indicates that liquidity position is better to serve its customers deposit withdrawal demands. But another way higher ratio also indicates idle cash in bank. So that, this have run average loss in last five year.

Total Assets to Total liabilities Ratio of whole commercial bank is $98.6 \%$ RBB, NBL and ADB have the highest ratio. These banks are able to convert t heir liabilities as assets by t heir performance. But other remaining banks are
unable to handle their assets. They have idle assets which are not in use . It increases their operation expenses.
(G) Loan Loss provision to total loan and advances ratio was $1.0 \%$ HBL have the lowest ratio. HBL manage its loan and advance and makes effort of timely recovered of loan. LBL was badly suffering form this ratio.
(G) Interest Expenses of Deposit to Total Deposit ratio of commercial bank is $2.07 \%$ LBL, NCCB have the hither ratio. They have costly deposit the other commercial bank. It decreases their profit. RBB and SBCL have the lower ratio.
(G) Total interest expenses to total asset ratio of commercial bank was $1.40 \%$ LBL. NBBL, NCCB and KBL have the higher ratio. They have to higher expenses for operated their net profit. RBB and NIC bank have lowest ratio. They are able to manage their expenses for operating the assets.

Total interest income from loan and advances to total interest income ratio of commercial banks is $80.45 \%$ NCCB, NBBL, LBL and MBL ratio was more then $90 \%$ SCBL have the lowest income from loan and advance.
(T) Capital Risk Ratio measures ability of bank to attract deposit and inter bank funds. It also determines the level of profit. Bank can earn if a bank if a bank chose to take high capital risk. As a while commercial bank capital risk ratio is negative. NRB and NBL have the negative capital risk. SBL and LAXMI bank have higher risk.
(6) Return on loan and advance ratio of whole commercial bank is $6.22 \%$ This ratio was increasing per year. Return in total assets ratio of whole commercial bank is $0.03 \%$. This ratio was in increasing trend per year. SCBL and NABIL have the higher ratio where as RBB, NBBL, NCCN, LBL and LAXMI have negative ratio.

Go Commercial bank priority sector for lending was classified into five sectors. In for year commercial bank give main priority to lending in service sector $50.97 \%$ After that $25.30 \%$ loan in domestic sector, Agriculture sector 14.70\%
loan in domestic sector, Agriculture sector $14.70 \%$, Power sector $8.82 \%$, machine and import $0.20 \%$. Commercial bank provides sector wise loan and advance. Production is the main sector of lending which occupied $44 \%$ of loan from last four year. Other main sector are wholesaler and retailer, service and industries. Finance and insurance, construction and consumable loan occupied $28 \%, 12 \%, 6 \%, 6 \%$ and $4 \%$ respectively.
(T) Because of the cumulative effect from 2004 to 2008, net profit of commercial banks was negative. RBB, NBBL, LBL and LAXMI net profit was negative. RBB was get highest profit in year 2006 and 2008, in 2007 in get second highest profit among the all commercial banks. But its huge loss in year 2004 and 2005 makes its average profit in loss. LAXMI bank was running in profit from last 4 year. In average SCBL and HBL get the higher profit in study period.
(o) According to the securities wise loan and advances guarantee of securities alone stood at $87 \%$ of total loan and advances of whole commercial banks. Fixed assets receipt and others securities receive $3 \%$ and $6 \%$ of loan and advances.
(G) Private sector is the main sector for commercial bank lending. $97.27 \%$ loan and advance was providing by commercial bank in private sectors. Government sectors receive only $2.118 \%$.

Nine commercial banks are able to maintain their NPL below the Standard. LAXMI and M BL were able to maintain their NPL. RBB and NBL badly suffering form the NPL. Their NPL is $50 \%$ nearly. NPL of commercial banks has not come down to an acceptable level.

From the last five year commercial bank collection $89.50 \%$ deposit in whole financial and non financial institutions and contribution $76 \%$ in lending. Commercial banks alone still held the dominant position on financial system.
(T) Trend analysis of total deposit of commercial banks was in increasing trend in volume each and every year. In year 2004 total deposit was Rs. 181151.7 million and in will be rise to Rs. 415810.6 million in year 2013. Growth rate
of total deposit was $14.39 \%$ in 2005 and it was decrease per year and it will be 6.09\% in 2013.

F From the trend analysis of total loan and advances it had been seen that the total loan and advances of whole commercial banks have in increasing trend. It will be Rs 233477.89 million in the mid july 2013. But the growth ratio of trend analysis was decreasing per year .
(n) NPL of commercial bank was found in increasing trend. But in other way the growth rate of NPL was in decreasing trend per year. Growth rate of NPL was $39.51 \%$ in 2005 and it will be decrease by $29.02 \%$ and reach to $10.49 \%$ in 2013. This was the significant for the commercial banks.

To In the study period 2006 and 2007, commercial bank net profit was found negative. After that year the trend of net profit was increasing trend per year. In year 2006 net profit was Rs.- 7072.30 million and it will be reach to Rs.31938.2 in year 2013.
(G) Trend analysis of interest income from loan and advances was in increasing per year. In year 2006 it was Rs. 4009.64 million and it will be reach to Rs. 25689.29 million in 2013. The growth rate of trend analysis was in decreasing trend per year.

The coefficient of correlation (r) between deposit and loan and advances of banks is 0.988951 . Its probable error (6P.Er) multiplied by six is found to be 0.006629 . Since $r>6 \mathrm{P} . E r$ and $r$ is positive which is near by 1 , there is very strong positive correlation between deposit and loan and advances during the study period. ]

To The Coefficient of correlation (r) between loan and advances to interest income from loan and advances of commercial bank is 0.952881 and $6 \mathrm{P} . \mathrm{Er}$ is 0.027756 . Since r>6P.Er. which indicate commercial banks are effectively utilize their deposit which has increase their interest income from loan and advance.

Coefficient of correlation 9 (r) between Loan and advances to Net profit is 0.949113 and its 6 P.Er is 0.029918 . Since $\mathrm{r}>6 \mathrm{P}$.Er it is significant relationship between loan and advance with net profit. It indicates that commercial bank is successful in maximizing profit from their loan advance.
(1) Coefficient of correlation (r) between total assets and net profit pf commercial banks is 0.87006 . Its 6 P .Er is 0.12994 . Since $\mathrm{r}<6 \mathrm{P}$.Er and r is positive. There is positive correlation between between total assets deposit and net profit.

Coefficient of correlation (r) between deposit and interest income of banks is 0.949145 . Its $6 \mathrm{P} . \mathrm{Er}$ and r is positive. So commercial banks have effectively mobilized of deposit which has major role to play in its earnings.

G Coefficient of correlation (r) between Loan and advances and NPL is 0.9520664 and its 6 P .Er is 0.031556 . Its $\mathrm{r}>6 \mathrm{P}$.Er and r is positive. It indicates that when loan and advances is increase then NOL is also increased.

Re Regression equation of loan and advances on total deposit of commercial banks is positive. It one million is increase in deposit, then loan and advances be also increase by Rs. 0.58728 million.

Re Regression equation between Non-performing Loan on Loan and advances is negative. If loan and advances will increase by one million then non performing will be decrease by Rs. 0.10 million. These negative relationship show the commercial banks are able to manage their loan and advances in effectively way.

R Regression equation between total interest expenses on loan and advances is positive. This means one million increases in loan and advances will also increase interest expenses by Rs. 0.005432 million total interest expenses.

Regression equation between interest income from loan and advances in loan and advances is positive. One million increase in loan and advances will increase Rs. 0.10 million of interest income from loan and advances.

## CHAPTER-V

## SUMMARY, CONCLUSION AND RECOMMENDATION

The last chapter of this study is summary, conclusion and recommendation development from the comparative analysis of various aspects of the lending of commercial banks by using financial and statistical tools. It is most important tasks of the researcher are to be summarized the stud and recommended for the further improvement.

### 5.1 Summary

Commercial banks are major financial institutions, which occupy quite an important place in the frame work of every economy because they provide for the development of industry trade and business and other resources deflect sectors lending the saving collected as deposit commercial bank, by playing active role have changed the economy structure of the world. Commercial banks have its own role and contribution in the economic development, it maintains economic confidence of various segments and extend credit to people.

The income and profit of the commercial banks depends upon its lending procedure. Lending policy and investment policy of its fund utilize in different sectors. Commercial banks aren't able to utilize its deposits properly i.e. providing loan and advances or Lending for a profitable project, the reason behind it is lack of sound lending policy. The main objective of this study is to evaluate the lending policy adopted by of commercial banks of Nepal. It is based upon secondary data but in some cases we used primary data also.

The study, Which researcher have chosen "Lending policy of commercial bank in Nepal" researcher tried to go through the practical aspect, which has been most of the commercial banks have. Researcher think that most of the research regarding the banking policy I founding normally moving around the principle aspect again and again rather then filtering the actual situation. Normally, this studies on the lending policy of commercial banks. In this process, researcher had consulted many books, articles, booklets with different related who are related in the internet. Researcher under look verbal interviews with deferent person who are related financial and non
financial institutions. During the period, researcher summarized the whole task in five chapters including this chapter.

First chapter of the study dealt about basic assumption of the study. Basically it highlighted the concept and importance of the study. It also presented research problem. Objective of the study and importance of the study. Second chapter the researcher to provide knowledge about the lending policy of commercial banks. It tried to know the some concept used in this study. Moreover, it summarized the previous findings of the study to provide knowledge about the background of the work done. The third chapter of the study discussed about various research methodologies used for the study. Fourth chapter of the study dealt about presentation and analysis of data. It first presented the generated data in tabular form and analyzed it in systematically as per the objectives mentioned above. The last chapter of this study is summary, conclusion and recommendation.

Various norms and regulation and directives as issued by Nepal Rastra Bank are presented so for these are treated as guidance and for comparing the performance as under which commercial bank has been running or not. Researcher used different graphs, charts and other statistical tools to make the study more compatible. These financial and statistical tools helped to measure the performance of the bank in comparative manner.

Regarding the lending policies of commercial banks there are basically five basic principles of the commercial banks follow while providing loans. Those principles are liquidity, Safety and Security, Suitability, Diversification. The main objective of these commercial banks is to generate profit by providing quality services to its client.

### 5.2 Conclusion

Volume contribution by commercial bank in lending and deposit collection both are in increasing trend. But the ratio was in decreasing trend. In an average $98.50 \%$ deposit collection and $76 \%$ of loan was providing by commercial bank in whole financial and non financial institution in last five year. Commercial banks alone still held the dominant position on the financial system.

Average total deposit to loan and advance ratio of commercial bank ratio was $60.93 \%$ Volume of deposit and loan and advances was in increasing per year. Average NIBD to total deposit ratio of whole commercial banks was 13.63 Oldest bank are successful to collected non interest bearing deposit then newly establish banks which decrease their deposit cost. Commercial bank total assets to loan and advances ratio was an average $40.38 \%$ The volume of loan and advance and total assets was increasing per year. Average total deposit to loan and advances and investment ratio of commercial bank was $76.65 \%$ which was satisfaction lending for commercial banks. Average Cash and bank balance to total deposit ratio of commercial bank was $13.13 \%$. Most of the commercial bank is able to meet their customer daily requirement cash. So that as a whole commercial banks lending strength is in satisfaction situations. NABIL, EBL, BOK and SBL have the more lending strength then other commercial bank. Theses bank ratio was better then remaining commercial banks.

Loan and advance to loan loss provision ratio commercial banks was $1.09 \%$. Average interest expenses of total deposit ratio to total deposit ratio of commercial banks was $2.07 \%$. Commercial banks have higher interest expenses on its deposit. Average total interest expenses to total assets ratio of commercial bank was $1.40 \%$. Most of the year, it was in increasing trend. These trends increase their operating cost and decrease their performance and its profit. Total interest income from loan and advances to total interest income ratio of commercial banks is $80.45 \%$. Commercial banks get their higher income from their loan and advance. Form the year 2003 as a commercial banks capital risk ratio was in negative. It was the cause of huge negative capital fund of NBL and RBB.

Average return on loan and an advance of commercial banks was $6.22 \%$. This ratio was in increasing trend per year. It's increasing commercial performance and efficiency and profit. Average return on total assets was also negative of commercial banks. Cumulative net profit of banks was negative. RBB, NBBL, LBL and LAXMI net profit was negative. As whole commercial banks have good lending performance in quality and efficiency.

Commercial banks give main priority to lending their funds in private sector, production sector and service sectors. Both sectors lending was increasing per year.

Beside it power. Construction, finance and insurance, consumable loan, guarantee loan are also. These sector lending are also increasing per year. Agriculture sector and domestic sector ending was fluctuating each and every year.

Commercial banks are badly suffering from non performing loan. Non performing loan of RBB and NBL was an average $50 \%$. But in was in decreasing trend. MBL and LAXMI have lowest non performing loan. When the non performing loan is decreasing at that tine commercial banks net profit was in increasing trend. Commercial banks are unable to maintain their non performing loan as international standard is $10 \%$. Whole commercial banks non performing loan was in decreasing trend in last four years. This decreasing trend is positive for commercial banks.

Commercial banks per year net profit, deposit, loan and advances, interest income from loan and advances volume was in increasing trend but its growth rate was in decreasing trend. Growth rate of non performing loan of commercial banks was found in decreasing trend which is significant for commercial banks. The coefficients of correlation between different variable such as loan and advances, net profit, interest income, interest income form loan and advances have positive correlation. The above variables have also positive regression equation. That means if one variable is fluctuate then other variable also vary in same way.

### 5.3 Recommendation

Present study can be a valuable piece of research works in lending policy topic. It explored the existing situation and identified the various components for further improvement in lending policy. Both primary as well as secondary sources of information were used for fulfilling the objectives. It may be useful for academicians, especially to bank management or any others who are directly or indirectly involved in banking activities. Based on the findings of the study, the researcher recommended highlighting the guidelines to put forward for further improvement.
(t) The proportion of lending made by commercial bank in agriculture and domestic industries sector is decreasing despite increasing volume in loan and advances of commercial banks. Since, the prosperity of national economy is
highly dependent upon this sector, commercial banks are recommended to increase its volume in these sectors.
(G) Cash and bank balance to total deposit ratio of commercial bank was found $13.12 \%$,. The have to decrease their ratio $7 \%$ and use idle balance in other area such as lending, investment so on.
(a) As a whole financial and non financial institution commercial bank volume contribution in lending and deposit collection was in increasing trend. So that commercial bank should be find out the new area for lending and investing to utilize their deposit. Otherwise they have to bear highly deposit expenses in near future, which decrease there profit.
(T) Most of the commercial banks Non performing loan was found higher then international standard. It is recommended to the commercial bank that before providing the loan make sure that your clients is in good character and able to pay its loan or may take the collateral which is nearly two times more than that of your guaranteed.

To Most of the bank interest income from loan and advances to interest income ratio was found good. But their net profit was negative or very poor. So that they have to reduce their operation cast of loan and advance and increase their profit.

To Newly establish banks are tried to increase their Non interest bearing deposit to decreases their interest expenses and increase profit.

T Average profit of commercial bank is not satisfactory. If resources held idle, bank have to beard more cost and result would be lower be lower profit margin. So portfolio condition of bank should be regularly revised from time to time. It should always try to maintain the equilibrium in the portfolio condition of the bank. The commercial bank should use its funds in more portfolio sectors. It should utilize its risky assets and other funds and it should its express should try to collect cheaper fund more profitability.
(l) An interest expense of deposit of commercial bank was found high. So that commercial bank has to collect more non interest bearing deposit to decrease their interest expenses.

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## Appendix no;-1

Total Deposit of Commercial Banks
( Rs In million)
( sources : Banking and financial statistics 2006 mid July )

| RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC | MBL | KBL | LAXMI | SE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 38964.6 | 15370.6 | 4174.8 | 15835.7 | 18595.2 | 5572.2 | 9514 | 5461.1 | 5735.9 | 3709 | 2646.1 | 3165.3 | 994.8 | 1180.0 | 112.6 |  |
| 39308.6 | 13437.7 | 7922.8 | 18755.5 | 21002.8 | 6522.8 | 10548 | 6694.9 | 6169.6 | 4294.8 | 2959.8 | 3143.9 | 1778.7 | 2513.1 | 691.8 | 39 |
| 40313.6 | 14098.0 | 11706.3 | 21161.4 | 22760.9 | 7232.1 | 12747.3 | 8064 | 7741.6 | 5959.6 | 3777.6 | 5146.4 | 2754.6 | 4816.5 | 1684.3 | 12 |
| 43489.2 | 14586.8 | 14254.8 | 19344 | 24831.1 | 8645.8 | 12125.5 | 10097.8 | 8942.8 | 6630.1 | 4029.5 | 6243.3 | 5586.5 | 6270.1 | 3028.6 | 24 |
| 45700.7 | 38348.4 | 18927.3 | 23050.5 | 26456.2 | 10852.7 | 13014.8 | 13802.5 | 10429.3 | 6619.5 | 4786.5 | 8765.8 | 7893.3 | 7800.1 | 44444.3 | 19 |
| 207776.7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.2 | 44120.3 | 39019.2 | 27212.3 | 18199.5 | 26464.7 | 19007.9 | 22580.1 | 9961.6 | 80 |

## Appendix no;-2 <br> Non Interest Bearing Deposit of Commercial Banks

( Rs In million)

| RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC | MBL | KBL | LAXMI | SF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4639.7 | 2723.0 | 787.5 | 3808.4 | 2652.8 | 1086.7 | 864.2 | 489.6 | 789.6 | 362.4 | 122.8 | 257.2 | 49.3 | 84.1 | 2.8 |  |
| 4687.9 | 3025.0 | 979.0 | 5768.6 | 3702.2 | 1300 | 884.2 | 562.4 | 935.7 | 252.3 | 158.7 | 235.8 | 53.5 | 135.1 | 49.7 | 49 |
| 5227.5 | 2687.0 | 125.1 | 5816.9 | 4353.1 | 1712.6 | 1137 | 719.8 | 997.9 | 452.5 | 200 | 278.5 | 71.4 | 250.8 | 211.1 | 58 |
| 6419.8 | 2843.5 | 1583.2 | 4356.3 | 5013 | 1774.1 | 1077 | 1025.2 | 1302.6 | 380.3 | 149.8 | 233.1 | 142.6 | 280.3 | 429.4 | 85 |
| 7891.2 | 2953.3 | 1751.3 | 4681.8 | 4993.6 | 1375.4 | 1117.5 | 1155.2 | 1409.2 | 372.6 | 159.9 | 391.8 | 248.9 | 355.2 | 94.6 | 82 |
| 28866.1 | 14231.8 | 6726.1 | 24432 | 20714.7 | 7248.8 | 5079.9 | 3952.2 | 5435 | 1820.1 | 791.2 | 1396.4 | 565.7 | 1105.5 | 787.6 | 27 |

( sources : Banking and financial statistics 2006 mid July )

## Appendix no;-

3
Total Assets of Commercial Banks
( Rs In million)
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and

| RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC | MBL | KBL | LAXMI | SBI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 76118.1 | 19645.7 | 5387.8 | 19675.6 | 21380.7 | 6952.19 | 11999.1 | 6774.2 | 6814.3 | 5017.8 | 3410.94 | 3862.68 | 1187.60 | 1611.69 | 389.5 |  |
| 82098.3 | 18275.9 | 9102.4 | 22309.1 | 24721.2 | 8000.6 | 12929.3 | 8260.2 | 7965.6 | 5636.3 | 3651.6 | 4247.7 | 2431.50 | 3067.30 | 1121.1 | 875 |
| 80824.5 | 18234.3 | 13565.3 | 24459.1 | 26751.2 | 8933.0 | 15896.6 | 9967.2 | 9963.0 | 7616.2 | 4785.1 | 6154.2 | 3496.30 | 5730.00 | 2621.7 | 195 |
| 82771.8 | 18752.5 | 16814.2 | 22758.8 | 29102.6 | 10616.6 | 15539.9 | 15121.6 | 10246.0 | 8697.8 | 5386.0 | 40490.68 | 20254.2 | 7696.00 | 3936.2 | 313 |
| 83480.6 | 24134.6 | 22007.2 | 26797.8 | 31064.9 | 13735.6 | 16721.8 | 16714.5 | 12660.8 | 8640.8 | 6735.2 | 49221.4 | 9255.80 | 9390.60 | 5509.1 | 490 |
| 405293.3 | 99043 | 66876.9 | 116000.4 | 133020.6 | 48237.99 | 73086.6 | 56837.7 | 47649.7 | 35608.9 | 23968.84 | 103976.66 | 36625.4 | 27495.59 | 13577.6 | 109 |

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| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 1.8 | 0.0** | 0.5 | 0.5 | 21.3 | 0.0** | 56 | 78.6 | 0.00 | 0.00 | 82.5 | 105.6 | 48.8 |
| 2005 | 471.3 | 0.0** | 20 | 14.8 | 4.4 | 0.00 | (22.7) | 205 | 16.9 | 102.4 | 18.5 | (59.7) | 40.2 |
| 2006 | 733.5 | 497.7 | 115.3 | 69.2 | 21.8 | 0.00 | 0 | 225 | 50.7 | 104.5 | 30.00 | 130.9 | 8.5 |
| 2007 | 404.1 | 1599.5 | 25.6 | 38.6 | 30.1 | 0.00 | 138.3 | 188.5 | 84.3 | 111.9 | 148.5 | 259.6 | 14.8 |
| 2008 | (560.8) | 490.1 | (7.5) | 47 | 43.5 | 23.7 | 88.1 | (26.9) | 69.6 | 62.7 | 153.3 | 774.6 | 57.7 |
| Total | 1049.9 | 2287.3 | 153.9 | 170.1 | 121.1 | 23.7 | 259.7 | 670.2 | 221.5 | 381.5 | 432.8 | 1211 | 170 |

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## Appendix no:-4

Total Loan Loss Provision of Commercial Banks
(Rs In million)

| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 20997.5 | 28516 | 7328.2 | 2715.7 | 5787.9 | 9673.5 | 4593.9 | 8222.1 | 3982.7 | 4977.6 | 2937.1 | 2296.6 | 2369 |
| 2005 | 19266.1 | 28258.9 | 8267.8 | 5954.4 | 6080.7 | 11074.2 | 4766.1 | 8491.9 | 5049.6 | 4956.2 | 3322.3 | 2632 | 2564 |
| 2006 | 19141.7 | 26781.7 | 8769.7 | 7290.2 | 6729.6 | 13081.7 | 5552.5 | 10253.6 | 6131.1 | 6104.9 | 4436.9 | 3218 | 3746 |
| 2007 | 17456 | 28614 | 11078 | 10295 | 8214 | 13245 | 6619 | 8740 | 7914 | 6167 | 5934 | 3817 | 4895 |
| 2008 | 12180 | 26864 | 13021 | 13007 | 8905 | 15516 | 8060 | 9011 | 10124 | 7525 | 5837 | 4315 | 6883 |
| Total | 89041.3 | 139035 | 48464.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 | 2045 |

## Appendix no;-5

Total Loan \& Advances of Commercial Banks
(Rs In million)

## Appendix no;- 7

## Total Interest Expenses Of Deposit of Commercial Banks

( Rs In million)

| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 7115.2 | 4088.5 | 4120.3 | 224.4 | 5784.8 | 2588.6 | 503.2 | 891 | 1538.9 | 542.7 | 199.7 | 100 | 680 |
| 2005 | 11722.8 | 4137.1 | 3663.5 | 400 | 6722.8 | 3980 | 1189.4 | 2040.4 | 1599.4 | 1510.8 | 315.2 | 274.9 | 1075. |
| 2006 | 10593.8 | 2918.9 | 3672.6 | 2001.1 | 7948.2 | 2781.7 | 1871.5 | 2578.9 | 2466.4 | 2371.8 | 511.9 | 433.1 | 1235. |
| 2007 | 13838.6 | 6494.8 | 2826.8 | 1984.5 | 7204.6 | 5467.7 | 2588.2 | 2212.5 | 2100.3 | 2216.5 | 324.7 | 376 | 1194. |
| 2008 | 11776.9 | 9025.7 | 2372.3 | 2522.3 | 8644.9 | 5144.4 | 3680.4 | 2525.3 | 3548.6 | 2654.8 | 521.6 | 527 | 1756. |
| Total | 55047.3 | 26665 | 16655.5 | 71323 | 36305.3 | 19964.4 | 9832.7 | 10248.1 | 11253.6 | 9296.6 | 1873.1 | 1711 | 5941. |

[^1]
## Appendix no;- 8 Total Interest Expenses of Commercial Banks

( Rs In million)

| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2004 | 94.9 | $00^{* *}$ | 52.70 | 9.4 | 223.5 | $00^{* *}$ | 216.9 | 413.9 | 232.6 | 214.3 | 206.4 | 121.4 | 150 |
| 2005 | 661.0 | $00^{* *}$ | 534.70 | 183.30 | 260.60 | 532.0 | 291.80 | 607.60 | 483.0 | 273.6 | 255.90 | 56.60 | 13.40 |
| 2006 | 1002.9 | 644.3 | 283.2 | 325.0 | 275.9 | 490.1 | 255.1 | 628.8 | 313.8 | 279.5 | 314.3 | 197.3 | 17.0 |
| 2007 | 699.3 | 965.0 | 243.4 | 350.8 | 254.2 | 556.3 | 256.2 | 544.6 | 299.5 | 174.2 | 315.7 | 191.0 | 226.0 |
| 2008 | 723.1 | 834.5 | 345.8 | 463.1 | 302.2 | 641.4 | 332.1 | 518.1 | 383.4 | 294.3 | 315.3 | 214.1 | 340.2 |
| Total | 3181.2 | 2443.8 | 1459.8 | 1331.6 | 1316.4 | 2219.8 | 1352.1 | 2713 | 1712.3 | 1235.9 | 1407.6 | 780.4 | 746.6 |


| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2004 | 94.90 | $00^{* *}$ | 52.70 | 9.40 | 223.50 | $00^{* *}$ | 216.90 | 413.90 | 232.6 | 214.3 | 206.40 | 121.4 | 150.0 |
| 2005 | 661.0 | $00^{* *}$ | 534.70 | 183.30 | 260.60 | 532.0 | 291.80 | 607.60 | 483.0 | 273.6 | 255.90 | 56.60 | 13.40 |
| 2006 | 1025.9 | 644.3 | 283.2 | 325.0 | 275.9 | 490.1 | 255.90 | 628.8 | 313.8 | 286.3 | 314.3 | 197.3 | 17.0 |
| 2007 | 748.7 | 965.0 | 243.4 | 350.8 | 254.2 | 556.3 | 258.4 | 548.4 | 299.5 | 180.2 | 315.7 | 193.5 | 226.0 |
| 2008 | 768.50 | 834.5 | 357.0 | 491.4 | 302.2 | 645.8 | 334.8 | 518.1 | 401.4 | 307.9 | 316.0 | 215.4 | 340.2 |
| Total | 3299 | 2443.8 | 1471 | 1359.9 | 1316.4 | 2224.2 | 1357.8 | 2716.8 | 1730.3 | 1262.3 | 1408.3 | 784.2 | 746.6 |


| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2004 | 150.0 | $00^{* *}$ | 60.5 | 23.6 | 749.3 | $00^{* *}$ | 323.5 | 653.4 | 426.2 | 365.7 | 259.0 | 151.8 |  |
| 2005 | 1892.0 | $00^{* *}$ | 1147.6 | 451.4 | 994.4 | 1216.0 | 462.0 | 1083.5 | 712.6 | 488.6 | 411.2 | 77.3 | 222.0 |
| 2006 | 1814.8 | 1257.2 | 945.4 | 721.1 | 1041.8 | 1306.5 | 430.9 | 1133.0 | 660.2 | 572.4 | 544.7 | 320.5 | 34.4 |
| 2007 | 1980.5 | 2398.4 | 1033.3 | 851.4 | 1058.6 | 1407.7 | 516.0 | 978.9 | 720.7 | 451.5 | 630.3 | 365.3 | 451.0 |
| 2008 | 2045.6 | 2516.8 | 1296.4 | 1153.5 | 1189.1 | 1562.1 | 703.1 | 955.9 | 907.3 | 722.1 | 571.1 | 349.1 | 573.7 |
| Total | 7882.9 | 6172.4 | 4483.2 | 3201 | 5033.2 | 5492.3 | 2435.5 | 4804.7 | 3427 | 2600.3 | 2416.3 | 1264 | 1303.3 |

( Rs In million)

| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | N | NBBL |  |  |  |  |  |

Appendix no;- 10
Total Interest Income of Commercial Banks
(Rs In million)

| 2004 | 144.1 | $00^{* *}$ | 33.0 | 19.2 | 404.2 | $00^{* *}$ | 295.6 | 629.7 | 296.9 | 334.9 | 242.3 | 143.5 | 186.7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2005 | 1483.3 | $00^{* *}$ | 864.2 | 415.8 | 563.5 | 918.0 | 412.4 | 1014.3 | 504.7 | 426.9 | 402.0 | 72.8 | 17.9 |
| 2006 | 1288.7 | 1143.4 | 703.7 | 656.7 | 558.1 | 1030.8 | 383.4 | 1050.4 | 565.9 | 476.3 | 513.5 | 303.1 | 28.1 |
| 2007 | 1512.9 | 2044.5 | 795.1 | 783.2 | 582.2 | 1083.7 | 456.4 | 883.6 | 634.5 | 374.0 | 618.0 | 348.2 | 371.8 |
| 2008 | 1406.1 | 2065.9 | 972.7 | 951.0 | 598.3 | 1076.4 | 604.9 | 836.0 | 777.0 | 554.0 | 553.9 | 317.5 | 479.0 |
| Total | 5835.1 | 5253.8 | 3368.7 | 2825.9 | 2706.3 | 4108.9 | 2152.7 | 4414 | 2779 | 2166.1 | 2329.7 | 1185.1 | 1083.5 |


| Year | NBL | RBB | NABIL | NIB | SCBL | BBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | 60.47 | 60.15 | 5.54 | 1.98 | 4.13 | 10.08 | 11.71 | 12.73 | 2.20 | 8.67 | 20.63 | 11.57 | 6.666 |
| 2006 | 53.74 | 57.64 | 3.35 | 2.47 | 3.77 | 8.88 | 6.25 | 10.81 | 1.72 | 6.66 | 12.72 | 7.36 | 3.92 |
| 2007 | 49.64 | 52.99 | 1.32 | 2.69 | 2.69 | 7.44 | 6.54 | 19.04 | 1.63 | 4.99 | 8.64 | 15.23 | 3.78 |
| 2008 | 25.11 | 45.34 | 1.25 | 2.30 | 2.12 | 6.14 | 6.32 | 12.27 | 1.2 | 2.52 | 11.09 | 31.97 | 2.60 |
| Total | 188.96 | 216.12 | 11.46 | 9.44 | 12.71 | 32.54 | 30.82 | 54.85 | 6.75 | 22.84 | 53.08 | 66.13 | 16.96 |
| Average | 47.24 | 54.03 | 2.87 | 2.36 | 3.18 | 8.14 | 7.71 | 13.71 | 1.69 | 5.71 | 13.27 | 16.53 | 4.24 |

Appendix no;-11
Total Non Performing Loan of Commercial Banks


## Appendix no;-

12
Non Performing Loan of Commercial Banks

| 2005 | 10964.91 | 16005.32 | 449.63 | 117.90 | 247.95 | 1092.84 | 561.67 | 1013.28 | 111.19 | 420.87 | 700.83 | 302.96 | 170 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 | 9640.08 | 14470.52 | 286.68 | 181.44 | 252.20 | 1147.46 | 345.82 | 1042.18 | 104.76 | 399.94 | 600.05 | 237.30 | 146 |
| 2007 | 8372.11 | 13689.34 | 144.51 | 280.87 | 226.31 | 1001.35 | 441.02 | 1832.94 | 128.81 | 308.51 | 519.26 | 5611.13 | 185 |
| 2008 | 3233.9 | 12313.89 | 165.98 | 302.94 | 195.17 | 978.69 | 520.26 | 1040.34 | 121.85 | 190.17 | 655.91 | 1401.58 | 173 |
| Total | 32211 | 56479.07 | 1046.8 | 882.34 | 921.63 | 4220.34 | 1868.77 | 4928.74 | 466.61 | 1319.49 | 2476.05 | 2502.97 | 675 |

## Appendix no:-20

Total five years loan and advances to total assets

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan | 89041.3 | 139035 | 48464.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 | 2045 |
| Assets | 313602.1 | 405293.3 | 99043 | 66876.9 | 116000.4 | 133020.6 | 48237.99 | 73086.6 | 56837.7 | 47549.7 | 35608.9 | 23968.84 | 1039 |
| Ratio(\%) | 28.39 | 34.30 | 48.93 | 58.71 | 30.79 | 47.05 | 61.34 | 61.19 | 58.41 | 62.39 | 63.09 | 67.92 | 19.6 |

## Appendix no:-21

Cash and bank balance to total deposit

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CD | 29105.9 | 48063.2 | 4218.8 | 7736 | 6751.2 | 8374.5 | 4500.7 | 7059.7 | 5102.5 | 3632.6 | 4643.5 | 2147.3 | 29 |
| Deposit | 175275.1 | 2077776.7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.6 | 44120.3 | 39019.2 | 27212.3 | 18199.5 | 26 |
| Ratio(\%) | 16.61 | 23.13 | 5.49 | 13.58 | 6.88 | 7.37 | 11.59 | 12.18 | 11.56 | 9.31 | 17.06 | 11.80 | 11 |

## Appendix no:-22

Non Interest Bearing Deposit to total Deposit

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NBD | 27046 | 28866.1 | 14231.8 | 6726.1 | 24432 | 20714.7 | 7248.8 | 5079.9 | 3952.2 | 5435 | 1820.1 | 7912 | 13 |
| Deposit | 175275.1 | 207776.7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.6 | 44120.3 | 39019.2 | 27212.3 | 18199.5 | 26 |
| Ratio(\%) | 15.43 | 13.89 | 18.52 | 11.80 | 24.89 | 12.23 | 18.67 | 8.77 | 8.96 | 13.93 | 6.69 | 4.35 | 5. |

## Appendix no:-23

Interest expenses of deposit to total deposit

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Expenses | 3181.2 | 2443.8 | 1459.8 | 1331.6 | 1316.4 | 2219.8 | 1352.1 | 2713 | 1712.3 | 1235.9 | 1107.6 | 780.4 |
| Deposit | 175275.1 | 207776.7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.6 | 44120.3 | 39019.2 | 27212.3 | 18199.5 |
| Ratio(\%) | 1.81 | 1.18 | 1.90 | 2.34 | 1.34 | 1.95 | 3.48 | 4.68 | 3.88 | 3.17 | 5.17 | 4.29 |

## Appendix no:-24

To Interest income to interest expenses ratio

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | $\overline{\mathrm{N}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenses | 3299 | 2443.8 | 1471 | 1359.9 | 1316.4 | 2224.2 | 1357.8 | 2716.8 | 1730.3 | 1262.3 | 1408.3 | 784.2 | 74 |
| Income | 7882.9 | 6172.4 | 4483.2 | 3201 | 5033.2 | 5492.3 | 2435.5 | 4804.7 | 3427 | 2600.3 | 2416.3 | 1264 | 13 |
| Ratio(\%) | 41.85 | 39.59 | 32.81 | 42.48 | 26.15 | 40.50 | 55.75 | 56.54 | 50.49 | 48.54 | 58.28 | 62.04 | 57 |

## Appendix no:-

25
To Interest income to interest expenses ratio

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest | 3299 | 2443.8 | 1471 | 1359.9 | 1316.4 | 2224.2 | 1357.8 | 2716.8 | 1730.3 | 1262.3 | 1408.3 | 784.2 | 7 |
| Assets | 313602.1 | 405293.3 | 99043 | 66876.9 | 110000.4 | 133020.6 | 18237.99 | 73086.6 | 56837.7 | 47649.7 | 35608.9 | 23968.84 |  |
| Ratio(\%) | 1.05 | 0.60 | 1.49 | 2.03 | 1.13 | 1.67 | 2.81 | 3.72 | 3.04 | 2.65 | 3.95 | 3.27 | 0 | S

## Appendix no:-26

Total Interest income to Interest income from loan and advances

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I.! | 7882.9 | 6172.4 | 4483.2 | 3201 | 5033.2 | 5492.3 | 2435.5 | 4804.7 | 3427 | 2600.3 | 2416.3 | 1264 | 13 |
| I.I.L.A | 5835.1 | 5253.8 | 3368.7 | 2825.9 | 2706.3 | 4108.9 | 2152.7 | 4414 | 2779 | 2166.1 | 2329.7 | 1185.1 | 10 |
| Ratio(\%) | 74.02 | 85.12 | 75.14 | 88.28 | 53.77 | 74.81 | 88.39 | 91.87 | 81.09 | 83.30 | 96.42 | 93.76 | 8. |

## Appendix no:-27

Interest income from loan and advances to interest expenses of total deposit

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC | MBL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income | 5835.1 | 5253.8 | 3368.7 | 2825.9 | 2706.3 | 4108.9 | 2152.7 | 4414 | 2779 | 2166.1 | 2329.7 | 1185.1 | 1083.5 | 1222.5 |  |
| Expenses | 3181.2 | 2443.8 | 1459.8 | 1331.6 | 1316.4 | 2219.8 | 1352.1 | 2713 | 1712.3 | 1235.9 | 1407.6 | 780.4 | 746.6 | 711.9 |  |
| Ratio(\%) | 54.52 | 46.51 | 43.33 | 47.12 | 48.64 | 54.02 | 62.81 | 61.46 | 61.62 | 57.06 | 60.42 | 65.85 | 68.91 | 58.23 | 5 |

Appendix no:-28
Loan Loss Ratio

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LLP | 1049.9 | 2587.3 | 153.9 | 170.1 | 121.1 | 23.7 | 259.7 | 670.2 | 221.5 | 381.5 | 432.8 | 1211 | 170 |
| Loan | 89041.3 | 139035 | 48464.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 | 20458.8 |
| Ratio(\%) | 1.18 | 1.86 | 0.32 | 0.43 | 0.34 | 0.04 | 0.88 | 1.50 | 0.67 | 1.28 | 1.93 | 7.44 | 0.83 |

Appendix no:-29
Return on loans and advances

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest | 5835.1 | 5253.8 | 3368.7 | 2825.9 | 2706.3 | 4108.9 | 2152.7 | 4414 | 2779 | 2166.1 | 2329.7 | 1185.1 | 10 |
| Loan | 89041.3 | 139035 | 48464.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 | 20 |
| Ratio(\%) | 6.55 | 3.78 | 6.95 | 7.20 | 7.58 | 6.56 | 7.27 | 9.87 | 8.37 | 7.29 | 10.37 | 7.28 | 5. |

## Appendix no:-30

## Credit risk ratio

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NPL | 32211 | 56479.07 | 1046.8 | 882.34 | 921.63 | 4220.34 | 1868.77 | 4928.74 | 466.61 | 1319.49 | 2476.05 | 2502.97 | 67 |
| Loan | 68043.8 | 110518.6 | 41136.5 | 36546.4 | 29929.3 | 52916.9 | 24997.6 | 36496.5 | 29218.7 | 24753.1 | 19530.2 | 13982 | 18 |
| Ratio(\%) | 47.34 | 51.10 | 2.54 | 2.41 | 3.08 | 7.98 | 7.48 | 13.50 | 1.60 | 5.33 | 12.68 | 17.90 | 3. |

## Appendix no:-31

Return on total assets


| Assets | 313602.1 | 405293.3 | 99043 | 66876.9 | 116000.4 | 133020.6 | 48237.99 | 73086.6 | 56837.7 | 47649.7 | 35608.9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 23968.2 |  |  |  |  |  |  |  |  |  |  |  |
| NP | 324.751 | $(7862.05)$ | 2298.54 | 909.295 | 2721.76 | 1501.99 | 324.29 | $(649.81868)$ | 602.05 | 560.97 | $(886.869)$ |
| Ratio(\%) | 0.10 | $(1.94)$ | 2.32 | 1.36 | 2.35 | 1.13 | 0.67 | $(0.89)$ | 1.06 | 1.18 | $(2.49)$ |

## Appendix:32

Tread analysis of total deposit
(Rs in million)

| Fiscal Year(t) | Total Deposit(Y) | $\mathbf{X}=\mathbf{t - 2 0 0 6}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{X Y}$ | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a + b x}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2004 | 185144.7 | -2 | 4 | -370289 | 181151.7 |
| 2005 | 203879.3 | -1 | 1 | -203879 | 207224.9 |
| 2006 | 233811.2 | 0 | 0 | 0 | 233298.1 |
| 2007 | 252409.8 | 1 | 1 | 252409.8 | 259371.3 |
| 2008 | 291245.50 | 2 | 4 | 582491 | 285444.5 |
| Total | 1166491.00 | 0 | 10 | 260732.1 |  |

$$
a=\frac{\sum y}{n}=\frac{1166491}{5}=233298.1 \quad b=\frac{\sum x y}{x^{2}}=\frac{260732.1}{10}=26073.21
$$

Project trend values of total deposit for next five year

| Fiscal Year(t) | $\mathbf{X = \mathbf { t - 2 0 0 6 }}$ | $\mathbf{Y}_{\mathbf{c}=\mathbf{a + b x}}$ |
| :--- | :---: | :---: |
| 2009 | 3 | 311517.7 |
| 2010 | 4 | 337590.9 |
| 2011 | 5 | 363664.2 |
| 2012 | 6 | 389737.4 |
| 2013 | 7 | 415810.6 |

## Appendix:33

Trend analysis of Loan and advances

| (Rs in million) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Fiscal Year(t) | Loan and advances(Y) | X=t-2006 | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{X Y}$ | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a + b x}$ |
| 2004 | 113174.60 | -2 | 4 | -226349 | 111043.3 |
| 2005 | 124522.40 | -1 | 1 | -124522 | 126596.9 |
| 2006 | 140031.40 | 0 | 0 | 0 | 142150.6 |
| 2007 | 159641.40 | 1 | 1 | 159641.4 | 157704.3 |
| 2008 | 173383.40 | 2 | 4 | 346766.8 | 173257.9 |
| Total | 916199.2 | 0 | 10 | 155536.6 |  |

$$
a=\frac{\sum y}{n}=\frac{916199.2}{5}=142150.6 \quad b=\frac{\sum x y}{x^{2}}=\frac{155536.6}{10}=15553.66
$$

Project trend values of loan and advances for next five year

| Fiscal Year(t) | X=t-2006 | $\mathbf{Y}_{\mathbf{c}=\mathbf{a + b x}}$ |
| :--- | :---: | :---: |
| 2009 | 3 | 188811.6 |
| 2010 | 4 | 204365.2 |
| 2011 | 5 | 219918.9 |
| 2012 | 6 | 235472.6 |
| 2013 | 7 | 251026.2 |

## Appendix:34

Trend analysis of Non-performing Loan

| (Rs in million) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Fiscal Year(t) | Non performing Loan(Y) | X=t-2006 | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{X Y}$ | $\mathbf{Y}_{\mathbf{c}=\mathbf{a + b x}}$ |
| 2005 | 32226.66 | -1 | 1 | -32226.7 | 20753.41 |
| 2006 | 28933.41 | 0 | 0 | 0 | 28952.08 |
| 2007 | 27877.84 | 1 | 1 | 27877.8 | 37150.74 |
| 2008 | 26770.42 | 2 | 4 | 53540.8 | 45349.41 |
| Total | 115808.3 | 2 | 6 | 49192 |  |

$$
a=\frac{\sum y}{n}=\frac{115808.3}{4}=28952.075 \quad b=\frac{\sum x y}{x^{2}}=\frac{49192}{6}=8198.6667
$$

Project trend value for next five years

| Fiscal Year(t) | $\mathbf{X = t - 2 0 0 6}$ | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a + b x}$ |
| :--- | :---: | ---: |
| 2009 | 3 | 53548.093 |
| 2010 | 4 | 61746.763 |
| 2011 | 5 | 69945.433 |
| 2012 | 6 | 78144.103 |
| 2013 | 7 | 86342.773 |

## Appendix:35

Trend analysis of Net Profit
(Rs in million)

| Fiscal Year(t) | Net Profit (Y) | $\mathbf{X}=\mathbf{t - 2 0 0 6}$ | $\mathbf{x}^{2}$ | $\mathbf{X Y}$ | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a}+\mathbf{b x}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2004 | -9428 | -2 | 4 | 18856 | -7072.3 |
| 2005 | -3317 | -1 | 1 | 3317 | -2737.8 |
| 2006 | 3707 | 0 | 0 | 0 | 1596.7 |
| 2007 | 5205 | 1 | 1 | 5205 | 5931.2 |
| 2008 | 7983.5 | 2 | 4 | 15967 | 10265.7 |
| Total | 4150.5 | 0 | 10 | 4345 |  |

$$
a=\frac{\sum y}{n}=\frac{4150.5}{5}=830.1 \quad b=\frac{\sum x y}{x^{2}}=\frac{43345}{10}=4334.5
$$

Project trend value for next five years

| Fiscal Year(t) | $\mathbf{X = t - 2 0 0 6}$ | $\mathbf{Y}_{\mathbf{c}=\mathbf{a + b x}}$ |
| :--- | :---: | :---: |
| 2009 | 3.00 | 14600.2 |
| 2010 | 4.00 | 18934.7 |
| 2011 | 5.00 | 23269.2 |
| 2012 | 6.00 | 27603.7 |
| 2013 | 7.00 | 31938.2 |

## Appendix:36

Trend analysis of Interest income from loan and advances

| Fiscal Year(t) |  |  |  | Interest income from <br> loan and advances(Y) | $\mathbf{X = t - 2 0 0 6}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{x}^{\mathbf{2}}$ | 4XY | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a + b x}$ |  |  |
| 2004 | 2838.00 | -2 | 4 | -5676 | 4009.64 |
| 2005 | 7456.00 | -1 | 1 | -7456 | 6418.49 |
| 2006 | 9405.50 | 0 | 0 | 0 | 827.34 |
| 2007 | 11653.90 | 1 | 1 | 11653.9 | 11236.19 |
| 2008 | 12783.30 | 2 | 4 | 25566.6 | 13645.04 |
| Total | 44136.7 | 0 | 10 | 24088.5 | 40127.06 |

$$
a=\frac{\sum y}{n}=\frac{44136.7}{5}=8827.34 \quad b=\frac{\sum x y}{x^{2}}=\frac{24088.5}{10}=2408.85
$$

Project trend values for next five years

| Fiscal Year(t) | X=t-2006 | $\mathbf{Y}_{\mathbf{c}}=\mathbf{a + b x}$ |
| :--- | :---: | :---: |
| 2009 | 3.00 | 16053.89 |
| 2010 | 4.00 | 18462.74 |
| 2011 | 5.00 | 20871.59 |
| 2012 | 6.00 | 23280.44 |
| 2013 | 7.00 | 25689.29 |

## Appendix:37

Coefficient of correlation between deposit and loan and advances.

| $\begin{array}{\|c} \hline \text { Yea } \\ \mathbf{r} \end{array}$ | $\begin{gathered} \text { Deposit( } \\ \mathbf{x}) \end{gathered}$ | Loan \& Advances( y) | $\mathrm{X}=\mathrm{x}-\bar{x}$ | $\mathrm{x}^{2}$ | $\mathbf{Y}=\mathbf{y}-$ $\bar{y}$ | $\mathrm{y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline 200 \\ 4 \end{array}$ | 185144.1 | 113174.8 | $48154.26$ | 2318832756 | $28976.4$ | 839631757 | $\begin{array}{r} 139533709 \\ 9 \end{array}$ |
| $\begin{array}{\|l\|} \hline 200 \\ 5 \end{array}$ | 203879 | 124526.6 | $29419.36$ | 865498743 | $17624.5$ | 310626525 | 518501510 |
| $\begin{array}{\|l\|} \hline 200 \\ 6 \end{array}$ | 233811.2 | 140031.5 | 512.84 | $\begin{array}{r} 263004.86 \\ 6 \end{array}$ | $2119.7$ | $\begin{array}{r} 4493128.0 \\ 9 \end{array}$ | 1087066.9 |
| $\begin{array}{\|l} \hline 200 \\ 7 \end{array}$ | 252412.1 | 159640 | $\begin{array}{r} 19113.7 \\ 4 \end{array}$ | 365335057 | $\begin{array}{r} 17488 . \\ 8 \end{array}$ | 305858125 | 334276376 |
| $\begin{array}{\|l\|} \hline 200 \\ 8 \\ \hline \end{array}$ | 291245.4 | 173383 | $\begin{array}{r} 57947.0 \\ 4 \end{array}$ | $\begin{array}{r} 335785944 \\ 5 \end{array}$ | $\begin{array}{r} 31231 . \\ 8 \end{array}$ | 975425331 | $\begin{array}{r} 180979036 \\ 4 \end{array}$ |
| Tota <br> 1 | $1166491 .$ | 710755.9 | 0.00 | $\begin{array}{r} 690778900 \\ 5 \end{array}$ | 0.00 | $\begin{array}{r} 243603486 \\ 7 \end{array}$ | $405681828$ $3$ |
| $\begin{gathered} \text { Mea } \\ \mathrm{n} \end{gathered}$ | $\begin{array}{r} 233298.3 \\ 6 \end{array}$ | 142151.2 |  |  |  |  |  |

Calculation of mean of total deposit $(\bar{x})$ and Loan and advance $(\bar{y})$

$$
\bar{x}=\frac{\sum x}{n}=\frac{1166491.8}{5}=233298.36 \quad \bar{y}=\frac{\sum y}{n}=\frac{710755.9}{5}=142151.2
$$

Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 4056818283)-(1166491.8 \times 710755.9)}{\sqrt{(5 \times 6907789005)-(1166491.8)^{2}} \sqrt{(5 \times 2436034867)-(7107559)^{2}}}=0.9889
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.988951 \times 0.988951=0.978023$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.978023}{\sqrt{5}}=0.006629$
$6($ P.Er. $)=0.03977$

## Appendix:38

Coefficient of correlation between loan and advances to interest income from LA

Calculation of mean of loan and advances $(\bar{x})$ and interest income from Loan and Advances ( $\bar{y}$ )
$\bar{x}=\frac{\sum x}{n}=\frac{710755.9}{5}=142151.2 \quad \bar{y}=\frac{\sum y}{n}=\frac{44181.8}{5}=8836.36$
Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 370268319)-(710755.9 \times 44181.8)}{\sqrt{(5 \times 2436034867)-(7107559)^{2}} \sqrt{(5 \times 619828968)-(44181.8)^{2}}}=0.95288144
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.95288144 \times 0.95288144=0.907983$
Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.907983}{\sqrt{5}}=0.027756$

## Appendix:39

## Coefficient of correlation between Total assets and net profit.

| Year | Total Assets (x) | $\begin{gathered} \text { Net } \\ \text { Profit }(\mathbf{y}) \end{gathered}$ | $\mathbf{X}=\mathbf{x}-x$ | $\mathrm{x}^{2}$ | $\mathbf{Y}=\mathbf{y}-\bar{y}$ | $\mathbf{y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 274918 | -9428 | -77091.14 | 5943043866.5 | -10258.1 | 105228615.61 | 790808623.23 |
| 2005 | 305570.40 | -317 | -46438.74 | 2156556572.79 | -4147.1 | 17198438.41 | 192586098.65 |
| 2006 | 339817.00 | 3707.00 | -12192.14 | 148648277.78 | 2876.90 | 8276553.61 | -35075567.57 |
| 2007 | 411033.90 | 5205.00 | 59024.76 | 3483922293.06 | 4374.90 | 19139750.01 | 258227422.52 |
| 2008 | 428706.40 | 7983.51 | 76697.26 | 5882469691.51 | 7153.40 | 51171274.63 | 548646946.66 |
| Total | 1760045.70 | 4150.51 | 0.00 | 17614640701.63 | 0.00 | 201014632.27 | 175519352.50 |
| Mean | 35009.14 | 830.10 |  |  |  |  |  |

Calculation of mean of total assets $(\bar{x})$ and net profit $(\bar{y})$

$$
\bar{x}=\frac{\sum x}{n}=\frac{1760045.70}{5}=352009.14 \quad \bar{y}=\frac{\sum y}{n}=\frac{4150.51}{5}=830.10
$$

Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 175519352350)-(11760045.7 \times 4150.51)}{\sqrt{(5 \times 17614640701.63)-(11760045.7)^{2}} \sqrt{(5 \times 4150.51)-(20101463227)^{2}}}=0.93277
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.95288144 \times 0.95288144=0.907983$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-087006}{\sqrt{5}}=0.12994$
$6($ P.Er. $)=0.77964$

## Appendix:40

## Coefficient of correlation between deposit an net profit

| Year | Deposit(x) | Net <br> Profit $(\mathbf{y})$ | $\mathbf{X}=\mathbf{x}-\bar{x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{Y}=\mathbf{y}-\bar{y}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| 2004 | 185144.1 | -9428 | -48154.26 | 2318832756 | -10258.1 | 105228657 | 493971215 |  |
| 2005 | 203879 | -3317 | -29419.36 | 865498743 | -4147.1 | 17198455 | 122005028 |  |
| 2006 | 233811.2 | 3707 | 512.84 | 263004.866 | 2876.898 | 8276542.1 | 1475388.37 |  |
| 2007 | 252412.1 | 5205 | 19113.74 | 365335057 | 4374.898 | 19139733 | 83620662.9 |  |
| 2008 | 291245.4 | 7983.51 | 57947.04 | 3357859445 | 715.408 | 51171246 | 414518820 |  |
| Total | 1166491.8 | 4150.51 | 0.00 | 6907789005 | 0.00 | 201014632 | 1115591113 |  |
| Mean | 233298.36 | 830.102 |  |  |  |  |  |  |

Calculation of mean of total deposit $(\bar{x})$ and net profit $(\bar{y})$

$$
\begin{aligned}
\bar{x}=\frac{\sum x}{n} & =\frac{1166491.8}{5}=233298.36 \\
\bar{y} & =\frac{\sum y}{n}=\frac{4150.51}{5}=830.102
\end{aligned}
$$

Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 1115591113)-(1166491.8 \times 4150.51)}{\sqrt{(5 \times 6907789005)-(1166491.8)^{2}} \sqrt{(5 \times 201014632)-(4150.51)^{2}}}=0.980244
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.980244 \times 0.980244=0.960877$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.960877}{\sqrt{5}}=0.129698$
$6($ P.Er. $)=0.77819$

## Appendix:41

## Coefficient of correlation between Loan and advances to Net Profit

| Year | Loan and <br> advances (x) | Net <br> Profit(y) | $\mathbf{X = \mathbf { x } - \overline { x }}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{Y}=\mathbf{y}-\bar{y}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | 113174.8 | $(9428)$ | -28976.4 | 839631757 | -10258.10 | 105228615.61 | 297242808.84 |
| 2005 | 124526.6 | $(3317)$ | -17624.5 | 310626525 | -4147.10 | 17198438.41 | 73090563.95 |
| 2006 | 140031.5 | 3707 | -2119.7 | 4493128.09 | 2876.90 | 8276553.61 | -6098164.93 |
| 2007 | 159640 | 5205 | 17488.8 | 305858125 | 4374.90 | 19139750.01 | 76511751.12 |
| 2008 | 173383 | 7983.51 | 31231.8 | 975425331 | 7153.40 | 51171274.63 | 223413870.44 |
| Total | 710755.9 | 4150.51 | 0.00 | 2436034867 | 0.00 | 201014632.27 | 664160829.42 |
| Mean | 142151.2 | 830.10 |  |  |  |  |  |

Calculation of mean of total deposit $(\bar{x})$ and net profit $(\bar{y})$

$$
\begin{aligned}
\bar{x}=\frac{\sum x}{n} & =\frac{710755.9}{5}=142151.2 \\
\bar{y} & =\frac{\sum y}{n}=\frac{4150.51}{5}=830.10
\end{aligned}
$$

Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 664160829.42)-(710755.9 \times 4150.51)}{\sqrt{(5 \times 2436034867)-(710755.9)^{2}} \sqrt{(5 \times 201014633227)-(4150.51)^{2}}}=0.949113
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.949113 \times 0.949113=0.900815$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.900815}{\sqrt{5}}=0.299187$
$6($ P.Er. $)=0.179512$

## Appendix:42

## Coefficient of correlation between deposit and interest Income

| Year | Deposit (x) | Interest <br> income (y) | X=x- $\bar{x}$ | $\mathbf{x}^{2}$ | $\mathbf{Y}=\mathbf{y}-\bar{y}$ | $\mathbf{y}^{2}$ | XY |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | 185144.1 | 3504.6 | -48154.26 | 2318832756 | -7479.7 | 55945912 | 360179419 |
| 2005 | 203879 | 9359.3 | -29419.36 | 865498743 | -1625 | 2640625 | 47806460 |
| 2006 | 233811.2 | 11548 | 512.84 | 263004.86 | 563.7 | 317757.7 | 289087.91 |
| 2007 | 252412.1 | 14152.3 | 1911374 | 365335057 | 3168 | 10036224 | 60552328 |
| 2008 | 291245.4 | 16357.3 | 57947.04 | 3357859445 | 5373 | 28869129 | 311349446 |
| Total | 1166491.8 | 54921.5 | 0.00 | 6907789005 | 0.00 | 97809648 | 780176741 |
| Mean | 233298.36 | 10984.3 |  |  |  |  |  |

Calculation of mean of total deposit $(\bar{x})$ and interest income $(\bar{y})$

$$
\begin{aligned}
\bar{x}=\frac{\sum x}{n} & =\frac{1166491.8}{5}=233298.36 \\
\bar{y} & =\frac{\sum y}{n}=\frac{54921.5}{5}=10984.3
\end{aligned}
$$

Coefficient of Correlation (r)

$$
r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 780176741)-(1166491.8 \times 54921.5)}{\sqrt{(5 \times 6907789005)-(1166491.8)^{2}} \sqrt{(5 \times 97809648)-(54921.5)^{2}}}=0.949145
$$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=0.949145 \times 0.949145=0.900876$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.900876}{\sqrt{5}}=0.0299$ $6($ P.Er. $)=0.1794$

## Appendix:43

## Coefficient of correlation between loan and advance to Non performing Loan

| Year | Loan and <br> advances (x) | Non <br> performing(y) | $\mathbf{X}=\mathbf{x}-\bar{x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{Y}=\mathbf{y}-\bar{y}$ | $\mathbf{y}^{2}$ | $\mathbf{X Y Y}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2005 | 124526.6 | 3226.66 | -24868.5 | 618451245 | 3274.57 | 10722874.2 | 4013076399 |
| 2006 | 140031.5 | 28933.41 | -9363.78 | 87680375.9 | -18.67 | 348.5659 | 4051588802 |
| 2007 | 159640 | 27877.84 | 10244.72 | 104954288 | -1074.24 | 1153991.58 | 4450418378 |
| 2008 | 173383 | 26770.42 | 23987.72 | 575410711 | -2181.66 | 4759640.36 | 4641535731 |
| Total | 597581.1 | 115808.3 | 0.00 | 1386496620 | 0.00 | 16636854.7 | 17156619310 |
| Mean | 149395.28 | 28952.08 |  |  |  |  |  |

Calculation of mean of loan and advance $(\bar{x})$ and non performing loan $(\bar{y})$

$$
\begin{aligned}
\bar{x}=\frac{\sum x}{n} & =\frac{597581.1}{4}=149395.28 \\
\bar{y} & =\frac{\sum y}{n}=\frac{115808.3}{4}=28952.08
\end{aligned}
$$

Coefficient of Correlation (r)
$r=\frac{n \sum x y-\sum x \sum y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}=\frac{(5 \times 17156619310)-(597581.1 \times 115808.3)}{\sqrt{(5 \times 1386496620)-(597581.1)^{2}} \sqrt{(5 \times 16636854.7)-(115808.3)^{2}}}=0.9520664$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=-0.9520664 \times(-0.9520664)=0.906431$

Probable $(P . E r)=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}=0.6745 \times \frac{1-0.906431}{4}=0.031556$
$6($ P.Er. $)=0.1893368$

## Appendix:44

## Regression equation of total deposit and total loan and advance

(Rs in million)

| Year | Deposit (x) | Loan \& Advances (y) | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | 185144.1 | 113174.8 | 34278337765 | 12808535355 | 20953646489 |
| 2005 | 203879 | 124526.6 | 41566646641 | 15506874108 | 25388358681 |
| 2006 | 233811.2 | 140031.5 | 54667677245 | 19608820992 | 32740933053 |
| 2007 | 252412.1 | 159640 | 63711868226 | 25484929600 | 40295067644 |
| 2008 | 291245.4 | 173383 | 84823883021 | 30061664689 | 50497001188 |
| Total | 1166492 | 710755.9 | 279048412898 | 132186541222 | 169875007055 |

$x=$ independent variable $y=$ dependent variable
Let the regression equation of Y and X is
$y=a+b x$ $\qquad$ equation (i)

To find the value of a and b we have two normal equation
$\sum y=n a+b \sum x$ $\qquad$ equation (ii)
$\sum x y=a \sum x+b \sum x^{2}$ $\qquad$ equation (iii)

Substituting the value of $n, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) and (iii) we get $710755.9=5 \times \mathrm{a}+1166492 \times \mathrm{b}$ $\qquad$ equation (iv)
$169875007055=1166492 \times \mathrm{a}+279048412898 \times b$ $\qquad$ equation (v)

Now multiplying equation (iv) by 1166492 and equation (v) by 5 then subtract equation (v)
$829091071302.8=5832460 \times a+1360703586064 \times b$
$-849375035275.0=-5832460 \times \mathrm{a}-1395242064490 \times \mathrm{b}$
$-20283963972=-34538478426 \times b$
or $b=\frac{-20283963972}{-34538478426}=0.58728$
substitution the value of $b$ in equation (iv) then we get the value of $a$ $710755.9=5 \times a+1166492 \times 0.58728$
or $a=\frac{25968.48}{5}=5139.696$

## Appendix:45

## Regression equation between loan and dances to total interest expenses.

(Rs in million)

| Year | Loan and <br> advances (x) | Total interest expenses <br> $(\mathbf{y})$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2004 | 113174.8 | 2016.5 | 12808535355 | 4066272.25 | 228216984.20 |
| 2005 | 124526.6 | 4348.2 | 15506874108 | 18906843.24 | 541466562.12 |
| 2006 | 140031.5 | 5444.6 | 19608820992 | 29643669.16 | 762415504.90 |
| 2007 | 159640 | 5810.7 | 25484929600 | 33764234.49 | 927620148.00 |
| 2008 | 173383 | 6858 | 30061664689 | 47032164.00 | 1189060614.00 |
| Total | 710755.9 | 24478 | 132186541222 | 133413183.14 | 3648779813.22 |

$\mathrm{x}=$ independent variable $\mathrm{y}=$ dependent variable
Let the regression equation of Y and X is
$y=a+b x$ $\qquad$ equation (i)

To find the value of $a$ and $b$ we have two normal equation
$\sum y=n a+b \sum x$ equation (ii)
$\sum x y=a \sum x+b \sum x^{2}$ $\qquad$ equation (iii)

Substituting the value of $n, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) and (iii) we get $24478=5 \times \mathrm{a}+710755.9 \times \mathrm{b}$ $\qquad$ equation (iv)
$3648779813.22=710755.9 \times a+132186541222 \times b$ $\qquad$ equation (v)

Now multiplying equation (iv) by 710755.9 and equation (v) by 5 then subtract equation (v)
$17397882920.20=3553779.50 \times a+505173949384.81 \times b$
$\underline{-18243899066}=-3553779.50 \times \mathrm{a}-660932706110.00 \times \mathrm{b}$
$-846016145.90=-155758756725.19 \times b$
or $b=\frac{-155758756725.19}{-846016145.90}=0.005432$

Substitution the value of $b$ in equation (iv) then we get the value of $a$
$24478=5 \times \mathrm{a}+710755.9 \times 0.005432$
or $a=\frac{20617.17395}{5}=54123.4348$

## Appendix:46

## Regression equation between loan and dances to interest income from LA

(Rs in million)

| Year | Loan and <br> advances (x) | Interest income from <br> Loan and advances(y) | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2004 | 113174.8 | 2838 | 12808535355 | 8054244.00 | 321190082.40 |
| 2005 | 124526.6 | 7456 | 15506874108 | 55591936.00 | 928470329.60 |
| 2006 | 140031.5 | 9405.5 | 19608820992 | 88463430.25 | 1317066273.25 |
| 2007 | 159640 | 11698.9 | 25484929600 | 136864261.21 | 1867612396.00 |
| 2008 | 173383 | 12783.4 | 30061664689 | 163415315.56 | 2216424242.20 |
| Total | 710755.9 | 44181.80 | 132186541222 | 452389187.02 | 6650763323.45 |

$x=$ independent variable $\quad y=$ dependent variable
Let the regression equation of Y and X is
$y=a+b x$ $\qquad$ equation (i)

To find the value of a and b we have two normal equation
$\sum y=n a+b \sum x$ $\qquad$ equation (ii)
$\sum x y=a \sum x+b \sum x^{2}$ $\qquad$ equation (iii)

Substituting the value of $n, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) and (iii) we get $44181.80=5 \times \mathrm{a}+710755.9 \times \mathrm{b}$ $\qquad$ equation (iv)
$6650763323.45=710755.9 \times \mathrm{a}+132186541222 \times \mathrm{b}$ $\qquad$ equation (v)

Now multiplying equation (iv) by 710755.9 and equation (v) by 5 then subtract equation (v)
$31402475022.62=3553779.50 \times \mathrm{a}+505173949384.81 \times b$
$-33253816617.25=-3553779.50 \times \mathrm{a}-660932706110.00 \times \mathrm{b}$
$-1851341594.63=-155758756725.19 \times b$
or $b=\frac{-1851341594.63}{-155758756725.19}=0.01$

Substitution the value of $b$ in equation (iv) then we get the value of $a$ $44181.80=5 \times \mathrm{a}+710755.9 \times 0.01$ or $a=\frac{37074.241}{5}=7414.8482$

## Appendix:47

Regression equation between Loan and advances to Non performing Loan

| Year | Loan and <br> advances (x) | NPL(y) | $\mathbf{x}^{2}$ | $\mathbf{y}^{\mathbf{2}}$ | XY in million) |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 2005 | 124526.60 | 32226.66 | 15506874107.56 | 1038557614.76 | 4013076399.16 |
| 2006 | 14003150 | 28933.41 | 19608820992.25 | 837142214.23 | 4051588802.42 |
| 2007 | 159640.00 | 27877.84 | 25484929600.00 | 777173963.07 | 4450418377.60 |
| 2008 | 173383.00 | 26770.42 | 30061664689.00 | 716655386.98 | 4641535730.86 |
| Total | 597581.10 | 115808.33 | 90662289388.81 | 3369529179.03 | 17156619310.03 |

Let the regression equation of Y and X is
$y=a+b x$ $\qquad$ equation (i)

To find the value of a and b we have two normal equation
$\sum y=n a+b \sum x$ $\qquad$ equation (ii)
$\sum x y=a \sum x+b \sum x^{2}$
equation (iii)

Substituting the value of $n, \sum x, \sum y, \sum x^{2}, \sum x y$ in equation (ii) and (iii) we get $115808.33=4 \times \mathrm{a}+597581.10 \times \mathrm{b}$ $\qquad$ equation
(iv)
$17156619310.03=597581.10 \times \mathrm{a}+90662289388.81 \times \mathrm{b}$ $\qquad$ equation (v)

Now multiplying equation (iv) by 597581.10 and equation (v) by 4 then subtract equation (v)
$69204869230.56=2390324.40 \times \mathrm{a}+357103171077.21 \times \mathrm{b}$
$-85783096550.15=-2390324.40 \times \mathrm{a}-453311446944.05 \mathrm{xb}$
$578391990.44=-5545986478.03 \times b$
or $b=\frac{578391990.44}{-5545986478.03}=-0.10$

Substitution the value of $b$ in equation (iv) then we get the value of $a$ $115808.33=4 \times \mathrm{a}+597581.10 \times(-0.10)$
or $a=\frac{175566.44}{4}=43891.61$

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2004 | 8059.7 | 15089.9 | 911.9 | 1899.1 | 828.6 | 1231.4 | 1403.2 | 1756.4 | 672.2 | 683.3 | 546 | 531.7 |
| 2005 | 4770.6 | 8158.8 | 1147.7 | 926.4 | 1512.1 | 2152.7 | 1331.6 | 891.8 | 1118.6 | 685.2 | 680.3 | 333.5 |
| 2006 | 5422 | 10604.1 | 969.4 | 1215.2 | 2023.2 | 1768.7 | 775 | 1406.9 | 637.6 | 794.9 | 970.5 | 531.1 |
| 2007 | 5336.2 | 6714.9 | 559.5 | 1340.4 | 1111.1 | 1549.4 | 459.6 | 1356.3 | 1054.2 | 740.5 | 662.7 | 348.9 |
| 2008 | 5517.4 | 7495.5 | 630.3 | 2354.9 | 1276.2 | 1672.3 | 531.3 | 1647.3 | 1619.9 | 728.7 | 1784 | 402.1 |
| Total | 29105.9 | 48063.2 | 4218.8 | 7736 | 6751.2 | 8374.5 | 4500.7 | 7059.7 | 5102.5 | 3632.6 | 4643.5 | 2147.3 |

## Appendix no:-13

## Total cash \& Bank Balance of commercial Bank

## Appendix no:-14

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004 | 1349.5 | 1538.2 | 1062.8 | 419.9 | 1012.3 | 651.6 | 541.5 | 595.6 | 497.8 | 510.7 | 380.8 | 351.4 | 531. |
| 2005 | 1449.1 | 1557.4 | 1146.4 | 557.1 | 1119 | 740.6 | 582.9 | 622.6 | 587.1 | 520.2 | 510.7 | 380.5 | 526. |
| 2006 | 1064.3 | -23839.2 | 1804.2 | 740.7 | 1527.9 | 1435.9 | 823.2 | 1038.7 | 665.8 | 734.6 | 941.3 | 358.4 | 559. |
| 2007 | -10347.5 | -21437.9 | 1482.35 | 1234.5 | 1278.2 | 1328.2 | 689.3 | 1038.1 | 980.3 | 650.8 | 725.5 | 526.3 | 620. |
| 2008 | -10066.5 | -20282.5 | 1657.7 | 1158.1 | 1576.3 | 1541.7 | 1119.8 | 234.6 | 832.5 | 720.7 | 260.7 | 106.1 | 673. |
| Total | -16551.1 | -62464.5 | 7153.45 | 4110.3 | 6513.7 | 5698 | 3756.7 | 3529.6 | 3563.5 | 3137 | 2819 | 1722.7 | 2909 |

Total Capital funds of commercial Bank

Appendix no:-15
Capital Risk Ratio
(In \%)

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | NIC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2005 | $(28.25)$ | $(44.28)$ | 13.05 | 8.85 | 14.21 | 11.03 | 13.78 | 8.11 | 12.33 | 12.05 | 6.51 | 11.37 | 18.87 |
| 2006 | $(24.97)$ | $(42.17)$ | 13.56 | 11.18 | 15.99 | 10.62 | 10.25 | 5.61 | 11.07 | 11.18 | 3.42 | 8.71 | 13.75 |
| 2007 | $(19.54)$ | $(40.54)$ | 12.44 | 11.58 | 16.36 | 11.10 | 9.47 | 3.02 | 13.57 | 11.22 | 5.51 | 6.35 | 13.29 |


| 2008 | $(29.67)$ | $(50.30)$ | 15.08 | 13.36 | 19.13 | $13 . .10$ | 15.01 | 6.70 | 12.86 | 15.71 | 5.22 | $(13.29)$ | 13.62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total | $(102.43)$ | $(177.29)$ | 54.13 | 44.97 | 65.69 | 45.85 | 48.51 | 23.44 | 49.83 | 50.16 | 20.66 | 13.14 | 59.53 |
| Average | $(25.6075)$ | $(44.3225)$ | 13.5325 | 11.2425 | 16.4225 | 11.4625 | 12.1275 | 5.86 | 12.4575 | 12.54 | 5.165 | 3.285 | 148825 |

(...) Figures in Negative

## ( sources: Banking and Financial statistics)

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2004 | $(3071.29)$ | $(7068)$ | 271.63 | 57.105 | 479.00 | 235.02 | 40.32 | $48.5^{*}$ | 85.3 | 9.00 | $(397.178)$ | $(97.972)$ |
| 2005 | $(251.73)$ | $(4840)$ | 416.23 | 116.82 | 507.00 | 147.89 | 48.74 | $50.95^{*}$ | 94.2 | 82.00 | 81.801 | 89.139 |
| 2006 | 710.391 | 1040.10 | 455.31 | 152.68 | 537.80 | 263.05 | 60.86 | 0264325 | 14.36 | 128.00 | 3.409 | 18.64 |
| 2007 | 1730.12 | 1322.90 | 520.11 | 232.15 | 239.20 | 308.57 | 57.37 | $(749.543)$ | 170.81 | 139.53 | $(5.157)$ | $(197.58)$ |
| 2008 | 1207.26 | 1682.95 | 635.26 | 350.54 | 658.76 | 547.46 | 117.00 | $0.0^{* *}$ | 237.38 | 202.44 | $(569.744)$ | $(806.06)$ |
| Total | 324.751 | $(7862.05)$ | 2298.54 | 909.295 | 2721.76 | 1501.99 | 324.29 | $9649.81868)$ | 602.05 | 560.97 | $(886.869)$ | $(993.833)$ |

Appendix no:-16
Total Net Profit of Commercial Banks

Appendix :-17
Total five year loan and advances to total deposit ratio
(Rs. In million )

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan | 89401.3 | 139035 | 48464.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 |


| Deposit | 175275.1 | 207776.7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.6 | 44120.3 | 39019.2 | 27212.3 | 18199.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ratio(\%) | $\mathbf{5 0 . 8 0}$ | $\mathbf{6 6 . 9 2}$ | $\mathbf{6 3 . 0 7}$ | $\mathbf{6 8 . 9 0}$ | $\mathbf{3 6 . 3 9}$ | $\mathbf{5 5 . 0 7}$ | $\mathbf{7 6 . 2 2}$ | $\mathbf{7 7 . 1 7}$ | $\mathbf{7 5 . 2 5}$ | $\mathbf{7 6 . 2 0}$ | $\mathbf{8 2 . 5 6}$ | $\mathbf{8 9 . 4 5}$ |

(Sources Appendix $1 \& \%$ )

## Appendix:-18

Average net profit
(Rs. In million )

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 324.751 | (7862.05) | 2298.54 | 909.295 | 2721.76 | 1501.99 | 324.29 | (649.81868) | 602.05 | 560.97 | (886.833) | 311.82 | 2 |
| Average | 64.95 | (1572.41) | 459.71 | 181.86 | 544.35 | 300.40 | 64.86 | (129.96) | 120.41 | 112.19 | (177.37) | (198.77) |  |

## Appendix:-19

Total five year loan and advances, Investment to total deposit ratio

| Year | NBL | RBB | NABIL | NIB | SCBL | HBL | NSBIB | NBBL | EBL | BOK | NCCB | LBL | $\overline{\mathrm{NI}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan | 89041.3 | 139035 | 4846.7 | 39262.1 | 35717.2 | 62590.4 | 29591.5 | 44718.6 | 33201.4 | 29730.7 | 22467.3 | 16278.6 |  |
| Invest | 55047.3 | 26665 | 16655.5 | 7132.3 | 36305.3 | 19964.4 | 9832.7 | 10248.1 | 11253.6 | 9296.6 | 1873.1 | 1711 |  |
| Total | 144088.6 | 165700 | 65120.2 | 46394.4 | 72022.5 | 82554.8 | 39424.2 | 5496.7 | 44455 | 39027.3 | 24340.4 | 17989.6 |  |
| Deposit | 175275.1 | $207776 .$ <br> 7 | 76841.5 | 56986 | 98147.1 | 113646.2 | 38825.6 | 57949.6 | 44120.3 | 39019.2 | 27212.3 | 18199.5 |  |
| Ratio(\%) | 82.21 | 79.75 | 84.75 | 81.41 | 73.38 | 72.64 | 101.54 | 94.85 | 100.76 | 100.02 | 89.45 | 98.85 |  |


[^0]:    (Timited variables have been selected for analysis.
    T Being a student time and resources are constraints.
    Time and cost factors also constrained the study.

[^1]:    Sourc
    es
    Banki
    ng
    Finan
    cial
    Statis
    tics
    2006
    mid
    July )

