## CHAPTER - I

## INTRODUCTION

## General Background

### 1.1 Historical Perspective of Nepal and Nepalese Economy

Nepal is a small but beautiful Himalayan kingdom lying between two emerging giants China and India. It occupies 0.03 and 0.3 percent land of world and Asia respectively. Within the average length of 885 K.M and average width is 193 K.M North to south, the elevation of the country ranges from 59 m to the highest peak of the earth i.e., 8848 m . This variation fosters an incredible variety of ecosystems, snow-capped mountains, thundering rivers, valleys, plains with flora and fauna. Different ethnic and linguistic groups inhabit the country. Due to all these vivid features, it is considered as a unique dreamland for unity and diversity in the world. ${ }^{1}$

So far as the economic aspect of Nepal is concerned, it is now forcing rapidly to economic reform through settlement of different acts, provisions, and inviting largely the foreign investment coincide with private participation within the country specially after the restoration of democracy in 2046 B.S. The economic plight of Nepal is neither satisfactory nor praiseworthy. However there are ample probable areas where lots of opportunities prevail.

Nepal is agro-based country with mixed economy. $80 \%$ percentage of people depends on agriculture and provides employment to about $66 \%$ of people ${ }^{2}$. Both states controls cum private participation are being observed in the country. Nepal is depended in foreign aid too. Dependency upon foreign aid is dramatically inclining each year. For the development of trade and industry within the country, it is essential to invest capital in huge level. Small-scale capital scattered throughout the country must be mobilized in order to promote investment. Nepalese people are poverty stricken as well as

[^0]characterized by low capital investment. The following inferences can be outlined as the features of Nepalese economy.

1. One of the poorest countries of the world
2. Country having unequal distribution of national income
3. Agro based country
4. Developing country
5. Land-locked country
6. Country of mixed economy
7. Country having high population growth rate
8. Country having unstable government
9. Country dependent on foreign aid
10. Country having low rate of capital investment

### 1.2 What is the Situation of Banking in Nepalese Economy?

Human activities are normally directed towards the well being of the people. Energy and efforts devoted by the people of the society aim at enhancing material benefits to the community. There are all total 26 commercial banks in Nepal and new banks are also in the process to come, In order to contribute in the process of economic development of the country banking industry has been established and operating to provide the financial resources to the economic activities.

Industrialization of the country is regarded as a precondition for providing employment opportunities to the people. This leads to the active participation of the people in the national development and the enlistment of their present economic condition. To improve the economic condition, the government needs to focus itself in formulation and implementation of the proper strategies for the overall industrializations of the nation for the integrated and speedy development of industrial sectors of the country.

During the last two and half decades the Nepalese Financial System has grown significantly. At the beginning of 1980s, there were only two commercial banks and two development banks in the country. After the adoption of economic liberalization policy,
particularly the financial sector liberalization that paved the way for establishment of new banks and non-bank financial institutions in the country. Consequently, by the end of Mid - Jan 2010, altogether 254 banks and non- bank financial institutions licensed by NRB are in operation. Out of them, 26 are "A" class commercial banks, 73 " B " class development banks, 78 "C" class finance companies, 17 "D" class micro-credit development banks, 16 saving and credit co-operatives and 45 NGOs as shown in table below;

## Growth of Financial Institutions

| Types of Financial <br> Institution | Mid-July |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 8 5}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 5}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | Mid Jan <br> $\mathbf{2 0 1 0}$ |
| Commercial Banks | 2 | 3 | 5 | 10 | 13 | 17 | 18 | 20 | 25 | 26 | 26 |
| Development Banks | 2 | 2 | 2 | 3 | 7 | 26 | 28 | 38 | 58 | 63 | 73 |
| Finance companies |  |  |  | 21 | 45 | 60 | 70 | 74 | 78 | 77 | 78 |
| Micro-Credit <br> Development Banks |  |  |  | 4 | 7 | 11 | 11 | 12 | 12 | 15 | 17 |
| Saving \& Credit Co- <br> operative Limited <br> Banking activities |  |  |  | 6 | 19 | 20 | 19 | 17 | 16 | 16 | 16 |
| NGOs (Financial <br> Intermediaries) |  |  |  |  |  |  |  |  | 47 | 47 | 47 |
| Total | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{7}$ | $\mathbf{4 4}$ | $\mathbf{9 8}$ | $\mathbf{1 8 1}$ | $\mathbf{1 9 3}$ | $\mathbf{2 0 8}$ | $\mathbf{2 3 5}$ | $\mathbf{2 4 2}$ | 254 |

Source: http://www.nrb.org.np

Bank in general means an institution that deals with money. It serves as the mediator between the lender and borrower of the money. A bank performs several financial and monetary and economic activities that are essential for the economic development of a country. It is a monetary institutional vehicle for domestic resource mobilization of the country that accepts deposits from various sources and invests such accumulated resources in the field of agriculture, trade, commerce etc.

Generally the term bank refers to commercial banks. Commercial banks are dominant institution in the financial sectors and are the foundation of the national economy. They transfer monetary sources from savers to users. They involve in various functions like creation money, facilitating credit, and facilitating foreign trade, safe keeping of the values etc. The activities of commercial banking sector have contributed to eliminate poverty and reduce unemployment. Some of the modern commercial functions of the commercial banks are listed below.

- Acceptance of deposits
- Granting of advances
- Remittances
- Cash management
- Issuance of Letter of Credit and Guarantees
- Merchant banking business
- Credit Cards
- Technology based services - Internet based services
- Dividend Warrants
- Safe keeping services/Lockers
- Handling Government business
- Automated Teller Machines (ATM's)

The first public bank "The Bank of Venice" was established in Italy in 1357A.D. Different countries in the world followed the footsteps of this bank to incorporate banking institutions in their countries. The evolution of " The bank of England " in the United Kingdom if 1694 A.D. brought remarkable changes in the process of establishing banking institutions in the world. The establishment of this bank was a big milestone in the history of banking development. It is believed that the idea of commercial banks rapidly spread all over the world only after the inception of this bank. ${ }^{3}$

In Nepal the development of banking is relatively recent. The record of banking system in Nepal gives detail account of mixture life. Landlord and rich merchants had acted as

[^1]lender in the unorganized money market. At the end of 8th century, Gunakamadev had borrowed money to rebuild the Kathmandu valley. In 11th century, Malla regime there was evidence of professional moneylenders and bankers. However, sue to the absence of regulatory bodies, the moneylenders used to charge high rate of interest and other extra dues on loans extended.

The Prime Minister Ranadip Singh introduce many financial and economic reforms. In 1877 the 'Tejaratha Adda' was established by him. The basic objectives of the establishing this was to provide credit facilities to general public. ${ }^{4}$ The government of Kathmandu valley, the banking system was flourished which helped general public to provide credit facilities as very low interest rate. The Tejarath Adda extended the loan to public against the collateral of gold and silver. Hence the establishment of thi could be taken as pioneer foundation of banking in Nepal. The Tejarath Adda could not run and extend the advance required to general public due to the lack of financial support, as no other financial institutions were set up. Again the unorganized money lender became active.

In the meantime government started to establish trade relationship between Tibet and India. The need of banking institution was realized when there was a need of finance for the reconstruction of work on 1934 A.D's earthquake. Considering this, Industrial Development Board was formed on 1936 A.D, which formulated the Company Act and Nepal Bank Act in 1937 A.D.

Nepal Bank Limited (NBL) was established in 1937 A.D as the first commercial bank of Nepal. At that time limited industrial undertaking and trading activities were created in the economy and NBL was set up for their financial needs. With the growth of diverse economic activities in the country other commercial banks were felt necessary at a later stage; as a result the Rastriya Banijya Bank (RBB) was set up in 1966 with full public (government) ownership. In 1956 the Central Bank of Nepal was, Nepal Rastra Bank was established with the mission of developing banking system in the country to promote

[^2]industry, trade and agriculture in addition to its main function of circulating Nepalese currency all over the country.

### 1.3 Background of Nepal Bank Limited

Nepal Bank Limited, a pioneer commercial bank. It is the oldest bank in the history of modern banking system of Nepal. The bank was established on 13th of Kartik, 1994 B.S (1937 A.D) in the technical assistance of Imperial Bank of India under "Nepal Bank Act 1993". The establishment of Nepal Bank Limited laid the foundation of modern financial system in the country. The late Prime Minister Juddha Samsher Janga Bahadur Rana highlighted the significance of launching of this bank in the speech on the occasion of its inauguration, as "The work which is being done in the larger interest of the nation is a great moment for me. Until today a bank could not be opened in Nepal. Therefore this bank which is being established under the name of Nepal Bank Limited to fill that need and to be inaugurated by His majesty the King Tribhuvan, is a moment of great joy and happiness." ${ }^{5}$

At the time of inception NBL had an authorized capital of Rs. 10 million and issued capital of Rs. 2.5 million. Presently, they are Rs.500and 380.5 million respectively. Simultaneously, it had started the banking business with Rs. 0.842 million as it's paid up capita with 10 shareholders. Along with the authorized capital, the paid up capital is also being changed from time as per the need of the business activities. At present, it has amounted to Rs. 38 million in fiscal year 2062/63. The total deposits for the first year was NRs. 17,02,025 where current deposits was about NRs. 12,98,898 fixed was about NRs. 3,88,964 and saving was NRs. 14,163. Loan disbursed and outstanding at the end of the first year was NRs. 1,985,000. Till some years back, government had held majority of its share but recently the government sold some parts of its share to the staff of the bank and common people, reducing ownership to $40.49 \%$. From the very conception and its creation, Nepal Bank Ltd, was as joint venture between the government and the private sector. Out of 2500 equity shares of NRs. 100 face value, $40 \%$ was subscribed by the

[^3]government and the balanced i.e. $60 \%$ was offered for the sale to private sector. There were only 10 shareholders when the bank first started.

## Shareholding Composition

| S.N | Ownership | Percentage |  |  |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Government of Nepal | 40.49 |  |  |
| 2 | 'A' Class Financial Institutions | 4.92 |  |  |
| 3 | NRB Licensed Financial Institutions | 3.42 |  |  |
| 4 | Other Institutions | 0.52 |  |  |
| 5 | General Public | 49.94 |  |  |
| 6 | Others | 0.71 |  |  |
| Total |  |  |  | 100 |

(Source: NRB, Banking and financial statistics No.-53)

## Shareholding Composition (Pie-Chart View)



### 1.4 Foreign Management Team in Nepal Bank Limited

As a component of the financial sector reform program, a management team "ICCMT" consisting of international bankers from Scotland (Ireland) has been appointed in NBL to restructure the NBL. The ICCMT assumed its assignment in NBL on July 22, 2002. The management team has completed the financial analysis of the NBL and the preparation of Management plan and the Budget plan for the bank. To date, the team has come up with clear vision, mission, goals and objectives of the bank. Asset liabilities management Committee (ALCO), Executive Committee ( EXCO), Credit Committee (CC), Relation Management Division (RMD), Credit Administration and Review Division (CARD), Special Asset Group(SAG), and several special task forces have been established to
create, apply and reinforce internationally accepted norms and modalities in the bank. The norms and modalities are focused toward identifying bank risk and enhance the loan risk rating systems in the bank. New credit policy guide, guidelines for credit decision process, and problem loan guide have been prepared and implemented from last year. A continuous negotiation and dialogue with big defaulters has been initiated and around Rs. 4.90 billion of loan categorized as NPA has been recovered in cash and restructured within the one and half year period. Despite the best efforts of the management team, loan recovery of the bank cannot be considered as satisfactory. Hence the management team needs to make more serious efforts to loan recovery (www.nbl.com.np).

### 1.5 Statement of the Problem

Financial institutions are the apex entities of economy in any nation for prompting different business activities such as trade, industry and commerce. As such activities get momentum; excess dependency on agriculture sector about livelihood will automatically be reduced. Hence necessity of these institution have been realized the must. In addition to this as the oldest bank, NBL has been providing a nice platform for the prospective entrepreneurs planning to capitalize future opportunities with financial as well as technical support. This activity helps inspiring entrepreneurial activity.

Due to open policy and economic liberalization, number of financial institutions is commercial bank is increasing in Nepal. In such stiff environment Nepal Bank is standing with weak accounting information system and less auditing system. Before present management system, it was audited three year before. Foreign management will not exist forever. It is not possible also. So again, Nepalese management must not repeat the last mistake. The environments of bank need to be changed fairly and far from political effects.

To provide loan without proper technical analysis was the great error of Nepal bank. To avoid this mistake it is needed to establish best system in management that can't be changed easily by any internal frauds. No company can run or earn smoothly without well-managed portfolio of loan management, hence I have taken loan management of NBL as my thesis topic to open clues about management of loan and default.

In essence, the current study especially focuses on the loan management of NBL (i.e. practices of disbursing loans and their recovery.)

## Research Issues are:

The questions were mainly targeted on loan disbursement process, loan management lending procedure and recovery system. The research has also tried to familiarize the deposit and lending pattern with different sectors of Nepal Bank Limited. The research questions of the study are as follows:

- What are the loan sectors to be distributed?
- What is the loan lending process?
- How the collaterals are examined?
- How the loan is monitored after lending?
- Does the interest and loan payment is timely?
- If not, what are the processes taken to collect the loan?
- What are the problems associated with recovery of loan?
- What is the level of satisfaction of NBL Customer and employees?


### 1.6 Objective of the Study

The main objectives of the study are to analyze, examine and to interpret the loan management of NBL. The other specific objectives of the study are as follows:-

1. To evaluate loan investment and loan recovery in relation to loan outstanding.
2. To gain knowledge of loan pattern of Nepal Bank Limited and its distribution.
3. To study relation between loan disbursement and it recovery.
4. To study Lending policy and process hold by NBL.
5. To measure the growth rate of loan outstanding, loan recovery and loan investment.
6. To determine at what level of satisfaction the NBL Customer and employees gain?

### 1.7 Need and Significance of the Study

It is indisputable that the loans and advances are major chunk (or source) for generating profit of NBL. Aforesaid activities stimulate economic momentum within the periphery of the country and ultimately enhance economic growth, development and prosperity.

Nepal, one of the poorest countries in the world is in need of additional capital investment to score higher rate of economic growth. Domestic savings and foreign capital (grants and loans) are two principal sources of capital available for investment. Domestic saving is the most crucial and viable source of capital.

Fund collected by NBL is cautiously allocated under loans and advances cum other heads. This undertaken venture is pivotal factor to know the true affairs and position of NBL in regard to management of loans. This will also be a guideline for improving their performances to achieve their objectives. This study also helps to identify the hidden weakness regarding loan management of NBL

The study of loan management of NBL will be beneficial for

## i. Shareholders:

Shareholders are the true owners of the company. This study will be useful to them for acquiring answers to the following questions.

- How funds are utilized as loans and advances?
- To what extent they are gaining?
- Is the productivity of their limited resources satisfactory?


## ii. Management

This study will be helpful to compare and analyze own with others regarding performance viz: success or failure, effectiveness and so forth.

## iii. Outsiders

Customers, creditors, competitors, investors, financing agencies, stock exchange, personnel can get information about the performance of NBL 's loans and default with the help of this analysis. They can make yes or no decision regarding investment decision.

## iv. Policy Makers

Officers of government, ministry, central bank, and security exchange and tax office can formulate appropriate policy regarding commercial banks with the help of this study.

### 1.8 Limitation of the Study

The research study has same limitations. The main limitations are as follows:-

1. Although there has been operation of 254 commercial banks and non-bank financial institutions licensed by NRB in Nepal. Only NBL is taken for the proposed study and thus may not represent the whole population.
2. The study concentrates only on the loan management and thus ignores the other financial aspects.
3. The secondary data will be used for the presentation and interpretation. Only 5 years data from fiscal year 2061/62 to fiscal year 2065/66 are considered. The reliability of the data depends totally on the annual report of the Bank.
4. In this study, only selected financial and statistical tools as well as technique are used

### 1.9 Organization of the Study

The study Loan management of "Nepal Bank Limited" is presented in organized form. The whole research is divided into five chapters and they are as given below:

## Chapter -I Introduction

The first chapter entitled the introduction chapter discloses the subject matter of the study. This contains Banking situation in Nepalese economy with background and foreign management team in Nepal Bank Limited. It also maintains need significance, organization of the study along with objectives, research questions followed by limitations of the study.

## Chapter -II Review of Literature

The relevant literatures have been reviewed in this second chapter of the study. It also contains facts and views about loan disbursement review of articles and loan management.

## Chapter -III Research Methodology

The third chapter Research Methodology provokes about research design, nature and sources of data, population and sampling, data collection procedure. Further, ratios analysis and hypothesis is also compacted in this chapter.

## Chapter -IV Presentation and Analysis of Data

Chapter four deals the major portion of the study that consists of analysis of primary and secondary data to reveals different facts in relation between sectors of loan disbursement. The data required for the study has been presented, analyzed and interpreted by using various tools and techniques of financial management and statistics to present the result relating to the study.

## Chapter -V Summary, Conclusion and Recommendations

This chapter includes summary of findings, conclusion and recommendations of the study. It chapter tries to draw out a conclusion of the study and recommendations for the improvement of the future performance of banks under review.

## CHAPTER - II <br> REVIEW OF LITERATURE

### 2.1 Theoretical Framework

### 2.1.1 General Background about Loan Disbursement

Banks are expected to support their local communities with an adequate supply of credit for all legitimate business and consumers' financial needs and to price that credit reasonably in line with competitively determined the interest rates. "Indeed, making loans is the principal economic function of the banks to fund consumption and investment spending by business, individual and units of government. How well the bank performs its lending function has a great deal to do with economic health of its region, because bank loans support the growth of new business and jobs within bank's trade territory and promote economic vitality. Moreover, bank loan often seems to convey positive information to the market place about a borrower's credit quality, enabling a borrower to obtain more and perhaps somewhat cheaper funds from other sources.

### 2.1.2 What is the Credit Policy of the Bank?

In providing loans to its customer, a bank has to follows a sound credit policy and conducts the business of lending on the basis of certain sound principles. In other words, a bank or any institution can disburse necessary amount to their borrowers and collect the entire disbursed amount in time, if there is a good lending policy. Without effective and proper lending or credit policy, no banks can accomplish its predetermined goals and objectives. The established credit policy normally speaks about the following components. ${ }^{6}$

## Safety of Fund

Bankers deal with others money and its own common sense. It has to use that common sense to safeguard the money of others. Its first duty is to see that money, which it lends,

[^4]comes back to him. The recovery of banks money will not only be safe at the time of lending but will remain so throughout.

## Liquidity

A bankers has to ensure that it comes by on demand to in accordance with agreed terms of repayment. Liquidity means short-term solvency of the borrowers. A banker is essentially the lender of short-term fund because he knows the bulks in his deposit are repayable on demand or at short notice. So a bank should maintain his liquidity position.

## Security

The credit policy should say what types of securities the bank want to take and does not want to take. Traditionally, bankers have been security oriented. It must ensure that the security when accepted must be adequate, readily marketable, easy to handle and free from encumbrances.

## Purpose of Loan

Now days the purpose of which the loan are granted has acquired precedence over the principle of security. If a loan is required for a non-productive or speculative purpose, bankers will be reluctant to entertain the proposal. A banker does not favor loan for social functions ceremonies, pleasure trips or for repayment of prior loans, as they are unproductive in nature.

## Profitability

Any advances given, has to be profitable, otherwise banks can't run properly. In other words, a bank should maintain its profitability while making a sound credit policy. Sometimes, the considered may not appear profitable in it but may be remunerative to a bank. Lending rates are affected by banks' internal policy like creating the borrower, bank rate of central bank, inter bank competition and the central directives on lend rates.

## Spread or Loan Mix

A successful bankers is one who can manage his risk one of the tools of management of risk is to spread his advances portfolio not only among many borrowers but also to diversify lending to types of industries and against different types of securities. A banker who puts all his eggs in one basket is not a prudent banker.

## National Interest

A banks should follow the national interest of that country while making disbursement policy. Purpose of advance priority given by government and national interest is assumed greater importance than securities specially in sector lending.

## Loan Classification Chart


(Source: Johnsonn et. al. Commercial Bank Management New York: The Dryden Press, 1940)

### 2.1.3 NRB Directives

The world has witnessed many financial crises and devastating consequences due to huge financial and economic losses that resulted from each episode. Every crisis was sudden in onset and their, magnitude of losses was much larger than expected. If we go back to the history, then on $3^{\text {rd }}$ march 1997; the Asian crisis began in the form of liquidity problem of two finance companies. Later this spread over to other financial intuition within the Thai financial system. Simultaneously, crisis began to cover Malaysian, Indonesian and South Korean financial statement and loomed in the form of Asian crisis. So this Asian crisis appealed the whole world for regular and timely supervision and assessment of financial system, its soundness and vulnerabilities. This event forced the regulatory authorities for the enforcement of prudential measures in order to avoid further crisis review and revision in prudential regulations such as capital adequacy ratio, asset classification. Provisioning for impaired assets, exposures limit and enforcement of international accounting standard etc have now become common issue all over the world since the late 1990s.

Similarly, in our country too, commercial banks could not recognize the importance of the quality credit and banking sector failed to witness the expected developments. Subsequently, the banking sector faced the problem of bad debts, overdue loans, accrued interest, accumulation of non-banking assets and excess liquidity in the banking system. In addition to these expected happenings new challenger were added to the Nepalese banking sector due to the adverse development in the domestic economy resulting from deteriorating peace and security situation and continuous persistence of natural calamities inside the country on one hand and the global recession primarily caused by international terrorism on the other. Viewing the need of structural reform amidst these adverse implications, NRB issued directives to run commercial banks in a healthy competitive manner to ensure the sustainable development of the overall banking system.

The financial sector reform of Nepal was initiated in mid 1980s. Since then NRB has been playing pioneer role in regulation, supervision and monitoring of commercial banks
by issuing directives. At present the number of guidelines issued by NRB to commercial bank reaches sixteen, which are as follows.

1. The provision of minimum capital fund to be maintained by the commercial bank.
2. The provision of loan classifications and loan loss provisioning on the credit.
3. The provision relating to limit on credit exposure and facilities to a single borrower, group of related borrowers and single sector of the economy.
4. The provision relating to accounting policy and the structure of financial statements to be followed by the commercial banks.
5. Regulation relating to minimization of risk inherent in the activities of commercial banks.
6. The provision of institutional good governance to be followed by commercial banks.
7. Time frame for implementation of regulatory directives issued in connection with inspection and supervision and supervision of commercial banks.
8. Regulation relating to investment in shares and securities by commercial banks.
9. The provision of submission of statistical data to the NRB. Banking management division and inspection and supervision division.
10. Regulation relating to sale and ownership transfer of promoters shares.
11. Regulation relating to, stringent blacklisting procedure for loan defaulters.
12. The provision relating to compulsory deposited amount of NRB.
13. Regulation relating to developing the branch office of commercial banks.
14. Provision relating to interest rates.
15. Provision relating to collection of financial sources.
16. Provision relating to consortium financing.

### 2.1.3.1 NRB Directives Relating to Loan Classification and Loan Loss Provision

 (www.nrb.org.np)1. Classifications of Loan and Advances: Effective from FY 2058/59 (2001/02) banks shall classify outstanding principal amount of loan and advances on the basis of aging. As per the directives issued by NRB, all loans and advances shall be classified into the following four categories:
a. Pass Loan: - Loans and advances whose principal amount are not past due and past due for a period up to 3 months shall be included in this category. These are classified and defined as performing loans.
b. Sub-Standard Loan: - All loans and advances that are past due for a period of 3 months to 6 months shall be included in this category.
c. Doubtful Loan: - All loans and advances which are past due for a period of 6 months to 1 year shall be included in this category.
d. Loss: - All loans and advances which are past due for a period of more than 1 year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

Loans and advances falling in this category of sub-standard, Doubtful and loss are classified and defined as Non-performing loan. It is appropriate in the view of the banks management; there is not restriction in classifying the loan and advances from low risk category to high risk category. For instance, loans falling under substandard may be classified into doubtful or loss and loans falling under doubtful may be classified into loss category. The term loan and advances also includes bulls purchased and discounted.

Historical Provisions Relating to Loan Classification is depicted in the following table: For fiscal year 2001/2002 A.D. (2058/2059 B.S.)

| Pass loan | Loans and advances not past due and past due up to 3 months. |
| :--- | :--- |
| Sub-standard loan | Loans and advances past due for a period of over 3 months to 1 <br> year. |
| Doubtful loan | Loans and advances past due for a period over 1 year to 3 year. |
| Loss | Loans and advances past due for a period of over 3 Year. |

For fiscal year 2002/2003 A.D. (2059/2060 B.S.)

| Pass loan | Loans and advances not past due and past due up to 3 months. |
| :--- | :--- |
| Sub-standard loan | Loans and advances past due for a period of over 3 months to 1 <br> year. |
| Doubtful loan | Loans and advances past due for a period over 1 year to 3 year. |
| Loss | Loans and advances past due for a period of over 3 Year. |

For fiscal year 2003/ 2004A.D. (2060/2061 B.S.)

| Pass loan | Loans and advances not past due and past due up to 3 months. |
| :--- | :--- |
| Sub-standard loan | Loans and advances past due for a period of over 3 months to 9 <br> months. |
| Doubtful loan | Loans and advances past due for a period over 9 months to 2 <br> years. |
| Loss | Loans and advances past due for a period of over 2 Years. |

For fiscal year 2004/2005A.D. (2061/2062 B.S.)

| Pass loan | Loans and advances not past due and past due up to 3 months. |
| :--- | :--- |
| Sub-standard loan | Loans and advances past due for a period of over 3 months to 6 <br> months. |
| Doubtful loan | Loans and advances past due for a period over 6 months to 1 year. |
| Loss | Loans and advances past due for a period of over 1 Year. |

2. Additional Arrangement in Respect of Pass Loan: Loan and advances fully secured by gold, silver, fixed deposit receipts, credit cards and government securities shall be include under "pass" category. Loans against fixed deposit receipts of other banks shall also qualify for inclusion under pass loan. However, where collateral of fixed deposit receipt or government securities or NRB bonds is placed as extra security, such loan has to be classified on the basis of clause 1 to clause 7 . While renewing working capital loan having maturity period up to one year can be classified as pass loan. If the interest of working capital nature loans and advance is not regular, such loan and advances should be classified on the basis of interest outstanding period.
3. Additional Arrangement in Respect of loss Loan: Even if the loan is not past due, loans having any or all of the following discrepancies shall be classified as "loss".
a.
sufficient,
b.
has been declared bankrupt,
c.
is absconding or cannot be found,
d.
discounted bills are not realized within 90 days from the due date and non fund based letter of credit and guarantees etc are not realized with in 90 days from the date of conversion into fund based are not realized within 90 days,
e.
recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation,
not been used for the purpose originally intended,
to the borrowers included in the blacklist of credit information center (CIC),
h.
business is not in operative conditions, project or business is not in operation,
i.

Loan is not written off within 90 days from past due date.
4. Additional Arrangements in Respects 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.

## 5. Prohibition to Recover Principal and Interest by Overdrawing the Current

 Account and Exceeding the Overdraft Limit: Principal and interest on loans and advance shall not be recovered by overdrawing the borrower's current account or whereoverdraft facility has been extended, by overdrawing such limit. However, this arrangement shall not be constructed as prohibitive for recovering the principal and interest by debiting the customers' account. Where a system in the bank exists as to recovery of principal and interest by debiting the customers' account, and recovery is made as such resulting in overdraft, which is not settled within one month, such overdrawn principal amount shall also be liable to be include under the outstanding loan and such loan shall be downgraded by one step from its current classification. In respects if recognition of interest, the same shall be as per the clause relating to income recognition mentioned in directives no 4.
6. Letter of Credit and Guarantees: If letter of credit and guarantees and other contingent liabilities converted into fund based liabilities and have to be paid, in such condition such loan shall be classified as pass loan within 90 days from the date of conversion into fund based. After 90 days such loan shall be classified as loss loan.
7. Rescheduling and Restructuring of the Loan: If the bank is confident on the following bases of written plan of action submitted by borrower, it may reschedule or restructure the loans and advances. Clear bases of rescheduling or restructuring should be attached with loan files.
a.

If there is proof of adequate documents and collateral security relating to loan.
b.

If the bank is
confident in recovery of restructured or rescheduled loans and advances.

In addition to written plan of action for rescheduling or restructuring of loan, payment of at least 25 percent of total accrued interest up to the date of rescheduling of restructuring should have been collected.
8. Loan Loss Provisioning: The loan loss provisioning, on the basis of the outstanding loans and advances and bills purchases classified as per this directives, shall be provided as follows:

Classification of Loan
Loan Loss Provision

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

This loan loss provision has affected banks capabilities to extend loan and made them risk averse in issuing new loan, particularly to the private sectors and priority sectors where the loan default is high.
Loan loss provision in performing loan (pass) has been defined as general loan provision and for non-performing loan (sub-standard, doubtful and loss) has been defined as special loss provision.

### 2.1.4 Establishing a Written Loan Policy

One of the most important ways a bank can make sure its loan meet regulatory standards and are profitable is to establish a written loan policy. Such policies give loan officers and the bank management specific guidelines in making individual loan decisions and in shaping the bank's overall portfolio.

What should a bank's written policy contain? The examinations manual, which the federal deposit insurance corporation gives to new banks examiners, suggests the most important elements of a good bank loan policy. These elements include:

1. A Loan statement for the bank's loan portfolio.
2. Specification of the lending authority given to each loan office rand loan committee.
3. Lines of responsibility in making assignments and reporting information within the loan department.
4. Operating procedures for soliciting, reviewing, evaluating, and making decisions on customer loan applications.
5. The required documentation that is to accompany each loan application and what must be kept in bank's credit files.
6. Lines of authority within the banks, a dealing that is responsible for maintaining and reviewing the bank's credit files.
7. Guidelines for taking, evaluating and perfecting loan collateral.
8. A presentation of policies and procedures for setting loan rates and fees and the terms of repayment of loan.
9. A statement of quality standards applicable at all loans.
10. A statement of the preferred upper limit for total loans outstanding.
11. A description if the bank's principal trade areas, from which most loans should come.
12. A discussion of the preferred procedures for detecting, analyzing, and working out problems loan situations ${ }^{7}$.

A written loan policy statement carries a number of advantages for the Bank adopting it. It communicates to employees working in the loan department what procedure they must follow and what their responsibilities are. It helps the bank move towards the loan portfolio that can successfully blend multiple objectives, such as promoting the banks profitability, controlling its risk exposure, and satisfying regulatory requirements. Any expectations of bank's written loan policy was permitted should be listed. While any written loan policy must be flexible due to continuing changes in economic conditions and regulations, violations of the banks' loan policy should be infrequent events.

### 2.1.5 What are Steps in Lending Process?

Most banks loans to individual areas from a direct request from a customer who approaches a member of the bank's staff and asks to fill out a loan application. Business loan requests, on the other hands, often arise from contacts the bank's loan officers and sales representatives make as they solicit new accounts from the form operating in the banks market areas. Sometimes loan officers will call in the same company for months before the customer finally agrees to give the bank a try by filling out a loan application.

### 2.1.6 Is a Borrower Creditworthy?

[^5]The question that must be dealt with before any other is whether or not the customer can service the loan - that is, pay out the credit when due, with a comfortable margin for error. This usually involves a detailed study of six aspect of the loan application: character, capacity, cash, collateral, conditions and control.

Regardless of whether you are using a large or small bank, each will look at what is commonly referred to as the "Six Cs" when deciding to give you a business loan. ${ }^{8}$

## 1. Capacity

What is your business's ability to repay the loan? This is the most important factor lenders will look at and is why creating a cash-flow statement in your business plan is so important. A good cash-flow statement will show the lender in detail how your business will be able to repay the loan timely and for the required amount.

## 2. Credit

How is your personal credit? For new businesses, lenders will require the owner to cosign or guarantee a loan. Lenders are willing to take a risk lending money to you but are not willing to let you walk away without assuming some of that risk yourself. The higher your personal credit score, the more likely you are to obtain a business loan with favorable terms.

## 3. Capital

How much money are you asking to borrow and is that amount reasonable given your business's financial situation? The more money you ask for, the more scrutiny your loan application will receive. It is a good idea to talk with your lender before submitting your application to find out the loan limits your business will qualify for.

## 4. Collateral

Do you have any assets to use as security for your loan? The more collateral you can provide, the better your chances are of getting your loan approved.

[^6]
## 5. Character

Are you a reputable and trustworthy person? This is a major aspect that smaller local and independent banks will look at and is not as big a factor for larger banks. However, all banks will look at both your business background and the amount of experience you have working in your industry.

## 6. Conditions

What is the purpose of your loan? Lenders will want to make sure that you are using the loan for a legitimate business purpose and that the terms of the loan make sense to them.

In addition to regular commercial banks, credit unions can be a good source for your lending needs. They usually offer good rates and flexible loan terms. The downside is that you usually have to be a member of the credit union and the amounts they are allowed to lend are usually less than those of commercial banks.

### 2.1.7 Component of Good Loan Application

Loan application is the primary source of information given in a systematic manner, requires for assessment of the proposal. There is always a moral fear on the borrowers that any wrong information filled would soon turn out to his utter disadvantages with doubtful creditability before bankers. Banks have different sets of application forms for different schemes contained in the loan application forms are (ADBN 2007, Bank Samachar year 26 volumes 7).

1. Name of the borrowers
2. Legal status of the borrowers
3. Address
4. Qualification
5. Experience
6. Past dealing
7. Dealing in other banks
8. Specific Purpose
9. Amount sought
10. Turnover and existing capacity
11. Profitability
12. Viability
13. Security
14. Business growth ${ }^{9}$

## Pricing of Loan

Pricing commercial loan is a vague process that needs estimation the return the bank should earn on a particular loan and then forming a loan agreement that will generate the desired return.

The yield on loan covers not only the interest rated charged for borrowed funds but also the charges a bank makes for commitments and compensating balance. It certain cases, service fee income also fall under total return.

The interest rates can either be fixed or variable (floating) rate terms to check elevation in the general level of interest that increases bank's cost of fund. Loan will be made on fixed rate if there is no possibility of rise in interest rate. Major pricing terms are:

## i. Fixed Rate

Fixed interest rate is agreed at organization until maturity if there is no chance of incline in rate of interest.

## ii. Variable Rate

Depending on the base rate varying interest rate is installed. It is classified as:

- Prime base: Highest graded customer obtains it.
- Prime plus: Prime rate plus a fixed percentage is charged under it
- Prime times: Under it the rate will mount (or dismount) by the multiple and prime rate times a fixed multiple.
- Other base rate: Beside the base, it is identical to Prime rate.
- Caps and floor: The highest and lowest limit up to which loan can be released on variable rates and caps and floors respectively.

[^7]
## iii. Commitment Fees

It is levied by bank to customer for agreement to availed fund. It is charged on used and unused portion of a credit line.

## iv. Compensating Balances

It is deposit balance to be kept as per the deed of lender until the over of loan period. It is to be kept on average rather than at a strict minimum.

### 2.1.8 Management and Control of Potential Loan Losses

A poorly administered loan portfolio germinates negative outcomes on earning and capital. Hence, control of loan losses is a crucial task of a bank. Greater provision for loan losses in the income statement is essential to coup the larger loan losses than anticipated situation. It comprises:

## i. Loan Review

Its main aim is to appraise the value of loan. It can be carried out as internally and externally (i.e. regulatory agencies). The quality and liquidity of each loan is being evaluated herein after studying about collaterals and credit files. The examiner grades loan as substandard, doubtful, loss or other specially mentioned loans.

## ii. Identifying Problem Loan

Early traces out of a problem loan increase the possibility of recovery of loan. But with the passes of time such type of hope ceases. Loan officer should be aware about the signs of existed of forth coming problem concerning to loan. These signs are:

- Customer's failure to provide current financial statement as per agreement
- Loss of borrower rapport (agreement)
- A recession economy
- Miscellaneous:
- Illness or death of a principal
- Martial problem of a principal especially divorce
- Irresponsible behavior of a principal
- Unexpected loan renewal
- Overdraft
- Strike or hostile relating with labor


## iii. Handling Problem Loan

Once problem loans are identified, search the causes of the customers' difficulties. Wait and see rule operates if customers are co-operative. Otherwise, more aggressive actions
should be taken. This may involve ceiling the loan which results either rehabilitation or liquidation of the company.

## - Rehabilitation

It converts the weak company into the strong company with loan performance. The bank has to hire management expert or consultant if it likes to provide loan to sound customer properly as possible. It can be done as:

- Eliminate or reduce every possible expense.
- Reduce inventory and review account receivable.
- Dispose of idle or unessential equipment or plant
- Analyze debt structure and mange cash flow to service debt
- Seek additional equity capital
- Prune unprofitable operating division.


## - Liquidation

Bank orders liquidation to satisfy creditors viewing the minimal possibility of long-term survival of the borrower. Most of the borrowers extremely resist it. It includes method of liquidation and settlement of debt obligations.

### 2.1.9 Loan Administration

Loan administration refers to planning, organizing, and controlling of lending activities. Here, planning denotes consideration of risk and return to meet profit object along with division of loan assets among consumer, commercial and mortgage. Organization refers to putting goals and objectives into action through definition and processes with support functions. Controlling entails making and monitoring loan as per deadlines supported by corrective actions to be taken in granting loans if necessary ${ }^{10}$.

Loan department carries out all acts relating to loan from initial stage if providing loan to the loan recovery stage. It does such work getting supports from other departments.

[^8]Excess flow of loan than demand of needy party results failure to the bank. It pertinent two parts:

## i. The Management for Providing Loan: (Disbursement Management)

The followings are inevitable for loan.

## a) Proposal for Loan

Printed loan proposal stating essential things should be kept ready and any in coming old or new customer should be given it. Necessary thing in it are: name, occupation, address, kind of loan, amount of loan and securities. After filling aforesaid, it should be given to loan department where it is to be reviewed carefully to know correctness.

## b) Deed of the Loan

Loan department prepares it and includes name, address of the loan taker and year of loan taken, quality of loan, interest rate, loan recovery date and date of loan agreement (deed) etc. Such deed has to be registered from related office.

## c) Securities

It is dealt in 1.1.4 under element to be dealt in loan policy. Any reliable securities such as movable or immovable should be kept as security to provide cushion for loan besides cash generated.

## d) Granting Loan based on Guarantee

Bank grants loan taking movable or immovable properties of third person if the debtor's security is less than needed or unacceptable or do not meet bank's limit. But all legal process related to it should be fulfilled.

## e) Commitment Deed

After approval of proponent's proposal, loan department prepares separate commitment deed to be signed by the debtor. It portrays loan condition and the rules of bank abiding the borrowers.

## f) Contract of Indemnity

Contract deed of indemnity needs to be prepared by the same department. The loan proponent signs in it and puts his thumbs over it. Such contract abides the debtor to pay debt and any breach of rule makes him liable for payment to bank.

## g) Invoice

The debtor must submit all bills, vouchers, and documents relating to business on time as per demand of the bank.

## ii. The Management for Loan Recovery (Recovery Management)

Bank desires the proper utilization of loan by the debtors. Indeed, recovery of loan denotes sequences lay down to get back loan amount with all due interest including remedial and punitive actions to be taken if necessary.

## a) Audit of Credit

Credit audit refers to keeping eyes on the granted loan to decide how properly this is utilized. It is done until the loan is recovered. It is done from time to time to know plight of debtor, proper use of the loan and profit-loss position. It comprises:

- Verification of loan documents
- Field visit
- Forms of credit to be prepared

It may be of different forms such as:

- Internal credit audit
- External credit audit
- Credit audit by central bank


## b) Recovery of Interest on Loan

The borrower should pay interest and principal on time as per the deed of the loan and time assigned by the bank. Other wise, bank adds interest according to rule of bank. It charges the interest on interest if borrower does not pay the interest and loan in fixed time.

## c) Loan Recovery Process

Bank recovers the granted loan as per the terms and conditions stated in the deed of the loan. Loan should be repaid either on installment basis or lump-sum basis as per the deed of loan. Loan recovery period can be extended making new agreement if borrower's situation goes beyond his control.

## d) Handover of Securities

Bank needs to return movable or immovable properties taken as securities from borrower or security received from third persons as guarantee.

## e) Process of Recovering Date-Expired Loan

The bank recovers principal and interest of not recovered loan as per commercial Bank Act 2031 (1934). After recovering the loan accordingly the remaining cash from sale of property (security) should be returned to the borrower. Good, acceptable, low qualities, doubtable and bad are the classification of loan by NRB.

## f) Maintenance of Data

A report must be prepared containing clear cut information about loan from release date to recovery data. This works as guideline to current and future management.

### 2.1.10 Renewal of Loan

Whether to renew a loan or not depends under discretionary right of a bank. There holds relationship between the bank and debtor once the loan is extended. Renewal of loan is possible if there is proper adoption of rule and deed including timely payment of debt and interest.

Borrower has to apply in the bank for the renewal of loan and needs to fill the printed form for that if available. Otherwise, borrower has to write application. Banks studies that and makes field visit to provide loan if necessary.

The following should be analyzed before giving green signal for the renewal of loan.
a. Is application for renewal of loan complying with loan or not?
b. Is it against the deadlines given by central bank?
c. Does the company's own memorandum, articles of association, policy and regulation permits that?
d. Is the liquidity remains in banks for renewing the loan of the debtor?
e. Whether any problem exists there to renew the loan or not.
f. Bank renews the loan if there is no problem.
g. Is payment of debt and interest is made on time?
h. Is debtor been benefited from loan taken?
i. Dose the use of debt accord with the proposal of loan taking?
j. Do any losses arise after renewal of the loan?
k. Whether the debtor is submitting real picture of his business or not.

1. Do any extra collateral require in renewing the loan?

### 2.1.11 Payment of Debt and Interest

As per varieties of loan, the payment procedure of debt and interest differs. In case of long-term loan, payment is received in the form of installment and same is applied to hire purchase loan while interest is paid at the stated frequency and principal at maturity in case of overdraft.

All these are as follows

## 1. Discount

Interest is collected at the commencement deducting from loan amount and debt at maturity. E.g. If debt Rs.100000/- has sanctioned @ $15 \%$ p.a., the borrower gets only Rs 85000/-is deducted at the source. He pays Rs. 100000/- at maturity.

## 2. Collects

Interest is collected periodically or in arrears on the basis of period the loan is outstanding. It may be as:

## a) Bullet Payment Method

Under it interest is paid periodically where as principal is paid at the maturity. Principal along with interest for that period is paid at final date.

## b) Balloon Payment Method

It is also known as lump-sum payment method since principal and interest are recovered at maturity or any date when debtor comes to pay loan. It is simple and matches with tradition of rural society.

## c) Installment Method (Amortization Method)

Repayment of loan is made in various installments. Bank may fix installment of principal and interest or only of principal and interest is calculated and collected separately, it is applicable to hire purchase, term loan, priority sectors of which are flown taking movable and immovable property as security.

### 2.1.12 Loan Approval Process

The loan appraisal process and working method of a bank are very important. It is a multi-step process. An individual or the business organization come to borrow loan so, a bank should know the process and working method about it. A bank provides loan to its customers. There may not be the same process/ method for providing all kinds of loans. The process to accept loan for common people and the process to approve the loan some industry, businessman or merchants are different. The process of the bank may be different in approving the loan for primary sectors and for bigger projects. The bank makes special types of study, research and analysis before providing loan. It makes supervision and inspection in such project even after providing the loan. Behind it, there are two fundamental reasons: First the bank wants to be more securing its investment and second it grows the quantity of loan. From the viewpoint of both principle and practice.

### 2.1.13 The Loan Approval Processes

The loan approval process followed by the bank is as follows:
Evaluation of loan proposal: After a proposal is submitted by a person, institution and project, bank makes a deep study and analyze from different angle of the proposal.

Before approving the loan proposal the bank evaluates all necessary documents for providing loan. In the case of person or businessman the study of such documents are different. It will be accepted or rejected depending on the will of bank. If the bank feels the loan proposal satisfactory, it can approve the loan accordingly.

1. The types of loan: After accepting the proposal of borrowers. The bank discusses on these subjects, what types of loan the business firm of the person wants. Generally, there are many different types of loan like social loan, business loan, primary sector loan, industrial loan, hire purchase loan and employee's loan etc. The loan can be classified in other way too like secured loan an unsecured loan. The bank wants to keep its loan safe. So, the banks can classify lain in this way.
2. Determination of loan amount: After classifying the loan category, a bank determines the limitation of a loan. In fact the proponent writes in his proposal, what amount of loan the customer needs. The bank may or may not give the amount, which proponent has demanded. It is the matter that depends on the will of the bank.
3. Preparation of Necessary Documentation: The banks should prepare some document while providing loan to its customers. Only after preparing the legal documents, an evidence of the borrowing loan is given to the creditor. It becomes the evidence of the loan taken by borrower.
4. Loan acceptance charge: After completing all process, the bank decides to provide loan to the loan proponent. According to this decision, the bank opens an account in the name of the borrowers, deposit the proposed loan in it. Accordingly to the provision of the loan document, borrowers can withdraw the money from the bank. But sometimes, such a situation may be created that the borrower doesn't take the loan after the bank accepts the loan.

### 2.1.14 Method for Collecting Debt (Payment of Debt and Interest)

A bank can collect easily its outstanding principal and interest in time, if it can disburse his amount properly. In other words quality lending is backbone of collection procedure so while providing loan to its customers a banks may sure to collect the distribute loan in time. The appropriate selection of repayment might thought accordingly to the nature of
loan is a challenging part of lending. There are several methodologies facilities extended by bank fro-collecting loan, however, the selection of appropriate loan depend upon the nature of loan, period of loan, and nature of project as well. Based on the banker normally has the following options available for the collection of loan. ${ }^{11}$

## 1. Short Period Loan

Historically, banks have preferred TP make short-term loan to business for nonpermanent addition to their working capital. In the early 50's year bank usually grants self-liquidating loan to business forms to finance the purchase of inventory a finished goods. The lengths of such loan are short period and are subject to make repayments depending upon cash availability with the forms. That is the loan is adjusted from the received of the goods sales.

On the other hand the banks for the operations of business form for short period not extending 1 year also extend working capital funds. The amount of loan is fixed from the manufacture estimate of the maximum amount of funds that will be needed at any point during the period. Such loans are subject to renewal or pay of the entire amount after its maturity. A revolving credit line allows a business customer to borrow up to a prescribed limit, repay all or a portion of the borrowing, and re borrows as necessary until the credit line matures.

## 2. Long Term Loans

The most risky of all business loans are project loans. Project loans are extended for the construction of fixed assets designed to generate a flow of revenue in future. Financing in mines, industries, power plants are some of the examples of the project loans. Project loan may be granted on a recourse basis, in which the lender or the bank can recover its funds from the companies sponsoring the project in the events the project doesn't pay out the loan as planned. On the other side of non-resources basis, the lender takes addition security to cover the loan at the end of maturity if it defaults. In both cases, the bank can take over the project itself to recover the loan.

[^9]Term loan are designed to fund the long and medium term business investment, such as the purchase of equipment or the construction of the physical facilities covering a period longer then one year. Long- term capital funds cannot be raise at short notice. This fund has to be tide up to acceptable proposal and planet and estimated in advance so that the funds in the required quantum are available in schedule. Usually, the borrower applies for a lump sum loan based other budgets cost of it purpose project and then pledges to repay a loan in series of installment (often payment are made quarterly or semester depending upon the convenience of the both parties). Therefore, term loan look to the follow a future earning of the future earning of the business form to amortize and retied the credit. The schedule of installment payment is usually structured with the borrower's normal cycle of cash in follow and out follow firmly in mind at the time of investment while some term loan agreement do not call for repayment of loan principal until the end of the loan period. In a bullet loan, one-day interest is paid periodically, with the full principal is paid when loan matures.

Every term loan has a fixed repayment schedule which can be extended only under exceptional circumstances a long tem borrow can repay his loan before maturity but then he will required to pay penal interest charge. Repayments are in annual or in periodical installment. The amortization schedule may prescribe equal installment plus interest or equal installment covering principal and interest or equal installments covering principal and interest. Interest is charged on declining balances; the payments have to be completed in any case before the expiry of the useful life cycle. All these types have been discussed below. ${ }^{12}$
a. Bullet payment method:
b. Balloon payment method
c. Amortization method.

[^10]
### 2.2 Review of Previous Studies

In this section, the previous studies, related to loan management, have been reviewed. This section has been divided in two sections. The first section reviews journals and articles and the second sections reviews the Master's Degree Thesis.

### 2.2.1 Review of Journals and Articles

Article Entitled, "Fifteen hundred borrowers in Blacklist of Bank" written by Ramchandra Bhatta taken from Nepal Samachar Patra states that NRB has registered one thousand five hundred and thirty eight (1538) borrowers who have repaid the loan the y received from the fifteen major commercial Banks of the country is Black listed.

The Black listed number of borrowers and the amount of different commercial banks are reported below:

| Banks | No. of Blacklisted Borrowers | Amount Due from them ('Million) |
| :---: | :---: | :---: |
| RBB | 546 | 5516.66 |
| NBC | 673 | 3904.47 |
| HBL | 57 | 383.04 |
| NBBL | 45 | 217.23 |
| NABIL | 32 | 229.3 |
| BOK | 17 | 116.15 |
| NSBIBL | 26 | 102.96 |
| NIBL | 17 | 56.05 |
| EBL | 9 | 33.89 |
| NCCBL | 19 | 32.38 |
| SCBNL | 4 | 19.13 |
| NICBL | 2 | 7.19 |
| LBL | 2 | 0.64 |

(Bhatta, Dec 6, 2002)

Koirala (2006), in his well read article, "Credit Culture of Commercial Banks in Nepal", has concluded that the unorganized moneylenders in Nepal never loose. They used to assess the record of accomplishment of potential borrowers and innocent characters termed as the best borrower. The bank, on the other hands, is an institution established to
support and improves development process of a nation. The politicians and the staff have been responsible for the existence of huge volume of NPA in state-owned commercial banks. In order to improve the situation, the re is a need to evolve a more acceptable working system backed by cooperation and realization by the banks employees as well as the politician and stakeholders, who an influence in banks operation.

Pyakurel (2006), has made a study on loan" Loan Disbursement and Recovery of Nepal Bank Limited", with the objective to see loan disbursement process, to analyze the condition of loan recovery and to see the efficiency of new management of recovery of loan. For this trend analysis, ratio analysis and correlation and regression analysis have been used. Trend for five years is studied and interpreted Loan Disbursement trend shows that it is decreasing every year. He says that what ever the disbursement process is, profit is not decreasing.

Similarly, he analyzes the priority sector loan into agriculture sector, cottage industry, service, deprive sector and private loan. Although he presents the data of disbursement, collection and outstanding figures are excluded. He found the present disbursement and recovery of NBL is normal. It is able to recover due loan unexpected by the conflict bank reduces many branches and it can not disburse additional loan in priority sector. His opinion is that the new management of NBL is not only effective for collecting over due loan, it is effective in, managing every essential factors of bank. He conclude that bank face a lot of fraud by bad employee in case of loan disbursement, recovery and expenses. His recommendation is related with supervision and inspection. His view is that the same system must be strict, effective and efficient. Loan should be provided with technical facility. Policy should be formulated taking into consideration of geographical features and infrastructure development of the country.

Bhandari (2007), in his well read article," Etiology and Strategy of Loan Repayment", has concluded that lending agencies should adopt several strategies for achieving their target of credit repayment. However, before enforcing coercive actions against
entrepreneur and the enterprise, the banks and the lending agencies should follow a series of liberal strategies for recovering their loans.

Zerith (2008), in her article "Loan Portfolio Management ", affirmed that to manage the loan portfolio, banker must understand not only risk posed by each credit but also how the risks of individual loan and portfolio are interrelated these interrelationship can multiply risks many times beyond what it would be if risk were not related until recently few banks used modern portfolio management concepts to control credit risks, Now, many banks view the loan portfolio in its segments and as a whole and considered the relationship among portfolio segments as well as among loans. These practices provide management with a more complete picture of the banks credit risk profile and with more tools to analyze and control the risk.

Zertith further concluded that effective loan portfolio management begins with oversight of the risk in individual loans. Prudent risk selection is vital to maintain favorable loan quality. Therefore, the historical emphasis on controlling the quality of individual loan approvals and managing the performance of loan continues to be essential. But better technology and information system have opened the door to better management methods. A portfolio manager can now obtain indications of increasing risks by taking more comprehensive view of the loan portfolio.

### 2.2.2 Review of Earlier Studies and Thesis

Nepal Bank Limited is the state owned commercial bank of Nepal. There are many studies related with Commercial bank. A few studies were conducted on the NRB role to develop the commercial banks and related to the NRB Directives, Credit management, lending practices, investment policy, loan loss provisioning and classification of the loan.

Shrestha (2004) has conducted a study on "Loan Management of Agriculture Development Bank" His research objectives are:

- To examine loan disbursement and collection procedure of ADB
- To evaluate the trend of loan investment and collection
- To shows the achievement of purpose wise, term and development region wise loan disbursement, outstanding and collection of ADB.


## Major Findings

- Finding from loan disbursement, the total loan investment of the developing financing increase from Rs. 4.43 billion in 2055/056 to Rs. 8.86 billion in 2059/060 registering an annual growth trend of 12.9 percent.
- From loan collection, total collection of the development financing increased from Rs. 305 billion in 2055/056 to Rs. 6096 billion in 2059/060 with annual growth of 120.8 percent.
- The total outstanding loan of the development financing increased from Rs. 9.76 billion to Rs. 16.67 billion in same period annual growth of Rs. 10.3 percent.
- Average loan collection to outstanding is strong in western region compared to the other region but weak in eastern, mid and far western region; whereas a average collection of loan to disbursement is stranger in western region and weak in far western region.

Gautam (2006) has submitted thesis named "Investment Analysis of Finance Company" to Tribhuvan University. Her research objectives relevant to mine research are:

- An analysis of the loan and advances of finance companies.
- An analysis of the interest rate structure loans.
- An analysis of the repayment of loans.

Her findings contextual to right research are as follows:

- The major source of fund of finance goes loan and advances with the range of $53 \%$, $65 \%$ and $75 \%$ as minimum, average and maximum.
- There are 38 companies having investment on housing loan use of fund towards housing loan is almost linear except for the year 1994.
- Except one company all other companies have investment on term loan and use of fund towards the term loan is gradually increasing.
- There are only 3 companies having investment on lease loan.
- The other areas of investment are merchant banking, loan against fixed deposit and other loans. Almost all companies have merchant banking.
- The interest rate structure of loan and advances of almost all companies are same and very from $17 \%$ to $20 \%$ with around $20 \%$ as an average. Recent interest rate is $18 \%-20 \%$.
- As the direct data of good and bad loan was not available, the loan loss provision used to analyze the loan quantity. Loan loss is increasing every year significantly and should be controlled.
- The loan loss provision of some of the company is more loan loss provision should rethink on their investment and repayment policy.

Thapa (2006) has studied about "The Human Resources of Nepal Bank Limited" and his recommendations were as follows:

- One of the key factors of the human resources development is the training for the employees. The need of the training should be assessed on the basis of their work nature.
- In the policy of the bank, there is a provision that an individual can not participated in training program twice while they are of same level. Here is the concept of the HRD shows a conflict; therefore, the conflict between the theoretical concept and practice should be adjusted in the training policy of the bank.
- For the development of the human resources there should be a proper manpower planning. In Nepal Bank Limited manpower planning policy has not been adopted yet. Therefore, there should a policy of proper manpower planning in the bank.
- Training should be focused on more specific areas e.g. international banking, credit management, banking planning and management, research methodology and modern technology of communication.
- Equal opportunity should be provided to all staff for the training. For this, the trading programs should be categorized into short term and long term training programs and should be provided to all staff as per their requirement and interests.

Pradhan (2007) in the work "A study on the resources mobilization and Utilization of Nepal Bank Limited ", he made an evaluation with an emphasis on resources mobilization potentially along with their utilization. The study covered a period of 10 years (1970 to

1979 B.S.). From the study, he found that the deposit increase year by year. During the period he found the deposit increased by 5 times, 7 times, and 9 times under current accounts, saving account and fixed deposit account respectively. He also reported that total utilization of resources of the bank has upturned by 6 times. In the process of analysis, he took the help of trend line analysis and testing correlation of few variables. He concluded his study revealing the fact that the bank has more than $25 \%$ of idle resources; the profit ratios has decreased with increased in the cost of operation. However, the efficiency in the mobilization of resources and in the utilization side, the bank has been able to utilize $74.5 \%$ on the average of total resources. He recommended that Nepal Bank Limited should extend the credit for the long term period along with short and medium term period. In order to collect resources, he suggests opening branches in rural areas to add facilities to the depositors and to level up to the marketing and publicity.

## Investment Practice of Nepal Bank Limited

Pradhan (2007) a study on "Investment Policy of Nepal Bank Limited" was designed to show the relationship of deposits of Nepal Bank Limited with their lending activities. The study covered a period a period of 6 years (1972 to 1977 B.S). He found that increase in deposits of the bank lead to increase in the loan and advances but it is not in proportionate manner. He also found that immense increase in the deposit could not proportionately increase in investment. He further stated that the main reason for decrease in loan and advances was due to the increase in interest rate. He recommended that the lending policy of the bank should not be security mined while approving loan. The bank must take some risk while granting the loan and advances. He also suggested that abolition of lengthy process of advancing loan and adoption of clear- cut policy of loan so that the borrowers feel grater convenience and facilities to get loan in short period. He also suggested the bank to expand its operation to the rural areas by opening more branches.

## Challenges Face

Pradhan (2007) in a study "Nepal Banijya Bank Upalabdhi Tatha Chaunatui" the writer has pointed out some major issues in our local commercial banks against foreign joint venture banks. The study focused the completely commercial banking system in Nepal in respect of their performances and profitability.

## His Major Findings were:

The deposit collection rate of local banks is very poor as compared to foreign joint venture banks. The annual average deposit collection rate of local banks in $17.9 \%$ between the years 1985 to 1989 B.S. whereas the same of foreign joint venture bank is $79.7 \%$ between the year 1987 and 1989.

The pattern of deposit is also different between these two types of commercial banks. The ratios of current deposit in local banks are $19.34 \%$ only whereas the same in the foreign joint venture bank. This reduces the profit margin of local banks.
The foreign joint venture banks are in better position than local banks in profit making. In average, no foreign bank has suffered till now. But local banks have earned negative profits two times during the study period. In 1988, the local banks have suffered a loss of $25 \%$ over the year 1987 .

The study has grouped Nepal Bank Limited and Rastriya Banijya Bank under local bank and Nepal Arab Bank Limited, Nepal Grindlays Bank Limited and Nepal Indosuez Bank Limited under joint venture.

Niraula (2008), has conducted research work on topic of "A study on Loan classification \& NPA management of Rastrya Banijya Bank" for partial fulfillment of MBA, submitted to the central development of management, Tribhuvan Univrsity.

## The objectives were:

- To find out loan classification and its impact on the profitability of the bank.
- To study implementation of NRB directives on classification of loans and loan loss provision.
- To study relation between loan classification and loan loss provision.
- To study relation between loan classification and loan loss provision.
- To find out factors affecting to accumulated of non performing assets.


## Major findings

- To analysis of performing loan and advances ratio found slightly improved after the new management team took over the bank.
- New management team has played a vital to reduce the percentage of non performing loan against the total loan and advances.
- From the analysis of loan and advances against the total deposit, it is found that the average ratio of loan and advances has decreased during the research period.
- It is found from the SWOT analysis there many strength factors in RBB like strong management team, strong deposit base, being the largest the largest commercial bank of the country etc. Similarly, poor financial position with negative net worth, low motivated human resources etc are main weakness of the bank. As well high level of NPA, increasing trend of negative net-worth etc are current threat of RBB against the opportunities of maximum use of geographical reach, strong enhancement supporting NPA recovery, extensive international relation.

Manandhar (2010) entitled "Loan management in Rastriya Banijya Bank Limited" for partial fulfillment of MBS, submitted to the faculty of management, Tribhuvan Univrsity.

## The objectives were:

- To evaluate loan investment and loan recovery in relation to loan outstanding.
- To measure the growth rate of loan outstanding, loan recovery and loan investment.
- To analyze the non performing loan of the banks and the provision made for default loan.
- To measure the deposit mobilization rate on loan and advances and the relationship of loan and advances with net profit.
- To estimate the value of loan and advances for the next four year periods.


## Major findings

- Since the loan investment per year represented only $12.79 \%$ of the total loan outstanding in average, it can be said that RBB necessitates strong recovery policy to decrease the outstanding amount.
- The average collection for the ten year was $6.04 \%$ of the total loan outstanding. It also indicates that RBB needs strong recovery policy.
- Almost two third of the deposit had been mobilized in granting loan and advances. The deposit mobilization rate of RBB on loan was $61.83 \%$ in average.
- The trend value indicated that loan and advances decreases by Rs. 38.09 millions, total deposit increases by Rs. 3094.18 millions, total investment increases by Rs. 1405.36 millions, non performing loan decreases by Rs. 1076.69 millions, and net profit increases by Rs. 968.44 millions in each forthcoming fiscal year.
- Further the majority of the respondents, $60 \%$, are satisfied in the mortgage valuation done by bank. Also, same percentage, $60 \%$, has stated that related specialist should be involved in mortgage valuation rather than bank staff and independent person.
- The majority of the respondents, $63 \%$, have opined that $10-20$ days will be the appropriate time to disburse loan after the bank receives application.
- In ranking the most influencing factor in loan disbursement, interest rate chargeable got rank 1, while collateral value got rank 2. Thus, interest rate of the bank is the most influencing determinants of loan. Eventually, the respondents have suggested that careful evaluation of the loan proposal before granting loan.


### 2.3 Critical Summary

Bank is one of the main pillars of the economy. It is not only deals with money but also it is linked with economic development of the country by utilizing resources and creating employment. Banks transfer money resources from server to users. The activities of commercial banking sectors have contributed to reduce poverty and reduce unemployment. NBL was established in order to enhance economy in $13^{\text {th }}$ Kartik, 1994 with the Capital of 12.5 millions. Now about $59.51 \%$ of its share is issued to general public whish is according to the government policies.

The main objective of this thesis is to know loan disbursement and recovery system of NBL. During loan disbursement it scans creditworthiness of creditors. The loans are disbursement in various sectors at different interest rates. The major factor for making different interest rate for loan is to reduce risk of recovery. Different strategies are also followed to recover bad debt.

### 2.4 Research Gap

Loan management and recovery is increasing challenge face by Nepal Bank Limited so, it one of the important of fund utilization in commercial Banks. Loan management is an important function of banking and financial institutions. This is the function which helps to collect major portion of profit of any commercial banks. In other words, there is no chance to success of every commercial bank without the proper management of credit. High competition occurs in today era.

To complete this thesis help from different people is taken. Although in this due courses, there are still some problems faced. Some of the obstacles named as research gap are listed as bellows

- Latest data could not collect so the thesis is based on data one year prior.
- The actual condition of the recovery can't be trace as the proper documents were not available (i.e. cash recovery, restructures etc)
- Actual condition of the bank is not told by the employees

The researcher has made an attempt to analyze the loan disbursement and recovery of NBL with latest information from 2061/62 to 2065/66. This make the study the latest version, with these bank which is the research gab of the study.

Thus to fulfill such gab, the present study embraces both the primary and secondary data. Further, the study makes relationship of loan and advances with financial indicators and makes trend analysis of loan and advances.

### 2.5 Justification

Although we can not place NBL in top position of commercial banks in Nepal, the condition is also not dissatisfactory. It is doing progress from latest few years. It is doing progress from last few years. It can take time to recover previous losses but we still have hope towards it because there is no doubt that NBL is only bank of Nepal which has its branches over remote areas and also making life easier to the people of rural area.

## CHAPTER - III

## RESEARCH METHODOLOGY

### 3.1 Introduction

The basic objective of this study is to highlight the disbursement and collection procedure and to explain the causes of delayed payment from borrowers of Nepal Bank Limited. For systematic analysis of related data and information proper research methodology is necessary. Research methods help to analyze, examine and interpretation of data and information in research work.

The sole objective of this study is to examine and to analyze the loan management (i.e. loan disbursement and recovery) of Nepal Bank Limited and to provide recommendation for their financial improvement. Research design, nature and source of data, period covered, research variables, sample and method of data analysis are incorporated under this chapter.

### 3.2 Research Design

The crux of this research is to analyze the soundness of Nepal Bank Limited in relation to loan disbursement, collection as well as recovery. Research design is the plan structure and strategy to obtain answer to research question through investigation and analysis. Research design is the task of defining the research problem. In other words "A research design is the arrangement of conditions and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure" The research design of this is descriptive as well as analytical. This available information's form primary and secondary source are used to examine, explain and evaluate the disbursement and collection situation of Nepal Bank Limited.

## i. Descriptive Analysis

Descriptive research design will be adopted in fulfilling the objective of this study. It is tough to study the principle causes arising from borrowers' side and quantify them in relation to the weak repayment performance of Nepal Bank Limited.

## ii. Statistical Tools Analysis

It shows the light trends situation of loan disbursement, collection and recovery from F.Y 2058/59 to 2061/2062. Karl Pearson's Coefficient of correlation is used to analyze the relationship between total deposits and loan and advances. Average, Percentage, graph, chart and diagrams and hypothesis are included.

### 3.3 Nature and Sources of Data

Both primary and secondary source data have been collected in order to achieve the real and factual data as far as available.
a. Primary source of data: Primary data are basically based on supplementary questionnaire as well as oral information from department employees to executive. Unstructured dialogs and discussion is also helpful for this purpose.

Ten persons of office and branches (related to loan head)of Nepal Bank Limited and client who have not cleared their loan are used to acquire primary data for right venture. Questionnaires are distributed to concern and then responses are collected for study.
b. Secondary source of data: Secondary data are information received from Books, Journals, newspapers, reports, dissertations etc. The major sources are:

- Financial statement and research paper of Nepal Bank Limited.
- Annual Report
- 'Nepal Bank Limited at glance' published by Nepal Bank Limited.
- Economic survey of HMG, Ministry of Finance.
- NRB Directives.
- -Central Bureau of statistics
- -Research report related to Nepal Bank Limited.


### 3.4 Population and Sample

At present, altogether there are all total 106 branches of Nepal Bank Limited is operating in Nepal. Under Kathmandu office there are 28 branches, Birgunj 16, Pokhara 19, Biratnagar 28, and Nepalgunj 15. All of these branches are focused in proving loan to their clients. Hence, loan disbursement and recovery of Nepal Bank Limited from

2058/59 to 2061/62 are available for study. This data are taken as sample for study, since it is time- consuming and cumbersome to census the whole population. All Nepal Bank Limited data published by Nepal Rastra Bank for the study period is taken as population of the study.

### 3.5 Data Collection Procedure

As the study will also be based on primary data, information will be collected developing a scheduled questionnaire and distributing these to employees of Nepal Bank Limited. (i.e. managers, credit controller and finance chief and juniors) and loan paying clients who will be more reliable. Question is open end (i.e. Yes/ No).

Beside this, junior's employees and client are also being observed and responses have been drawn from them about relevant questionnaires.

In case of primary data collection, selected clients of loan paying group are taken as sample for study using systematic random sampling taking 10 as interval from namelisted of borrowers (Loan takers) clearly stating unsettled and settled loans. Then from these selected clients again $50 \%$ are selected randomly after shuffling to distribute. Acquires answers to the right study from those selected clients are then used for the purpose of analysis.

Analysis of Responses to Questionnaire by Employees of NBL
Answers obtained from questionnaire send to 10 employees of NBL are portrayed herein.
Table 3.1
Frequencies of Responses from employees of Nepal Bank Limited

| Issues (Particulars) | Total |  | Yes |  | No |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\%$ | No. | $\%$ | No. | $\%$ |
| NRB related problems | 10 | $100 \%$ | - | - | 10 | $100 \%$ |
| Problems related to loan subscription | 10 | $100 \%$ | 5 | $50 \%$ | 5 | $50 \%$ |
| Problems related to deposit collection | 10 | $100 \%$ | 1 | $10 \%$ | 9 | $90 \%$ |
| Problems related to customers | 10 | $100 \%$ | 3 | $30 \%$ | 7 | $70 \%$ |
| Customer satisfaction with Nepal Bank <br> Limited | 10 | $100 \%$ | 9 | $90 \%$ | 1 | $10 \%$ |
| Problem related to flow of loan | 10 | $100 \%$ | - | - | 10 | $100 \%$ |
| Opinion about pricing of interest rate <br> charged on loan | 10 | $100 \%$ | 6 | $60 \%$ | 4 | $40 \%$ |
| Offer of incentives to employees by Nepal <br> Bank Limited | 10 | $100 \%$ | 10 | $100 \%$ | - | - |
| Emphasis on single factor while giving loan | 10 | $100 \%$ | - | - | 10 | $100 \%$ |
| Regular information about collateral <br> accepted | 10 | $100 \%$ | 7 | $70 \%$ | 3 | $30 \%$ |
| Fund based loan beneficial or not | 10 | $100 \%$ | 10 | $100 \%$ | - | - |
| Correctness of process involved in <br> recovering due loan | 10 | $100 \%$ | 9 | $90 \%$ | 1 | $10 \%$ |
| Obeying of NRB directive sincerely | 10 | $100 \%$ | 10 | $100 \%$ | - | - |
| Necessity to amend loan policy of NBL' <br> and NRB directive | 10 | $100 \%$ | 8 | $80 \%$ | 2 | $20 \%$ |

Table 3.1 shows the frequencies and percentage of employees responding to given questionnaires.

Analysis of Responses to Questionnaires by Loan paying clients of NBL:
Table 3.2
Frequencies of Responses from Loan Paying Clients of NBL

| Issues (Particulars) | Total |  | Yes |  | No |  | No idea |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\%$ | No. | $\%$ | No. | $\%$ | No. | $\%$ |
| Information about NBL <br> before taking loan | 10 | $100 \%$ | 10 | $100 \%$ | - | - | - | - |
| Correctness of lending policy <br> of Nepal bank | 10 | $100 \%$ | 5 | $50 \%$ | 4 | $40 \%$ | 1 | $10 \%$ |
| Feasibility of interest rate <br> charge on loan and advances | 10 | $100 \%$ | 7 | $70 \%$ | 3 | $30 \%$ | - | - |
| Rebate and discount on <br> processing of loan | 10 | $100 \%$ | 8 | $80 \%$ | 2 | $20 \%$ | - | - |
| Utilization of whole amount <br> of loan | 10 | $100 \%$ | 10 | $100 \%$ | - | - | - | - |
| Relevance of service charge | 10 | $100 \%$ | 4 | $40 \%$ | 6 | $60 \%$ | - | - |
| Toughness and Length of <br> lending process | 10 | $100 \%$ | 60 | $60 \%$ | 4 | $40 \%$ | - | - |
| Verification of property kept <br> as collateral | 10 | $100 \%$ | 10 | $100 \%$ | - | - | - | - |
| Tediousness of repayment <br> process | 10 | $100 \%$ | 1 | $10 \%$ | 8 | $80 \%$ | 1 | $10 \%$ |
| Financial position has <br> strengthen from loan or not | 10 | $100 \%$ | 3 | $30 \%$ | 5 | $50 \%$ | 2 | $20 \%$ |
| Is NBL more preferable | 10 | $100 \%$ | 6 | $60 \%$ | 3 | $30 \%$ | 1 | $10 \%$ |
| Happy with lending process <br> of NBL | 10 | $100 \%$ | 5 | $50 \%$ | 5 | $50 \%$ | - | - |
| Suffer from fluctuating <br> interest rate of NBL. | 10 | $100 \%$ | 2 | $20 \%$ | 8 | $80 \%$ | - | - |
| Satisfied with the behavior <br> of employee of Nepal Bank <br> Limited | 10 | $100 \%$ | 9 | $90 \%$ | - | - | 1 | $10 \%$ |
| Willingness to keep on <br> transaction with Nepal Bank <br> Limited | 10 | $100 \%$ | 8 | $80 \%$ | 2 | $20 \%$ | - | - |

Table 3.2 shows the frequencies and percentage of client responding to given questionnaires.

### 3.6 Method of Data Analysis

Any statistical tools can be used in solving the problem of the study. For the purpose of the study, all collected primary as well as secondary data are arranged, scanned, tabulated under various heads and then after descriptive cum statistical analysis have been carried out to enlighten the study.

Mean, standard deviation, correlation, coefficient of variation, hypothesis are being calculated under statistical analysis. Hypothesis is especially tested to prove the significance of the study. "Financial analysis is the starting point for making plans before using any sophisticated forecasting and budgeting procedures. Hence, ratio analysis is used under financial analysis to attain the result after the data.

### 3.6.1 Ratios Analysis

A ratio is a quotient of two mathematical expressions. Establishing of quantitative relation of data furnished by the financial statement is called ratio analysis. In other words, a financial ratio uses the mathematical expression of relationship of two accounting figures. It helps in taking decision since it help to establish relationship among various ratios and interpretation thereon. Inter firm comparison between past and present ratio for same form give enormous and fruitful result to test financial performance. One other has said that to evaluate the financial condition and performance of firm, the financial analysis needs certain yardsticks. The yardsticks frequently used are ratio or index relating two pieces of financial data of each other. Analysis and interpretation of various ratios should give experience, skill analyzed better understanding of financial condition and performance of the firm then they would option from analysis of the financial data alone. As synopsis, "A single ratio in itself doesn't indicate favorable or unfavorable condition. IT should be compared with some standard"

Ratio analysis isn't just comparing different numbers from the balance sheet, income statement, and cash flow statement. It's comparing the number against previous years, other companies, the industry, or even the economy in general. Ratios look at the
relationships between individual values and relate them to how a company has performed in the past, and might perform in the future.

- Profitability Ratio
- Liquidity Ratio
- Activity ratio


## Leverage Ratio

This Debt/Worth or Leverage Ratio indicates the extent to which the business is reliant on debt financing (creditor money versus owner's equity):
Debt/Worth Ratio $=\frac{\text { Total Liabilities }}{\text { Net Working Capital }}$

## Gross Margin Ratio

This ratio is the percentage of sales dollars left after subtracting the cost of goods sold from net sales. It measures the percentage of sales dollars remaining (after obtaining or manufacturing the goods sold) available to pay the overhead expenses of the company.

Comparison of your business ratios to those of similar businesses will reveal the relative strengths or weaknesses in your business. The Gross Margin Ratio is calculated as follows:

Gross Margin Ratio $=\frac{\text { Gross Profit }}{\text { Net Sales }}$
Reminder: Gross Profit $=$ Net Sales - Cost of Goods Sold

## Net Profit Margin Ratio

This ratio is the percentage of sales dollars left after subtracting the Cost of Goods sold and all expenses, except income taxes. It provides a good opportunity to compare your company's "return on sales" with the performance of other companies in your industry. It is calculated before income tax because tax rates and tax liabilities vary from company to company for a wide variety of reasons, making comparisons after taxes much more difficult.

The Net Profit Margin Ratio is calculated as follows:
Net Profit Margin Ratio $=\frac{\text { Net Profit Before Tax }}{\text { Net Sales }}$

## Inventory Turnover Ratio

This ratio reveals how well inventory is being managed. It is important because the more times inventory can be turned in a given operating cycle, the greater the profit. The Inventory Turnover Ratio is calculated as follows:

Inventory Turnover Ratio $=\frac{\text { Net Sales }}{\text { Average Inventory at Cost }}$

## Account Receivable Turnover Ratio

This ratio indicates how well receivables accounts are being collected. If receivables are not collected reasonably in accordance with their terms, management should rethink its collection policy. If receivables are excessively slow in being converted to cash, liquidity could be severely impaired. Getting the Accounts Receivable Turnover Ratio is a two step process and is calculated as follows:

Daily Credit Sales $=\frac{\text { Net Credit Sales Per Year }}{365(\text { Days })}$
Accounts Receivable Turnover (in days) $=\frac{\text { Accounts Receivable }}{\text { Daily Credit }}$

## Return on Assets Ratio

This measures how efficiently profits are being generated from the assets employed in the business when compared with the ratios of firms in a similar business. A low ratio in comparison with industry averages indicates an inefficient use of business assets. The Return on Assets Ratio is calculated as follows:

Return on Assets $=\frac{\text { Net Profit Before Tax }}{\text { Total Assets }}$

## Return on Investment (ROI) Ratio

The ROI is perhaps the most important ratio of all. It is the percentage of return on funds invested in the business by its owners. In short, this ratio tells the owner whether or not all the effort put into the business has been worthwhile. If the ROI is less than the rate of return on an alternative, risk-free investment such as a bank savings account, the owner may be wiser to sell the company, put the money in such a savings instrument, and avoid the daily struggles of small business management. The ROI is calculated as follows:

## Net Profit Margin Ratio

This ratio is the percentage of sales dollars left after subtracting the Cost of Goods sold and all expenses, except income taxes. It provides a good opportunity to compare your company's "return on sales" with the performance of other companies in your industry. It is calculated before income tax because tax rates and tax liabilities vary from company to company for a wide variety of reasons, making comparisons after taxes much more difficult. The Net Profit Margin Ratio is calculated as follows:

Net Profit Margin Ratio = Net Profit Management Ratios

### 3.6.2 Tools Used in Research

Collected data and information from different sources are analyzed and presented in proper tables, chart, format and graphs. To analyze the collected data some financial and statistical tools have been used as per requirements like trends analysis, ratios analysis and correlation.

## Statistical Tools Used

For supporting the study, statistical tools such as mean (average), Standard deviation, correlation, coefficient of variation, hypothesis and diagrammatic cum pictorial tools have been used under it.

## Arthimatic Mean (Average)

"Average is statistical constraints which enables us to comprehend in a single effort the significance of the whole." (S.C Gupta "Fundamental of Statistic" 2000: 357). Arthimatic

Mean represents the entire data by a single value. It provide the gist and gives the bird's eye view of the huge mass of unwieldy numerical data. It is calculated as:

$$
\begin{aligned}
& \overline{\mathrm{X}}=\frac{\sum \mathrm{x}}{\mathrm{~N}} \\
& \overline{\mathrm{X}}=\text { Mean value or Arthimatic Mean } \\
& \mathrm{N}=\text { Number of obseravation } \\
& \Sigma \mathrm{X}=\text { Sum of observation. }
\end{aligned}
$$

## Standard Deviation

The standard deviation is measured in the same units as the values of the population. For a population of distances in meters, the standard deviation is also measured in meters, whereas the variance is measured in square meters.

Standard deviation is the most common measure of statistical dispersion, measuring how spread out the values in a data set, If the data points are all close to the mean, then the standard deviation is close to zero. If many data points are far from the mean, then the standard deviation is far from zero. If all the data values are equal, then the standard deviation is zero.
$\sigma=\sqrt{\frac{1}{N} \sum_{i=1}^{N}\left(x_{i}-\bar{x}\right)^{2}}$

In other words, the standard deviation of a discrete uniform random variable $X$ can be calculated as follows:

1. For each value $x_{i}$ calculate the difference $\left(\mathrm{x}_{\mathrm{i}}-\overline{\mathrm{x}}\right)$ between $x_{i}$ and the average value $\overline{\mathrm{x}}$.
2. Calculate the squares of these differences.
3. Find the average of the squared differences. This quantity is the variance $\sigma^{2}$.
4. Take the square root of the variance.

## Coefficient of Variation

The coefficient of variation is a dimensionless number that allows comparison of the variation of populations that have significantly different mean values. It is often reported as a percentage (\%) by multiplying the above calculation by 100 .

The coefficient of variation (CV) is a measure of dispersion of a probability distribution. It is defined as the ratio of the standard deviation $\sigma$ to the mean $\mu$ :

$$
\mathrm{C}_{\mathrm{v}}=\frac{\sigma}{\sigma}
$$

The standard deviation of an exponential distribution is equal to its mean, so its coefficient of variation is equal to 1 . Distributions with CV $<1$ (such as an Erlang distribution) are considered low-variance, while those with $\mathrm{CV}>1$ (such as a hyperexponential distribution) are considered high-variance. Some formulas in these fields are expressed using the squared coefficient of variation, often abbreviated SCV.

## The Correlation Analysis

Correlation is the measure of relationship between two or more characteristics of a population or sample. It simply measures the change between the phenomenon. The correlation coefficient between two variables describes the degree of relationship between those two variables. It measures the increase and decrease in one variable due to increase or decrease in other variables. Simply stated, correlation is a statistical tools with the help of which we can determine whether two or more variables are correlation analysis describes the relationship between variables i.e. positive and negative. It helps to determine the following:

- A positive or negative relationship exists.
- The relationship is significant or insignificant
- Establish cause and effect relation if any

Karl Pearson's method, popularly known as Pearson coefficient of correlation is most widely used in practice. The Pearson coefficient of correlation is denoted by the symbol of ' r ' and is calculated as follows:

$$
\mathrm{rxy}=\frac{\mathrm{n} \sum \mathrm{xiyi}-\sum \mathrm{xi} \sum \mathrm{yi}}{\sqrt{\mathrm{n} \sum \mathrm{x}_{\mathrm{i}}^{2}-\left(\sum \mathrm{x}_{\mathrm{i}}\right)^{2}} \sqrt{\mathrm{n} \sum \mathrm{y}_{\mathrm{i}}^{2}-\left(\sum \mathrm{y}_{\mathrm{i}}\right)^{2}}}
$$

where $\bar{x}$ and $\bar{y}$ are the sample means of $x_{i}$ and $y_{i}, s_{x}$ and $s_{y}$ are the sample standard deviations of $x_{i}$ and $y_{i}$ and the sum is from $i=1$ to $n$. As with the population correlation, we may rewrite this as

Where ' r ' is the coefficient of correlation and N the niumber of observation.

- If the value is $r$ is more than six times the probable error the coefficient of correlation is practically certain, i.e. the value of $r$ is not at all significant.
- If the value is $r$ is more than six times the probable error the coefficient of correlation is practically certain, i.e. the value of $r$ at all significant.
- If the value of correlated coefficient is greater than six times the value of probable Error, the correlation of coefficient is as significant and reliable.
- If the value of correlation coefficient is less then the probable Error, the correlation coefficient is said to be insignificant and there is evidence of correlation.

The statistical tool correlation analysis is used in the study to measure the relationship between variables in determining whether the relationship is significant or not.

For the purpose of decision making interpretation are based on the following terms:
When, $\mathrm{r}=1$, there is perfect positive correlation.
When, $r=-1$, there is perfect negative correlation.
When, $r=0$, there is no correlation.
When, 'r' lies between 0.7 to .99 ( -0.7 to -0.999 , there is high degree of positive or negative correlation.

When, 'r' lies between 0.5 to .699 there is moderate degree of correlation.
When, 'r' is less than 0.5 there is low degree of correlation.

## 2. Probable Error (P.E) of Correlation Coefficient

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error it is possible to determine the reliability of the value of coefficient in so far depends on the conditions of random sampling. It used in interpretation whether the calculated value of ' $r$ ' is significant or not (Bajracharya, 2065).

The probable error of the coefficient of correlation is obtained as follows:

$$
\text { P.E } r=0.6745 \times \frac{1-\mathrm{r}^{2}}{\sqrt{\mathrm{~N}}}
$$

i. If $\mathrm{r}<$ P.E., it is insignificant, so, perhaps there is no evidence of correlation.
ii. If $\mathrm{r}>6 \mathrm{P}$.E., it is significant in other cases nothing can be concluded.

### 3.7 Hypothesis Testing

It is dubbed as "An idea or suggestion that is based on known facts and used as a basis for reasoning or further investigation" (Hornsby, 1997: 586) The theory of testing hypothesis was initiated by J. Newman and F.S Pearson and employs statistical technique to arrive at decision in certain situation where is an element of uncertainty on the basis of a sample of same whose size is fixed in advance (Gupta,1992: 117).

Here t-test (i.e. small sample test) is carried out as sample size is smallest then 30 (i.e. 5). Single man test is applied herein to know the validity of assumption. T-test (Single mean) is being used as sample taken is for 5 years of only one company (i.e. Nepal Bank Limited)

Setting up and testing hypotheses is an essential part of statistical inference. In order to formulate such a test, usually some theory has been put forward, either because it is believed to be true or because it is to be used as a basis for argument, but has not been proved, for example, claiming that a new drug is better than the current drug for treatment of the same symptoms.

In each problem considered, the question of interest is simplified into two competing claims / hypotheses between which we have a choice; the null hypothesis, denoted H0, against the alternative hypothesis, denoted H1. These two competing claims / hypotheses are not however treated on an equal basis; special consideration is given to the null hypothesis. We have two common situations:

1. The experiment has been carried out in an attempt to disprove or reject a particular hypothesis, the null hypothesis, thus we give that one priority so it cannot be rejected unless the evidence against it is sufficiently strong. For example, H 0 : there is no difference in taste between coke and diet coke against H 1 : there is a difference.
2. If one of the two hypotheses is 'simpler' we give it priority so that a more 'complicated' theory is not adopted unless there is sufficient evidence against the simpler one. For example, it is 'simpler' to claim that there is no difference in flavor between coke and diet coke than it is to say that there is a difference.

The hypotheses are often statements about population parameters like expected value and variance, for example H 0 might be that the expected value of the height of ten year old boys in the Scottish population is not different from that of ten year old girls? A hypothesis might also be a statement about the distributional form of a characteristic of interest, for example that the height of ten year old boys is normally distributed within the Scottish population?

The outcome of a hypothesis test is 'reject H0' or 'do not reject H0'.

## Null Hypothesis

The null hypothesis, H0 represents a theory that has been put forward, either because it is believed to be true or because it is to be used as a basis for argument, but has not been proved. For example, in a clinical trial of a new drug, the null hypothesis might be that the new drug is no better, on average, than the current drug. We would write H 0 : there is no difference between the two drugs on average.

We give special consideration to the null hypothesis. This is due to the fact that the null hypothesis relates to the statement being tested, whereas the alternative hypothesis relates to the statement to be accepted if / when the null is rejected.

The final conclusion once the test has been carried out is always given in terms of the null hypothesis. We either 'reject H 0 in favor of H 1 ' or 'do not reject H 0 '; we never conclude 'reject H1', or even 'accept H1'.

If we conclude 'do not reject H 0 ', this does not necessarily mean that the null hypothesis is true, it only suggests that there is not sufficient evidence against H 0 in favor of H 1 ; rejecting the null hypothesis then, suggests that the alternative hypothesis may be true

## Alternative Hypothesis

The alternative hypothesis, H1, is a statement of what a statistical hypothesis test is set up to establish. For example, in a clinical trial of a new drug, the alternative hypothesis might be that the new drug has a different effect, on average, compared to that of the current drug. We would write H 1 : the two drugs have different effects, on average. The alternative hypothesis might also be that the new drug is better, on average, than the current drug. In this case we would write H1: the new drug is better than the current drug, on average.

The final conclusion once the test has been carried out is always given in terms of the null hypothesis. We either 'reject H 0 in favor of H 1 ' or 'do not reject H 0 '; we never conclude 'reject H1', or even 'accept H1'.

If we conclude 'do not reject H 0 ', this does not necessarily mean that the null hypothesis is true, it only suggests that there is not sufficient evidence against H 0 in favor of H 1 ; rejecting the null hypothesis then, suggests that the alternative hypothesis may be true.

Where Test Statistic is as follows:
$\mathrm{tcal}=\frac{\overline{\mathrm{x}}-}{\frac{\mathrm{S}}{\sqrt{\mathrm{n}-1}}}$

Whereas
$x^{\prime}=$ sample mean
$\mu=$ population mean
S = S.D of sample
$\mathrm{n}=$ Number of sample

- Looks at 5\% level of significance at 4 degree of freedom (n-1 or $5-1=4$ two tailed test test. t cal $=2.776$ )
- Since tcal < ttab, H0 is accepted or as tcal>, H1 is accepted(i.e H 0 is rejected).


## CHAPTER - IV PRESENTATION AND ANALYSIS OF DATA

### 4.1 Introduction

This chapter deals with the analysis and interpretation of data. In the course of analysis data gathered from the various sources have been inserted in the tabular and other form according to their nature.

Our main objective to study is find the disbursement and recovery of loan. To analysis the clear condition about this there are other factors which are closely related to it. Before 2002 Nepal bank was in loss but after new management it began to operate in profit. Profit related to recovery general debts and debts and bad debts. We are going to analyze these all factors especially as follows:

- List square linear trend analysis
- Correlation analysis
- Ratio analysis


### 4.2 Analysis of Loan Management of Loan Disbursement

Loan management of loan disbursement refers to identifying and investing sources of fund in the forms of loan and advances to capitalize prospects opportunities and action for that. Lending money as loan and advances is not just giving alms to the beggars. Hence, it requires wise and rational practices.

## Lending Management

It is process as well as act of managing overall lending activities of loan. It is guided by loan policy of institution itself and side by side NRB Directives to finance companies (2058 B.S). It is also divided into lending practices and procedure, lending ratios (i.e. used to know lending strength of Nepal Bank Limited) and test of hypothesis.

### 4.3 Trends Analysis

Trend analysis reflects the dynamic piece of movement of a phenomenon over a period of time. In the study it is fond that profit, disbursement and recovery is changing every year.

We can find actual increasing or decreasing position by this study. This method is based on the assumption that past tendency continues in the future.

It is computed by using formula
$y=a+b x$
Where
$y=$ the value of depended variables
$a=Y$ - intercept of trend line
$\mathrm{b}=$ slope of trend line/ Coefficient of regression
$x=y e a r$, the value of independent variable
$\mathrm{Y}=$ the value of dependent variable
$\mathrm{N}=$ number of pairs of observation

### 4.4 Trends Analysis of Loan Disbursement

As interest income is major source of income, higher loan yields greater returns. But to get return from disbursement effective is the importance things. The system to get back its interest and its principle in a time is called recovery. All the creditors any and return its debt that time defaulter occur. Before present management in Nepal Bank was followed bad process of loan disbursement. But present management is following good process. By which the bank was unable to recover. In present new management is reducing disbursement in some sectors and increasing in some sector but total disbursement is reducing.

## Table 4.1

Trends of Loan Disbursement
(Rs. '000000)

| S No | Year (X) | Disbursement (Y) | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X}^{*} \mathbf{Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 62$ | 26519.784 | -2 | 4 | -53039.6 |
| 2 | $2062 / 63$ | 25934.161 | -1 | 2 | -25934.2 |
| 3 | $2063 / 64$ | 20416.9 .86 | 0 | 0 | 0 |
| 4 | $2064 / 65$ | 26574.454 | 1 | 2 | 26574.45 |
| 5 | $2065 / 66$ | 26497.16 | 2 | 4 | 52994.32 |
|  |  | $\Sigma \mathrm{Y}=105525.6$ |  | $\Sigma \mathrm{x}^{2}=10$ | $\Sigma \mathrm{XY}=595.04$ |

(Source Annual Report of NBL from year 2061/62 to 2065/66)

Figure 4.1
Total Loan Disbursement


## Where,

$$
\begin{aligned}
& \text { X=2064/2065 } \\
& \Sigma \mathrm{y}=105525.6 \\
& \Sigma \mathrm{x}^{2}=10 \\
& \Sigma \mathrm{xY}=595.04 \\
& \mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=105525.6 / 5 \\
& =21105.11 \\
& \mathrm{~b}=\Sigma \mathrm{xY} / \Sigma \mathrm{x}^{2} \\
& =595.04 / 10 \\
& =59.504
\end{aligned}
$$

It shows that the disbursement is changing each year. The highest disbursement was seen in 2064/2065 with Rs. 26574454000 and lowest in 2062 with Rs. 16867640000 . The increasing trends are steady but at the end of year 2065/2066 again disbursements is decreasing. What ever disbursement is decreasing, it is in correct process so profit is not decreasing.

## Priority Sector Loan

## Agriculture Loan

Agriculture is the backbone of Nepalese economy. A major portion of the economy is contributed by agriculture. Most of the people in rural sectors are depended on this sector so it is important to disburse loan in this sector.

Table 4.2

## Trend Loan Disbursement in Agriculture Sectors

(Rs. in '000000)

| S. No | Year | Disb. in Agriculture | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X}$ *Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 62$ | 278.912 | -2 | 4 | -557.824 |
| 2 | $2062 / 63$ | 119.546 | -1 | 2 | -119.546 |
| 3 | $2063 / 64$ | 116.9442 | 0 | 0 | 0 |
| 4 | $2064 / 65$ | 529.305 | 1 | 1 | 529.305 |
| 5 | $2065 / 66$ | 66.003 | 2 | 2 | 132.006 |
|  |  | $\Sigma \mathrm{Y}=1110.71$ |  | $\Sigma \mathrm{x}^{2}=10$ | $\Sigma \mathrm{xY}=-16.059$ |

(Source: Statistics and Information Centre, NBL, Head office)

$$
\begin{aligned}
& \Sigma \mathrm{Y}=1110.71 \\
& \Sigma \mathrm{x}^{2}=10 \\
& \Sigma \mathrm{xY}=-16.059 \\
& \begin{array}{l}
\mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=1110.71 / 5 \\
\quad=222.142
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
\mathrm{b} & =\Sigma \mathrm{x} Y / \Sigma \mathrm{x}^{2}=-16.059 / 10 \\
& =-1.6
\end{aligned}
$$

Figures 4.2
Agriculture Sectors Loan Disbursement


It shows that the disbursement is very high in year 2063/2064 Rs. 116944200 but its disbursement is very low in year 2065/2066 i.e. 66003000. This is because people are highly attracted in this field agriculture in year 202063/2064 but after due to political instability in country disbursement decline. This is also proved by the recent GDP of the nation. In GDP, the contribution of agriculture loan is seen decreasing.

## Cottage Industry Disbursement

There are lots of natural resources in Nepal. Local people can easily utilize these resources. To utilize these sources Nepal Bank Limited is providing loan for cottage industry like handicraft, cottons, nylon firm etc. If cottage industry is well developed in the country there is no doubt of economic development.

Table 4.3
Loan Disbursement in Cottage Industry
(Rs. in '000000)

| S. No | Year(X) | Disb. in Cottage (Y) | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X}$ *Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 62$ | 159.726 | -2 | 4 | -319.452 |
| 2 | $2062 / 63$ | 276.565 | -1 | 2 | -276.565 |
| 3 | $2063 / 64$ | 657.107 | 0 | 1 | 0 |
| 4 | $2064 / 65$ | 377.37 | 1 | 2 | 377.37 |
| 5 | $2065 / 66$ | 285.40 | 2 | 4 | 570.8 |
|  |  | $\Sigma \mathrm{Y}=1756.168$ |  | $\Sigma \mathrm{x}^{2}=10$ | $\Sigma \mathrm{xY}=352.153$ |

(Source: Statistics and Information Centre, NBL, Head office)
$\Sigma Y=1756.168$
$\Sigma \mathrm{x}^{2}=10$
$\Sigma \mathrm{xy}=352.153$
$\mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=1756.168 / 5$

$$
=351.2336
$$

b= $\Sigma \mathrm{xY} / \Sigma \mathrm{x}^{2}=352.153 / 10$
$=35.2153$
Figure 4.3
Loan Disbursement in Cottage Industry


As the table shows, In first, second and third year disbursement is increased whereas from third year disbursements are decreases rapidly. The highest disbursement is Rs. 657107000 This mean disbursement in cottage industry is due to political instability and people are attracted in other field. Most youth in the country are interested to go abroad, either for the purpose of study or for the purpose of employment. This is due to frequent change in government and political scenario. Although the disbursement is fluctuating, it is in decreasing trend.

## Service Sectors Loan Disbursement

The bank is providing loan in several sector like hotel, hospital, insurance, travel and tourism, finance company. Out of these sector hotel is most loan demanding sectors but these days in Nepal hotel business is in crises. So its sector loan is decreasing. Decreasing trends is due to the people who are interested to go abroad. Unfavorable condition of Nepal like various types political strikes and bands.

Tables 4.4
Loan Disbursement in Service Sector
(Rs. in '000000)

| S. No | Year (X) | Disb. in Service (Y) | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X}$ *Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 62$ | 347.19 | -2 | 4 | -694.38 |
| 2 | $2062 / 63$ | 930.00 | -1 | 1 | -930 |
| 3 | $2063 / 64$ | 758.765 | 0 | 0 | 0 |
| 4 | $2064 / 65$ | 242.938 | 1 | 1 | 242.938 |
| 5 | $2065 / 66$ | 200.119 | 2 | 4 | 400.238 |
|  |  | $\Sigma \mathrm{Y}=2479.012$ |  | $\Sigma \mathrm{X}^{2}=10$ | $\Sigma x \mathrm{Y}=-981.204$ |

(Source: Statistics and information centre, NBL, Head office)

$$
\begin{aligned}
& \Sigma \mathrm{Y}=2479.012 \\
& \begin{array}{l}
\Sigma \mathrm{x}^{2}=10 \\
\Sigma \mathrm{xY}=480738
\end{array} \\
& \begin{array}{l}
\mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=2479.012 / 5 \\
\quad=495.8024
\end{array} \\
& \mathrm{~b}=\Sigma \mathrm{xY} / \Sigma \mathrm{x}^{2}=-981.204 / 10 \\
& \quad=-98.1204
\end{aligned}
$$

Figure 4.4
Loan Disbursement in Service Sector


As the figure show disbursement is low in first year 2061/62 i.e. Rs. 347.19 but at second year 2062/63 its disbursement is very high i.e. Rs. 930000000 but after second year disbursement trend falls steadily. Unfavorable economic condition in Nepal compel there people to go abroad in search of wealth and food.

## Trends of Loan Disbursement in Private Sector

Nepal Bank ltd is providing loan in private sectors such as housing loan, automobile loan, Education loan etc. The purpose of this loan is to strengthen the position of the people.

Table 4.5
Loan disbursement in Private Sector
(Rs. '000000)

| S. No | Year (X) | Disb. in Private sector (Y) | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X} * \mathbf{Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 62$ | 104.294 | -2 | 4 | -208.588 |
| 2 | $2062 / 63$ | 114.149 | -1 | 1 | -114.149 |
| 3 | $2063 / 64$ | 124.241 | 0 | 0 | 0 |
| 4 | $2064 / 65$ | 148.098 | 1 | 1 | 148.098 |
| 5 | $2065 / 66$ | 182.0819 | 2 | 4 | 364.1638 |
|  |  | $\Sigma \mathrm{Y}=672.8639$ |  | $\Sigma \mathrm{x}^{2}=10$ | $\Sigma \mathrm{xY}=189.5248$ |

(Source: Statistics and information centre, NBL, Head office)
$\Sigma \mathrm{Y}=672.8639$
$\Sigma \mathrm{x}^{2}=10$
$\Sigma \mathrm{xY}=189.5248$
$\mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=672.8639 / 5$
$=134.5728$
$\mathrm{b}=\Sigma \mathrm{x} \mathrm{Y} / \Sigma \mathrm{x}^{2}$
$=\Sigma \mathrm{xY} / 10$
$=189.5248 / 10$
$=18.95248$
Figure 4.5
Loan Disbursement in Private Sector


From the table and graph of loan disbursed in Private sectors, it shows that the loan is disbursed in a constant increasing trend from the year 2061 to 2065. It is due to the lending policy of bank itself. But at year 2066 private loan increases very high because investment trend of people are attracted on land and building. The highest disbursement in year 2065/66 is Rs. 182081900.

## Loan Disbursement Deprive Sectors

The bank is providing loan on deprive sector to up lift the economic condition of the people. Deprive loan is disburse in the deprive group of the people.

Table 4.6
Loan Disbursement in Deprive Sector
(Rs. '000000)

| S.No | Year (X) | Disb. in Deprive(Y) | $\mathbf{x}=\mathbf{X}-\overline{\mathrm{X}}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{X}$ *Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $2061 / 63$ | 3160.13 | -2 | 4 | -6320.26 |
| 2 | $2062 / 63$ | 3151.50 | -1 | 1 | -3151.5 |
| 3 | $2063 / 64$ | 4007.77 | 0 | 0 | 0 |
| 4 | $2064 / 65$ | 5741.90 | 1 | 1 | 5741.9 |
| 5 | $2065 / 66$ | 5849.92 | 2 | 4 | 11699.84 |
|  |  | $\Sigma \mathrm{Y}=21911.22$ |  | $\Sigma \mathrm{x}^{2}=10$ | $\Sigma \mathrm{XY}=7969.98$ |

(Source: Statistics and information centre, NBL, Head office)

$$
\begin{aligned}
& \Sigma \mathrm{Y}=21911.22 \\
& \begin{array}{l}
\Sigma \mathrm{x}^{2}=10 \\
\Sigma \mathrm{xY}=7969.98
\end{array} \\
& \begin{array}{l}
\mathrm{a}=\Sigma \mathrm{Y} / \mathrm{N}=21911.22 / 5 \\
\quad=4382.244
\end{array} \\
& \begin{array}{r}
\mathrm{b}=\Sigma \mathrm{xY} / \Sigma \mathrm{x}^{2} \\
\quad=7969.98 / 10=796.998
\end{array}
\end{aligned}
$$

Figure 4.6
Loan Disbursement in Deprive Sector


From the table and figure of loan disbursement in deprive sectors, it shows it highest disbursement on year 2065/66 that is Rs. 5849920000 and lowest in year 2061/62 i.e. Rs. 3151500000. The lending Policy for deprive sector was favorable so disbursement was constantly increasing.

## Statistical Tools

## Correlation Analysis

If we have a series of $n$ measurements of $X$ and $Y$ written as $x_{i}$ and $y_{i}$ where $i=1,2$, $\ldots, n$, then the Pearson product-moment correlation coefficient can be used to estimate the correlation of $X$ and $Y$. The Pearson coefficient is also known as the "sample correlation coefficient". It is especially important if $X$ and $Y$ are both normally distributed. The Pearson correlation coefficient is then the best estimate of the correlation of $X$ and $Y$. The Pearson correlation coefficient is written:

$$
\mathrm{rxy}=\frac{\mathrm{n} \sum \mathrm{xiyi}-\sum \mathrm{xi} \sum \mathrm{yi}}{\sqrt{\mathrm{n} \sum \mathrm{x}_{\mathrm{i}}^{2}-\left(\sum \mathrm{x}_{\mathrm{i}}\right)^{2}} \sqrt{\mathrm{n} \sum \mathrm{y}_{\mathrm{i}}^{2}-\left(\sum \mathrm{y}_{\mathrm{i}}\right)^{2}}}
$$

Where
$\mathrm{n}=$ number of observation of X and Y
$\Sigma \mathrm{X}=$ Sum of observation in series X
$\Sigma \mathrm{Y}=$ Sum of observation in series Y
$\Sigma \mathrm{X}^{2}=$ Sum of observation in series X
$\Sigma \mathrm{Y}^{2}=$ Sum of observation in series Y
$\Sigma \mathrm{XY}=$ Sum of the product of the observation in series X and Y

## Correlation between Priority Sectors Disbursement and Recovery

To find recovery data in Nepal bank is very difficult. They have not total actual loan recovery data. But loan department provide data about total priority sectors. In Nepal bank new management is able to recover over due loan 11405 million with interest, which is not added, in following data.

## Total Recovery

Table 4.7
Total Recovery for year 2062/63
(Rs. in million)

| Particular | No. of Accounts | Principal | Interest | Totals |
| :--- | :---: | :---: | :---: | :---: |
| Cash Recoveries | 12,321 | 3,924 | 1,773 | 5,697 |
| Restructures | 25 | 2.243 | 376 | 2,601 |
| Workouts | 1 | 39 | 17 | 56 |
| Collateral assumed | 138 | 720 | 700 | 1,420 |
| Debt recovery tribunal | 91 | 294 | 444 | 738 |
| Repudiation of loan commitments | 1 | 120 | - | 120 |
| Total netted off Goss recoveries | $\mathbf{1 2 , 5 7 7}$ | $\mathbf{7 , 3 2 1}$ | $\mathbf{3 , 3 1 0}$ | $\mathbf{1 0 , 6 3 2}$ |

(Source: Cash Recovery section Risk Management Division)

Table 4.8
Total Recovery for year 2063/64
(Rs. in Million)

| Particular | No. of <br> Accounts | Principal | Interest | Totals |
| :--- | :---: | :---: | :---: | :---: |
| Cash Recoveries | 14,507 | 5,062 | 2,428 | 7,490 |
| Restructures | 28 | 2,358 | 420 | 2,778 |
| Workouts | - | - | - | - |
| Collateral assumed | 422 | 1,290 | 1,556 | 2,846 |
| Debt recovery tribunal | 1,439 | 6,967 | 11,126 | 18,093 |
| Repudiation of loan commitments | 1 | 120 | - | 120 |
| Total netted off Goss recoveries | $\mathbf{1 6 , 3 9 7}$ | $\mathbf{1 5 , 7 9 7}$ | $\mathbf{1 5 , 5 3 0}$ | $\mathbf{3 1 , 3 2 7}$ |

(Source: Cash Recovery section Risk Management Division)
Table 4.9
Total Recovery for year 2064/65
(Rs. in million)

| Particular | No. of Accounts | Principal | Interest | Totals |
| :--- | :---: | :---: | :---: | :---: |
| Cash Recoveries | 15,789 | 5,899 | 2,813 | 8,712 |
| Restructures | 29 | 2,392 | 465 | 2,857 |
| Workouts | - | - | - | - |
| Collateral assumed | 423 | 1,291 | 1,556 | 2,847 |
| Debt recovery tribunal | 1,441 | 6,973 | 11,135 | 18,108 |
| Repudiation of loan commitments | 1 | 120 | - | 120 |
| Total netted off Goss recoveries | $\mathbf{1 7 , 6 8 3}$ | $\mathbf{1 6 , 6 7 5}$ | $\mathbf{1 5 , 9 6 9}$ | $\mathbf{3 2 , 6 4 4}$ |

(Source: Cash Recovery Section Risk Management Division)
Table 4.10
Total Recovery for year 2065/66
(Rs. in million)

| Particular | No. of Accounts | Principal | Interest | Totals |
| :--- | :---: | :---: | :---: | :---: |
| Cash Recoveries | 16,542 | 6,426 | 3,155 | 9,581 |
| Restructures | 35 | 3,355 | 1,330 | 4,685 |
| Workouts | - | - | - | - |
| Collateral assumed | 423 | 1,291 | 1,556 | 2,847 |
| Debt recovery tribunal | 1,441 | 6,973 | 11,135 | 18,108 |
| Repudiation of loan commitments | 1 | 120 | - | 120 |
| Total netted off Goss recoveries | $\mathbf{1 8 , 4 4 2}$ | $\mathbf{1 8 , 1 6 5}$ | $\mathbf{1 7 , 1 7 6}$ | $\mathbf{3 5 , 3 4 1}$ |

## Table 4.11

Correlation between Loan Disbursement and Recovery
(Rs. in '000000)

| Year | Loan (X) | Recovery(Y) | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{Y}^{\mathbf{2}}$ | $\mathbf{X}$ * $\mathbf{Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 63$ | 17964.995 | 3412.031 | 322741045 | 11641955.5 | 61297119.9 |
| $2062 / 63$ | 9756.162 | 900.513 | 95182697 | 810923.663 | 8785550.71 |
| $2063 / 64$ | 11508.477 | 3132.7 | 132445043 | 9813809.29 | 36052605.9 |
| $2064 / 65$ | 13251.962 | 3264.4 | 175614497 | 10656307.4 | 43259704.8 |
| $2065 / 66$ | 17614.898 | 3534.1 | 310284632 | 12489862.8 | 62252811 |
|  | $\boldsymbol{\Sigma}$ <br> $=70096.49$ | $\Sigma Y$ <br> $=14243.74$ | $\Sigma X^{2}$ <br> $=1036267914$ | $\Sigma Y^{2}$ <br> $=45412859$ | $\Sigma X^{2}$ <br> $=211647792$ |

$\mathrm{N}=5$
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=14243.74$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=45412859$
$\Sigma \mathrm{XY}=211647792$

## Now

$$
\begin{aligned}
& \text { rxy }=\frac{\mathrm{n} \sum \mathrm{xiyi}-\sum \mathrm{xi} \sum \mathrm{yi}}{\sqrt{\mathrm{n} \sum \mathrm{x}_{\mathrm{i}}^{2}-\left(\sum \mathrm{x}_{\mathrm{i}}\right)^{2}} \sqrt{\mathrm{n} \sum \mathrm{y}_{\mathrm{i}}^{2}-\left(\sum \mathrm{y}_{\mathrm{i}}\right)^{2}}} \\
& =\frac{5 \times 211647792-70096.49 \times 14243.74}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 45412859-(14243.74)^{2}}}=0.743135
\end{aligned}
$$

$r=0.743135$ shows positive relation between disbursement and recovery. The strength of the relation is measured by r 2 . The value of r 2 is (.5522). This shows the average relation, as the relation is strong when it is above 0.5522 to 1 .

The coefficient of determination r2 measures the systematic risk of total risk; this is created from the market moment or macro factors. Here $45 \%$ is the portion is unsystematic risk.

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.5522}{\sqrt{5}} \\
& =0.1351
\end{aligned}
$$

Again, 6 P.E r $=0.8105$
Now, $r=0.743135$, P.E. $=0.1351, \quad 6 P . E=0.8105$

The value of P.E is 0.1351 ; the value of ' $r$ ' is higher than P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between loan and advances and recovery. There is insignificant relationship $r$ and 6P.E, since $r<6$ P.E so the bank is mobilizing its loan \& advances and capable to recover.

## Table 4.12

## Correlation between Total Deposit and Loan

(Rs. in '000000)

| Years | Total Deposit (X) | Loan (Y) | X^2 | $\mathbf{Y}^{\wedge} \mathbf{2}$ | X*Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 36519.784 | 17964.995 | 1333694623 | 322741045.4 | 656077737 |
| 2062/63 | 35829.765 | 9756.162 | 1283772060 | 95182696.97 | 349560991.8 |
| 2063/64 | 39014.204 | 11508.477 | 1522108114 | 132445042.9 | 448994069.4 |
| 2064/65 | 41829.391 | 13251.962 | 1749697951 | 175614496.8 | 554321500 |
| 2065/66 | 45194.232 | 17614.898 | 2042518606 | 310284631.6 | 796091786.9 |
|  | $\boldsymbol{\Sigma X}$ | $\boldsymbol{\Sigma} \mathbf{Y}$ | $\boldsymbol{\Sigma} \mathbf{X}^{2}$ | $\boldsymbol{\Sigma} \mathbf{Y}^{\mathbf{2}}$ | EXY |
|  | $=198387.4$ | =70096.49 | =7931791355 | $=1036267914$ | $=2805046085$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=198387.4$
$\Sigma \mathrm{Y}=70096.49$
$\Sigma \mathrm{X}^{2}=7931791355$
$\Sigma \mathrm{Y}^{2}=1036267914$
$\Sigma \mathrm{XY}=2805046085$
$\mathrm{N}=5$
Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 2805046085-198387.4 \times 70096.49}{\sqrt{5 \times 7931791355-(198387.4)^{2}} \sqrt{5 \times 1036267914-(70096.49)^{2}}} \\
& =0.418738
\end{aligned}
$$

$r=0.42$ shows positive correlation between deposit and total loan. The strength of the relation is measured by r 2 . The value of r 2 is (.175). This shows the average relation, as the relation is strong when it is above 0.17 tol.

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.175}{\sqrt{5}} \\
& =0.2489
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.2489=1.4931$
Now, $r=0.42, \quad$ P.E. $=0.2489, \quad 6$ P.E $=1.4931$

The value of P.E is 0.2489 ; the value of ' $r$ ' is higher than P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between total deposit and total loan. There is insignificant relationship between $r$ and 6P.E, since $\mathrm{r}<6 \mathrm{P}$.E. so the bank is mobilizing its deposit.

Table 4.13

## Correlation between Total Loan and Agriculture

(Rs. in '000000)

| Years | Total Loan $(\mathbf{X})$ | Agriculture $(\mathbf{Y})$ | X^2 | Y^2 | X*Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 278.912 | 322741045.4 | 77791.90374 | 5010652.685 |
| 2062/63 | 9756.162 | 119.546 | 95182696.97 | 14291.24612 | 1166310.142 |
| 2063/64 | 11508.477 | 116.9442 | 132445042.9 | 13675.94591 | 1345849.636 |
| 2064/65 | 13251.962 | 529.305 | 175614496.8 | 280163.783 | 7014329.746 |
| 2065/66 | 17614.898 | 66.003 | 310284631.6 | 4356.396009 | 1162636.113 |
|  | $\begin{gathered} \Sigma \mathrm{X} \\ =70096.49 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{Y} \\ = \\ 1110.71 \end{gathered}$ | $\begin{gathered} \Sigma X^{2} \\ =1036267914 \end{gathered}$ | $\begin{gathered} \Sigma Y^{2} \\ =390279.275 \end{gathered}$ | $\begin{gathered} \quad \Sigma X Y \\ =5699778.3 \end{gathered}$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=1110.71$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=390279.275$
$\Sigma \mathrm{XY}=15699778.3$
$\mathrm{n}=5$

Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 15699778.3-70096.49 \times 1110.71}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 390279.275-(1110.71)^{2}}} \\
& =0.046306
\end{aligned}
$$

Correlation between Total loan and advances and disbursement on agriculture is 0.046306. It shows positive and weak relation between disbursement on agriculture and loan. The strength of the relation is measured by r 2 . The value of r 2 is (.0.0021). This shows the weak relation, as the relation is strong when it is above 0.0021 to1.

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.0021}{\sqrt{5}} \\
& =0.3010
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.3010=1.8061$
Now, $r=0.046306, \quad$ P.E $r=0.3010$, $\quad 6$ P.E $r=1.8061$
The value of P.E is 1.8061 ; the value of 'r' is lower than P.E. Which shows the value of co-efficient of correlation is insignificant. There is insignificant relationship between loan and advances and Agriculture and the bank is not investing loan properly in agriculture. There is insignificant relationship between $r$ and 6P.E, since $r<6$ P.E.

## Table 4.14

Correlation between Total loan and Cottage industry
(Rs. in '000000)

| Years | Total loan (X) | $\begin{gathered} \text { Disb. in } \\ \text { Cottage }(\mathbf{Y}) \end{gathered}$ | X ${ }^{\wedge}$ | $\mathbf{Y}^{\wedge} \mathbf{2}$ | X* ${ }^{\text {\% }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 159.726 | 322741045.4 | 25512.39508 | 2869476.791 |
| 2062/63 | 9756.162 | 276.565 | 95182696.97 | 76488.19923 | 2698212.944 |
| 2063/64 | 11508.477 | 657.107 | 132445042.9 | 431789.6094 | 7562300.796 |
| 2064/65 | 13251.962 | 377.37 | 175614496.8 | 142408.1169 | 5000892.9 |
| 2065/66 | 17614.898 | 285.4 | 310284631.6 | 81453.16 | 5027291.889 |
|  | $\begin{gathered} \Sigma X \\ =70096.49 \end{gathered}$ | $\begin{gathered} \Sigma Y \\ =1756.168 \end{gathered}$ | $\begin{gathered} \Sigma X^{2} \\ =1036267914 \end{gathered}$ | $\begin{gathered} \Sigma Y^{2} \\ =757651.4807 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{XY} \\ =23158175.3 \end{gathered}$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=1756.168$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=757651.4807$
$\Sigma X Y=23158175.3$
$\mathrm{n}=5$
Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 757651.4807-70096.49 \times 1756.168}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 757651.4807-(1756.168)^{2}}} \\
& =-0.53234
\end{aligned}
$$

Correlation between loan and advances and disbursement on cottage industry is -0.53234 . It shows negative and weak relation between loan \& advance and disbursement cottage industry. The strength of the relation is measured by r 2 . The value of r 2 is (.2834). This shows the weak relation, as the relation is strong when it is above 0.2834 to 1

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.2834}{\sqrt{5}} \\
& =0.2162
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.2162=1.297$
Now $r=-0.53234 \quad$ P.E $=0.2162 \quad 6 \mathrm{P} . \mathrm{E}=1.297$

The value of P.E is 0.2162 ; the value of ' r ' is lower than its P.E. Which shows the value of co-efficient of correlation is insignificant. There is insignificant relationship between loan and advances and Cottage industry and the bank is not utilizing its loan and advances properly in cottage industry. There is insignificant relationship between $r$ and 6P.E, since r<6P.E

Table 4.15
Correlation between Loan and Service
(Rs. in '000000)

| Years | Total loan $(\mathbf{X})$ | Disb. in Service(Y) | X ^2 | $\mathbf{Y}^{\wedge} \mathbf{2}$ | X* Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 347.19 | 322741045.4 | 120540.8961 | 6237266.614 |
| 2062/63 | 9756.162 | 930.00 | 95182696.97 | 864900 | 9073230.66 |
| 2063/64 | 11508.477 | 758.765 | 132445042.9 | 575724.3252 | 8732229.551 |
| 2064/65 | 13251.962 | 242.938 | 175614496.8 | 59018.87184 | 3219405.144 |
| 2065/66 | 17614.898 | 200.119 | 310284631.6 | 40047.61416 | 3525075.773 |
|  | $\begin{gathered} \Sigma \mathrm{X} \\ =70096.49 \end{gathered}$ | $\begin{gathered} \Sigma Y \\ =2479.012 \end{gathered}$ | $\begin{gathered} \Sigma X^{2} \\ =1036267914 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{Y}^{2} \\ =1660231.707 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{KY} \\ =30787207.7 \end{gathered}$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=2479.012$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=1660231.707$
$\Sigma \mathrm{XY}=30787207.7$
$\mathrm{n}=5$

Now,

$$
\begin{aligned}
& r_{x y}=\frac{5 \times 30787207.7-70096.49 \times 2479.012}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 1660231-(2479.0122)^{2}}} \\
& =-0.82546
\end{aligned}
$$

Correlation between Total loan and advances and disbursement on service sector is 0.82546 . It shows negative and strong relation between disbursement on service sector and loan. The strength of the relation is measured by r 2 . The value of r 2 is (.680). This shows the weak relation, as the relation is strong when it is above 0.68 to 1

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.68}{\sqrt{5}} \\
& =0.4694
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.4694=2.1163$
Now $=-0.82546 \quad$ P.E $r=0.4694 \quad$ P.E $r=2.1163$

The value of P.E is 0.4694 ; the value of ' $r$ ' is lower than its P.E. Which shows the value of co-efficient of correlation is insignificant. There is insignificant relationship between loan and advances and Service sector and the bank is not utilizing its loan and advances properly. There is insignificant relationship between $r$ and 6P.E, since $r<6$ P.E

## Table 4.16

Correlation between Loan and Private
(Rs. in '000000)

| Years | Total Loan (X) | $\begin{gathered} \text { Disb. in } \\ \text { Private(Y) } \end{gathered}$ | X^2 | $\mathbf{Y}^{\wedge} \mathbf{2}$ | X* ${ }^{\text {\% }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 104.294 | 322741045.4 | 10877.23844 | 1873641.189 |
| 2062/63 | 9756.162 | 114.149 | 95182696.97 | 13029.9942 | 1113656.136 |
| 2063/64 | 11508.477 | 124.241 | 132445042.9 | 15435.82608 | 1429824.691 |
| 2064/65 | 13251.962 | 148.098 | 175614496.8 | 21933.0176 | 1962589.068 |
| 2065/66 | 17614.898 | 182.0819 | 310284631.6 | 33153.81831 | 3207354.096 |
|  | $\begin{gathered} \Sigma X \\ =70096.49 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{Y} \\ =672.8639 \end{gathered}$ | $\begin{gathered} \Sigma X^{2} \\ =1036267914 \end{gathered}$ | $\begin{gathered} \Sigma \mathrm{Y}^{2} \\ =94429.89463 \end{gathered}$ | $\begin{gathered} \Sigma X Y \\ =9587065.18 \end{gathered}$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=672.8639$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=94429.89463$
$\Sigma \mathrm{XY}=9587065.18$
$\mathrm{n}=5$
Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 9587065.18-70096.49 \times 672.8639}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 94429.89463-(672.8639)^{2}}} \\
& =0.337742
\end{aligned}
$$

Correlation between Total loan and advances and disbursement on Private sector is positive and week. Their correlation is 0.337742 . The strength of the relation is measured by r 2 . The value of r 2 is (.114). This shows the weak relation, as the relation is strong when it is above 0.114 to 1

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.114}{\sqrt{5}} \\
& =0.3360
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.3360=2.016$
Now , $\mathrm{r}=0.337742 \quad$ P.E $\mathrm{r}=0.3360 \quad 6$ P.E $\mathrm{r}=2.016$

The value of P.E is 0.3360 ; the value of ' $r$ ' is higher than its P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between loan and advances and Private sector and the bank is utilizing its loan and advances properly in private sector. There is insignificant relationship between $r$ and 6P.E, since $r<6$ P.E

Table 4.17
Correlation between Loan and Deprive
(Rs. in '000000)

| Years | Total loan <br> $(\mathbf{X})$ | Disb. in <br> Deprive(Y) | $\mathbf{X}^{\wedge 2}$ | $\mathbf{Y}^{\wedge 2}$ | $\mathbf{X}$ *Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 17964.995 | 3160.13 | 322741045 | 9986421.62 | 56771719.6 |
| $2062 / 63$ | 9756.162 | 3151.5 | 95182697 | 9931952.25 | 30746544.5 |
| $2063 / 64$ | 11508.477 | 4007.77 | 132445043 | 16062220.4 | 46123328.9 |
| $2064 / 65$ | 13251.962 | 5741.9 | 175614497 | 32969415.6 | 76091440.6 |
| $2065 / 66$ | 17614.898 | 5849.92 | 310284632 | 34221564 | 103045744 |
|  | $\Sigma X$ <br> $=70096.49$ | $\Sigma \mathrm{Y}$ <br> $=21911.22$ | $\Sigma \mathrm{X}^{2}$ <br> 1036267914 | $\Sigma \mathrm{Y}^{2}$ <br> 103171574 | $\Sigma \mathrm{XY}$ <br> $=312778778$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{X}=70096.49$
$\Sigma \mathrm{Y}=21911.22$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=103171574$
$\Sigma \mathrm{XY}=312778778$
$\mathrm{n}=5$

Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 312778778-70096.49 \times 21911.22}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 103171574-(21911.22)^{2}}} \\
& =0.286068
\end{aligned}
$$

Correlation between Total loan and advances and disbursement on Deprive sector is positive and week. Their correlation is 0.286068 . The strength of the relation is measured by r 2 . The value of r 2 is (.0.0818). This shows the weak relation, as the relation is strong when it is above 0.081 to 1 .

## Calculation of Probability Error

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

$$
\begin{aligned}
& =0.6745 \times \frac{1-0.0818}{\sqrt{5}} \\
& =0.277
\end{aligned}
$$

Again, 6 P.E r $=6 \times 0.277=1.6618$
Now, $\mathrm{r}=0.286068 \quad$ P.E $r=0.277 \quad 6$ P.E $r=1.6618$

The value of P.E is 0.277 the value of ' $r$ ' is higher than its P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between loan and advances and deprive and the bank is utilizing its loan and advances properly on deprive sector. There is insignificant relationship between $r$ and 6P.E, since $r<6$ P.E.

Table 4.18
Correlation between Loan and Interest Income
(Rs. in '000000)

| Years | Total Loan $(\mathbf{X})$ | $\begin{gathered} \text { Interest } \\ \text { Income (Y) } \end{gathered}$ | X^2 | Y^2 | X* ${ }^{\text {\% }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 2248 | 322741045 | 5053504 | 40385308.8 |
| 2062/63 | 9756.162 | 2049.029 | 95182697 | 4198519.84 | 19990658.9 |
| 2063/64 | 11508.477 | 1848.612 | 132445043 | 3417366.33 | 21274708.7 |
| 2064/65 | 13251.962 | 2094.905 | 175614497 | 4388626.96 | 27761601.5 |
| 2065/66 | 17614.898 | 2690.058 | 310284632 | 7236412.04 | 47385097.3 |
|  | 上X | LY | $\Sigma \mathrm{X}^{2}$ | $\Sigma \mathrm{Y}^{2}$ | EXY |
|  | =70096.49 | $=10930.6$ | ${ }^{1} 1036267914$ | $=24294429$ | $=156797375$ |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{x}=70096.49$
$\Sigma \mathrm{y}=10930.6$
$\Sigma$ XY=156797375
$\Sigma \mathrm{X}^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=24294429$
$\mathrm{N}=5$
Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 156760074-70096.49 \times 10930.6}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 24294429-(10930.6)^{2}}} \\
& =0.769809
\end{aligned}
$$

Correlation between Loan and Advances and interest income is 0.769809 which is relatively strong and positive. By correlation analysis two variables is normal. The strength of the relation is measured by r 2 . The value of r 2 is ( 0.5926 ). This shows the strong relation, as the relation is strong when it is above 0.59 to 1 .

## Calculation of Probability Error

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

$$
=0.6745 \times \frac{1-0.5926}{\sqrt{5}}
$$

$$
=0.1229
$$

Again, 6 P.E r $=6 \times 0.1229=0.7373$
Now, r $=0.769809$

$$
P . E=0.1229, \quad 6 P . E=0.7373
$$

The value of P.E is 0.1229 ; the value of ' $r$ ' is higher than its P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between loan and advances and interest income and the bank is utilizing its loan and advances properly and collecting its interest. There is significant relationship between $r$ and 6P.E, since r>6P.E.

Table 4.19

## Correlation between Total Loan and Saving

(Rs. in '000000)

| Years | Total Loan (X) | Saving (Y) | X^2 | Y^2 | X*Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/62 | 17964.995 | 36519.784 | 322741045.4 | 1333694623 | 656077737 |
| 2062/63 | 9756.162 | 35829.765 | 95182696.97 | 1283772060 | 349560991.8 |
| 2063/64 | 11508.477 | 39014.204 | 132445042.9 | 1522108114 | 448994069.4 |
| 2064/65 | 13251.962 | 41829.391 | 175614496.8 | 1749697951 | 554321500 |
| 2065/66 | 17614.898 | 45194.232 | 310284631.6 | 2042518606 | 796091786.9 |
|  | 上X | $\Sigma \mathrm{Y}$ | $\Sigma \mathrm{X}^{2=}$ | $\Sigma \mathrm{Y}^{2}$ | $\Sigma \mathrm{XY}=$ |
|  | =70096.49 | $=198387.4$ | 1036267914 | $=7931791355$ | 2805046085 |

(Source: Statistics and Information Centre and Loan Department of NBL)
$\Sigma \mathrm{x}=70096.49$
$\Sigma \mathrm{y}=198387.4$
$\Sigma \mathrm{XY}=2805046085$
$\Sigma X^{2}=1036267914$
$\Sigma \mathrm{Y}^{2}=7931791355$
$\mathrm{N}=5$

Now,

$$
\begin{aligned}
r_{x y} & =\frac{5 \times 2805046085-70096.49 \times 198387.4}{\sqrt{5 \times 1036267914-(70096.49)^{2}} \sqrt{5 \times 7931791355-(198387.4)^{2}}} \\
& =0.418738
\end{aligned}
$$

Correlation between Total Loan and saving is 0.4187 which is positive. The strength of the relation is measured by r 2 . The value of r 2 is $(0.175341513)$. This shows the normal relation, as the relation is strong when it is above 0.18 to 1 .

## Calculation of Probability Error

P.Er $=0.6745 \times \frac{1-\mathrm{r}^{2}}{\sqrt{\mathrm{~N}}}$

$$
=0.6745 \times \frac{1-0.175}{\sqrt{5}}
$$

$$
=0.2489
$$

Again, 6 P.E r $=6 \times 0.2489=1.4931$
Now, $\mathrm{r}=0.418738 \quad$ P.E $\mathrm{r}=0.2489 \quad 6$ P.E $\mathrm{r}=1.4931$

The value of P.E is 0.2489 ; the value of ' $r$ ' is higher than its P.E. Which shows the value of co-efficient of correlation is significant. There is significant relationship between loan and advances and saving and the bank is utilizing its saving. There is insignificant relationship between $r$ and 6P.E, since $r<P$.E.

### 4.5 Ratios Analysis

Ratios analysis has been adopted to evaluate the financial health of the banks. Operating result of the bank are analyzed and interpreted on the basis of following ratios. Our main objective of the study is to find the efficiency of new management to find out its ratios analysis and comparative ratio analysis which play important role in NBL.

1. Profitability Ratio
2. Liquidity Ratio
3. Activity Ratio

## 1. Profitability Ratio

Profitability ratio includes profit on assets. Profit maximization is the main objectives of each and every financial institution. It shows the overall efficiently of the organization. The earning capacity of any organization is measured by profitability ratios.

## a. Return on Assets

This ratio measures the profitability of all financial resources invested in the firm's assets. Hence a higher ratio implies that the available source and tools are employed efficiently. Return on assets $=\frac{\text { Net Profit }}{\text { Total Asset }} \times 100$

Table 4.20
Return on Assets
(Rs. '000000)

| Year | Net Profit | Total Assets | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 44161.88 | 0.391770006 |
| $2062 / 63$ | 120.7264 | 35918.905 | 0.336108242 |
| $2063 / 64$ | 226.952 | 39258.793 | 0.578092149 |
| $2064 / 65$ | 239.214 | 42053.444 | 0.568833316 |
| $2065 / 66$ | 894.252 | 47559.110 | 1.88029591 |

(Source: Annual Report of Nepal Bank Limited)

In Nepal bank new management entered on July 22, 2002, the ratio show very least. At year 2061-2063 return was in decreasing and again from year 2063/64 to 2065/66 return on assets increases highly. There all the ratios are positive and after each year ratio seems fluctuating. Bank able to achieve profit in year 2066/67 in compared with first three years.

## b. Return on Share Holder Equity

The ratio shows the relation between the net profit after tax and shareholder's fund. Share holder's funds include equity share capital, preference share capital, reserve and surplus and share premium.
Return on Share Holder Equity $=\frac{\text { Net Profit }+ \text { Interest }}{\text { Share Holders Equity }} \times 100$

Table 4.21
Return on Share Holder Equity
(Rs. '000000)

| Year | Net <br> Profit | Interest <br> income | Shareholders <br> equity | Ratio in percentage |
| :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 2248 | 380382600 | 636.46786 |
| $2062 / 63$ | 120.7264 | 2049.03 | 380382600 | 570.41395 |
| $2063 / 64$ | 226.952 | 1848.61 | 380382600 | 545.65167 |
| $2064 / 65$ | 239.214 | 2094.91 | 380382600 | 613.62402 |
| $2065 / 66$ | 894.252 | 2690.06 | 380382600 | 942.29074 |

(Source: Annual Report of Nepal Bank Limited)

This ratio indicates how well the firm has used the resources contributed by the owners. It is good for the firm to be return of investment is high. Here we see ratio on return on equity is low is year in 2063/64 and high in year 2065/2066 i.e 942.29.

## c. Return on Income

Return on Income $=\frac{\text { Net Profit }}{\text { Total Income }} \times 100$

Table 4.22
Return on Income
(Rs. '000000)

| Year | Net Profit | Total Income | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 1156.729 | 14.9570902 |
| $2062 / 63$ | 120.7264 | 1274.705 | 9.47092857 |
| $2063 / 64$ | 226.952 | 1075.967 | 21.0928402 |
| $2064 / 65$ | 239.214 | 1322.248 | 18.0914624 |
| $2065 / 66$ | 894.252 | 1898.347 | 47.1068777 |

(Source: Annual Report of Nepal Bank Limited)

In first years return is declining and again at third year return increases similarly in fourth and fifth year 2065 return seems increasing. The ratio shows the there in fluctuation in every year return. In year 2065/66 return is 47.11 .

## d. Earning Per Shares (EPS)

The income per common share is called earning per shares. The more per return more excellent it is and the less per return is worst.

Earning Per Shares $=\frac{\text { Net Profit }}{\text { Number of Equity }}$
Table 4.23
Earning Per Shares (EPS)
(Rs. '000000)

| Year | Net Profit | Number of equity | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 380382600 | 45.483942 |
| $2062 / 63$ | 120.7264 | 380382600 | 31.73815 |
| $2063 / 64$ | 226.952 | 380382600 | 59.664138 |
| $2064 / 65$ | 239.214 | 380382600 | 62.887735 |
| $2065 / 66$ | 894.252 | 380382600 | 235.09277 |

(Source: Annual Report of Nepal Bank Limited)

New management entered in bank in complex situation. But also it able to reduced total loss in 17 months and increase profit. This very well and effective change in Nepal Bank is due to its present management system. EPS increases gradually each year. EPS of NBL goes down from first to second year but after third year 2063/64 its EPS increases. This is the good sign of good management.

## e. Return on Loan and Advance

This shows the relationship between loan and advance with net profit. Higher the return good will be performance.
Return on Loan and Advance $=\frac{\text { Net Profit }}{\text { Loan and Advances }}$

Table 4.24
Return on Loan and Advance
(Rs. In '000000)

| Year | Net Profit | Loan and advance | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 17964.995 | 0.96305621 |
| $2062 / 63$ | 120.7264 | 9756.162 | 1.237437427 |
| $2063 / 64$ | 226.952 | 11508.477 | 1.972042 |
| $2064 / 65$ | 239.214 | 13251.962 | 1.805121385 |
| $2065 / 66$ | 894.252 | 17614.898 | 5.076679979 |

(Source: Annual Report of Nepal Bank Limited)

Return on loan and an advance are highly negative till 2002. After a new management system return on loan and advance is increase in year 2063/64 i.e. 1.972 and it decreases in year 2064/65. In fifth year its return is 5.76679979

## f. Return to Deposit Ratio

Return to Deposit Ratio $=\frac{\text { NPAT }}{\text { Total Deposit }}$

Table 4.25

## Return to Deposit Ratio

(Rs. '000000)

| Year | NPAT | Total Deposit | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 173.013 | 36519.784 | 0.473751433 |
| $2062 / 63$ | 120.7264 | 35829.765 | 0.336944437 |
| $2063 / 64$ | 226.952 | 39014.204 | 0.581716341 |
| $2064 / 65$ | 239.214 | 41829.391 | 0.571880188 |
| $2065 / 66$ | 894.252 | 45194.23 | 1.978686217 |

(Source: Annual Report of Nepal Bank Limited)

In this ratio also first and second performance shows slightly decreasing. From third year its ratio is increasing. The entire ratios are positive.

## 2. Liquidity Ratio

The ability of the firm to meet its short term obligation is known was liquidity. It reflects the short term financial strength of the business. These ratios are used to know the capacity of the concern to repay its short term liability.

## a. Current Ratio

This ratio shows the relationship between current assets and current liabilities. The objectives of this ratio are to measure the ability of the firm to meet is short term obligation.

$$
\text { Current Ratio }=\frac{\text { Current Assets }}{\text { Current Liabilities }}
$$

Table 4.26

## Current Ratio

(Rs. '000000)

| Year | Current Assets | Current Liabilities | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 102.3248000 | 189.4904 | 0.539999916 |
| $2062 / 63$ | 111.0953183 | 102.099912 | 1.088103957 |
| $2063 / 64$ | 128.6066645 | 628.09156 | 0.204757829 |
| $2064 / 65$ | 118.1792413 | 544.10199 | 0.217200531 |
| $2065 / 66$ | 191.5654833 | 140.81549 | 1.360400644 |

(Source: Annual Report of Nepal Bank Limited)

In the case of Quick ratio assets also the bank is week. 1:1 ratio is the best quick ratio. Here ratio in first year is below 1 means there is more liabilities then assts. Very sound ratio in year 2062/63 but after 2063 it have more current liabilities. But in the fiscal year 2065/66 it has good ratio even its current assets in more. For this they should efficient mobilize current assets and current liabilities.

## 3. Leverage Ratio

It is also term as solvency ratio or capital structure ratio. This measures the firm ability to pay the interest regularly and to repay the principle on maturity.

Investment to Total Deposit Ratio: It shows the relationship between investment and total deposit.

Investment to Total Deposit Ratio $=\frac{\text { Investment }}{\text { Total Deposit }}$
Table 4.27

## Leverage Ratio

(Rs. '000000)

| Year | Investment | Total Deposit | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 10593.845 | 36519.784 | 29.00850947 |
| $2062 / 63$ | 14490.247108 | 35829.765 | 40.44192617 |
| $2063 / 64$ | 16072.179882 | 39014.204 | 41.19571396 |
| $2064 / 65$ | 16570.755516 | 41829.391 | 39.61510106 |
| $2065 / 66$ | 13397.559686 | 45194.23 | 29.64440303 |

(Source: Annual Report of Nepal Bank Limited)

Investment percentages on total deposit are 29.008, 40.441, 41.195, 39.615 and 29.64 respectively. It seems that in each year ratio are decreasing and increasing. Its lowest ratio in year 2061/62 which is 29.008 and highest ratio in 2063/64 is 41.195 .

## b. Loan and Advance to Total Deposit Ratio

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

Table 4.28
Loan and Advance to Total Deposit Ratio
(Rs. '000000)

| Year | Loan and advance | Total Deposit | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 17964.995 | 36519.784 | 49.1925007 |
| $2062 / 63$ | 9756.162 | 35829.765 | 27.2292101 |
| $2063 / 64$ | 11508.477 | 39014.204 | 29.498172 |
| $2064 / 65$ | 13251.962 | 41829.391 | 31.6809824 |
| $2065 / 66$ | 17614.898 | 45194.23 | 38.9759887 |

(Source: Annual Report of Nepal Bank Limited)

This ratio is decreasing every year from year 2061/62 to 2062/63.From third year ratio are increasing. But the bank is increasing its investment out of deposit.

## c. Loan and Advance to Total Assets

This ratio shows the relationship between loan and total assets of the firm. Higher will be assts stronger will be firm position.

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

Table 4.29
Loan and Advance to Total Assets
(Rs. in '000000)

| Year | Loan and Advance | Total Assets | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 17964.995 | 44161.88 | 40.679869 |
| $2062 / 63$ | 9756.162 | 35918.905 | 27.161635 |
| $2063 / 64$ | 11508.477 | 39258.793 | 29.314393 |
| $2064 / 65$ | 13251.962 | 42053.444 | 31.512192 |
| $2065 / 66$ | 17614.898 | 47559.110 | 37.037905 |

(Source: Annual Report of Nepal Bank Limited)

On the basis of total assets the loan and advances is $30-40$ present with is normal according to investment policy.

## d. Priority Sectors Loan to Total Deposit

There are some polices which need to be followed by commercial bank, made by center Bank. To provide Priority sector loan there is also important rule, that is disbursement on priority sectors are decreased by NBL.
Priority Sector Loan to Total Deposit $=\frac{\text { Priority Sectors Loan }}{\text { Total Deposit }}$

Table 4.30
Priority Sectors Loan to Total Deposit
(Rs. in '000000)

| Year | Priority Sectors Loan | Total Deposit | Ratio in percentage |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | 1723.543 | 36519.784 | 4.71947753 |
| $2062 / 63$ | 7339.89 | 35829.765 | 20.48545392 |
| $2063 / 64$ | 9136.65 | 39014.204 | 23.41877845 |
| $2064 / 65$ | 2082.20 | 41829.391 | 4.977839625 |
| $2065 / 66$ | 1313.73 | 45194.23 | 2.906853375 |

(Source: Annual Report of Nepal Bank Limited)

In priority sector expect disbursement is very much increasing from year 2061 to 2063. This may be due to interest on priority sector loan disbursement. So, priority sectors loan also decreasing comparison to total Loan. At the year 2065/66 priority sectors have lowest level of loan disbursements. and it has lowest ratio i.e. 2.906.

### 4.6 Majors Findings of the study

## Trend Analysis

Trend analysis of loan disbursement shows that the disbursement is decreasing every year. The highest disbursement was seen in F/Y 2064/65 with Rs. 26574454000 and lowest in F/Y 2063/64 with Rs. 20416986000. The increasing trends are steady but at the end of year 2065/2066 again disbursements is decreasing. Here we should conclude there better source of income for NBL it has to disburse high so that it can gain more interest income. Although disbursement is decreasing, it is in correct process so profit is not decreasing.

Agricultural sector loan is the highest fluctuating disbursement. As agricultural loan is disbursed mostly in rural areas, it may be the reason that shifting of bank from rural areas due to Maoist problems. It has lowest disbursement in year 2065/2066 i.e. Rs. 66003000 and very much high in year 2064/65 Rs. Rs. 529305000.

In a cottage industry disbursement is very low in every year but at year 2063/64 disbursement is Rs. 657107000 which is highest disbursement. This mean disbursement in cottage industry is due to political instability and people are attracted in other field. Most youth in the country are interested to go abroad, either for the purpose of study or for the purpose of employment. This is due to frequent change in government and legal scenario. Although the disbursement is fluctuating, it is in decreasing trend.

Service sector loan is also seen to be decreasing, but after the new management in 2062, it is in increasing stage. The highest disbursement is in second year 2062/63 i.e. Rs. 758765000 and lowest in year 2065/66 is Rs. 200119000. The reason of the declining of loan is told due to competition of different financial instructions.

Private sector loan is increasing each year from F/Y 2061/62 to F/Y 2065/66. Highest disbursement is in year 2065/66 is Rs. 182881900.

Deprived sector loan is stable in compared to other loan. In a deprive sector its highest disbursement in year 2065/66 that is Rs. 5849920000 and lowest in year 2061/62 is Rs. 3151500000 The lending Policy for deprive sector was favorable so disbursement was constantly increasing.

## Correlation Analysis

Correlation between loan disbursement and recovery is 0.743135 as calculation, this shows that there is positive relation between loan disbursement and recovery. The recovery system of the banks is strong and able to collect its disbursement back. For more betterment its r 2 should be more than .55 to 1 .

Correlation Between total Deposit and loan is 0.418738 this indicates that two variables are positively but not perfectly related. The relation is comparatively weak as compared to correlation between loan disbursement and recovery. This shows the average relation, as the relation is strong when it is above 0.17 to 1 .

Correlation between loan and advances and saving is 0.4187382 which is positive and low. The strength of the relation is measured by r 2 . The value of r 2 is ( 0.175341513 ). This shows the normal relation, as the relation is strong when it is above 0.18 tol.

## Ratio Analysis

All the return on income from the year 2061/62 is higher then its ratio decreases then again its ratio increases in year 2065/66., All the ratios are positive return on income. This shows bank is achieving its sound position in the country. . Bank able to achieve profit in year 2066/67 in compared with first three years. In year 2065/66 return is 47.11 Return on loan and advance is increase in year 2063/64 i.e. 1.972 and it decreases in year $2064 / 65$, its return is 5.76679979 .

Quick ratio of NBL is seen ranging 0.2 to 1.36 . The best quick ratio is $1: 1$, Here ratio in first year is below 1 means there is more liabilities then assts. Very sound ratio in year 2062/63 but after 2063 it have more current assets then liabilities. The ratio of NBL is normal.

In Case of leverage ratio, the investment to total deposit ratio is in increasing trend in first third year then after it decreases. Investment percentages on total deposit are 47.01, 40.44, $41.19,39.62$, and 29.64 respectively. It seems that in each year ratio are decreasing. According to investment policy, the loan and advance ratio of NBL is normal and weak from $29 \%$ to $47 \%$.

Priority sector loan is ranging from $2.9 \%$ to $7.6 \%$. In both case the loan is seen to disbursed least in 2061 to 2066. In priority sector expect disbursement is very much decreasing from year 2061 to year 2066 which may be due to different other sector loan disbursement. So, priority sectors loan also decreasing comparison to total Loan. At the year 2063/64 priority sectors have higher level of loan disbursements but it decreases consequently

## On the Employees of NBL

- Out of total number of respondents, $100 \%$ of them stated that they do not have problem related to NRB. These problems are frequent changes in rules, regulation, provision and directives.
- Half of the respondents are in favor and against of problems related to loan subscription. They said that due to economic downfall, increasing competition and unrest existed in the country; there is a problem of qualitative loan subscribers.
- Almost all the respondents ( $90 \%$ ) said that there is no any problem in deposit collection. Due to lack of security in investment, unsecured feelings of life, ups and downs in economy, customers themselves are depositing willingly.
- Nearly $60 \%$ of the respondents knew about interest rate and its provision where as $40 \%$ are not known about that. Hence the top and middle are well informed about lending rate of NBL where as junior level are not familiar with that.
- There is $100 \%$ of the respondents are agreed that they are getting incentives from organization via allowances, bonus and so on.
- All the respondents consider that fund based loan is useful for the benefit of the organization.
- More over $80 \%$ of the respondents are in favor of amendment in loan policy of organization and NRB Directive. Rest $20 \%$ from them is not realizing the necessity of amendment in the above stated policy and directives.

From the collected responses of respondents, the major problems witnessed by most of the commercial banks are weak economic condition of the country, insufficient demand of the potential loan takers, competition, weak supervision by NRB and excess concentration in urban areas.

## On the Client Side of NBL

Through the close study of records kept in NBL, different sectors of loan were identified. Among them randomly five sectors were selected. Again first two clients of each sector were chosen. Answers obtained from questionnaire send to those 10 loan-paying clients of NBL are portrayed herein.

- All of the respondents said that the name of NBL is not new for them.
- Only $50 \%$ of the respondents think that the lending process and policy of NBL is correct but $40 \%$ are found against of that whereas $10 \%$ have no idea about the policy and process.
- Convinced client with the feasibility of the interest rate charged on loan is $70 \%$ where as remaining complained it is not with comparison with other commercial banks.
- $80 \%$ of the respondents knew about the interest rebate and other discounts but side-by-side $20 \%$ did not notice about the same.
- There $100 \%$ of the respondents responded that they have utilized the whole loan amount on the sector for which it is taken.
- $40 \%$ of the respondents provoked that service charges charged by NBL is relevant but $60 \%$ of the respondents did not accept the service charge of NBL being relevant.
- $60 \%$ of the respondents feel that the lending process is tough and lengthy whereas 40\% didn't feel so.
- All the clients responded that NBL use to conduct inspection cum verification of collaterals and properties before granting loan. It is good for efficient loan management.
- $80 \%$ of the clients do not feel tedious in loan payment procedure but $10 \%$ feel so and the same do not have idea on it.
- Only $30 \%$ of the clients agreed that their financial position has strengthened by the loan of NBL but $50 \%$ do not agree with this and $20 \%$ haven't idea about it.

From the responses depicted above everyone come to conclude that loan paying clients of NBL are positive about lending policy and process, interest rate charges, service charges, rebate and concession offered by the NBL and finally they are willing to keep on transaction with NBL All this provoked that loan paying clients responses are mixed. Hence, their grievances are to be analyzed completely in order to achieve objectives and goal of NBL without any barriers in day-to-day practice of lending and recovery policy of loan.

## CHAPTER - V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The research conducted is about the loan disbursement and recovery of Nepal Bank Limited. The main objectives of this study are to analyze the loan disbursement in different sectors out of total deposit. To fulfill these objectives relevant books, articles and thesis were studied as literature review. Data presented and analyzed in fourth chapter are taken from the annual reports provided by the books.

### 5.1 Summary

Commercial banks is one of the organs of capital market, which accumulates the scattered fund in the form of deposit and utilized them by giving loan to the various sectors like trade, industry, agriculture etc. The well managed investing activities of banks enhance the economic health of the country because the loan provided by the banks support the growth of new business. The most worry factors of banking are the management of the loan. Though the economic development is in creeping speed, remarkable achievement is being obtained in the development of financial institutions. At present there are all total 29 commercial banks are operating in the Nepal. Among this Nepal Bank Limited is the pioneer bank. There are 108 branches of Nepal Bank Limited operating all over Nepal.

The success of the banks depends upon its effective mobilization of deposit as loan. Lending is the most important function of commercial bank and the composition of loan and advances directly affect the performance and profitability of the bank. Timely recovery of the loan is equally important. If loan is not collected in the times then it becomes non-performing and a bank has to face higher loan loss. So we can conclude the profitability of the bank is very much affected by the lending function. In this research, analysis and presentation of data has been conducted by using various financial and statistical tools.

NBL itself has faced many challenges in its path. As of other banks, the very basic function of this bank is also to collect deposit and loan disbursement. The deposits are collected in different ways under different headings as suitable to the customers. Loan is also disbursed in different sectors. Some to promote business like trade, industry, tourism; some to make daily life easier like hire purchase, housing loan, and education loan and also provide facility in import and export through letter of credit. Nepal bank not only seeks profit but also helps deprived sector by providing priority sector loan. Some of the branches of NBL are also providing pledge loan, which is directly helpful to farmers. In this loan they lock up agricultural products like grains, mustard, paddy for short period as surety as most of Nepalese are totally depend upon agriculture.

In this study, the financial tools, ratios analysis and profitability ratios are calculated to find out lending strength of NBL. Statistical tools like coefficient of correlation, and regression analysis is calculated. Both primary and secondary data are collected for the purpose of this research. The financial statement of five year(2061/62 to 2065/66) is the secondary data collected from Nepal Bank Limited, Bank statistics of NRB, Articles from newspapers, past thesis, books, internet are sources of secondary data where as questionnaires given to employees and clients, direct observation, personal interview, are sources of primary.

### 5.2 Conclusion

After analyzing the loan disbursement and recovery of Nepal Bank Limited, It is observed that in the initial years of establishment the bank was not performing well. Huge amount of loan became non-performing. Recovery status was very poor resulting into high loan loss and bank suffers from heavy loss.

Despite the fact that the management of bank was taken under the control of international bankers from Scotland has been appointed in the NBL to restructure the NBL on July, 2002. Even the best efforts of the management team, loan recovery of bank can't be considered as satisfactory. Hence the management team needs to make serous effort to loan recovery .The trend of deposit collection, loan disbursement and recovery also
indicate that the bank is performing better and will perform better in future. Study also indicates that it is doing better in recent year in comparison to the initial year of establishment. This research can be concluded as:

- Through the analysis of total deposit and disbursement made in different sectors are fluctuating. Deposit seems increasing every year but disbursement seems decreasing in first three year of study period but after that it increases steadily. Loan and advances given in Agriculture, cottage and service is low.
- On the basis of trend analysis, it can be considered that loan and advances in the forth coming year will decrease, the collection of deposit amount will increase, the total investment amount will increase, the non performing loan will decrease and net profit will increase. Hence, a good financial performance of the bank can be expected in the future.
- The coefficient of correlation between loan and advances and deposit is 0.4187 , which indicate positive correlation. Which indicate if deposit increases loan and advances also increases but it has no strong relation. It is found that the value of 'r' is not significant. Deposit is not utilizing properly. Analyzing different disbursement and loan and advances it is found almost disbursement is insufficient except recovery and disbursement. That mean bank is able to collect its loan.
- While calculating ratio, it is found that return on assets, EPS, return on loan and advances are in increasing trends. But in case of current ratio it is not managing properly. It is better when it is in 1:1 ratio. Ratio on priority sectors are decreasing. In ratio analysis we find very much vast different in return when new management enter in NBL. New management is operating very much to obtain high return. NBL is also achieving its objectives. This shows bank is achieving its sound position in the country. Bank able to achieve profit in year 2066/67 in compared with first three years. In year 2065/66 return was 47.11.
- While interpreting recovery data, we find all correlation is near to 1 . This shows the average relation is strong which is related and positive.


### 5.3 Recommendations

The analysis of the study reveals that the loan disbursement and collection function of banks is satisfactory. But the fluctuating trends of loan disbursement can't be overlooked. In order to improve "Loan management of Nepal Bank Ltd", the following suggestions and recommendations have portrayed here on the basis of analysis and conclusions of the entire research study.

- It is truly realized that gradual shift of focus from traditional lending areas of business such as term loan, hire purchase, housing loan to the dynamic and innovative areas like merchant banking, venture capital, consortium financing, project financing and so on. This will help in diversifying risk of loan lending.
- 

Nepal is enriched with varieties of natural resources but they are not properly exploited in absence of appropriate and sufficient financial and technical support numerous opportunities like rural and small electricity, rural tourism, small-scale women entrepreneur, agro based and forest based business. Hence NBL should promote these areas through loan lending.

Loan investment is largely effected by re status. So management should always adopt such a policy that lure the customer to pay loan before due date. Liberal action and subsidy can be schemed for this.

Realizing the current plight of economy and risk management, it is rational to minimize risk through short-term lending instead of long -term lending. Therefore preference should be given to short-term loan over long -term loan. make profitability ratios remarkably good and excellent.

- Quick ratio is to be improved and kept to standard (i.e. 1:1).

Percent of non performing loan need to reduce for effective recovery of due loan and to increase profitability.

Supervision and inspection related to loan must be unbiased, strict and efficient

## BIBLIOGRAPHY

Agnes, M (2000). Websiter's New World College Dictionary. New Delhi: IDG Books India (P) Ltd.

Agrawal, G.R. (2002). Dynamic of Business Environment in Nepal. Katmandu: M.K Publishers \& Distributors.
Aswathapa, K. (2002). Business Environment for Strategic Management. Bangalore: Himalayan Publishing House.
B.K, M.B. (2006). Corporate Financial Management. Kathmandu: Advocy Publisher and Distributors.

Bajracharya, B.C. (2065). Business Statistics and Mathematics. Kathmandu: M.K Publishers \& Distributors

Bhandari, D. (2003). Banking and Insurance Management. Kathmandu: Ayush Prakashan.

Bhattarai, R. (2008). Investment Analysis of Financial Companies of Nepal, Shankar Dev Campas, Tribhuvan University.

Dahal, B. \& Dahal, S. (2002): A Hand Book to Banking. Kathmandu: Asmita Books and Stationary.
Dangol, R.M. (2056). Management Accounting: Principle and Practice. Kathmandu: Taleju Prakashan.

Gitman, L.J. (1988). Principles of Management Finance. New York: Harper \& Row Publisher.

Gupta, S.P (1992). Advance Account. New Delhi: S. Chand \& Company.
Harold, K. (1987) Project Manager. ( $1^{\text {st }}$ Ed.). New Delhi: Himalayan Publishers \& Distributors.
Hornsby, A.S (1997). Corporate Financial Management. New York: McGraw Hill.
Nepal Rastra Bank (2061/62-2065/66). Banking and Financial Statistics, No. 38 Kathmandu.
Rose, P. S. (2002). Commercial Bank Management. (5 $5^{\text {th }}$ Edition). New York: McGraw Hill Publication.

Securities Board (2001/2002) Annual Report. Kathmandu

Shrestha, M.P. \& Gautam, D.P (2005). Nepalese Business Environment. Kathmandu: Asmita Publication.

Shrestha, M.S. (2009). Fundamental of Banking, Kathmandu:
Singh, S.K. (1999). A Study of Financial Performance of NGBL and NABIL. Kathmandu: An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Sudedi, N. (2004). Loan Management of HISEF Finance Limited. Kathmandu: An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.
Thapa, K \& Neupane, D.K(2005) Banking and Insurance
Vaidya, S. (2002), Banking and Finance Management. Kathmandu: Monitor Nepal.
Van Horn, J.C. \& Western, J.M. (1996). Fundamentals of Financial Management. (9 ${ }^{\text {th }}$ $e d$. .). New Delhi: Prentice Hall of India Pvt. Ltd
Western, J. F. \& Eugene, F.B. (1999). Essential of Managerial Finance. Orlando: The Dryen Press.
World Bank (2002, Oct) Financial Sector Study Report No. 24959. Kathmandu.

## Websites:

www.cbs.gov.np
www.nbl.com
www.nrb.org.np

## APPENDIX

## Research Questions

## Questionnaire to Loan Paying Clients' of Nepal Bank Limited

Please fill the following personal information clearly.

Name:
Sex
Occupation

Age:
Address:
Year of Experience

1. Do you know about Nepal Bank Limited before taking Loan?
a. Yes
b. No.
c. No idea.
2. Do you think lending policy and process of Nepal Bank Limited is correct?
a. Yes
b. No.
c. No idea.
3. Is the present interest rate charge on loan and advances by Nepal Bank Limited is feasible?
a. Yes
b. No.
c. No idea.
4. Does Nepal Bank Limited give you rebate and other discount on the processing on loan?
a. Yes
b. No.
c. No idea.
5. Have you utilize the whole amount of loan taken for your purpose?
a. Yes
b. No.
c. No idea.
6. Is the service charge is relevant?
a. Yes
b. No.
c. No idea.
7. Is lending process is tough and lengthy?
a. Yes
b. No.
c. No idea.
8. Does Nepal Bank Limited verify your property kept as collaterals?
a. Yes
b. No.
c. No idea.
9. Is repayment process is tedious?
a. Yes
b. No.
c. No idea.
10. Has your financial position strengthen up from the loan?
a. Yes
b. No.
c. No idea.
11. Is Nepal Bank Limited more preferable in compared to other banks?
a. Yes
b. No.
c. No idea.
12. Are you happy with lending process of Nepal Bank Limited?
a. Yes
b. No.
c. No idea.
13. Are you suffering from fluctuating interest rate of Nepal Bank Limited?
a. Yes
b. No.
c. No idea.
14. Are you satisfied from the behavior of employee of Nepal Bank Limited?
a. Yes
b. No.
c. No idea.
15. Are you willing to keep on transaction with Nepal Bank Limited?
a. Yes
b. No.
c. No idea.

## Questionnaire to Staffs' of Nepal Bank Limited

Please fill the following personal information clearly.

Name:
Sex
Occupation

Age:
Address:
Year of Experience

1. Does your organization have any problems related to NRB?
a. Yes
b. No
2. Does your organization have any problems related to loan subscription or subscribers?
a. Yes
b. No
3. Does your organization have any problems related to deposit collection?
a. Yes
b. No
4. Does your organization have any problems related to customers?
a. Yes
b. No
5. Are your customers satisfied with Nepal Bank Limited?
a. Yes
b. No
6. Has your organization failed any problem related to flow of loan?
a. Yes
b. No
7. Do you know about pricing of interest rate charged on loan?
a. Yes
b. No
8. Is any incentive offered to employees by Nepal Bank Limited?
a. Yes
b. No
9. Are you satisfied with Nepal Bank Limited?
a. Yes
b. No
10. Does your organization give emphasis on single factor while giving loan?
a. Yes
b. No
11. Does our organization receive regular information about collateral accepted?
a. Yes
b. No
12. Is fund based loan beneficial for Nepal Bank Limited itself?
a. Yes
b. No
13. Is the process involved in recovering due loan correct?
a. Yes
b. No
14. Is Nepal Bank Limited obeying NRB directive to commercial bank sincerely?
a. Yes
b. No
15. Do you think there is necessity to amend 'loan policy of Nepal Bank Limited' and NRB directive to commercial bank?
a. Yes
b. No

[^0]:    ${ }^{1}$ Statistical pocket book 1998, CBS, National Planning Commission Secretariat P. 1
    ${ }^{2}$ Mahendra Pd. Shrestha and Dhurba K. Gautam, Nepalese Business Environment. P.1.27

[^1]:    ${ }^{3}$ Shakespeare Vaidya, Banking and Finance Management P. 26

[^2]:    ${ }^{4}$ Madhu S. Shrestha (2009) Fundamental of Banking P. 3

[^3]:    ${ }^{5}$ http://www.nepalbank.com.np/bankoverview/history

[^4]:    ${ }^{6}$ Madhu S. Shrestha (2009). Fundamentals of Banking. P-82

[^5]:    ${ }^{7}$ Kiran Thapa, Dipendra K. Neupne, (2005). Banking and Insurance. P. 163

[^6]:    ${ }^{8}$ Shakespeare Vaidya, Banking and Insurance Management P. 111

[^7]:    ${ }^{9}$ Shakespeare Vaidya, Loan Management P-105

[^8]:    ${ }^{10}$ Nepal Bank Limited, Loan Policy Guideline

[^9]:    ${ }^{11}$ Dilli Raj Bhandari (2003), op. cit P. 121

[^10]:    ${ }^{12}$ B. Dahal and S. Dahal (2004), op. Cit P 141.

