## CHAPTER - I

## INTRODUCTION

### 1.1 Background of the Study

Many industries were opened after the establishment of industrial council in1935 A.D. Budgetary system was introduced in 1952A.D. For uplifting the nation, different five years plan were implemented since 2013 B.S. The democratic government started the policy of economic liberalization and globalization. Similarly, government enforced 'Industrial Enterprises act 2049 formulated new industrial policy and "commercial policy 2049". Also enforced "privatization Act 2050" for promoting private sector organizations. These policies had contributed in the initial stage of globalization of Nepal and had enhanced in Overall Gross National product (GNP) and Gross Domestic product (GDP) of the country.

Lending is one of the most important functions of commercial bank. It involves the transfer of money or other property on promise of repayment, usually at a fixed future date. The person who deposit money in the bank they becomes creditor and the person who borrows money from the bank they become debtor of the bank. Bank takes mortgage of property from the debtors to provide loan.

Lending has its different forms. It can be divided into fund based and non-fund based lending. The fund based lending can be further divided into cash credit, overdraft, demand and term loans, bills purchased and discounted and export, packing credit, project finance, consortium finance, loan syndication, bridge loan etc. Similarly, nonfund based credit can be classified into documentary credit, guarantees and bill coacceptance facility. Besides the lending function, there is another function, which is related to the investment in different securities.

Loan is essential aspect of commercial bank. First, income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in
the community strengthens the community-bank relationship. Third, lending money spurs business development and supports a growing economy. Credit being the most important function of commercial banks, affects overall development of the country. So, far as pace of economic development is considered, it is directly related to the quality and quantity of the credit, which is derived from various financial institutions, especially commercial banks in Nepal. Lending operation of commercial banks is very risky one. For this commercial banks have to pay due consideration while formulating lending policy. A healthy development of any commercial bank depends upon its lending policy. A good lending policy attracts of borrowers and lenders, which help to increase the volume and quality of deposits, loan and investment.

Commercial banks are established on the basis of commercial bank act. At present there are 26 commercial banks, which are running in competitive environment. In this study concerns on the credit policy of four commercial banks; Everest Bank Limited, Nabil Bank Limited, Nepal Bangladesh Bank Limited and Nepal industrial and Commercial Bank Limited respectively.

### 1.2 An Introduction of Banks under Study

Everest Bank Limited, Nabil Bank Limited, Nepal Bangladesh Bank Limited and Nepal industrial and Commercial Bank are four Joint venture banks out of 26 commercial banks operating within territory of Nepal at the end of mid July 2008. These banks are established in different time period. Nabil bank is first JVB in the history of Nepal where as Everest Bank is established as the joint venture of Punjab National Bank (India). NIC bank deals with Nepalese business men whose business area lies within the territory of Nepal. So, it was clear that these sample banks with difference service can cover all information for the thesis and make meaningful.

### 1.2.1 Nabil Bank Limited

"Nabil Bank Limited (erstwhile Nepal Arab Bank Limited) was established on 12 July 1984 under a technical service services agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank Ltd. Dubai Nabil bank is the first and major
joint venture bank in the country with key points of representation all over the kingdom of Nepal. The Bank is managed by a team of qualified and highly experienced professionals" ( Nabil Bank's Annual Report 2008).

Share holding are distributed as 50\% by N.B International Limited, Ireland, 20\% by local financial institution and $30 \%$ by the Nepalese.

Nabil is the sole bankers to a multitude on international Aid Agencies, Non-Government Organizations, Embassies and Consulates in the Kingdom. The bank has a dominant market share in these consumer segments which is a compliment to its image and servicing capabilities. Nabil is almost successful joint venture organizations in Nepal registering strong growth in balance sheet footing as well as profits year after year. The initial capital of Rs. 30.00 million, in 1984, has grown to Rs. 2057.00 million in mid-July 2008 (Nabil Bank Annual Report, 2008).

Nabil Bank's Capital Adequacy Ratio stood at $12.04 \%$ as on mid-July 2008 against statutory minimum requirement of $10 \%$. The bank's financial performance is detailed further in this report.

The bank provides a complete range of personal, commercial and corporate banking and related financial services through its 26 branches. It is the largest number amongst any private sector commercial banks in Nepal, Four branches are expected to add in this year.

### 1.2.2 Everest Bank Limited

Everest Bank Ltd.(EBL) started its operation in 1994 with the view and objective of extending professionalized and efficient banking services to various segment is of the society. EBL joined hands with Punjab National Bank (PNB) India as its joint venture partner in 1997. PNB is largest nationalized bank having 111 years of banking history with more than 4500 office all over the India (EBL, Annual Report: 2008).

Despite fragile law and order situation especially during last 3-4 years, the Bank has
recorded spectacular performance. As per audited accounts of Fiscal Year 2007/2008, the Bank's operating profit was Rs. 823.89 million registering a growth of $33.5 \%$ over the previous year. The Bank's credit recorded a growth of nearly $43.21 \%$ over the last year reaching a figure of Rs.18, 482.01 million. Similarly, the total deposits of the Bank posted a growth of $35.66 \%$ amounting to Rs.23, 127.31 million over the preceding year. This sustained growth of the Bank is attributable to its strong systems ad procedures, professional approach, quality lending and highly motivated staff members.

The Bank recognized the value of offering a complete range of services. EBL have pioneered in extending various customer friendly products. EBL have always endeavored in delivering innovative products suiting the consumer's requirements and needs thus enriching, enabling and beautifying their lives.

### 1.2.3 Nepal Industrial and Commercial (NIC) Bank Limited

Nepal Industrial \& Commercial Bank Ltd. (NIC Bank) was incorporated on $30^{\text {th }}$ may 1997 ( Jestha 17, 2054) and commenced business on $21^{\text {st }}$ July 1998 (Shrawan 5, 2055). NIC Bank is one of the banks with largest capital base with authorized capital of Rs. 1600 million and paid capital of Rs. 943 million.

The bank was promoted by some of the renowned business houses in the country along with Rastriya Banijaya Bank (RBB). The Bank had been successful to register operating profit in the very first year of its operation, which is indeed historical. Within 10 years of commencement of business the Bank has established 16 branches.

However, rapidly progressing Nepal offers tremendous potential outside the capital, as well. In order to provide the necessary impetus to the economic progress of Nepal, through banking support of international standards, NIC Bank established its Head office at Biratnagar, the "Commercial Capital" of Nepal.

NIC Bank has an Authorized Capital of Rs. 1600 million with paid-up capital of Rs. 943.9 million. The promoter group holds $65 \%$ of issued capital amounting to Rs. 429 million. The remaining $35 \%$ of paid -up capital amounting to Rs. 231 million is held by
the general public. The shares are listed with Nepal Stock Exchange (NIC Annual Report 2008).

NIC Bank has been able to record substantial increments in balance sheet size and profit since last couple of years. In the financial year ended $16^{\text {th }}$ July 2008, the Bank registered an impressive growth of $53 \%$ in net profit amounting to Rs. 243.1 million compared to Rs. 158.47 million in the previous year (NIC Annual Report 2008).

### 1.2.4 Nepal Bangladesh Bank Ltd.

Nepal Bangladesh Bank ltd. was established in June 1994 with an authorized capital of Rs. 240 million and paid up capital of Rs. 60 million as a joint Venture Bank with IFIC Bank Ltd. of Bangladesh. Its head office is situated at New Baneshwore, Bijuli Bazar, Kathmandu. It has now paid up capital of Rs. 359.93 million. The total equity is participated as $50 \%$ by IFIC Bank Ltd, $30 \%$ by general public and $20 \%$ by local promoters.

The prime objective of this Bank is to render banking services to the different sectors like industries, traders, businessmen, priority sector, small entrepreneurs and weaker section of the society and every other people who need Banking Services. During the period of 10 years of its operation, it has accommodated a large number of clients and has been able to provide excellent services to its clients.

With network of 17 branches and a corporate office, the Bank commands the largest network amongst the joint venture commercial banks in Nepal. The bank has introduced its first ATM facility at Kathmandu plaza, Putali Sadak Branch to give 24 hours 356 days banking services to their valued costumers. The Bank has earned the glory of making available the services to almost all the top Business houses of the country and it occupies one of the leading positions among the Joint Venture Banks in Nepal. The Bank is still pursuing to accommodate as many clients as far as possible.

Top Exporters and Importers of the country have established banking relationship with the Bank with a substantial volume of foreign business which has enhanced the Bank's popularity in the International Trade front. Bank has developed Agency and Correspondent relationship with more than 200 prominent Foreign Banks in the world. With the continuous support of our valued customers the Bank has made all round progress in every sphere of its operation. The Bank has mobilized deposit to the extent of Rs. 13015.14 million and advances loan to the extent of Rs. 9796.38 million as on Ashad end 2065 (Annual Report 2008).

### 1.3 Statement of the Problem

When government introduced the liberalization policy, many banks, financial institution and other institution are established rapidly. These days many commercial banks, development banks and financial institutions are operating their works to assist in the process of economic development in the country. Due to the high competition among these financial institutions, complications are faced in fund mobilization and investment practice. So, it raised the problems of proper fund mobilization activities, which may play the vital role in ensuring banking success and economic development of the nation.

Demand and floating of loan on the non productive sectors is leading the banking system in over liquidity. This has compelled banks to search alternative avenues to mobilize their funds, and thus emerged the new and alternative concepts in the area of lending.

Liquidity pressure in the commercial banks and lack of the best floats of loan sharply reduced the return on shareholders fund. NRB imposed many rules and regulation so that commercial bank can have sufficient liquidity and security. Though most of commercial bank has been successful to earn profit from fund mobilization, but they are not capable to invest their entire fund in more profitable sector.

As the major motive of the commercial banks is to earn more profit, they want to disburse the deposited on loans and advance on different sectors. These days, most of commercial banks are moving towards to the consumer lending. Bank has to take
minimum risk while making consumer lending and the banks have been facing various problems while providing lending service.

Joint venture banks are helping to finance and support the industrial development and business houses in the country. It is because industrialization is one of the alternatives which help to develop the economy of a nation. But it has been common to signal out "Under-development" as one of the major hindrances of the industrial development. Lack of infrastructural supports has been strongly believed to be another set of reasons. Apart from that, joint venture banks for the safe lending of the public saving are faced with a number of problems.

Agriculture has still been the dominating sector in Nepal with around $54.25 \%$ share of GDP and it being the major source for raw materials. A cursory view at Nepali industries that occupy around $9.56 \%$ of GDP delineates agro -industry as a major contributing sector. Out of 2,987 total industrial establishments, there were 572 industries classified as Agro industries in Fiscal Year 2005/2006(tentatively around 23.71\%). This is further confirmed by the fact that joint venture banks and Nepal industrial Development Corporation (NIDC) are major industrial financing institutions in the country, holds around $36 \%$ of the total portfolio directly under Agro -sector.

With the prevailing economic condition of the country, the investment in agriculture, manufacturing and in the industrial sectors has not grown satisfactorily. So, the joint venture banks are also not succeeding perfectly to swift the deposit in profitable sectors. Competitions, being the burning issues at present the related JVBs are at the high time to focus their eye for the better management for the survival and growth.

The present problems related to the credit policy are:
a. What is the position of lending and advancing of sample commercial bank?
b. Whether the Nepalese JVBs are conforming to the guidelines of NRB as to credit practices?
c. What problems are facing by commercial bank in availing lending service?
d. What types of major lending products are prescribed by consumer?

### 1.4 Objectives of the Study

The objectives of this study are;

1. To study the relationship between deposits and lending
2. To study the classification, provision for loan and advances and its effect in profitability.
3. To examine the sector wise and security wise lending.

### 1.5 Significance of the Study

In this present era, joint venture banks are going a wide popularity through their efficient management professional service and playing an eminent role in the economy. Considering the economic structure of the country, the banks do not have sufficient investment opportunities. Rapidly increasing financial institutions are creating threats to joint venture banks. In the contest the study would analyze strengths, weakness, opportunities, and threats of selected joint venture bank. The research would be helpful for the joint venture bank to formulate strategies to face the increasing competitions. Besides it also helps to identify the importance of shareholders, policy formulators academically professional and outside investors. So, an independent in this sector will help people find their way to the solution for the investment.

The Significance of the study can be written as the following manner;
a. By the help of this study, general public can know the lending activities and situation of Nepalese commercial banks.
b. It is also beneficial for the government while formulating policies and rules regarding the credit policy.
c. The study of credit policy would provide information to the management of the concerned banks that would be helpful to take corrective actions in the banks activities.
d. The study provides valuable information that is necessary for the management of the banks, shareholders, general public and related parties.

### 1.6 Limitations of the Study

The present study is not free from the limitations. The limitations of this study are a follows;

- Basically secondary data is used in this study.
- The study mainly focuses on the loan \&advances and doesn't cover other banking services and facilities provided by the banks
- This study has been carried out for the partial fulfillment of master's degree faculty of management of TU.
- So the time and resources are major limitation of the study.
- In this study only limited financial and statistical tools and techniques of credit analysis is used.
- The analysis period of research covers only five years. ( FY 2003/2004 to Fy2007/2008)
- Only 4 commercial banks among 20 have been selected as sample for the study. Due to the small sample size, it may not fully represent complete banking credit concept as a whole.


### 1.7 Organization of the Study

The study has been organized into five chapters each devoted to some aspects of the study of the credit policy of banking of Nepal. The chapters one to five of consist of introduction, review of literature, research methodology, presentation and analysis of the data \&summary, conclusions and recommendations.

## Chapter I: Introduction

The first chapter consist introduction of the study, background of the study, statement of the problems, significance of the study, objectives of the study, limitation of the study, and plans of the study.

## Chapter II: Review of Literature

This chapter includes review of the literature, which was obtained during the review of books, articles, Journals, reports and other relevant materials.

## Chapter III: Research Methodology

This chapter deals on research design, research questions, population and sample, size, sources of data, data collection and processing techniques, analysis of tools.

## Chapter IV: Data Analysis and Presentation

This chapter attempts to analyze and evaluate data with the help of analytical tools and interpret all the results into the units of empirical findings and results.

## Chapter V: Summary, Conclusion and Recommendations

This chapter covers on the results and findings and recommend some suggestions.

## CHAPTER - II

## REVIEW OF LITERATURE

### 2.1 Introduction

Review of literature includes the detail study and review of those books, articles and thesis, which are related to our research. It provides the information about the research. By the detail study of literature, we can come to know up to how the researchers have researched. And what are the things remain to be researched. To make a research effective, the research must be new in the field of research. And without reviewing previous thesis, one can't know what is new? So as to know subject researched and remains to research, review of literature is so important like an investigation of disease before treatment in medical science. It includes related books, articles, journals, and thesis. The textual matters would help the researcher to support the area of research in order to explore the relevant and true facts for the reporting purpose. Actually, it is the best guideline for the research work.

From above it is clear that the purpose of literature review is to find out what research has been conducted is one's chosen field of study and what remarks to be done.

Thus the chapter is broadly discussed under three sections.
a. Conceptual framework
b. Review of journals and Articles
c. Review of previous research

### 2.2 Conceptual Review

This section is developed to discuss briefly about the theoretical frame work, which are closely related to the research work

### 2.2.1 Lending: A Definition

Lending is the essence of commercial banking consequently the formulation and implementation of sound lending policies are among the most important responsibilities
of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk in any extension of credit.

Lending is a firm of trade. It means giving up purchasing power now in exchange for purchasing power in the future.

Lending is to give someone the procession or use of something on the condition that it will be returned later. Concludes that commercial banks have collected such resources from people but they are far behind in their utilization. Commercial banks in Nepal are still lazy to play an active role to utilize their resources collected from different sector in accordance with the need of the economy (Joshi 1982:114).

For our purpose, Lending is the act of giving out money. This has to be repaid after the specified time frame, so as to earn profit from interest. The capital Deficit unit (CDU) borrows fund from capital surplus Unit (CSU) with an agreement to repay/pay back the loan with specified interest in some agreed terms and conditions.

When an organization or individual makes a some available for one to borrow, then the act of granting credit is referred to as lending. Banks and financial institutions avail some funds towards its potential customers upon satisfying their terms and condition. Talking about the term lending, there are few other implicit concepts that come together namely, the concept of repayment, the concept of interest rate and so on.

Credit is the confidence in a borrower's ability and intention to repay. People use the credit they have with financial institutions, businesses, and individuals to obtain loans. And they use the loans to buy goods and services. The credit a person has typically determines how much they will be permitted to borrow, for what purpose, for how long, and at what interest rates. The level of confidence lenders have in potential borrowers depends on many factors. A person's income is an indicator of a person's ability to repay, particularly when compared to the amount of debt they already have. The amount of
borrowing a person has already done and how well they handled repayment is an indicator of their intention to repay.

The reasons people borrow are varied and personal. Loans allow people to obtain goods and services today, such as homes and automobiles, and spread the cost over time. This makes these purchases more affordable than they might otherwise be. Most Americans could not afford homes or cars without the ability to borrow. Many people who have built up their savings use loans instead because they consider rebuilding their savings more difficult than repaying the loan (Khanal 2008:25).

Responsible use of credit revolves around one's budget and how much $s /$ he can afford to devote to loan payments. As general guideline, borrowing may be justified for automobiles, homes, recreational vehicles, education, home improvements, and other purchases that have value lasting beyond the time it takes to pay them off. Responsible use of credit also refers to living within one's means. One should limit the size of the home $\mathrm{s} /$ he buy or the price of the car $\mathrm{s} /$ he drive by the size of the monthly payment $\mathrm{as} / \mathrm{he}$ can comfortably afford (Khanal 2008:26).

### 2.2.2 Bank Lending: An Outline

There are two main types of credit that are available with the Nepalese commercial banks. One type of credit/loan is linked to specific item like home loans, mortgages, personal loan, shop loans vehicle loan, education loan, etc. The second type of loan, which is known as revolving credit, means that the client always has access to the amount of the line of credit that remains unspent. And every time s/he pay off some of the outstanding amount, that proportion of his/her credit limit becomes available for spending again.

Term and Demand loans are normally repaid in regular installments over an agreed period of time. The amount of installments may be variable or fixed repayments of approximately equal amounts. In case of revolving credit facility, the client has an option to pay off the outstanding amount within the expiry date of that facility. In order to cover the lending risk and to make a profit on their money, lenders generally charge interest on loans and revolving credit. With fixed repayment loans, the amount of interest is worked
out in advance and added into the repayments. There is often a penalty if the customer wants to repay the outstanding amount earlier than agreed. With revolving credit, customer can repay as much or as little as s/he wanted, at any point.

### 2.2.3 Credit Policy: An Explanation

Credit policy provides a philosophical framework for day -to-day credit decision. Policy will guide officers in balancing the bank's earnings objectives. Credit policy refers to the overall guidelines that spill out how to decide which customers are availed the credit, the exact repayment terms, the limits set and how to deal with delinquent accounts.

It is the borrowing capacity provided to an individual by the banking system, in the form of credit or a loan. The total bank credit the individual has is the sum of the borrowing capacity each lender bank provides to the individual

A typical credit policy will address the following points:

- Credit Limits

Depending upon the various factors, credit limit is set for each customer.

## - Credit Terms

Decide when the repayment will start, prepayment and late payments conditions are to be set.

## - Margin

It may be required customers to pay a portion of the availed due in advance.

## - Customer Information

This section should outline what the lender wants to know about a customer before making a credit decision. Typical points include years in business, length of time at present location, financial data, credit rating with other vendors and credit reporting agencies, information about the individual principals of the company, and how much they expect to borrow from the lender, etc.

## - Documentation

This includes credit applications, agreements, contacts, correspondence, and so on. It is also the most important part in establishing legal proof of evidences before the court, if the client is failed to fulfill the commitment made towards the lender.

### 2.2.4 Credit Culture: An Overview

Credit culture is the foundation of credit risk management in any bank provided it is effective. Some people define credit culture as simply the way things get done around here. Scholars define credit culture more narrowly as the sum of all the characteristics of an organization's unique behavior in its extension of credit. It not only encompasses the tangible written policies and procedures, but also intangible, such as ideas, tradition, skills, attitudes, philosophies, and standards. Credit culture is developed over time, and then communicated and passed on. it is the true spirit behind the rules. Credit culture is the critical micro piece of the credit risk management process, since an appropriate credit culture determines not only a bank's profitability but also its very survival.

The banking environment has changed dramatically from both an industry and regulatory perspective. Banking has evolved into a fiercely competitive business. Separate business line -specific risk management practices continue to evolve into consolidated enterprise risk management (ERM) frameworks, the purpose of which is to evaluate and manage the uncertainties the enterprise faces as it enhances value to shareholders. However, creating an ERM framework does provide even the smallest institutions with a structured and disciplined approach to aligning strategy, processes, people, technology, and knowledge. Banks are expected by their boards of directors to effectively manage and compete in today's changing environment. Pressure to enhance shareholder value can lead to slippages in credit practices, such as approving marginal credits, waiving personal guaranties and other standards, and irrational pricing. That is, of course, unless an organization has a carefully defined and disciplined credit culture, supported by its board, as its first line of defense against imprudent credit and pricing decisions. In fact, credit culture concepts remain as immutable and relevant today as they were over thirty years ago.(Khanal 2008:29)
P. Henry Mueller, The former chairman of the credit policy committee and chief lending officer of Citibank, New York, has offered 20 self-evident essentials of good banking. The essentials apply to the credit culture of any institution, regardless of size:

- Continuing commitment to excellence.
- Logical framework for day-to -day decision making.
- Sound value systems that will not break down under change.
- Uniform and consistent approach to risk taking.
- A common credit language.
- Business cycle perspective on the bank's credit experience.
- Supremacy of the bank's objectives over individual profit center goals.
- Can did and frank communication at all levels.
- Awareness of every transaction's effect on the bank.
- A portfolio with integrity and few exceptions.
- Individual accountability for decisions and actions.
- Balance of long-term insight with short -term view.
- Respect for credit basics.
- Common-sense reality checks against market practices.
- Encouragement of independent judgment over the herd instinct.
- Constant mindfulness of the bank's risk taking parameters.
- Realistic approach to markets and budgeting.
- An understanding of what the bank expects and the reasons behind its Policies.
- Credit systems with early warning capabilities.
- Expectation that problems are identified early and that no tolerance for Surprise exists.

Policy, process, auditing, and behavior are the underpinnings of a strong credit culture. As the starting point, credit policy provides a philosophical framework for day-to-day credit decisions. Policy will guide officers in balancing the bank's earnings objectives. Process is the line-driven operational arm of credit extension and credit strategy. Through the delegation of authority, a strong credit process will provide a policing mechanism for
the integrity of the credit apparatus. Auditing is responsible for ensuring adherence to credit policy, procedures, and business plans. Behavior is related to the values held by bank employees. Each credit officer should be expected to reflect conservative risktaking attitudes and a commitment to excellence. Exceptions to policy should be few and well documented when approved.

Each type of credit culture has its own characteristics with a driving force, which sets the priorities, stated or unstated, and produces a credit environment with different success factors. There are several determinants of a bank's credit culture that are beyond the scope of this article. However, the most significant determinant in developing an optimal culture is top management's unwavering commitment to credit quality. Any uncertainty or ambiguity opens the door for arguments to stretch, bend, or eliminate policies.

### 2.2.5 Bank Credit /Lending Policies

The principal reason banks are charted by state and federal authorities is to make loans their customers. Banks are expected to support their local communities with an adequate supply of credit for all the intimate business and consumer financial needs and to price that credit reasonably in line with competitively determined interest rates. Indeed, making loans is the principal economic function of bank -to fund consumption and investment spending by businesses, individuals and units of government. How well a bank performs its lending function has a great deal to do with the economic health of its region, because bank loans "support the growth of new businesses and jobs within the bank's trade territory and promote economic vitality. Moreover, bank loans often seem to convey positive information to the marketplace about a borrower's credit quality, enabling a borrower to obtain more and perhaps somewhat cheaper funds from other sources (Khanal 2008:31).

### 2.2.6 Type, Nature and Feature of Loans

This report mainly focuses on the lending practice and procedure of Everest Bank Ltd, Nabil Bank, NB Bank Ltd and NIC Bank. So, it is rational to present the type, nature and feature of loan provided these Banks as the researcher has consulted from the books, information provided by the officers of the concern Bank.

## 1 Term Loan

Term loan is money lent to the borrowers in a lump sum. Generally subsequent debt in the loan account is not allowed except by way of interest, incidental charges, insurance premiums, expenses incurred for the protection of the security. Term loans are generally granted for long period to finance fixed assets and are repayable on installments over the period of loan.

## 2 Project Loan

Project loan granted to customers on the basis of the nature of the project. The financial institution asks the borrower to invest certain portion to the project from their equity and the rest will be financed as project loan. The debit equity ration in case of project loan is generally $60: 40$. The project loan includes the term loan and working capital loan required by the project.

## 3 Working Capital Loan

Working capital is the difference between current assets and current liabilities. This type of loan id granted to the customer to meet their working capital gap. Working capital can be divided into fixed working capital and variable working capital. Fixed working capital is financed by way of short-term loan while variable working capital is financed by overdraft.

## 4 Loan against Fixed Deposit Receipt

Fixed deposits are kept for a specified period by the depositor. If a depositor needs money before is maturity, he/she can obtain loan against the security of such deposits. Generally financial institutions allow up $90 \%$ of the fixed deposits as loans.

Before an advances is allowed against fixed deposit/recurring deposit/other deposit as security, a letter of pledge/lien signed by the depositor along with original fixed deposit receipt/recurring deposit/other deposit duly discharged is normally required by the institutions.

In case of term deposits under reinvestment plan, security for advances made there against is not merely the amount of original deposit but also the amount of interest accrued up to the last/preceding quarter. In such cases the interest accrued may be determined at quarterly compounding basis till the preceding quarter on the date of granting such advances and may be treated as deposit.

## 5 Priorities/Deprived Sector Loan

Commercial banks are required to extend advances to priority sector and deprived sector. Out of the total credit facility of the commercial bank, $12 \%$ must be extend towards priority sector loan including deprived sector. Loan granted to agricultural sector and service sector up to Rs.2millions and cottage industry up to Rs 2.5 millions (for single borrowers) falls in the priority sector. Institutional credit to Agricultural Development Bank and Rural Development Banks also fall in this category. Similarly, advance for the purchase of Captive Generation and Export Credit up to Rs.5.00Millions are also considered as priority sector loan. Deprive sector Loan include:-

Advances to the poor/weak /deprived people unto Rs30,000.00 for income generation or employment oriented schemes.

Institutional credit to Rural Development Banks.
Loans to NGOs those are permitted to carry on banking transaction for lending less than Rs.30,000.00

## 6 Overdrafts

Overdraft facility is a kind of working capital loan. This facility is allowed in current accounts. Overdraft is an agreement by which the banker allows the customers to draw over and above the current account balance. The borrower can not exceed the limit sanctioned to him. In this account, the balance will be fluctuating because of withdrawal and repayment of money by the borrower. Interest on overdraft is changed on debit balance on daily basis. Overdraft is generally granted to the businessmen for the fulfillment of their short term needs. This type of loan is renewed every year if necessary.

## 7 Cash Credit

Cash credit is similar to the overdraft amount by which the consumer is allowed to overdraw his account. The borrower may operate the account within stipulated limit and when required. Cash credit is against the pledge or hypothecation of stock in trade, goods, machinery, land and building etc.

## 8 Hire Purchase Financing

Hire purchase is a type of installment credit under which the hire purchaser, called the hirer, agrees to take the goods on hire at a stated rental which is inclusive of repayment of principal as well as interest, with an option to purchase. Goods for the purchase of hire purchase may be bus, truck. car, jeep, machinery etc. Hire purchase facility can be granted to the person having fixed source of income. The facility can also be granted to the institutions.

## 9 Bill Purchase and Discount

A Bill of Exchange is an instrument in writing containing an unconditional order, signed by the maker, directing a certain person to pay a certain sum of money only to, or to the order of, a certain person or to the bearer of the instrument. A cheque is also a bill of exchange except that it is drawn on a specific banker and not a expressed to be payable otherwise than on demand.

Purchasing of bill of exchange of customers in whose favor limit is sanctioned is called purchasing of bills. Bills may be either documentary bills or clean bill. If a bill is accompanied documents of title to the goods (for example, Railway Receipt, Truck Receipt, Airway Bill, Bill of landing )it is called clean bill. Although the term "bill purchased" seems to imply that the bank becomes the purchaser /owner of such bills, the bank holds the bills (even if they are endorsed in its favor) only as security for the advance. In additions to any right the banker may make against the parties liable on the bills, the bank can also fully exercise a pledge's right over the goods covered by the documents. Bank for regular parties discount the usance /time bills. The banks also purchase cheque of approved customers. At the time of purchase of cheque, the amount is
credited to the party's account by debiting bills purchased account and on receipt of the proceeds of the cheque, after collection, the bills purchased account is liquidated.

## 10 Bridge-Gap Loan

If a term loan is approved to some customers and the approving institution can not disburse the facility because of in completion of legal and other formalities, in this situation customer may ask as bridge gap loan.

## 11 Consortium Loan

While a single financial institution cannot grant credit to a project because of single borrower limit or other reasons, two or some such institutions may agree to grant credit policy to the project. Such kind of loan is called consortium loan. Financial institution may also go on consortium financing to share the risk of project between them selves. In case of consortium loan, the financiers will have paripassu charge on project assets.

## 12 Housing Loan

Financial institutions also extend housing loan to their customers. Housing loans may be of different nature, e.g. residential building, commercial complex, construction of warehouse etc. Housing loans are granted to the customer if they have regular source of income or if they earn revenue from the housing project itself. The purpose of housing loan is for construction of house or purchase of house/flat, for carrying out repairs/renovation/additions/alteration to the house/flat, for purchase of land.

## 13 Off Balance Sheet Transaction

The bank provides the facilities to the client being the guarantor in some transaction. This facility provided to the client mainly in two ways namely, Bank Guarantee, Letter of Credit. This transaction is also called Off Balance Sheet Transaction. Such type of liability called contingent liability. Contingent liability is such type, of liability which may or may not arise during the transaction. It is possible liability but on happening of a certain event it may become actual liability. It is not usual to record contingent liabilities in the Books of Account but the reference is made to them by way of foot notes in the

Balance Sheet. Because of that it is also known as Off Balance Sheet Transaction (Khanal:2008:37).

In the same for bank it is non-funded based remunerative facilities but more risky than the funded until sufficient collateral are taken. Because of them nature of risk, bank need to analysis of the financial standard, credit worthiness and for ascertaining the performance ability of the customer.

## 1 Bank Guarantee

No loan is disbursed in the transaction of bank Guarantee. Hence the researcher would like to introduce it in a single sentence. Bank guarantee expresses a commitment of the bank to make good any financial loss and beneficiary of the guarantee may sustain when the party named in guarantee on whose behalf the guarantee is issued falls to perform the contact and or discharge his/her obligation.

## 2 Letter of Credit (L/C)

L/C is a commitment / undertaking by a bank on behalf of its customer (known as buyer / importer) to pay the count5 value of goods/service within a given date of its supplier (known as seller/export) according to agued stipulated and against presentation of specified documents. A "Letter of Credit is used as an instrument for settlement of payment obligation arising out of commercial transaction like sales/[purchases . In such credit, payment obligation arises only upon fulfillment of specified conditions.

It can be also defined that $\mathrm{L} / \mathrm{C}$ is a written instrument issued by a bank undertaking to pay a certain sum of money to certain party upon presentation of certain documents complying certain terms and conditions as specified in the Letter of credit and under Uniform customs and practice for Documentary credits (UCPDC) if international chamber of commerce (ICC) 500 (revised)

The bank of importer normally opens a letter of credit not the exporter, hence it is known as importer letter of credit. However the same import $\mathrm{L} / \mathrm{C}$ is known as export $\mathrm{L} / \mathrm{C}$ for the
bank of exporter and the exporter himself. This should be understood that importer as well as exporter both $d$ not open separate $\mathrm{L} / \mathrm{C}$ for the trade of same commodities.

## 3 Import Financing

Opening Import $\mathrm{L} / \mathrm{C}$ for the procurement of raw material for the production of finished goods as stipulated by the export $\mathrm{L} / \mathrm{C}$ are made the financing as normally made in the following way:

## Payment against Document (PAD)

In letter of credit transaction, when the document arrives at the bank, principally the L/C opening bank should make the payment of the value to the reimbursing bank. In this situation bank make payment by booking the loan. This type of loan can be treated as forced loan. If the buyer is not able to make the settlement in the due date of the LC, bank makes the payment by financing forces loans. The period of this loan is too short.

## CT (Calcutta Transit) Loan

This loan is also just like the PAD but this loan is not treated as force loan. In case of the raw material procurement from the foreign country, transit may be through Calcutta, India. In this case bank make the payment of value, the document, financing CT loan called Calcutta Transit Loan. The period of the loan is unit the raw material arrives up to customs points.

## TR Loan (Trust Receipt Loan)

Trust Receipt Loan is the major loan in the import financing. If the payment of the import LC's are made, the financing is normally booked under Trust Receipt Loan. Each TR loan is settled normally from the export proceeds or by cash deposits by the client if it is matures before export. Each TR Loan has normally three months of maturity.

## Pre Export Loan

Disbursement in short term loan in cash either in foreign currency or in local currency for the working capital requirement complete the export order is as per the export order (as
per the export LC)is known as pre export loan. This is also known as packing credit loan (PC Loan).

## Post Export Loan

Upon making the shipment by the exporter, he may require another firm of financing from the bank. This might be conducted in terms of post export loan. Very popular export loan is the Foreign Documents Bills Purchase (FDBP). The export document which exporter submits at the bank for sending to the drawee bank for the further realization can be purchased by the exporter's bank which is known as negotiation of the export document. If this is done the bank provides as the amount of negotiation to the exporter as a loan till the proceeds of the same documents realizes. This is known as FDBP.

In some cases, in LC transaction the importer may ask the loan from the exporter's bank adding the additional clause in LC. Exporter's Bank (Negotiating Bank) may provide the loan as per terms and condition mentioned in the Letter of Credit. This type of loan is availed as per the terms and condition mentioned in the Letter of Credit. This type of LC is called the Red clause Letter. Banks can provide this type of loan against the terms and conditions mentioned in LC. (Khanal 2008:41)

### 2.2.7 Credit Principles, Policy and Practice

During the study, it is become familiar about the credit principle, policy and practice of the banks. To reveal the essential aspect of this chapter, researcher has taken some empirical principle developed and expressed by the exports, NRB Directives and other evidence, which will help to make the clear concept to this chapter.

Mr. Sudir Karki, financial expert giving his view about the credit policy that:
Where security is obtained a professional and impartial view of its value and marketability must be obtained.

- The character of the borrower in the case of corporations, the management and shareholders must be free of any doubt as to their integrity.
- If the loan is to be guaranteed, be sure that the guarantor's interest is served as
well as the borrower's
- Quality of credit is more important than exploiting new opportunities
- Every loan should have two ways out that are not related and exist from the beginning
- Successful completion of the transaction, Realizing Assets/Drawing on the borrower's resources.
- See where the bank's money is going to be spent.
- Think first of the bank. Risk increases when credit principles are violated.


### 2.2.8 Portfolio Management

Portfolio is defined as a combination of assets and portfolio theory deals with the selection of optimum portfolio that provides the highest possible return for any specified degree of risk or the lowest possible risk of any specified rate of returns. Hence an investor or investment company should invest its assets diversifying in several opportunities so that maximum return can be obtained with minimum risk.

### 2.2.9 Risk on Lending

NRB has clearly mention in their directives that the fund collected from the general public as deposit should invest in the profitable sector and as far as possible in the risk free sector. But there is no sector where there is risk free lending. So, to minimize the risk of lending commercial banks have to lending. Provision certain portion of investment at NRB according to the nature of credit.

## 1 Business Risk

Risk arises from the nature of business. Sales and operation expenses in business unit is uncertain. Change in the economy definitely affect to the business units. No business units can run with its of all variable expenses, there lies some proportion of fixed expenses/ There lies operating leverage due to irregular relationship in sales and expenses change. The risk arise due to the operating leverage is called business risk.

## 2 Financial Risk

The risk may arise in business unit or production unit may arise due to capital formation. This type of risk is called financial risk.

This risk has been facing by business units and many production units. Hence, an investing company or bank should consider it before approaching to lending. Basically Risk can be classified in two ways:

## 3 Unsystematic Risk (Diversified Risk)

This risk may arise due to the nature of investment and seen in a particular sector. This risk can be minimized by diversifying of lending at various sectors.

## 4 Systematic Risk (Non Diversified)

Such type of risk does not arise in a particular sector but in whole economy, income level, inflation, taxation policy of the government may effect to the whole economy. This risk can not be minimized. Hence investors acquire external return on its investment portfolio management should be oriented towards the followings:

- Portfolio Limit.
- Portfolio towards risk and higher return.
- Pricing management
- Key risk area must be defined.
- Single Borrower limit.


### 2.2.10 NRB Directives

## 1 Directive Relating to the Single Borrower

Nepal Rastra Bank has issued the directive regarding the single borrower limit. The main purpose of the directives is to divers if the commercial banks' lending rather than focusing to the particular borrowers. The directive regarding single borrower limit is as follow.

## 2 Limits on Credit and Facilities

- Funded based credit up to $25 \%$ of core capital
- Non funded based facilities up to $50 \%$ of core capital

Core capital shall be included the following:

- General Reserve Fund
- Paid up capital
- Share Premium
- Non Redeemable preference share


## 3 Directives Relating Loan Loss Provision

A bank should identify and recognize impairment in a loan or a collective assessed group of loans when it is probable that the bank will not be able to collect or there is no longer reasonable assurance that the bank will collect all amount due accruing to the contractual term of the loan agreement. The impairment should be recognized by reducing the carrying amount of loans through and allowance pr charge off and charging the income statement in the period in which the impairment occurs. A Bank should measure an impaired loan at its estimated revocable. A bank should adopt a sound system for managing credit risk. To be able to prudently value loans and to determine appropriate allowances, it is particularly important that banks have a system in place, where established by the institution itself or by the supervisor, to ratable classify all loans on the basis of risk. A credit risk classification system may include categories or designation that refers to varying the degree of credit deterioration such as substandard loans, designation that refers to varying the degree of credit deterioration such as substandard loans, doubtful loans and irrecoverable loans. A classification system typically takes into account the borrower's current financial condition and paying capacity, the current value and reliability of collateral and other factors that effect the prospects for collection of principle and interest. Hence, Bank should maintain reserve of fund as loan loss provision against the loan disbursed. Nepal Rastra Bank has issued the directive relating the provision of loan loss. We have many examples that most of the banks are taken into liquidation due to bad debt or not repayment of the loan by the borrowers. Hence to relief
from this situation NRB has issued and directives by which commercial bank should make some provision against the loan disbursed by them. For this purpose loan categorized as follow and required the certain percentage of reserve in accordance with classification. Now, let us discuss the classification of loan and percentage required to maintain the provision as directive issued by the NRB.

## 1. Pass (Performing Loan)

All Loans and Advances the principal of which are not past due or past due for a period up to three months is included in this category. These are classified and defined as performing Loans.

## 2. Substandard Loan

All loans and Advances the principal of which are past due for a period of more than 3 months and up to 6 months shall be included in this category.

## 3. Doubtful debt

All loans and Advances the principal of which are past due for a period of more than 6 months and up to 1 year shall be included in this category.

## 4. Loss Loan

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

All loans and Advances classified under substandard, doubtful and loss are categorized as non performing loan.

NRB issued Directive No. 2 dated $15^{\text {th }}$ march 2001as revised by their circular dated $14^{\text {th }}$ September 2001 where in fresh guidelines given for the classification of Loans \&Advances including bills purchased and discounted. The required loan loss
provisioning on the basis of classification of outstanding credit shall be as follows:

| Classification of Loan | Loss Provisioning |
| :--- | :---: |
| Pass | $1 \%$ |
| Rescheduled/Restructured | $12.5 \%$ |
| Substandard | $25 \%$ |
| Doubtful | $50 \%$ |
| Loss | $100 \%$ |
| Only Against personal Guarantee | Additional $20 \%$ |

## 4 Directives for Sector Wise Lending

Commercial Banks are also required to grant loan and advances in the productive sector, priority sector and deprived sector of the total advances as:

- $40 \%$ to the productive sectors
- $12 \%$ to the priority sector including deprive sectors.
- $0.70 \%$ to the deprive sector out of loan disbursed to the priority sectors.


### 2.2.11 Credit Policy and Flow of Credit

Looking at the credit policy of the bank the bank usually flow credit in the three sector

- Industry Sector: This sector includes manufacturers of the industrial goods and consumers goods.
- Trading Sector: This sector deals with the purchased and sales of finished goods which can be directly consume for the final use or it may be the industrial raw material for the manufacturing industry.
- Consumer financing: This type of policy focuses the investment of the bank to the individual citizen to the different sector.


### 2.2.12 Procedure for Application, Sanction, Disbursement of Loan

The various steps involved in the loan appraisal approval and disbursement process are set out below:

## 1 Business Plan

A borrower interested in taking a loan should approach the marketing and planning Division at the bank and make an application by filling out the project information sheet
available with the above division regional offices. In this the prospective borrower has to furnish the following:

- Technical details;
- Proposed financial structure;
- Expected raw material requirement and
- Certain legal information relevant to the proposed project.

The project information sheet (PIS) is to be submitted along with a project feasibility report and documents certifying the legal status of the company.

## 2 Processing Of Business Plan

In the event of processing of business plan at the branch, the plan is scrutinized by the branch officials related to credit department. They prepare the loan proposal, which includes the feasibility of the plan.

At the central office business plan along with the loan proposal submitted by the branch well recommended by branch in-charge /credit in-charge is scrutinized by a project screening committee headed by the general manager and consisting of deputy general managers' sectoral division chiefs and chiefs of the bank.

## 3 Screening the Business Plan

The duly filled Out PIS along with detailed feasibility report will be processed by credit department and then referred to the project screening committee for review as to the desirability of the project in the context of national priorities legal obligations, national and international policies and banks own credit policies. After analysis of the internal and external factors the credit in charge focuses to the security against the lending. Such credits are extended by bank against security of properties. Security may be collateral of fixed nature of stock of the unit or both. Credit in-charge observes the sight of the properties. The parameters for good security define the approaches of road, electricity water and other civil amenities. Important is given to the property situated in the urban areas.

If the proposal is accepted, the applicant will be advised to file the formal loan application from for financial assistance.

## 4 Loan Applications

In the event of processing the loan application at the office, the application is forwarded by the credit department to the concerned sectoral division. Each sectoral division is entrusted with the following functions:

The concerned sectoral division appraises the project, and decides its viability on the basis of technical and financial soundness of the loan proposal, the marketability of the products as well as the proposal credit worthiness of the applicant borrower. Once the viability of the project is ascertained, the credit division at central office takes a decision as of whether the project will be financed solely by concerned bank or by a consortium formed with some other banks.

Age Criteria for co-applicant is 21 years at the time of applicant received and not older than 75 years at loan maturity. Subsequent to appraisal an appraisal report is tabled before the sanctioning authority for final decision and approval.

## 5 Loan Sanction

Upon proper security of the loan appraisal the sanctioning authority approves the proposal and prepares a loan sanction letter. The sanction letter spells out the details of the loan, the amount and its purpose, the manner of disbursement the securities to be pledged against the loan (usually, the entire fixed assets of the project are pledged; extra collateral is taken for working capital loan is for those term loans which are intended to finance a movable assets like machinery) the repayment schedule, and other terms and conditions of financing.

Upon receipt of the approval from sanctioning authority at the branch the credit department issues a credit facility offer letter to the borrower. This letter spells out the details of the loan, the amount and its purpose, details of charges, the manner of
disbursement the securities to be pledged against the loan and other terms and conditions to be implemented by the bank and the borrower.

The loan documentation charged by the banks is
NPR 15,00 up to NPR 1 Million Loan
NPR 3,000 up to NPR 10 Million Loan
NPR 5.000 above NPR 10 Million Loan

If the borrower is satisfied with the offer the borrower signs the offer letter and the agreement is made. Upon acceptance of the offer of the bank the borrower is required to adhere to the terms and conditions stipulated in the offer letter.

## 6 Executions of Legal Formalities

When the memo is approved from the top level, some legal formalities are obtained before sanction of loan. The legal formalities are obtained in accordance to the nature of securities and loan. Now, let discuss about the type of securities and methods of execution.

## - Moveable Securities

Moveable securities include Current Assets, Business Stock, Merchandise items, Shares, Debentures, Government Bond, Treasury Bills, Fixed Deposits, Receipts, Vehicles under Hire Purchase and Export Documents.

## - Immovable Securities

Immovable Securities are fixed properties such as land, and building, heavy plant and machines installed within factory premised. Such types of security can not be replaced from one place to other place therefore it is called immovable securities.

So the way of charging according to various types of movable and immovable securities is different. Generally the major way of charging are as mentioned below:

## - Mortgage

The fixed properties of immovable properties are taken as a security by way of mortgage. Mortgage formality shall be done by preparing mortgage deed. Required information are carried out from Title Deed and from valuation report. Mortgage is the transfer of loan interest in specific immovable property for the purpose of securing bank's finance. There are two kinds mortgage as mentioned below:

## - Equitable Mortgage

Equitable Mortgage is an agreement, express or implied where the interests of property pass to the bank as security for a debt due or to become due. It is created by a simple deposit of original title deed with an intent letter of property owner.

## - Legal Mortgage

In legal Mortgage the property owner transfer his legal title in favor of bank under "Dristi Bandhak" where the bank gets legal estate in the property and he will endow with all sorts of right and remedies if required.

## - Pledge

Mr Khanal (2008:52) in his thesis entitled," Credit Policy and its Implementation in Nepalese Commercial Banks" Various types of merchandise items and the business stocks can be considered as security for short term credit facilities by way of pledge arrangement, In this arrangement, bank has effective control over the security and the customer cannot allow transacting over the security before clearing dues outstanding. Furthermore, various types of Government Bond, Treasury Bills, and Development Bonds where the lien from the issuing authority is not possible ( as observed from the present practice) is also considerable as a pledge item to provide bank advances to its customers. In this situation customers are required to simply pledge the certificates to the bank and bank will make necessary arrangement.

## - Hypothecation

Banks can make hypothecation fixed assets and current assets of their customers for the purpose of availing loans and advances against the security of the same.

Hypothecation documents have to be duly signed by authorized persons of company. Goods under hypothecation is under control of customers itself and he is allowed to do the transaction on goods solely, however he is also required to adjust the liability created against hypothecation according to change in the level of stocks/goods. Under hypothecation there is also an arrangement by which bank can convert the hypothecated item into pledge, if required. (Khanal (2008:52).

## - Lien

Various types of documents security such as share certificates of listed company. Fixed Deposit receipt of different banks and other negotiable instruments can also be considered as a security for loans and advances under lien arrangement of the same. It can be done with request to issuing authority by making lien over the same under permission of owner of such documents. The owner of such documents will provide such certificates duly discharge in favor of bank along with letter of lien signed by him.

## - Hire Purchase

Hire purchase transaction is a king of bailment where the hirer pays money in consideration of the use of goods yet the ownership continues to remain with the bank and who gives the commodities/goods on hire purchase finance.

After being finalized to grant the loan, bank obtained/executed various documents to make legally liable to lone for repayment of sanctioned loan. This process is called documentation. Since, different documents are required to be executed accordance to the nature of loan, normally following documents are necessary.

- Promissory Note
- Letter of Request
- Letter of Continuity
- It is filled up for the continue use of those facilities as provided.
- Letter of Arrangement
- Letter of Arrangement is the commitment to the bank by the borrower to arrange
the repayment of loan.
- Letter of Disbursement
- Hypothecation of entire current assets and fixed assets.
- Personal guarantee of all the directors and the property owners(Khanal 2008:53)


## - Loan Disbursement

Usually, loan is disbursed maintaining a 75:25 loan/ Equity ratio at any stage of the project. For example, the first disbursement may be made against land and building to the extent of $75 \%$ of the total cost of the land and building and the disbursement is made only when the promoter has purchased the land and completed the construction of the building at least up to plinth level through equity financing. Similarly, the bank may disburse loan for the purchase of machinery by opening a letter of credit, ensuring however that out of the total investment, including that to be made for the machinery, $40 \%$ is out of once operation are about the start, the concerned sectoral division appoints a team to prepare a project completion report (PCR).At the time of disbursement of loan bank charged $1 \%$ as the service charge of loan amount. (Khanal 2008:54)

### 2.3 Review of Related Books, Articles and Journal

In this section, effort has been made to examine and review of some related articles on different journals, magazines, newspapers and other related books.

### 2.3.1 Review of Books

Commercial banks, now-a-days, playing a very dominant role for the development of industrial sector, business sector and individual live standard too. Due to open market policy and liberalization policy the establishment and growth of banks has boost the economy of the country.

Banks are currently view as catalyst and the key factor in the development of the economy by mobilization of domestic resources. The government in turn is required to regulate their activities and policies such as lending to the private sector, lending to the unemployed people, and creation of entrepreneurship in the society.

Banking means accepting deposits for the purpose of lending or investing, the deposits of money from the public, repayable by cheque, drafts, order of otherwise.(Mali Ram 1969 :112)

## Meaning \& Definition of Lending

Commercial bank as of its primary function make lending activity, it is apparent that loan is defined as a thing is lent, esp. a sum of money. Likewise, debt means a sum of money owed to somebody. However in financial terms loan or debt means principal and interest availed to the borrowers against the security. Debt means money that owes or will lend to individual or person (Ghimire, 2005).

Cheney and Edward (1998), said that the lending objectives are to increase systematically the individual wealth, defined as asset, minus liabilities. The higher the level of desired wealth the higher must be received. An investor seeking higher return must be willing to face higher level of risk.

Frank (1999) defines, and credit may be define as current commitment of funds for a period of time to derive future flows that will compensate the investing unit for the time the funds are committed, for the expected rate of inflection and also for the uncertainty involved in the future flow of the funds. Loan management of a bank is guided by the credit policy adopted by the bank. The credit policy of the bank helps the lending operation of the bank to be efficient and profitable by minimize the risk.

### 2.3.2 Review of Articles /Journal /Official publication

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

Dr. Sunity Shrestha (2055) in her article "Lending Operation of Commercial Bank of Nepal and Its Impact an GDP" has presented with the objectives to make an analysis of
contribution of Commercial Banks, lending to the Gross Domestic product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sector of lending are agricultural, industrial, commercial, service and general social sectors as independent variables. A multiple regression techniques have been applied to analyze the contribution.

The multiple analyze has shown that the entire variable except service sector lending has positive impact an GDP. Thus, in conclusion she had accepted the hypothesis i.e. there has been positive impact on GDP and also she has accepted the hypothesis i.e. there has been positive impact by the lending of Commercial banks in various investment (Shrestha, 2055:23-27).

Commercial banks provide short-term debts necessary for trade and commerce. They take deposits from the trade and commerce. They take deposits from the public and grant loans in different forms. They purchase and discount the bill of exchange, promissory notes and exchange foreign currencies. They discharge the various functions on behalf of their customers provided that they are paid for their services. (Commercial Bank act 2031)
"Banks and financial institutions are the vehicles through which public deposits are mobilized in various development activity i.e. Agricultural, Industry. Trade, commercial institution like commercial banks, development banks, financial companies and various micro-financing institution with different model" (Timilsina, 1999:30).

This thesis mainly focuses on the lending practice and Procedure of Nepalese four commercial banks (i.e. Everest Bank, Nabil Bank NB Bank And NIC Bank) Hence it is rational to state these articles and reports those may make a clear concept to understand the said topic.
"The investor or whether banks, financial institutions, individuals, private or government sector, most not took the proposal by making decision making without having adequate
judgment because sometimes they perform out of norms, related studies, policies and techniques. A project appraisal will best viable only if it has accessed through conscious analysis as well as through thoroughly investment decisions to make its macro and micro level viability effective (Lamichhane 2063:125).

He added some test of tips before and after financing:

- Borrowings and landing activities are based on rate of cash flow coming from the assets, from financed funds and based also on general strength, security cleanliness and on credit worthiness.
- The Interest rate in the loan may be fixed floating or simple calculated or discounted rate based.
- The borrowers should fulfill some convenience such as to safely the regulation of lenders, to maintain a certain financial rations or to produce essential information on time for the lenders.
- Rationality of short fall of funds (requirement of the funds) and goodness of the project proposal.
- The banker also before making any funding should prepare appraisal report by analyzing and assessing the components of project cost and the overall viability.The gravity of the capital.
- The banker should try to receive the appropriate financial segments (Loan characteristic) i.e. through overdraft, acceptance facilities, mortgage, and syndicate of through personal efforts.
- The loan may be secured with the project itself or with clean collateral of on guarantee. The financial task may be facilitated in one currency or number of currencies.
"A loan is Financial Assets resulting from the delivery of cash or to the assets by a lender to a borrower in return for an obligation repay on specified date or dates or on demand."

Usually Loan Comprise:

- Consumer installments, overdrafts and credit card loan.
- Residential mortgages.
- Non personal loans such as commercial loans to business, financial institution, governments and their agencies.
- Direct financing lease
- Other financial arrangements that are in substance loans

Khatiwada (1987), in his Article "Financial Markets \& System" stated that the organized financial system is only a small segment of the overall financial system and in the informal financial system interest rate are neither determined by the free market forces, nor by the authorities but by the monopoly market condition where there exit a few suppliers of credit in relation to a large number of borrowers. Since interest rates are administered and have remained sticky for quite a long period, the statistical relationship between demand for money and the interest has remained insignificant in Nepal.

A web site report of Basel committee- A banking supervision committee, the group of ten countries establishment in 1975 AD. The Base Committee adds "when a bank becomes a party to the contractual terms comprising a loan and as consequence has legal right to receive principal and interest on the loan, it controls the economic benefits associated with loan. Normally, a bank become a party to the contractual provision that comprise a loan (i.e. acquire legal ownership of the loan) or the date of the advances of funds or repayment to a third party. As a result, a commitment to lend funds neither is nor recognized as an asset on the balance sheet. In certain jurisdictions, the acquisition of legal ownership is viewed more as a process than a discrete event. However providing consideration (the advancement of funds) is typically one of the more important factors constituting ownership."

Hendershott and leeuw (1970), in their article " Central Bank Operation and Money Stock of Commercial Bank" dealt with central bank operation and money stock of commercial bank. Their principal hypothesis of their study is that the economic implications of both deposits and short-term interest rates respond promptly to open-
market operations, but that even bank behavior alone is sufficient to dilute the interest-rate effect somewhat as time passes. All of the varied forms of the relationship between central bank actions and the money stock that have been investigated can be traced back to a free reserves equation and the basic reserves identity. Short-term interest rate equation and commercial bank deposit "supply" functions (stock and flow) can be derived by solving the free-reserves equation or the free-reserves equation supplemented by either the first difference or level of the reserves identity for one's preferred dependent variable. Thus, the criterion for choosing among the various empirical results must be statistical in nature, not theoretical. By simple algebraic transformation. The authors show how the freereserve equation and the banking-system identity are equivalent to:

- An equation "explaining" the level of short-term interest rates,
- An equation explaining the change in bank deposits, and
- An equation explaining the level of deposits.

The authors say that each of these derived equations, as well as the initial free-reserve equation, has been the subject of a body of recent empirical work. The authors estimates on non-seasonally adjusted quarterly data for the $1954=$ mid-67 period.

The findings imply that a billion-dollar open-market purchase, holding income and deposits constant, lowers the treasury bill rate by about three percentage points during the first quarter. Allowing for the response of deposits and income would, of course, reduce the bill-rate effect; in fact as time passes the lagged banking system response alone reduces the effect to about minus two. This reduction is attributable to their relatively low estimate of the banking system's quarterly speed of adjustment, 0.35 . The short-run deposit multiplier is in the neighborhood of five; that is, holding interest rates constant, a dollar open-market purchase increases deposits by about five dollars.

The authors say that not too surprisingly, given that the relationships are simple algebraic transformations of one another, the ordinary least-squares estimates of the free-reserve and deposit-change and level equations are quite similar. The authors also apply a two-
stage procedure for correcting a likely source of the great discrepancy between these estimates and those obtained in the short-term interest rate equation. The authors claim that a two- stage procedure for correcting the bias is successful in eliminating most of the discrepancy. Thus, authors suggest that not only are the four equations identical theoretically, but they yield very similar statistical estimates when a two-stage procedure is carefully applied in the investigation.

### 2.4 Reviews from Previous Thesis

Mr. Joshi (1999) has studied on,, "Lending Policy of Commercial Banks in Nepal. ’The main objective of this study is to examine the role of Commercial banks in its functions as weel as performance: to show the relationship between deposit loan and advance, to identify major weakness is of lending policy to commercial banks, to suggest lending policy to process the utilization of the resources and they are still lazy to play an active role to utilizes these sources collected from different sectors accordance with the need of the economy. He recommended that Nepal Rastra Bank have significant role in the overall economic policy of the country. NRB must safe of lending policy and role to solve various problems, which have been arising in the banking development. The researcher found that the Nepalese banks need to remain in the competition in lending, the lending activity in Nepal is remarkably increasing and bank lending has started playing and important role in economic development of the country.

Mrs. Bhattarai (1978), in her thesis entitled "Lending Policy of Commercial Banks in Nepal "has made on effort to examine the lending policy of commercial banks. She has concluded that efficient utilization of resources is more important than collection of the same. Lower investment means lower capital formation that hapless economic development of the people and the country. So, she recommended that bank should give emphasis on efficient utilization of resources.

Mr. Aryal (2006), in his thesis entitled, " An Analysis of Retail Lending in market with Special Reference to Everest Bank Limited" concludes that the to get success in competitive banking environment depositors money must be utilized as loan and advance.

The largest items of the bank in the assets sides in loan and advances.
If it is neglected, it could be the main causes of liquidity crisis in the banks and one of the reasons for a banks failure. He recommended that bank should follow liberal lending policy and invests more and more percentage of total deposit in loan and advances and similarly, maintains more stability in the investment policy.

Mr. Khatiwada (2004), in his thesis entitled, "Retail Banking an Emerging Trend in India" has made in effort to analyzing the trend of retail banking product offered by Indian commercial banks and evaluating the contribution in India economy. He concluded that there is highly positive correlation co-efficient and co- efficient of determination of above $90 \%$ between per capital GDP and retail banking indicated the direct relationship between them. When one Rs. per capital GDP increase, the retail banking player can enhance its retail banking segment and housing finance segment by Rs. 3.26 core and Rs. 1.36 core respectively. He finds that the retail banking segment has much low level of NPA then banking industry's NPA. Housing financing segment of the retail banking is the most lending segment. This segment contributes to retail banking by more than $40 \%$. He suggests that there is tremendous upwards potential in this segment. The future or retail banking is dependent on technology facilities reduction in transaction cost and provides the ability to do business involutes. New kinds of management skill are required to manage the retail -landing portfolio.

Mr. Pradhan (1980), in his thesis entitled, "A Study on Investment Policy of Nepal Bank Ltd" has emphasized that there is a greater relationship between deposits and Loans and advances. He can include that through loan and advance as well as deposits is increasing trend, their increase is not in proportionate manner. Immense increase in deposit had led to little increase in loan and advances due to the increase in the interest rates. His recommendation was to great loan and advances without its lengthy process. He has suggested enhancing banking transactions up to rural sector of the kingdom.

Mr. Pant (2006), in thesis entitled, "A Study of Commercial Bank Deposits and Its

Utilization. " He made an attempt to highlight the discrepancy between resource collection and research utilization. He concluded that commercial banks failure in resource utilization is due to their lending confined to short term only. He recommended the commercial banks to give emphasis also as long and medium term lending for better utilization of the deposit.

Mr. Om Bakhati (2006), in his thesis entitled, "A Comparative Study on Housing Finance of Everest Bank, Nepal Bangladesh Bank Limited and Kumari Bank Limited., concludes that the proportion of housing loan in total loan and advances for all the banks under study is in increasing trend. Among the sample banks, EBL has disbursed higher amount for housing loan. EBL is the pioneer bank in Nepal which initiates the housing loan schemes in Nepal. He suggests that the growth of housing loan depends upon interest rates, so the samples banks are requested to lower down the invest rate and make the procedure of getting loan easy.

## CHAPTER - III

## RESEARCH METHODOLOGY

This chapter describe the approach, materials, and procedures the present study uses to analyze the primary and secondary data. Research methodology is a research method used to meet specific objectives. it is a systematic way to find out the probable solutions. It includes research design, sample design, period of study, sources of data and collection procedure, data processing and terms methods, and tools and techniques, theories to analyze and interpret.

### 3.1 Research Design

Research design the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance, the plan is the over all schemes or program of the research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis of data. The structure of the research is more specific. It is the outline the scheme, the paradigm of the operation of the variables.

When we draw diagrams that outline the variables and their relation and juxtaposition, we build structural schemes for accomplishing operational research purpose. Strategy as used here is also more specific than plan. In other words, strategy implies how the research objectives will be reached and how the problems encountered in the research will be tackled. Some common Research Designs are: Conventional research, Historical research, Descriptive research, Development research, Action research, Field study research, case study research and Assessment study .So descriptive, exploratory and analytical methods are combined, as the study demands for the best result,

### 3.2 Population

The entire number of commercial banks functioning in Nepal as the population of this study. Nabil bank was taken as one of the most successful and pioneer in the banking
field of Nepal. Similarly Everest bank and NIC bank were including in the sample as they are rapidly growing and moderate ranked banks. Finally NB bank was taken as one of the sample to analyze and compare the reasons for failure with other successful sample banks. For the analysis of credit policy and its implementation, among the 26 Commercial banks. Following four banks are selected for study.

1. Nabil Bank Ltd.
2. Everest Bank Ltd.
3. NIC Bank Ltd.
4. Nepal Bangladesh Bank Ltd.

### 3.3 Nature and Sources of Data

To fulfill the objective of this study, primary as well as secondary data had been used. To study the policy and its implementation in the portfolio of investment, historical data of selected commercial banks are used. Both primary and secondary sources are used for the required data. The study heavily depends upon the secondary sources, since the main objective of research is to study the policy and its implementation by banks.

### 3.3.1 Sources of Primary Data

The primary sources of data were the opinion survey through questionnaire and information received from the concerned banks. The primary sources are
a. Discussion with Concerned officer
b. Personal approach and interview
c. Questionnaire Survey

For the survey from primary sources, 50 -sample size has selected from four different groups of respondents. The following table shows the group of respondents and sample size.

Table 3.1
Group of Respondents and Sample Size

| S.N | Group of Respondents | Sample Size |
| :---: | :--- | :---: |
| 1 | Commercials Bank Managers | 5 |
| 2 | Commercial Bank Officers | 10 |
| 3 | Academicians | 10 |
| 4 | Commercial Banks customers | 25 |
| Total |  | 50 |

### 3.3.2 Sources of Secondary Data

The Secondary data for this research has been collected form the following different sources

- Publications and annual reports of Sample Banks (up to fiscal year
- Textbooks of related subject
- Published documents, Bulletins of Nepal Rastra Bank
- Research and thesis reports submitted by different researchers
- Web sites, etc.


### 3.4 Period of Observation

Five years data of four commercial banks was taken for the study. The amount of investments and deposits during the sample period by sampled banks from 2004 to 2008 is taken for study.

### 3.5 Data Analysis Tools

Relevant statistical tools and financial tools are used to find out the best appropriate outcomes as per designed objectives of the present study. The present research has used mix of following tools in the analysis.

### 3.5.1 Statistical Tools

Brief explanations of the statistical tools used in this study are given below.

## - Arithmetic Mean (Mean)

The simple or arithmetic average in which all the observations are treated equally, is the sum of all the individual numbers divided by the number of observations.

$$
\operatorname{Mean}(\bar{X})=\frac{X_{1}+X_{2}+X_{3}}{n}
$$

$$
\operatorname{Mean}(\bar{X})=\frac{X_{1}+X_{2}+X_{3} \ldots \ldots \ldots \ldots . \ldots n}{n}
$$

Where $\bar{x}=$ Mean
$\mathrm{X}_{1} \mathrm{X}_{2} \mathrm{X}_{3}$ to $\mathrm{X}_{\mathrm{n}}$ are given set of observations up to the period n $\mathrm{n}=$ number of items observed.

## - Standard Deviation

In order to indicate the variability of the individual observations, standard deviation is used in this study. Standard deviation measures the dispersion or variability around the mean. The equation for the computation of the standard deviation $(\sigma)$ is

$$
\begin{aligned}
& \text { S. } \mathrm{D}(\sigma)=\sqrt{\frac{\sum(\mathrm{Xn}-\overline{\mathrm{X}})^{2}}{\mathrm{n}-1}} \\
& \bar{X}=\text { The average (mean) } \\
& \mathrm{X}_{\mathrm{n}}=\text { the individual observation } \\
& \mathrm{n}=\text { Total number of observation }
\end{aligned}
$$

- Coefficient of Variation (CV)

Coefficient of variation (CV) is used to adjust for such differences in scale. It is a relative measures of dispersion and is defined as the ratio of the standard deviation divided by the mean.That is,
$\mathrm{CV}=\frac{\sigma}{\bar{X}}$
It is usual for the risk /return model. It shows the return per unit of risk.

### 3.5.2 Financial Tools

Financial ratios are computed and interpreted from two perspectives. They are complied for a number of years to perceive trends, which is usually known as time -series analysis. Next, they are compared at a given time for sample banks, known as cross-sectional analysis. Some of the selected tools are explained as below.

## Current Ratio

Current ratio is the ratio of current assets to current liabilities. It is a measure of liquidity:

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

Current assets include normally those assets of a firm, which are converted into cash within one year. These assets of a firm includes cash, bank balance, investment in treasury bills, discount, overdrafts, short term advances loans, foreign currency loan, bills for collection, customer acceptance, stock, receivable and prepaid expenses.

Similarly current liabilities include those liabilities of a firm which are paid within one year, like current payments, cash margin, current deposits, saving deposits, inter bank reconciliation accounts, bills payable, provision for overdraft, accrued expenses, bills for collection, customer acceptance, outstanding expenses, dividend payable, and provision for taxation. Although there is no hard and fast rule for measuring this ratio, conventionally a CR ratio of $2: 1$ is considered satisfactory.

## Loan and Advances to Current Assets Ratio

Loan and advance to current Assets Ratio measures the relationship between loan and advances to current assets. It shows the banks liquid capacity of lending, discounting and purchasing the bills and loans, cash credit and overdrafts facilities to the customers. Loan and advances refers to local and foreign bills discounted and purchased and loans, cash credit and overdraft in total currency as well and inconvertible foreign currency. The ratio can be computed by dividing the total amounts of loans and advances by total deposited funds.

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

## Loan and Advance to Total Deposit Ratio

Most of the commercials banks earn more profit by using funds of outsider deposited in terms of loan and advances. The ratio shows whether the banks are efficient to utilize the outsiders' fund (i.e. total deposits) for the purpose of profit generation on the loans and advances thus provided.

Generally higher ratio reflects higher efficiency of in utilizing outsiders 'fund and vice versa. The ratio can be computed by dividing the total amounts of loans and advances by total deposited funds.

Loan and Advance to Total Deposits Ratio $=\frac{\text { Loan And Adavances }}{\text { Total Deposits }}$

Loan and advances refers to the total amount of loan and advance and overdraft (i.e. in local currency plus convertible foreign currencies) and total deposit refers the total of all kinds of deposit.

## Fixed Deposit (F.D) to Loan and Advances (L\&A) Ratio

This ratio represents how many times the funds are used is loans and advances against fixed deposits. Loan and advances are the main sources of earning of the bank. In other ways, this ratio of commercial banks indicates, how much of loan and advances are granted against fixed deposit. Fixed deposits long term interest bearing obligations and are the higher interest rate payable deposits. Hence, commercial bank should utilize the fixed deposits properly. This ratio can be calculated as:

Fixed deposit to loan and Advance Ratio $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$

A high ratio indicates idle cash balance i.e. cash is not being utilized properly.

## Saving Deposit (S.D) to Loan and Advances Ratio

This ratio indicates the portion of total saving deposit utilized in loan and advances. Saving deposits are interest paying deposits. So, the banks should utilize them properly. This ratio can be calculated with the help of following formula.
Saving Deposit to Loan and Advance Ratio $=\frac{\text { Saving Deposit }}{\text { Loan and Advances }}$

Stated differently, this ratio examines how many times the funds are used to loans and advance against saving deposits. Saving deposits are interest bearing short term obligation and loan and advance are the major sources of generating income.

## Current Deposit (C.D) to Loan and Advance Ratio

This ratio indicates the portion of total current deposit utilized in loan and advances. Current deposits are non interest paying deposits. So, the banks should utilize them properly at the same time bank have to aware of heavy withdrawal at any time. Here, margin deposit, credit balance in overdraft accounts and other non interest bearing deposits are considered as the total current deposit. This ratio can be calculated with the help of following formula.

Current Deposit to Loan and Advance Ratio: $\frac{\text { Current Deposit }}{\text { Loan and Advances }}$

## Non Performing Loan (NPL) to Total Gross Loan Ratio

This ratio indicates the quality of assets by showing the portion of non performing loan to total gross loan and advances. It is one of the tools in CAMEL's model for exploring the assets quality of the bank. As per the directives of NRB, non -performing loan consists of the three categories of loans, namely, substandard loan, doubtful loan and loss loan. Similarly, total gross loans means total of loan and advances with bills purchased and discounted before provisioning.

The ratio of Non-Performing loan to total loan is taken as one of the important tool/indicator in identifying the institutions' soundness. NRB, the governing organization of commercial banks also monitors this ratio closely. This ratio is calculated with the help of following formula.

Non performing Loan to Total Gross Loan and Advances $=\frac{\text { Non Performing Loan }}{\text { Total Gross LOan and Advances }}$

Lower the ratio means the institution is wise enough in credit administration. So as lower as possible of this ratio is desirable by all the stakeholders of the organization.

## Loan Loss Provision to Non Performing Loan Ratio

To evaluate the quality of assets of commercial banks, the ratio of loan loss provision to non performing loan is used. It is one of the tools in CAMEL's model for exploring the assets quality of the bank. Here, non-Performing loan consists of the three categories of loans, namely, substandard loan, doubtful loan and loss loan. Similarly, loan loss provision means total of applicable provision amount in all kinds of loan and advances with bills purchased and discounted.

The ratio of loan loss provision to non-Performing loan is taken as one of the important tool/indicator in identifying the institutions' soundness. This ratio is calculated with the help of following formula.
Loan Loss Provision to non Performing Loan Ratio $=\frac{\text { Loan Loss Provision }}{\text { Non Perfoming Loan }}$

## Interest Income to Total Loan and Advances Ratio

This ratio indicates the contribution of loan and advances in operating profitability. In other words, this ratio is used to find the average yield of the assets/lending. Here, interest income refers to the interest yield from performing assets. Similarly, total loan and advances means total of loan and advances with this purchased and discounted.

The ratio of interest income to total loan and advances is taken as one of the important tool/indicator in identifying the institutions' position. This ratio is calculated with the help of following formula.

Interest Income to Loan and Advances Ratio $=\frac{\text { Interest Income }}{\text { Total Loan and Advances }}$

Higher the ratio means the institution is generating higher rate of yield in its assets, which is desirable by all the stockholders of the organization.

## Net Profit to Total Loan and Advances Ratio

This ratio indicates the contribution of loan and advances in profitability. In other words, this ratio is used to find the yield efficiency of the lending. Here, Net profit refers to the profit of the year after deducting necessary provision, tax, bonus and other expenses and liabilities. Similarly, total loan and advances means total of loan and advances with bills purchased and discounted. The ratio of net profit to loan and advances is taken as the important tool/indicator in identifying the institutions' position. This ratio is calculated with the help of following formula.
Net Profit to Loan and Advances Ratio $=\frac{\text { Net Profit }}{\text { Total Loan and Advances }}$

Higher the ratio means the institution is generating higher yield in its assets, which is desirable by all the stakeholders of the organization.

## CHAPTER-IV DATA PRESENTATION AND ANALYSIS

### 4.1 Presentation and Analysis of Data

This chapter analysis the lending position of selected banks using financial and stastical tools, over the period from 2004 to 2008. It also presents the result of primary data. This study is mostly based on the two aspects. The first part defines the credit policy (Loan Sanction Process) of the bank and next part defines the implementation of the credit in the different sector. This chapter of thesis also presents the data, facts, figures relating to different aspect of NABIL Bank, NIC Bank, NB Bank and EBL. These available data are tabulated, analyzed and interpreted so that the credit flow of the above bank can be easily understood. Though there are many financial tools but due to some curbs and constraints, only selected tools have been taken to analyze the credit policy of the commercial banks. The types of loans offered by the banking sector have been mentioned in the second chapter as all the banks have identical type of loan in the competitive market. This chapter defines only the credit flow procedure and the different sector of investment.

The second pat of the thesis consists of the credit policy implementation. This part describes the credit flow of the bank in the chart and tabular form; later on it is analyzed and interpreted using different measurement tools.

### 4.2 Analysis of Primary data

The information that has been collected from the primary data is though the questionnaire distributed to the various staff of the banks and the also the personal visit with the concern staff has helped to collect the information. Not only the interview is held with the bank staff but the researcher has also taken interview with the various credit client of the bank. One set of the question is been attached with this thesis in the Annex 1, and the average answer is interpreted by the researcher.

While collecting data from primary source, more than one respondent have been included from the same organization as possible. The respondent of the data cover personalities involving bank managers, officers, bank customers, academicians. This study is mainly based on questionnaire survey of the opinions of 50 respondents. Out of 50 respondents, 5 persons belong to commercial banks managers, 10 respondents belong to commercial Bank officers, 10 belong to academicians and 25 respondents belong to commercial bank's customer.

## Table 4. 1

## Which Sector of Lending Does you Find the Most Secure Sector of Lending?

| Sectors Respondents | Bank <br> Managers | Bank <br> Officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Manufacturing <br> Industry | 1 | 2 | 1 | 2 | 6 |
| Education Loan | 1 | 1 | 1 | 3 | 6 |
| Housing Loan | 2 | 2 | 2 | 7 | 13 |
| Flexi Loan |  | 1 | 1 | 1 | 3 |
| Trading Business |  | 1 | 2 | 6 | 9 |
| Personal Loan | 1 | 1 | 1 | 2 | 5 |
| Professional Loan |  | 1 | 1 | 1 | 3 |
| Loan to Government |  | 1 | 1 | 3 | 5 |
| Total | 5 | 10 | 10 | 25 | 50 |

Source: Field Survey.

The first question is asked which sector is the most secure lending; most of the banks managers, bank staffs, academicians and bank customers reply that the housing financing is the most secure lending. They told that housing loan in the history of Nepal. and is the successful and secure scheme, so out of many 'consumer financing' the housing financing is the secure financing.

Table 4. 2
What is the Common Security that the Bank Demands Before Disbursing Loan?

| Respondents | Bank <br> managers | Bank <br> officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Fixed Assets | 3 | 3 | 4 | 8 | 18 |
| Personal Guarantee | 1 | 2 | 1 | 4 | 8 |
| Stock and Debtors |  | 1 |  | 1 | 2 |
| FD Receipt |  |  |  | 1 | 1 |
| Gold and Silver |  | 1 | 2 | 2 | 5 |
| Government Bond | 1 | 2 | 2 | 6 | 11 |
| Foreign Bills |  | 1 |  | 1 | 2 |
| Life Insurance policy |  |  | 1 | 2 | 3 |
| Total | 5 | 10 | 10 | 25 | 50 |

Source: Field Survey

The second question is asked for the common security that the bank demands at that time of granting the loan the common answer is that commercial banks usually accept the fixed assets as the security. Government bond is also highly preferred by the banks by the duration of these bond are for the short period commercial banks usually accept fixed assets as the collateral. Personal guaranteed is also accepted by the bank only to the prime client- But the banks do not usually accept personal Guarantee, because bank has to provision $100 \%$ of it's lending on the personal guarantee. Bank usually takes more value of securities.

Table.4.3
How Long Does Your Branch Take to Disburse the Loan from the Date of Loan Application ?

| Days Respondents | Bank <br> managers | Bank <br> officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| With in 7 days | 1 | 1 | 2 | 4 | 8 |
| With in 25days | 1 | 2 | 2 | 3 | 8 |
| With in 30 days | 3 | 5 | 3 | 8 | 19 |
| With in 60days |  | 1 | 2 | 5 | 8 |
| 60 days and above |  | 1 | 1 | 5 | 7 |
| Total | 5 | 10 | 10 | 25 | 50 |

[^0]The third question asked how long does the commercial banks takes to disburse the loan form the date of loan application, The answer in this question is found positive in an average of within 30 days as from the date of loan application. It means we can analyze that commercial banks are quick in their services.

Table 4.4
Did you Ever Buy Lending Product Offered by Commercial banks?

| S.N | Response | No. of Respondents |
| :--- | :--- | :---: |
| a | Yes | 16 |
| b | No | 9 |
| c | Don't Know | - |

Source: Field Survey

In the fourth query, respondent were asked whether they have bought or not credit products of any banks, 16 respondent tick to yes and 9 respondent tick to No.. On this note, the researcher has observed that majority of respondents have still not purchased credit products by bank.

## Does Your Bank Have the Hierarchy for the Loan Sanction?

A. Yes
B. No

In the fifth question it is asked that does your bank have the hierarchy for the loan sanction, and it is found that every level above the branch manager has the certain credit limit to sanction credit facility, then power beyond branch manager passes to the deputy general manager, and again power beyond deputy general passes to Executive director and final decision goes to board director. The hierarchy is made for the loan sanction and to provide the loan to its client as soon as possible and to make fewer burdens to the higher authority.

Table N. 4. 5
Which Product of Credit Facility is Most Profitable?

| Factors | Bank <br> managers | Bank <br> officers | Total |
| :--- | :--- | :--- | :--- |
| Working capital Loan | 1 | 1 | 2 |
| Trust Receipt Loan | 1 | 1 | 2 |
| Education Loan | 1 | 2 | 3 |
| Personal Loan |  | 1 | 1 |
| Housing Financing |  | 2 | 2 |
| Demand Loan | 1 | 1 | 2 |
| Vehicle/Hire purchase Loan | 1 | 1 | 2 |
| Mortgage Loan |  | 1 | 1 |
| Total | 5 | 10 | 15 |

## Source: Field Survey

The sixth question is which product of credit facility is most profitable and the answer on this question is in the mixed form everyone comes in his or her view. So, we can convince that every product of the banks is the profitable scheme.

Table 4.6
What is the Time Taken in Follow-up for the Overdue Loan?

| Respondents | Bank <br> managers | Bank <br> officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Immediately | 5 | 4 | 3 | 10 | 22 |
| With in 7 days | --- | 2 | 1 | 4 | 7 |
| With in 15days | --- | 1 | 2 | 2 | 5 |
| With in 1 month | --- | 1 | 3 | 5 | 9 |
| One month or onward | ---- | 2 | 1 | 4 | 7 |
| Total | 5 | 10 | 10 | 25 | 50 |

Source: Field Survey

The seventh questions is asked for the follow -up for the over due of the loan to the immediately. Because due to the high technology and software, they are using the banks gets information about the overdue immediately and tries to take action of recovery soon and effectively.

Table 4.7
What is the Most Important Reason that Leads to the NPA?

| Respondents | Bank <br> managers | Bank <br> officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Investment in wrong <br> sector | 1 | 1 | 2 | 4 | 8 |
| Excess credit flow than <br> the necessary to the <br> client | --- | 2 | 1 | 4 | 7 |
| Lack of documentation <br> process at the time of <br> loan disbursement | ---- | 1 | 1 | 5 | 7 |
| Investment to the client <br> on Ad-hoc basis | 1 | 1 | 2 | 3 | 7 |
| High interest rate <br> charged to the client | --- | 1 | 1 | 2 | 4 |
| Irregular inspection and <br> follow-up of the field | 3 | 4 | 3 | 7 | 17 |
| Total | 5 | 10 | 10 | 25 | 50 |

## Source: Field Survey

The eight question is asked for the most important reason that leads to the NPA (Non Performing Assets). The most common answer is due to irregular follow up and inspection in the site visit. Further the respondent has given the clear and most happening situation of Nepal bank limited. But investment in the wrong sector also leads to the increase in the NPA. Staffs of the banks do not agree on the due to higher interest rate they offer to the client is reasonable. And further more they told that the option given in the questionnaire is equally important and have to consider all the precaution. Like investment in wrong sector, excess credit flow than the necessary, lack of document process at the time of loan disbursement, high interest and irregular inspection and field visit.

## Table 4.8

What is the Procedure for the Banks to Reduce NPA?

| Respondents | Bank managers | Bank <br> officers | Academicians | Banks <br> customers | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Take of legal action | 1 | 2 | 2 | 5 | 10 |
| Forcing the client to <br> pay back soon | 3 | 4 | 3 | 8 | 18 |
| Reschedule the loan | ---- | 1 | 1 | 4 | 6 |
| Reduce the interest rate <br> and force them to pay <br> back | ---- | 1 | 1 | 3 | 5 |
| Rebate interest rate and <br> forcing them to pay <br> back | 1 | 2 | 3 | 5 | 11 |
| Total | 5 | 10 | 10 | 25 | 50 |

Source: Field Survey

The ninth question is asked for the banks procedure to reduce NPA. The bank's first procedure to reduce the NPA is the regular follow up to the client forcing them to pay back all the due amount. The second alternative is to rebate the interest amount and forcing to the client to pay the principal amount immediately. The last actions for the bank to get the amount recover with the help of the legal action. According to their answer, in the question no. nine it indicates that banks can go to any up to level to get public's money back.

### 4.3 Analysis of Secondary Data

Liquidity of the firm refers to the sound solvency position of a firm to meet its obligation, liquidity ratios measures the ability of a firm to meet its short term obligations. Various ratios come under this category.

### 4.3.1 Current Ratio/ Quick Ratio

It is the ratio of total current assets to total current liabilities calculated by dividing the company's current liabilities. In the service industries like banks doesn't have their stock, so current and quick ratio are same.

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

Current assets of commercial banks refers to cash and near cash items like cash and bank balance, money at call and short notice, loans and advances, cash credit ,bills discounted, investment, interest receivables, miscellaneous current assets. Similarly current liabilities are fixed deposit, current deposit, call deposit and other deposit of maturity less than a year, other bill's payable and miscellaneous liabilities. Following table shows the current ratio of NIBL, EBL, NBBL AND NICBL

Table 4.9
Current Ratio
Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CA | CL | Ratio | CA | CL | Ratio | CA | CL | Ratio | CA | CL | Ratio |
| 2004 | 11329 | 5388 | 2.1 | 6750 | 2902 | 2.33 | 5540 | 2392 | 2.32 | 9826 | 5006 | 1.96 |
| 2005 | 8819 | 4147 | 2.13 | 8150 | 3302 | 2.47 | 6174 | 2629 | 2.35 | 11171 | 6148 | 1.82 |
| 2006 | 13858 | 6661 | 2.08 | 11399 | 4748 | 2.38 | 7983 | 4450 | 1.79 | 11434 | 6771 | 1.69 |
| 2007 | 16954 | 9259 | 1.83 | 14227 | 7364 | 1.93 | 9002 | 5563 | 1.62 | 12412 | 7690 | 1.61 |
| 2008 | 22431 | 11315 | 1.98 | 17512 | 11221 | 1.56 | 10210 | 6312 | 1.61 | 13302 | 8230 | 1.60 |
| Mean |  |  | 2.02 |  |  | 2.13 |  |  | 1.93 |  |  | 1.74 |
| S.D |  |  | 0.12 |  |  | 0.38 |  |  | 0.37 |  |  | 0.14 |
| C.V |  |  | 0.06 |  |  | 0.18 |  |  | 0.19 |  |  | 0.08 |

[Sources: Annual Report, Appendix I, II, III IV]

From the table 4.9 Show, it is noticed that the current ratio of Nabil bank over the study period has been ranged between 1.98 in the year2008 and highest ratio recorded as 2.13 in year 2005. From the above table, we can see that the change of ratios is in decreasing trend by the change in time. Where as the ratio of Everest bank is in between 2.33 in year 2004 to 1.45 in year 2008. Similarly, the lowest ratio of NIC Bank is 1.61 in the year 2008 and highest ratio is recorded as 2.35 in year 2005. Finally, the ratio of NB Bank is noticed between 1.96 in the year 2004 and 1.60 in the year 2008.

Further, the NIC bank and EBL bank have less consistency in its current ratio with S.D of 0.37 and 0.38 respectively as compared to other sample banks.

Looking above at the above ratios, it can be said that the banks are meeting the universal standard principle of current ratio i.e. 2:1, in an average. We can say that NB bank, Everest Bank, NIC Bank has maintained the standard but NABIL Bank has relatively low in the standard of the ratio, so it is difficult to measure the liquidity position. We can say the low liquidity position means that the bank is not getting the good opportunity to invest in the profitable sector and holding the amount.

### 4.3.2. Loan and Advances to Current Assets Ratio

This ratio measures the relationship between loan and advances to current assets. It shows the banks liquid capacity of lending, discounting and purchasing the bills and loans, cash credit and overdrafts facilities to the customers. In this study loan and advances refers to local and foreign bills discounted and purchased and loans, cash credit and overdraft in local currency as well and inconvertible foreign currency. This ratio is calculated by dividing loans and advances by current assets.

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

The following table shows the ratios between loan and advances and the current assets of the NIBL Bank, Everest Bank, NIC Bank and NB Bank.

Table 4.10

## Loan and Advances to Current Assets Ratio

Rs. In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | CA | Ratio | L\&A | CA | Ratio | L\&A | CA | Ratio | L\&A | CA | Ratio |
|  | 8549 | 11329 | 0.75 | 6096 | 6750 | 0.90 | 3743 | 5540 | 0.68 | 9645 | 9826 | 0.98 |
| 2005 | 10947 | 8819 | 1.24 | 7900 | 8150 | 0.97 | 4909 | 6174 | 0.80 | 9627 | 11171 | 0.86 |
| 2006 | 13279 | 13858 | 0.96 | 10155 | 11399 | 0.89 | 6659 | 7983 | 0.83 | 8479 | 11434 | 0.74 |
| 2007 | 15903 | 16954 | 0.94 | 14100 | 14227 | 0.99 | 9129 | 9002 | 1.01 | 9159 | 12412 | 0.74 |
| 2008 | 21365 | 22431 | 0.95 | 18836 | 17512 | 1.07 | 11465 | 10210 | 1.12 | 10411 | 13302 | 0.79 |
| Mean |  |  | 0.96 |  |  | 0.96 |  |  | 0.88 |  |  | 0.82 |
| S.D |  | 0.18 |  |  | 0.073 |  |  | 0.18 |  |  | 0.10 |  |
| C.V |  |  | 0.19 |  |  | 0.08 |  |  | 0.20 |  |  | 0.12 |

[Sources: Annual Report, Appendix V, VI, VII VIII]

The above table 4.10 shows that the loan and advances to current assets ratio of NIBL Bank is highest in the year 2005 i.e. 1.24 and the lowest in the year 2007 is 0.94 and increase 0.95 in the year 2008. where as EBL is the highest ratio of 1.07 in the year 2008. And lowest of 0.89 in the year 2006. NICBL has highest ratio of 1.12 in the year 2008 and lowest of 0.68 in the year 2004.Similarly, NBBL has ratio between 0.98 and 0.74. In this way we can observe that there is high variance in the ratio of NICBL and NBBL as the ratio swings heavily during the study period. The highest ratio of 1.24 of NABIL bank is the highest ratio among the above sampled banks.

Among the sampled banks, EBL has more consistency compared to other banks as it has lowest CV of 0.08 and similarly, NABIL, NICBL and NBBL has the C.V of $0.19,0.20$ and 0.12 respectively.

The above table 4.10 shows that the utilization of current assets in terms of loan and advance of NICBL is relatively low compared among the sample banks. So it should increase the utilization of its current assets in terms of loan and advance.

### 4.3.3 Loan and Advance to total Deposit Ratio

This ratio measures whether the banks are successfully utilizing outsider's fund in profit generating purpose by extending for credit facilities.

Generally' a high ratio reflects higher efficiency to the utilization of outsider's fund and voice- versa. This ratio is calculated by using following formula.

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

Here, loan and advances refers to total of loan, advance and overdraft and total deposit refers to sum of all kinds of deposit at the bank. The figure of total loan and advances and total deposit is presented in the table 4.3.

Table 4.11

## Loan and Advances to Total Deposit Ratio

Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | Dep. | Ratio | L\&A | Dep. | Ratio | L\&A | Dep. | Ratio | L\&A | Dep. | Ratio |
| 2004 | 8549 | 14098 | 0.61 | 6096 | 8064 | 0.76 | 3743 | 5146 | 0.73 | 9645 | 12747 | 0.76 |
| 2005 | 10947 | 14587 | 0.75 | 7900 | 10098 | 0.78 | 4909 | 6243 | 0.79 | 9627 | 12126 | 0.79 |
| 2006 | 13279 | 19348 | 0.69 | 10155 | 13803 | 0.74 | 6659 | 8766 | 0.76 | 8479 | 13015 | 0.65 |
| 2007 | 15903 | 23342 | 0.68 | 14100 | 18186 | 0.77 | 9129 | 10068 | 0.91 | 9159 | 9464 | 0.97 |
| 2008 | 21365 | 31915 | 0.67 | 18836 | 23976 | 0.79 | 11465 | 13084 | 0.88 | 10411 | 10883 | 0.95 |
| Mean |  |  | 0.68 |  |  | 0.76 |  |  | 0.81 |  |  | 0.82 |
| S.D |  |  | 0.05 |  |  | 0.021 |  |  | 0.077 |  |  | 0.13 |
| C.V |  |  | 0.08 |  |  | 0.027 |  |  | 0.095 |  |  | 0.16 |

Source: Annual Report, Appendix IX, X, XI XII]

Table 4.11 deposits the facts the most of the fund received from the capital surplus unit has been floated in the form of loan and advances to the capital deficit unit. The lowest ratio of loan and advances to deposit is 0.61 of NABIL Bank in the year 2004 and highest ratio is 0.97 of NB Bank in the year 2007.

The C.V of EBL bank is lowest i.e. 0.027 among the sampled bank so it has high level of consistency. Likewise, it can be observed that the NBBL has highest CV i.e. 0.16 which reveals the greater disparity in the ratio.

The table 4.11 shows that the utilization of deposit to loan and advances of NABIL bank is lowest among the sample banks. It will be better for NABIL bank to increase the portion of loan and advances to earn more interest.

Higher ratio between loan and advances to deposit indicates that the bank is mobilizing high volume of deposit into loan and advances, which results in the positive contribution to profitability. Contradictorily, high ratio between loan and advances to deposit brings the bank in the liquidity risk. There might be the chances, surprisingly, to pay back the customer deposit before maturity. In such cases, higher ratio is less preferred as mobilizing most of the deposit in the form of lending may not meet the liquid obligations, which could occur unexpectedly.

### 4.3.4. Fixed Deposit (F.D) to Loan and Advances (L\&A) Ratio

This ratio of commercial banks indicates, how much of loan and advances are granted against fixed deposit. Fixed deposits are the higher interest rate payable deposits. Hence, commercial bank should utilize the fixed deposits properly. This ratio can be calculated as

Fixed Deposit to Loan and Advance Ratio $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$
The following table displays the ratio of fixed deposit to loan and advances of NABIL Bank, Everest Bank NIC bank and NB Bank.

Table 4.12
Fixed Deposit to Loan and Advances Ratio
Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | FD | Ratio | L\&A | FD | Ratio | L\&A | FD | Ratio | L\&A | FD | Ratio |
| 2004 | 8549 | 2311 | 0.27 | 6096 | 2914 | 0.48 | 3743 | 2083 | 0.56 | 9645 | 4876 | 0.51 |
| 2005 | 10947 | 2079 | 0.19 | 7900 | 3445 | 0.44 | 4909 | 2931 | 0.60 | 9627 | 3537 | 0.37 |
| 2006 | 13279 | 3450 | 0.26 | 10155 | 4298 | 0.42 | 6659 | 4065 | 0.61 | 8479 | 2867 | 0.34 |
| 2007 | 15903 | 5435 | 0.34 | 14100 | 5659 | 0.40 | 9129 | 4075 | 0.45 | 9159 | 1578 | 0.17 |
| 2008 | 21365 | 8464 | 0.39 | 18836 | 6397 | 0.34 | 11465 | 5876 | 0.51 | 10411 | 1104 | 0.10 |
| Mean |  |  | 0.29 |  |  | 0.42 |  |  | 0.55 |  |  | 0.30 |
| S.D |  |  | 0.07 |  |  | 0.05 |  |  | 0.16 |  |  | 0.16 |
| C.V |  |  | 0.24 |  |  | 0.11 |  |  | 0.29 |  |  | 0.53 |

[Sources: Annual Report, Appendix XIII, XIV, XV XVI]

The above table 4.12 shows the total ratio of the fixed deposit to loan and advances. Looking at the average of the five year ratio of total lending from the fixed deposit the average lending of the NABIL Bank is lowest among other banks. Cost of deposit is relatively higher for the fixed deposit compared to other sources of deposit. Fixed deposit is termed as safe deposit for the banks because of the predefined maturity. Though the lending from the fixed deposit is safe NABIL bank is lending only the fewer portions. NIC bank, Everest bank and NB bank have utilized the benefit of the fixed deposit. So they have utilized high portion of the fixed deposit i.e. $0.55,0.42,0.30$ respectively to the loan and advance. Additionally, NB and NIC bank have high CVs of 0.53 and 0.29 which reveals that the pattern of lending from the fixed deposit is fluctuating more.

Thus the above table 4.12 clearly indicates that the fixed deposit to loan and advances ratio are being efficiently and properly utilized by the Everest and NIC bank. But, NABIL bank requires utilizing the benefit of fixed deposit and invests more the portion of fixed deposit in various productive and profitable sectors. Similarly, the trend of lending from the fixed deposit of NB bank is decreasing remarkably, so, it also needs to keep its eye open to optimize the benefit from fixed deposit.

### 4.3.5. Saving Deposit (S.D) to Loan and Advance Ratio

This ratio indicates the portion of total saving deposit utilized in loan and advance saving deposits are interest paying deposits. So, the banks should utilize them properly. This ratio can be calculated with the help of following formula.

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

The following table displays the ratio of saving (plus call) deposit to loan and advances of NABIL Bank, Everest Bank, NIC bank and NB Bank.

Table 4.13

## Saving Deposit (with call) to Loan and Advances Ratio

Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | SD | Ratio | L\&A | SD | Ratio | L\&A | SD | Ratio | L\&A | SD | Ratio |
| 2004 | 8549 | 8796 | 1.03 | 6096 | 4296 | 0.70 | 3743 | 2697 | 0.72 | 9645 | 6435 | 0.67 |
| 2005 | 10947 | 10368 | 0.95 | 7900 | 5511 | 0.70 | 4909 | 3016 | 0.61 | 9627 | 7246 | 0.75 |
| 2006 | 13279 | 12622 | 0.95 | 10155 | 8223 | 0.81 | 6659 | 4257 | 0.64 | 8479 | 8778 | 1.04 |
| 2007 | 15903 | 14149 | 0.89 | 14100 | 10597 | 0.75 | 9129 | 5402 | 0.59 | 9159 | 6739 | 0.74 |
| 2008 | 21365 | 16159 | 0.76 | 18836 | 11883 | 0.63 | 11465 | 6322 | 0.55 | 10411 | 7601 | 0.73 |
| Mean |  |  | 0.92 |  |  | 0.72 |  |  | 0.62 |  |  | 0.79 |
| S.D |  |  | 0.01 |  |  | 0.07 |  |  | 0.06 |  |  | 0.15 |
| C.V |  |  | 0.010 |  |  | 0.09 |  |  | 0.09 |  |  | 0.19 |

[Sources: Annual Report, Appendix XVII, XVIII, XIX XX]

Lending from the saving deposit is also a safe lending because this type of deposit is made by the individual who have excess saving from their income. The chance of withdrawal from the deposits is also low.

Looking at the above table NABIL Bank has invested highest ratio in the year 2004 of 1.03 and lowest of 0.76 in the year 2008. Everest bank has the highest ratio of 0.81 in the year 2006 and lowest of 0.63 in 2008. NIC bank has recorded highest ratio of investment of 0.72 in year 2004 and lowest 0.55 in 2008. Finally, NB bank has the highest ratio of 1.04 in year 2006 and lowest of 0.67 in 2004.

The average ratio of investments from the saving deposit of NABIL bank is 0.92 which is the highest among the average ratio of other banks. Everest bank and NB bank have average ratio of $0.72,0.79$ respectively. But NIC bank seems to be the conservative bank which invests only 0.62 from the saving deposit.

The C.V of the NABIL bank is lowest of 0.010 among other sampled banks, so, we can say that is has the highest consistency. The C.V of the Everest bank and NIC bank has 0.09 and 0.09 respectively. From the above calculation we can say NB bank has low consistency which fluctuates in the high ratio. It also means that NABIL bank is utilizing its saving deposit properly than Everest Bank, NB Bank and NIC Bank.

### 4.3.6. Current Deposit (C.D) to Loan and Advance Ratio

This ratio indicates the portion of total current deposit utilized in loan and advances. Current deposits are non interest paying deposits. So, the banks should utilize them properly at the same time bank have to aware of heavy withdrawal at any time. Here, margin deposit, credit balance in overdraft accounts and other non interest bearing deposits are considered as the total current deposit. This ratio can be calculated with the help of following formula:
Current Deposit to Loan and Advance Ratio: $\frac{\text { Current Deposit }}{\text { Loan and Advances }}$

Following table shows that ratio of current deposit to loan and advances of NABIL Bank, Everest Bank, NIC bank and NB Bank.

Table 4.14

## Current Deposit to Loan and Advances Ratio

Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | CD | Ratio | L\&A | CD | Ratio | L\&A | CD | Ratio | L\&A | CD | Ratio |
| 2004 | 8549 | 2992 | 0.35 | 6096 | 854 | 0.14 | 3743 | 367 | 0.10 | 9645 | 1437 | 0.15 |
| 2005 | 10947 | 3141 | 0.29 | 7900 | 1142 | 0.14 | 4909 | 297 | 0.06 | 9627 | 1343 | 0.14 |
| 2006 | 13279 | 3276 | 0.25 | 10155 | 1282 | 0.13 | 6659 | 445 | 0.07 | 8479 | 1369 | 0.16 |
| 2007 | 15903 | 3758 | 0.24 | 14100 | 2842 | 0.20 | 9129 | 592 | 0.06 | 9159 | 1147 | 0.13 |
| 2008 | 21365 | 5284 | 0.25 | 18836 | 2865 | 0.15 | 11465 | 608 | 0.05 | 10411 | 1542 | 0.14 |
| Mean |  |  | 0.28 |  |  | 0.15 |  |  | 0.06 |  |  | 0.14 |
| S.D |  |  | 0.04 |  |  | 0.03 |  |  | 0.02 |  |  | 0.01 |
| C.V |  |  | 0.14 |  |  | 0.19 |  |  | 0.33 |  |  | 0.07 |

[Sources: Annual Report, Appendix XXI, XXII, XXIII XXIV]

By interpreting the above data we can see that NABIL bank has utilized the maximum ratio of current deposit. But the nature of current is non interest payable deposit and can be withdrawal from the bank at any time. So less amount of investment made from the current deposit more it is benefit to the bank. NRB directive has also clearly mentioned the highest ratio of liquidity should be maintained by the banks.

NABIL bank has highest ratio of investment from the current deposit. In the average of five years sample, it has invested 0.28 to the total Loan and advances. Others sample banks EBL, NICBL AND NBBL has invested the lowest portion from the current deposit i.e. $0.15,0.06$ and 0.14 respectively. The C.V of the NB bank has the lowest of 0.07 and has the highest consistency. But C.V of NIC bank is 0.33 showing the lowest consistency among the sample banks.

### 4.3.7 Non Performing Loan (NPL) to Total Gross Loan Ratio

This ratio indicates the quality of assets by showing the portion of non performing loan to total gross loan and advances. It is one of the tools in CAMEL's model for exploring the
assets quality of the bank. As per the directives of NRB, non-performing loan consists of the three categories of loans, namely substandard loan, doubtful loan and loss loan. Similarly, total gross loans means total of loan and advances with bills purchased and discounted before provisioning.

The ratio of Non-performing loan to total loan is taken as one of the important tool/indicator in identifying the institutions' soundness. NRB, the governing organization of commercial banks, also monitors this ratio closely. This ratio is calculated with the help of following formula.

Non Performing Loan to Total Gross Loan $=\frac{\text { Non performing Loan }}{\text { Total Gross Loan ana Advances }}$

Lower the ratio means the institution is wise enough in credit administration. So as lower as possible of this ratio is desirable by all the stakeholders of the organization.

Following table shows the ratio of non-performing loan to loan and advances of NABIL Bank, Everest Bank, NIC bank, NB Bank and Banking industry as a whole.

Table 4.15
Non Performing Loan to Total Gross Loan Ratio (in \%)
Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  | $\begin{array}{\|c\|} \hline \text { Industry } \\ \hline \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loan | NPL | \% | Loan | NPL | \% | Loan | NPL | \% | Loan | NPL | \% |  |
| 2004 | 8549 | 287 | 3.35 | 6096 | 105 | 1.72 | 3743 | 147 | 3.92 | 9645 | 1042 | 10.81 | 2.77 |
| 2005 | 10947 | 145 | 1.32 | 7900 | 129 | 1.63 | 4909 | 185 | 3.78 | 9627 | 1833 | 19.04 | 8.94 |
| 2006 | 13279 | 166 | 1.25 | 10155 | 122 | 1.20 | 6659 | 173 | 2.60 | 8479 | 1040 | 12.27 | 4.22 |
| 2007 | 15903 | 178 | 1.12 | 14100 | 107 | 0.76 | 9129 | 100 | 1.10 | 9159 | 3218 | 35.13 | . 65 |
| 2008 | 21365 | 193 | 9.03 | 18836 | 120 | 0.64 | 11465 | 98 | 8.54 | 10411 | 3312 | 31.81 | 5.98 |
| Mean |  |  | 3.21 |  |  | 1.19 |  |  | 3.98 |  |  | 21.81 | 14.31 |
| S.D |  |  | 3.38 |  |  | 0.49 |  |  | 2.78 |  |  | 11.15 | 6.78 |
| C.V |  |  | 1.05 |  |  | 0.41 |  |  | 0.7 |  |  | 0.51 | 0.47 |

[Sources: NRB Quarterly Bulletin 49, Appendix XXV, XXVI, XXVII, XXVIII, XXIX]

From the above table, it is observed that the ratio of NPL to total loan is in decreasing trend except that of NB Bank. The ratio of NABIL Bank is 3.35\% in the year 2004 and came up 9.03 in the year 2008. The ratio of EBL is $1.72 \%$ in the year 2004 and came significantly down to $0.64 \%$ in the year 2008. In the same trend NIC Bank is good enough in reducing the ratio from $3.92 \%$ of year 2004 to $1.10 \%$ of year 2007 and increasing the ratio is 8.54 of year 2008. But NB bank's ratio is deviating largely in the study period from $10.81 \%$ of year 2004 to $31.81 \%$ of year 2008 .

Comparing among the sample banks, EBL has the lowest average ratio i.e. $1.19 \%$ which reveals banks effectiveness and efficiency in the process of credit administration and recovery. Similarly NABIL, NIC has the average ratio of $3.21 \%$ and $3.98 \%$ respectively. However NB Bank's average ratio stands out to be $21.81 \%$ which is remarkably high showing management's inefficiency and ineffectiveness.

Comparing the ratio with the industry average ratio, the average ratio of all banks seems to be lower than that of the industry average. But when we look at the data of individual years, the ratio of NB Bank is even higher than the industry average in the year 2005 and 2008.

Taking help of standard deviation to analyze the above data, EBL has maintained the smooth trend of NPL to total loan ratio i.e. 0.49 , which further exhibits the less fluctuation of the ratio during the study period. Similarly NABIL and NICBL have standard deviation of 3.38 and 2.78 respectively, showing the moderate fluctuation in the above ratio. But standard deviation of NBBL is 11.15 , even higher than that of industry i.e. 6.78 , which shows higher fluctuation in the ratio of NPL to total gross loan.

### 4.3.8 Loan Loss Provision to Non Performing Loan Ratio

To evaluate the quality of assets of commercial banks, the ratio of loan loss provision to non performing loan is used is one of the tools in CAMEL,S model for exploring the assets quality of the bank. Here, non-performing loan consists of the three categories of loans, namely, substandard loan, doubtful loan and loss loan. Similarly loan loss
provision means total of applicable provision amount in all kinds of loan and advances with bills purchased and discounted.

The ratio of Loan Loss Provision to Non -Performing loan is taken as one of the important tool/indicator in identifying the institutions’ soundness. This ratio is calculated with the help of following formula.

Loan Loss Provision to Non Performing Loan Ratio $=\frac{\text { Loan Loss Provision }}{\text { Non Performing Loan }}$
Following table shows the ratio of Loan Loss Provision to Non Performing Loan of NABIL Bank Everest Bank NIC bank and NB Bank.

Table 4.16
Loan Loss Provision (LLP) to Non Performing Loan (NPL) Ratio
Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LLP | NPL | Ratio | LLP | NPL | Ratio | LLP | NPL | Ratio | LLP | NPL | Ratio |
| 2004 | 359 | 287 | 1.25 | 212 | 105 | 2.02 | 182 | 147 | 1.24 | 996 | 1042 | 0.96 |
| 2005 | 361 | 145 | 2.50 | 281 | 129 | 2.18 | 198 | 185 | 1.07 | 1839 | 1833 | 1.00 |
| 2006 | 356 | 166 | 2.14 | 335 | 122 | 2.75 | 246 | 173 | 1.42 | 3336 | 1040 | 3.21 |
| 2007 | 357 | 178 | 2.00 | 419 | 107 | 3.92 | 187 | 100 | 1.86 | 3634 | 3218 | 1.13 |
| 2008 | 358 | 193 | 1.85 | 514 | 120 | 4.28 | 200 | 98 | 2.04 | 3911 | 3312 | 1.18 |
| Mean |  |  | 1.95 |  |  | 3.03 |  |  | 1.53 |  |  | 1.50 |
| S.D |  |  | 0.46 |  |  | 1.02 |  |  | 0.41 |  |  | 0.96 |
| C.V |  |  | 0.24 |  |  | 0.33 |  |  | 0.26 |  |  | 0.64 |

[Source: NRB Bulletin 49, Annual Report Appendix XXXVIII, XXXIX, XL, XLI]

From the above table, it is observed that the ratio of Loan Loss Provision to Non Performing Loan is found in between of 4.28 of EBL being highest and 0.96 of NBBL being least.

The ratio of NABIL Bank is 1.25 in the year 2004 and gone up to 1.85 in the year 2008 . Similarly, the ratio of EBL was 2.02 in the year 2004 and gone significantly up to 4.28 in the year 2008. In the same trend, the ratio of NIC bank was 1.24 in the year 2004 and
gone slightly up to 2.04 in year 2008. But NB bank's ratio is deviating largely in the study period from 0.96 of year 2004 to 3.21 of year 2006 and again down to 1.18 in the year 2008.

Comparing among the sample banks, EBL NABIL, and NICBL seems to be the effective and efficient in the process of credit administration and recovery. In the other hand NBBL is relatively weaker in the management and administration of advancing of loan. So, it is recommended to NBBL for the improvement of recovery process and proper management of credit.

### 4.3.9 Interest Income to Total Loan and Advances Ratio

This ratio indicates the contribution of loan and advances in operating profitability. In other words, this ratio is used to find the average yield of the assets/lending. Here, Interest income refers to the interest yield from performing assets. Similarly, total loan and advances means total of loan and advances with bills purchased and discounted.
The ratio of interest income to total loan and advances is taken as one of the important tool/indicator in identifying the institutions' position. This ratio is calculated with the help of following formula

Interest Income to Loan and Advances Ratio $=\frac{\text { Interest income }}{\text { Total Loan and Advances }}$

Higher the ratio means the institution is generating higher rate b of yield in its assets, which is desirable by all the stakeholders of the organization.

Following table shows the ratio of interest income to loan and advances of NABIL Bank, Everest Bank, NIC bank and NB Bank.

Table 4.17
Interest Income to Loan and Advances Ratio
Rs in Million(000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | Int.Inc | \% | L\&A | Int.Inc | \% | L\&A | Int.Inc | \% | L\&A | Int.Inc | \% |
| 2004 | 8549 | 1002 | 11.72 | 6096 | 657 | 10.78 | 3743 | 363 | 9.70 | 9645 | 1096 | 11.36 |
| 2005 | 10947 | 1069 | 9.77 | 7900 | 719 | 9.10 | 4909 | 458 | 9.33 | 9627 | 877 | 9.11 |
| 2006 | 13279 | 1310 | 9.87 | 10155 | 903 | 8.89 | 6659 | 580 | 8.71 | 8479 | 785 | 9.26 |
| 2007 | 15903 | 1588 | 9.99 | 14100 | 1144 | 8.11 | 9129 | 726 | 7.95 | 9159 | 998 | 10.90 |
| 2008 | 21365 | 51978 | 9.26 | 18836 | 1548 | 8.2 | 11465 | 931 | 8.12 | 10411 | 530 | 5.09 |
| Mean |  |  | 10.12 |  |  | 9.01 |  |  | 8.76 |  |  | 9.14 |
| S.D |  |  | 9.35 |  |  | 1.07 |  |  | 0.75 |  |  | 2.48 |
| C.V |  |  | 0.9 |  |  | 0.11 |  |  | 0.85 |  |  | 0.27 |

[Sources: Annual Report, Appendix XXX, XXXI, XXXII XXXIII]

From the table 4.17, it is observed that the trend of interest income to loan and advances ratio is decreasing, which shows the rate of yield is decreasing with the time. In the year 2004, NABIL has having $11.72 \%$ of yield, which lows down to 9.26 in the year 2008 . Similarly, the yield of EBL was $10.78 \%$ in 2004 but decreases to 8.2 while coming to year 2008. Likewise, NICBL also maintained the same trend of decreasing, from 9.70\% of 2004 to $8.12 \%$ of 2008 . But we can notice relatively different trend of the ratio of NBBL, which was $11.36 \%$ in 2004 decreases to 9.11 in year 2005, again decreases to 5.09 in year 2008.

Further, NABIL and NBBL are found to be the higher yield gaining organization compared to EBL and NICBL. The average ratio NABIL, NBBL is 10.12 and 9.14 respectively, whereas the average ratio of EBL and NICBL is 9.01 and 8.76 respectively. Hence, NICBL is found to be the lowest yield generating organization from its performing assets.

### 4.3.10 Net Profit to Total Loan and Advances Ratio

This ratio indicates the contribution of loan and advances in profitability. In other words, this ratio is used to find the yield efficiency of the lending. Here, Net Profit refers to the
profit of the year after deducting necessary provision, tax, bonus and other expenses and liabilities. Similarly, total loan and advances means total of loan and advances with bills purchased and discounted.

The ratio of net profit to loan and advances is taken as the important tool/indicator In identifying the institutions' position. This ratio is calculated with the help of Following formula.
Net Profit to Loan and Advances Ratio $=\frac{\text { Net profit }}{\text { Total Loan and Advances }}$

Higher the ratio means the institution is generating higher yield in its assets, Which is desirable by all the stakeholders of the organization.

Following table shows the ratio of net profit to loan and advances of NABIL Bank, Everest bank, NIC bank and NB Bank.

Table 4.18
Net Profit (NP) to Loan and Advances Ratio
Rs In Million (000000)

| Year | NABIL |  |  | EBL |  |  | NICBL |  |  | NBBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L\&A | NP | \% | L\&A | NP | \% | L\&A | NP | \% | L\&A | NP | \% |
| 2004 | 8549 | 455 | 5.32 | 6096 | 144 | 2.36 | 3743 | 68 | 1.82 | 9645 | 264 | 0.03 |
| 2005 | 10947 | 519 | 4.74 | 7900 | 168 | 2.13 | 4909 | 114 | 2.32 | 9627 | (782) | (8.12) |
| 2006 | 13279 | 635 | 4.78 | 10155 | 237 | 2.33 | 6659 | 97 | 1.46 | 8479 | $(1,797)$ | (21.19) |
| 2007 | 15903 | 674 | 4.24 | 14100 | 296 | 2.10 | 9129 | 158 | 1.73 | 9159 | 577 | 6.30 |
| 2008 | 21365 | 747 | 3.49 | 18836 | 451 | 2.39 | 11465 | 243 | 2.11 | 10411 | 549 | 5.28 |
| Mean |  |  | 4.51 |  |  | 2.26 |  |  | 1.89 |  |  | (3.54) |
| S.D |  |  | 0.69 |  |  | 0.13 |  |  | 0.25 |  |  | 11.40 |
| C.V |  |  | 0.15 |  |  | 0.05 |  |  | 0.13 |  |  | (3.22) |

[Sources: Annual Report, Appendix XXXIV, XXXV, XXXVI, XXXVII]

From the table 4.18, it is observed that the NABIL bank is making highest net
Profitability ratio is compared to other sampled banks. In the year 2004. NABIL is having $5.32 \%$ of yield, which reduces down to 3.49 in the year 2008. Similarly
the yield of EBL was $2.36 \%$ in 2004 and increases to 2.39 while coming to year 2008. Likewise, NICBL also maintained the same trend and the ratio remained $1.82 \%$ the year 2004 gone up to 2.32 in the year 2005 but again downs to 2.11 by The year 2008. But we can notice relatively different trend of the ratio of NBBL, Which was $0.03 \%$ in 2004 decreased to -21.19 in 2006 again increased to 5.28\% In year 2008.

Further, NABIL and EBL are found to be the higher profit gaining organization Compared to others. The average ratio of NABIL, EBL is 4.51 and 2.26 respectively Whereas the average ratio of NICBL and NBBL is 1.89 and -3.54 respectively. Hence, NBBL is found to be the negative yield generating organization.

### 4.3.11 Sector Wise Loan and Advances

There are various sectors in the market that the bank has an opportunity to invest In. Even NRB have issued in its directives that commercial banks have to invest Certain percentage in the deprived and priority sector. So that the backward sector Will also get the benefit form the financial facility.

The table below shows the sector wise loan and advances and their ratio in Percentage out of the total lending.

Table 4.19

## Sector Wise Loan \&Advances

Amount in Million (000000)

| Sectors | NABIL |  | EBL |  | NICBL |  | NBBL |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | $\%$ | Amount | $\%$ | Amount | $\%$ | Amount | $\%$ |
| Agriculture | 54.5 | 0.34 | 55.4 | 0.39 | 139.7 | 1.5 | 47.7 | 0.52 |
| Mining | 13.9 | 0.09 | 11.8 | 0.08 | 0 | 0.0 | 25.5 | 0.28 |
| Production | 5701.5 | 35.85 | 3319.1 | 23.54 | 3511.1 | 38.5 | 3332.9 | 36.39 |
| Construction | 1923.3 | 12.09 | 6822.8 | 14.80 | 1698.2 | 18.6 | 512.9 | 5.60 |
| Machinery | 163.2 | 1.03 | 58.8 | 0.42 | 2.3 | 0.0 | 150.2 | 1.64 |
| Transpiration | 6893.9 | 9.23 | 86.5 | 0.61 | 0 | 0.0 | 76.3 | 0.83 |
| Public service | 917.7 | 5.77 | 964.9 | 6.84 | 252 | 2.8 | 2324.7 | 11.71 |
| Wholesalers | 2458.5 | 15.46 | 4266.2 | 30.26 | 4049.8 | 18.8 | 1716.3 | 18.74 |
| Finance | 821.1 | 5.16 | 466 | 3.30 | 647.5 | 7.1 | 535.3 | 5.84 |
| Service Industry | 1260.7 | 7.93 | 502.9 | 3.57 | 368.4 | 4.0 | 952.6 | 10.40 |
| Consumable | 84.6 | 0.53 | 228 | 1.62 | 41.2 | 0.5 | 100.8 | 1.10 |
| Local Govt. | 0 | 0.00 | 24.1 | 0.17 | 0 | 0.0 | 0 | 0.00 |
| Others | 1036.1 | 6.52 | 2029.7 | 14.39 | 755.5 | 8.3 | 635.8 | 6.94 |
| TOTAL | 21365 | $100 \%$ | 18836 | $100 \%$ | 11465 | $100 \%$ | 10411 | $100 \%$ |

[Source: NRB Quarterly Bulletin mid-July2008]

From the above table we can see that there are various sectors that the banks are Investing. Almost all the sectors the banks are trying to invest their funds. Up to The mid July 2008. NABIL banks has invested total of 21365 Million, Everest Bank has total lending of 18836 Million; NIC bank has the lending of 11465 Million and NBBL have lending of 10411 Million. So it is difficult to calculate and Analysis data amount wise, researcher has tried to interpret according to the Percentage into the various sector.

All the above sampled commercial banks have invested their major portion in the Production sector. The NIC bank have made the highest portions in production sector of $38.5 \%$. NBBL and NABIL bank have also investment of $36.39 \% 35.85 \%$ respectively in the production sector. Everest bank Has also invested major portion of lending in production sector of $23.54 \%$. We can say the NIC bank, NBBL and NABIL bank are
more constrained in the production sector but Everest bank has slightly diversified the investment in other sectors.

EBL is the only one bank which has invested its fund to the local government of $0.17 \%$ out of the total lending. It shows that the ratio of investment in this sector is too low comparative to other sector. But we can say that as a private bank has invested to the local government in the Nepalese banking history.

Further, we can conclude the sector wise lending of sampled commercial banks by saying that productions, constructions, wholesalers, transportation, communication \&public services are the few sectors which consumes higher portion of the lending of commercial banks.

### 4.3.12 Security Wise Loan and Advances

None of the banks invest without the security from clients. Holding the security is to assure the bank in the creation of credit transaction. Bank will recover the fund from the security if the client will not pay back the principal and interest in the due course of time.

The table below shows the total lending and their ratio in percentage through holding various type of security.

Table 4.20
Sector Wise Loan \&Advances
Amount in Million (000000)

| Security | NABIL |  | EBL |  | NICBL |  | NBBL |  |
| :--- | :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
|  | Amount | $\%$ | Amount | $\%$ | Amount | $\%$ | Amount | $\%$ |
| Gold | 0.0 | 0.00 | 0.0 | 0.00 | 4.2 | 0.05 | 0.0 | 0.00 |
| Govt. Securities | 41.6 | 0.26 | 53.3 | 0.38 | 0.0 | 0.00 | 1.1 | 0.01 |
| Non Govt. securities | 1.7 | 0.01 | 21.3 | 0.15 | 506.7 | 5.55 | 8.9 | 0.10 |
| Fixed A/C receipt | 1700.2 | 7.95 | 1739.4 | 9.23 | 226.1 | 2.48 | 123.9 | 1.35 |
| Assets Guarantee | 12584.2 | 58.90 | 13934 | 73.97 | 9967.6 | 86.93 | 7656.2 | 73.53 |
| On bills G' tee | 3991.8 | 18.68 | 648.7 | 3.44 | 12.7 | 0.14 | 1655.3 | 15.89 |
| Guarantee | 589.3 | 3.71 | 1135.6 | 6.02 | 220.2 | 2.41 | 944.0 | 10.31 |
| Credit Card | 62.8 | 0.40 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| Earthquake victim | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| Others | 2393.5 | 11.20 | 1303.7 | 6.92 | 527.5 | 4.60 | 31.5 | 0.34 |
| Total | 21365 | $100 \%$ | 18836 | $100 \%$ | 11465 | $100 \%$ | 10411 | $100 \%$ |

[Source: NRB Quarterly Bulletin mid-July2008]

The table 4.20 shows that there are different types of securities that the bank keeps in the custody at the time grating the loan. Looking at the figure and ratio of the commercial bank in the above table we found that all the banks prefer assets guarantee as the best secured securities. The assets securities include land and buildings, machinery tools. Furniture \&fixtures, vehicle, other fixed assets, rice, raw jute agriculture etc.

First choice and priority in taking security of NABIL is assets guarantee as contributes $58.90 \%$ out of total security. The second prior security for the NABIL bank is on bills guarantee i.e. $18.68 \%$. On bills guarantee includes domestic bills, foreign bills, import bills, letter of credit, export bill, against export bill and other foreign bills. Banks usually reject the gold and silver as the securities because calculation of the actual market value of gold is difficult and the value of these securities keeps in fluctuating all the time.

Everest bank has accepted highest percentage of assets guarantee as the best securities i.e. $73.97 \%$, and lowest of gold and non-government securities. Similarly NIC bank and NB bank have also invested $86.93 \%$ and $73.53 \%$ respectively against the security of assets guarantee.

### 4.4 Major Finding of the Study

From the above analysis made through information from primary sources as well as secondary sources, the researcher has divided the major findings drawn from this study into two categories as

### 4.4.1 Major Findings from Primary data

- Researcher has observed the following important findings from the analysis of primary data, which are enumerated below.
- Most of the respondents agree that the consumer financing are the most secure sector of lending.
- On the basis of the respondents, the common security that the bank demands at the time of granting the loan is fixed assets followed by government bond.
- Most respondents are positive in the time taken by commercial banks in disbursing loan. They have experienced the time taken was less than 30 days from the date of loan application
- Majority of respondent have not yet purchased credit products offered by any banks. Only 16 out of 9 respondents purchased the credit banking products.
- Most of the respondents agree that irregular follow up and inspection in the site visit are most important reason that leads to the NPA.
- Most of the respondents agree that the bank's first procedure to reduce the NPA is the regular follow up to the client forcing them to pay back all the due amount the second alternative is to rebate the interest amount and forcing to the client to pay the principal amount immediately Most of the respondents totally agree that economic and industrial recession is the prime external factors to increase NPA.
- From the responses of the banker's it is noticed that the decision making authority is hold by the top level and rest of the employee is exercise the policy decided by the
top management.
- Comparative analysis of borrowers before granting a loan is major positive aspect of all the sample banks. General interview to sophisticated financials observation is obtained before granting the loan. For uniformity in the procedure in appraising, particular format has been designed separately by the management and officers of banks. But the necessary information relating to the client is enough in their credit application format. Though the banks wants more information form the credit clients but some where it is seems that the information collected form the banks are more than the necessary to the banks.
- The criteria of appraising the proposal on the basis of project feasibility and viability is attractive and innovative aspect of the bank. It is though that the repayment of the loan should be made through the earning of the particular projects. Bank thinks that "man with the knowledge is securing than man with wealth.
- Observation on lending portfolio of the bank reveals that major portion of loan and advances goes to productive sector. This show that bank has been playing vital role in the development of industrial activities realizing the situation that industries are the pillar to the economy developments. Although the industries are getting the financial support from the bank they are not able to take advantage from the financial support due to strike, lockout, changes in government policy etc. Banks are ready to invest in productive sector but due to lack of investment opportunity new concept has been arrived for lending in individual customers i.e. retail lending.
- On the basis of better performance of the client bank provide the interest reduce or rebate to its prime client and provides certain facility and discount as the prizes. On the other hand if negligence arises from the client bank can charge panel so that client are forced for timely repayment of borrowings.
- Nature of loan has been designed considering the nature of the project and business activity and interest rate has been charged according to the nature of loan. As per
present interest rate issued by NABIL Bank, Everest Bank, NB Bank and NIC Bank the researcher found discrimination on the interest is mainly relies on the basis of industry and trading, on the basis of prime client and ordinary client, on the basis of nature of loan
- In my study, it seems that most of the portion of loan granted by sample banks goes to industrial sector only the future of the banks depends to the prosperity of the industry. Low diversification of loan shows higher risk hence the bank lending policy can be treated poorer also the branches of the bank are situated at the highly urban area of the country. According to the verbal information provided by the officer concern bank the collateral of the land and building against the security of the loan should be within the urban area near by the bank location. Branches of these banks are concentrated to sophisticated urban area. Also bank does not entertain collateral outside the urban area. In Nepal $80 \%$ of the total population resides in the village area which directly shows that commercial banks are providing its facility to $20 \%$ of the population living in urban area.


### 4.4.2 Major Findings from Secondary data

- Researcher has observed the following important findings from the analysis of secondary data, which are listed below.
- Current ratio of the banks under study is meeting the universal standard principle of current ratio i.e. 2:1, in an average.
- Mean of the current ratio of NABIL, EBL, NICBL and NBBL is 2.02, 2.13, 1.93 and 1.74 respectively. EBL bank and NICBL bank have less consistency in its current ratio with S.D of 0.38 and 0.37 respectively as compared to other sample banks. Looking at the above ratios, we can say that NB bank, Everest banks NIC Bank has maintained the standard but NABIL Bank has relatively low in the standard of the ratio. We can say the low liquidity position means that the bank is not getting the good opportunity to invest in the profitable sector and holding the amount.
- In utilizing current assets in terms of loan advances, EBL has more consistency compared to other banks as it has lowest CV of 0.08 and similarly, NABIL,NICBL and NBBL has the C.V of $0.19,0.20$ and 0.12 respectively.
- It is observed that there is high variance in the ratio of NICBL and NBBL as the ratio swings heavily during the study period. The highest ratio of 1.24of NABIL bank is the highest ratio among the above sampled banks.
- Utilization of deposit to loan and advances of NABIL bank is lowest among the sample banks. Higher ratio between loan and advances to deposit indicates that the bank is mobilizing high volume of deposit into loan and advances, which results in the positive contribution to profitability. Contradictorily, high ratio between loan advance to deposit brings the bank in the liquidity risk.
- The lowest ratio of loan and advances to deposit is 0.61 of NABIL Bank in the year 2004 and highest ratio is 0.97 of NB Bank in the year 2007. The C.V of EBL bank is lowest i.e. 0.027 among the sampled bank so it has high level of consistency. Likewise, it is observed that the NBBL has highest C.V i.e.0.16, which reveals the greater disparity in the ratio.
- It is found that the fixed deposit to loan and advances ratio are being efficiently and properly utilized by the Everest and NIC bank. Similarly, the trend of lending from the fixed deposit of NB bank is decreasing remarkably. The five year ratio of total lending to fixed deposit shows the average lending of the NABIL bank is lowest among other banks.
- Though the lending from the fixed deposit is safe, NABIL bank is lending only the fewer portions. NIC bank, Everest bank NB bank have utilized the benefit of the fixed deposit. So they have utilized high portion of the fixed deposit i.e.0.55, $0.42,0.30$ respectively to the loan and advance. Additionally, NIC and NB bank
have high CVs of 0.29 and 0.53 , which reveals that the pattern of lending from the fixed deposit is fluctuating more.
- From the ratio of lending to saving deposit, it is revealed that NB bank has low consistency which fluctuates in the high ratio. It also means that NABIL bank is utilizing its saving deposit properly than Everest Bank, NB Bank and NIC bank.
- The average ratio of investments from the saving deposit of NABIL is 0.92, Which is the highest among the average ratio of other banks . Everest bank and NB bank have average ratio of $0.72,0.79$ respectively. But NIC bank seems to be the conservative bank which invests only 0.62 from the saving deposit. The C.V of the NABIL Bank is lowest of 0.010 among other sampled banks, showing highest consistency. The C.V of the Everest bank and NIC bank has 0.09 and 0.09 respectively.
- From the ratio of lending to current deposit, it is found that NABIL bank has highest ratio of investment from the current deposit. In the average of five years sample, it has invested 0.28 to the total Loan and advances. Other sampled banks EBL, NICBL and NBBL has invested the lowest portion from the current deposit i.e. 0.15 .0 .06 and 0.14 respectively. The C.V of the NB bank has the lowest of 0.07 and has the highest consistency. But C.V of NIC bank is 0.33 showing the lowest consistency among the sample banks.
- The ratio of Non-Performing Loan to Total Loan is in decreasing trend except that of NB Bank. The ratio of NABIL Bank is $3.35 \%$ in the year 2004 and came down to $1.12 \%$ in the year 2007 and up to 9.03 in the year 2008. The ratio of EBL is $1.72 \%$ in the year 2004 and came significantly down to $0.64 \%$ in the year 2008. In the same trend, NIC bank is good enough in reducing the ratio from $3.92 \%$ of year 2004 to 1.10 \% of year 2007 and up to $8.54 \%$ in the year 2008.But NB bank's ratio is deviating largely in the study period from $10.81 \%$ of year 2004 to
$35.13 \%$ of year 2007 and down $-31.81 \%$ of year 2008.Comparing among the sample banks, EBL has the lowest average ratio i.e. $1.19 \%$, which reveals banks effectiveness and efficiency in the process of credit administration and recovery. Similarly NABIL, NIC has the average ratio of $3.21 \%$ and $3.98 \%$ respectively. However NB Bank's average ratio stands out to be $21.81 \%$, which is remarkably high showing management's inefficiency and ineffectiveness.
- Comparing the ratio with the industry average ratio, the average ratio of all banks seems to be lower than that of the industry average. But when we look at the data of individual years, the ratio of NB bank is even higher than the industry average in the year 2005, 2007and 2008.
- EBL has maintained the smooth trend of NPL to total loan ratio i.e. 0.49 , which further exhibits the less fluctuation of the ratio during the study period. Similarly NABIL and NICBL have standard deviation of 3.38 and 2.78 respectively, showing the moderate fluctuation in the above ratio. But standard deviation of NBBL is 11.15 , even higher than that of industry i.e. 6.72 , which shows higher fluctuation in the ratio of NPL to total gross loan.
- From the ratio of Loan Loss Provision to Non Performing Loan, it is found the EBL, NABIL and NICBL seem to be the effective and efficient in the process of credit administration and recovery. In the other hand NBBL is relatively weaker in the management and administration of advancing of loan.
- It is observed that the ratio of Loan Loss Provision to Non Performing Loan is found is between of 4.28 of EBL being highest and 0.96 of NBBL being least. The ratio of NABIL Bank is 1.25 in the year 2004 and gone up to 2.00 in the year 2007 and again down 1.85 in the year 2008. Similarly, the ratio of EBL was 2.02 in the year 2004 and gone significantly up to 4.28 in the year 2008. In the same trend, the ratio of NIC bank was 1.24 in the year 2004 and gone slightly up to 2.04 in year 2008. But NB bank's ratio is deviating largely in the study period
from 0.96 of year 2004 to 3.21 of year 2006 and again down to 1.18 in the year 2008.
- The trend of interest income to loan and advances ratio is decreasing, which shows the rate of yield is decreasing with the time. In the year 2004.NABIL is having $11.72 \%$ of yield, which lows down to 9.26 in the year 2008. Similarly, the yield of EBL was $10.78 \%$ in 2004 but decreases to 8.2 while coming to year 2008. Likewise, NICBL also maintained the same trend of decreasing, from $9.70 \%$ of 2004 to $8.12 \%$ of 2008 . But we can notice relatively different trend of the ratio of NBBL, which was $11.36 \%$ in 2004 decreases to 5.09 in year 2008.
- Further NABIL and NBBL are found to be the higher yield gaining organization compared to EBL and NICBL. The average ratio of NABIL, NBBL is 10.12and 9.14 respectively, whereas the average ratio of EBL and NICBL 9.01 and 8.76 respectively. Hence, NICBL is found to be the lowest yield generating organization from its performing assets.
- From the ratio of net profit to loan and advances, it is observed that the NABIL bank is making highest net profitability ratio as compared to other sample banks.
- In the year 2004 NABIL is having $5.32 \%$ of yield, which reduces down to 3.49 in the year 2008. Similarly, the yield of EBL was $2.36 \%$ in 2004 and increases to 2.39 while coming to year 2008. Likewise, NICBL also maintained the same trend and the ratio remained $1.82 \%$ in the year 2004 gone up to 2.32 in the year 2005 but again downs to 2.11 by the year 2008. But we can notice relatively different trend of the ratio of NBBL, which was 0.03 in 2004 decreased to 21.19 in 2006 again increased to 6.30 in year 2007 and again decreased 5.28in the year 2008.The average ratio of NABIL, EBL is 4.51 and 2.26 respectively, whereas the average ratio of NICBL and NBBL is 1.89 and -3.54 respectively. Hence, NBBL is found to be the negative yield generating organization.
- From the analysis of sector wise loan and advances, it is noticed that productions, constructions, wholesaler \&retailers, transportation, communication \&public
services are the few sectors which consumes higher portion of the lending of commercial banks. Up to the mid July 2008 NABIL banks has invested total of 21365 million, Everest Bank has total lending of 18836 million, NIC bank has the lending of 11465 million and NBBL has lending of 10411.
- All sampled banks have invested their major portion in the production sector. The NIC banks have made the highest portions in production sector of $38.5 \%$ NBBL and NIBL bank have also investment of $36.39 \%, 35.85 \%$ respectively in the production sector. Everest bank has also invested major portion of lending in production sector of $23.54 \%$. We can say the NIC bank, NBBL and NABIL bank are more constrained in the production sector but Everest bank has slightly diversified the investment in other sectors. EBL is the only one bank which is invested its fund to the local government of $0.17 \%$ out of the total lending. It shows that the ratio of investment in this sector is too low comparative to other sector.
- From the analysis of security wise loan and advances, it is noticed that there are different types of securities that the bank keeps in the custody at the time granting the loan. Looking at the figure and ratios, we found that all the banks prefer assets guarantee as the best secured.
- First choice and priority in taking security of NABIL is assets guarantee as it contributes 58.90 out of total security. The second prior security for the NABIL bank is on bills guarantee i.e. $18.68 \%$ On bills guarantee includes domestic bills, foreign bills, import bill, letter of credit, export bill, against export bill, and other foreign bills. Banks usually reject the gold and silver as the securities because calculation of the actual market value of gold is difficult and the value of these securities keeps in fluctuating all the time. Everest bank has accepted highest percentage of assets guarantee as the best securities i.e. $93.97 \%$, and lowest of gold and non government securities. Similarly NIC bank and NB bank have also invested $86.93 \%$ and $73.53 \%$ respectively against the security of assets guarantee.


## CHAPTER -V <br> SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is the final chapter of the study. Summary, Conclusions and Recommendations are the three heads included in this chapter.

### 5.1. Summary

In this history of Nepal, financial sector has undergone a signified evolution in the past two decades. Commercial banking activities in Nepal started in 1937 with the establishment of Nepal Bank Ltd in the public sector. At present there are 26 commercial banks in operation many commercial bank, development banks and financial institutions are operating is the economy to assist in the process of economic development is the country. Due to high competition between the financial institutions, the collected high amount of deposit from public is not properly invested. It is due to lace of demand for fund. So it raised the problems of investment and proper mobilization of activities play a vital role in the overall development of economy of the nation.

This study "Credit Policy and its Implementation in Nepalese Commercial Banks" Is primarily prepaid for the partial fulfillment of the requirements of master of business studies (MBS). This study is mainly based on secondary and primary data provided by concerned banks and respondents. Here 4 commercial banks are selected as a sample. The main objective of the study is draw out the existing situation of credit/lending procedure, to study the relationship between deposits and loan and advances, to study the classification of loan and advances, provision for loan and advances and its effect in profitability, to examine the utilization of resources (fund) in various sectors. Information is collect during the period FY 2003/2004 to FY 2007/2008. The collected information is presented, analyzed and conclusion is drawn from the study.

The researcher has tried to go through the practical aspects, which has been followed by above sample bank. Normally, this study focuses on the credit policy and its
implementation, which has been adopted by above four banks. In this process the researcher had consulted many books, booklets, magazine; newspaper in most case, the researcher undertook verbal interviews with officers of the concern banks and their selected client and general public too.

Chapter one is concerned with the introduction of the whole study. It explained about the selected banks, concentration of the study objectives, statement and organization of the study, which provides guideline for entire study.

Chapter two is concerned with the review of study as well as the review of related previous studies, journals and article etc.

Chapter third specifies the guidelines, tools and research design to achieve the objectives of the study.

Chapter four, for the analysis of data mean, standard deviation, coefficient of variation are considered as the main statistical tools in this study. Data are collected through different sector and annual report of related banks. But the primary data are generated through personal interview of banks officers, customer and academicians. So that everyone can understand my thesis, It is anticipated this research will works as the partial fulfillment of requirement for Master's Degree and will be benefit to general readers, new students, researcher department of banks new bank client and general public too. This study shows that the history of JBVs are of too short period but also. It has covered the huge market in the Nepalese economy within a short period.

### 5.2. Conclusion

This study "Credit Policy and Its Implementation in Nepalese Commercial Banks" analyzed and draw out the existing situation of credit/lending procedure, the relationship between deposits and loan and advances, the study of classification of loan and advances, provision for loan and advances and its effect in profitability, examine the utilization of
resources in various sectors based on the data provided in the financial statement as well as other concerned information. Present study is successful to explore the findings of the result designed for the study various statistical tools were used as requirements of nature of data. A secondary as well as primary source of information was used for analysis of data. Based on the data analysis and finding of the result, the conclusion can be drawn as: From this study, the researcher concludes that lending activities in Nepal is remarkably increasing. Bank lending has started playing and important role in economic development of the country. In response to this there have been active efforts within the Nepalese banks to be more focused on the financial products and services.

Again, the researcher found that the Nepalese banks need to remain in the competition in lending, banks need to operate efficiently, package and deliver products on time, leveraging the multiple channels of delivery such as the internet, mobile banking, e-cash and the ATMs. The future of lending is dependent on technology, marketing and capital employment on the sector. Technology facilities reduction in transaction cost and provides the ability to do business in volumes. Banks have to prepare themselves to face a soft interest regime. New kinds of management skills are required to manage the lending portfolio. Banks are competing in the lending products on the basis of product innovation, rationalization of service charges, competitive pricing and simplified procedures for documentation.

Further, researcher has found that the consumer financing and manufacturing sectors are the most secure sector of lending. It is also found that the common security that the bank demands at the time of granting the loan is fixed assets followed by government bond. Low interest rate is the most motivating factors to get the loan in the marked followed by promotion \&advertisement campaign. Tedious and lengthy legal procedure is the main barrier in the growth of lending and availing credit facilities. Irregular follow up and inspection in the site visit are most important reason that leads to the NPA. Economic and industrial recession is the prime external factors to increase NPA. Bank's first procedure to reduce the NPA is the regular follow up to the client forcing them to pay back all the due amount the second alternative is to rebate the interest amount and forcing to the
client to pay the principal amount immediately. Finally, it is noticed that the decision making authority is hold by the top level and rest of the employee is exercise the policy decided by the top management.

### 5.3. Recommendations

The following recommendations are drawn from the findings and conclusions of the study.

## 1. Lending Procedure Should be Short

It is found that the bank's procedure in term of lending is too lengthy. Commercial banks are established in the motive of profit earning from secure lending. So these institutions try to gather more and more information and collateral from the borrower which ultimately consumes more and time. It is recommended to the bank to go to the short procedure of lending so that the borrower will get the necessary fund on time.

## 2. Need to Grab more Benefit from Fixed Deposit

Fixed deposits are that type of deposit which can be withdrawal at the time of maturity only. So the banks advice to utilize the maximum benefit from the nature of fixed deposit by investing in the long term loans.

## 3. Need to Invest in Productive Area that Utilized the Natural Resources

Nepal is rich in natural resources but these resources are not properly utilized due to lack of financial support and technical assistant. Numerous opportunities like electricity, tourism mines etc unused due to the lack of financial support. So banks have to divert their investment in the natural resources too.

## 4. Needs to Diversity Lending

Though the banks are established to earn the profit but besides profit making it has to invest in those sector where the society is really in need of investment. Analyzing in the previous chapter it is fund that most portions of the investment is made in the service or retail sector only. Over concentration of lending reveals
the excessive level of risk. Hence bank should take the steps to diversify its lending. Also bank should bank should develop the concept of micro financing. In additional, commercial banks are recommended to the group financing there by diversifying new avenues rather than focusing merely in one sector.

## 5. Preference to Support Short Term Lending

Considering the present scenario and risk management, it is justifies that risk can be minimized through short term lending than long term. Hence preference to be given for short trade financing and discouraging long term loan finance and also focusing multiple returnable loan rather than dry as far as possible.

## 6. Explore the un-Banked Sectors

Banks should not only concentrate on the city, valley but they also have to find and serve the un-banked areas. Banks should increase effort to cover the wide areas by increasing the branch network as well more geographical coverage. In new area, bank should make effort to tap these are as consumer by providing the product suitable and reasonable for them rather than copied product.

## 7. Target the Agricultural Sector

The world is now facing problem from the scarcity for the food. As a result of which price for food is rising day by day. Fortunately Nepal is the agricultural country, so the financial players should focus on this part as a corporate social responsibility. To tap these consumer, agriculture related financial product like Agricultural financing, micro credit should be introduced.

# ANNEX- 1 <br> Questionnaire -I 

Dear Sir/Madam!

I would be very much thankful for your few minutes time to fill up the following questionnaires that have importance in finding the situation, problems of credit products under banking industry in Nepal. Your individual responses will be kept anonymous and only the general findings will be presented in the research report.

Ganesh Sapkota
Name (optional):
Designation:
Age (in year):
Professional experience (in year)
Organization:

Please answer the following questions as they relate to the bank lending
1)Which sector of lending does you find most the most secure sector of lending.
2) What is the common security that the bank demands before disbursing loan?
3)How long does the bank to disburse the loan form the date of loan application?
4) Did you ever buy lending product offered by commercial banks?
5) Does your bank have the hierarchy for the loan sanction?
6) Which product of credit facility is most profitable?
7)What is the time taken in follow-up for the overdue loan?(Please tick any one)
8) What is the most important reason that leads to the NPA?
9) What is the procedure for the banks to reduce NPA?

Thank you for your kind cooperation.

## APPENDIX -I

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering current assets (CA) and Current liability (CL)

| YEAR | CA | CL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 11,329 | 5,388 | 2.10 | 0.08 | 0.0064 |
| 2005 | 8,819 | 4,147 | 2.13 | 0.11 | 0.0121 |
| 2006 | 13,858 | 6,661 | 2.08 | 0.06 | 0.0036 |
| 2007 | 16,954 | 9,259 | 1.83 | -0.19 | 0.0361 |
| 2008 | 22,431 | 11,315 | 1.98 | -0.04 | 0.0016 |
| Total |  |  | $\sum \mathrm{X}=10.12$ |  | $\sum(X-\bar{X})^{2}=0.0598$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{10.12}{5}=2.02$
(S.D) $\sigma=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0598}{5-1}}=0.12$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.12}{2.02}=0.06$
Where,
CA= Current Assets
CL= Current Liability
S.D $=$ Standard Deviation
C. $V=$ Coefficient of Variances

## APPENDIX -II

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering current assets (CA) and Current liability (CL)

| YEAR | CA | CL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6,750 | 2,902 | 2.33 | 0.2 | 0.04 |
| 2005 | 8,150 | 3,302 | 2.47 | 0.34 | 0.1156 |
| 2006 | 11,399 | 4,784 | 2.38 | 0.25 | 0.0625 |
| 2007 | 14,227 | 7,364 | 1.93 | -0.2 | 0.04 |
| 2008 | 17,512 | 11,221 | 1.56 | -0.57 | 0.3249 |
| Total |  |  | $\sum \mathrm{X}=10.67$ |  | $\sum(X-\bar{X})^{2}=0.583$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{10.67}{5}=2.13$
(S.D) $\sigma=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.583}{5-1}}=0.38$
$\mathrm{CV}=\quad=\quad \frac{\sigma}{\bar{X}}=\frac{0.38}{2.13}=0.18$
Where,
CA= Current Assets
CL= Current Liability
S.D= Standard Deviation
C. $V=$ Coefficient of Variances

## APPENDIX -III

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering current assets (CA) and Current liability (CL)

| YEAR | CA | CL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 5,540 | 2,392 | 2.32 | 0.39 | 0.1521 |
| 2005 | 6,174 | 2,629 | 2.35 | 0.42 | 0.1764 |
| 2006 | 7,983 | 4,450 | 1.79 | -0.14 | 0.0196 |
| 2007 | 9,002 | 5,563 | 1.62 | -0.31 | 0.0961 |
| 2008 | 10,210, | 6,312 | 1.61 | -0.32 | 0.1024 |
| Total |  |  | $\sum \mathrm{X}=9.69$ |  | $\sum(X-\bar{X})^{2}=0.5466$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{9.69}{5}=1.93$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.5466}{5-1}}=0.37$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.37}{1.93}=0.19$
Where,
CA= Current Assets
CL= Current Liability
S.D $=$ Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -IV

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering current assets (CA) and Current liability (CL)

| YEAR | CA | CL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9,826 | 5,006 | 1.96 | 0.22 | 0.0484 |
| 2005 | 11,171 | 6,148 | 1.82 | 0.08 | 0.0004 |
| 2006 | 11,434 | 6,771 | 1.69 | -0.05 | 0.0025 |
| 2007 | 12,412 | 7,690 | 1.61 | -0.13 | 0.0169 |
| 2008 | 13,302 | 8,230 | 1.60 | -0.14 | 0.0196 |
| Total |  |  | $\sum \mathrm{X}=8.69$ |  | $\sum(X-\bar{X})^{2}=0.0878$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{8.69}{5}=1.74$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0878}{5-1}}=0.14$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.14}{1.74}=0.08$
Where,
CA= Current Assets
CL= Current Liability
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -V

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Loan and Advances (LA) and Current Assets (CA)

| YEAR | L \&A | CA | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8,549 | 11,329 | 0.75 | -0.21 | 0.0441 |
| 2005 | 10,947 | 8,819 | 1.24 | 0.28 | 0.0784 |
| 2006 | 13,279 | 13,858 | 0.96 | 0.00 | 0.0000 |
| 2007 | 15,903 | 16,954 | 0.94 | -0.02 | 0.0004 |
| 2008 | 21,365 | 22,431 | 0.95 | -0.01 | 0.0001 |
| Total |  |  | $\sum \mathrm{X}=4.84$ |  | $\sum(X-\bar{X})^{2}=0.123$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.84}{5}=0.96$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.123}{5-1}}=0.18$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.18}{0.96}=0.19$
Where,
CA= Current Assets
L\&A= Loan and Advances
S.D= Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -VI

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Loan and Advances (LA) and Current Assets (CA)

| YEAR | L \&A | CA | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6,096 | 6,750 | 0.90 | -0.06 | 0.0036 |
| 2005 | 7,900 | 8,150 | 0.97 | 0.01 | 0.0001 |
| 2006 | 10,155 | 11,399 | 0.89 | -0.07 | 0.0049 |
| 2007 | 14,100 | 14,227 | 0.99 | 0.03 | 0.0009 |
| 2008 | 18,836 | 17,512 | 1.07 | 0.11 | 0.0121 |
| Total |  |  | $\sum \mathrm{X}=4.82$ |  | $\sum(X-\bar{X})^{2}=0.0216$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.82}{5}=0.96$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0216}{5-1}}=0.07348$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.07348}{0.96}=0.08$
Where,
CA= Current Assets
L\&A= Loan and Advances
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -VII

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Loan and Advances (L\&A) and Current Assets (CA)

| YEAR | L\&A | CA | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 5,540 | 0.68 | -0.2 | 0.04 |
| 2005 | 4,909 | 6,174 | 0.80 | -0.08 | 0.0064 |
| 2006 | 6,659 | 7,983 | 0.83 | -0.05 | 0.0025 |
| 2007 | 9,129 | 9,002 | 1.01 | 0.13 | 0.0169 |
| 2008 | 11,465 | 10,210 | 1.12 | 0.24 | 0.0576 |
| Total |  |  | $\sum \mathrm{X}=4.44$ |  | $\sum(X-\bar{X})^{2}=0.01234$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.44}{5}=0.88$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.1234}{5-1}}=0.18$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.18}{0.88}=0.20$
Where,
L\&A = Loan and Advances
CA= Current Assets
S.D= Standard Deviation
C. $V=$ Coefficient of Variances

## APPENDIX -VIII

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Loan and Advances (L\&A) and Current Assets (CA)

| YEAR | L\&A | CA | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9,645 | 9,826 | 0.98 | 0.16 | 0.0256 |
| 2005 | 9,627 | 11,171 | 0.86 | 0.04 | 0.0016 |
| 2006 | 8,479 | 11,434 | 0.74 | -0.08 | 0.0064 |
| 2007 | 9,159 | 12,412 | 0.74 | -0.08 | 0.0064 |
| 2008 | 10,411 | 13,302 | 0.79 | -0.03 | 0.0009 |
| Total |  |  | $\sum \mathrm{X}=4.11$ |  | $\sum(X-\bar{X})^{2}=0.0409$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.11}{5}=0.82$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0409}{5-1}}=0.10$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.10}{0.82}=0.12$
Where,
L\&A = Loan and Advances
CA= Current Assets
S.D= Standard Deviation
C. $V=$ Coefficient of Variances

## APPENDIX -IX

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Loan and Advances (L\&A) and Total Deposit

| YEAR | L\&A | Deposit | RATIO (x) | $X-\bar{X}$ | $(X-\bar{X})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8,549 | 14,098 | 0.61 | -0.07 | 0.0049 |
| 2005 | 10,947 | 14,587 | 0.75 | 0.07 | 0.0049 |
| 2006 | 13,279 | 19,348 | 0.69 | 0.01 | 0.0001 |
| 2007 | 15,903 | 23,342 | 0.68 | 0.00 | 0.0000 |
| 2008 | 21,365 | 31,915 | 0.67 | -0.01 | 0.0001 |
| Total |  |  | $\sum \mathrm{X}=3.4$ |  | $\sum(X-\bar{X})^{2}=0.01$ |

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

Mean $\bar{X}=\quad \frac{\sum X}{N}=\frac{3.4}{5}=0.68$
S.d. $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.01}{5-1}}=0.05$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.05}{0.68}=0.08$

Where,
L\&A= Loan and Advances
Deposits $=$ Total Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -X

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Loan and Advances (L\&A) and Total Deposit

| YEAR | L\&A | Deposit | RATIO (x) | $X-\bar{X}$ | $(X-\bar{X})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 8064 | 0.76 | 0.00 | 0.0000 |
| 2005 | 7900 | 10098 | 0.78 | 0.02 | 0.0004 |
| 2006 | 10155 | 13803 | 0.74 | -0.02 | 0.0004 |
| 2007 | 14100 | 18186 | 0.77 | 0.01 | 0.0001 |
| 2008 | 18836 | 23976 | 0.79 | 0.03 | 0.0009 |
| Total |  |  | $\sum X=3.84$ |  | $\sum\left(\mathrm{X}-\mathrm{X}^{-}\right)=0.0018$ |

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

Mean $\bar{X}=\quad \frac{\sum X}{N}=\frac{3.84}{5}=0.76$
S.d. $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0018}{5-1}}=0.021$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.021}{0.76}=0.027$

Where,
L\&A= Loan and Advances
Deposits $=$ Total Deposits
S.D = Standard Deviation
C.V = Coefficient of Variances

## APPENDIX -XI

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Loan and Advances (L\&A) and Total Deposit

| YEAR | L\&A | Deposit | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 5146 | 0.73 | -0.08 | 0.0064 |
| 2005 | 4,909 | 6243 | 0.79 | -0.02 | 0.0004 |
| 2006 | 6,659 | 8766 | 0.76 | -0.05 | 0.0025 |
| 2007 | 9,129 | 10068 | 0.91 | 0.1 | 0.01 |
| 2008 | 11,465 | 13084 | 0.88 | 0.07 | 0.0049 |
| Total |  |  | $\sum \mathrm{X}=4.07$ |  | $\sum(X-\bar{X})^{2}=0.0242$ |

Loan and Advances to Total Deposit $=\frac{\text { Loan and Advances }}{\text { Total Deposit }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.07}{5}=0.81$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0242}{5-1}}=0.077$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.077}{0.81}=0.095$
Where,
L\&A = Loan and Advances
Deposits $=$ Total Deposits
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XII

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Loan and Advances (L\&A) and Total Deposit

| YEAR | L\&A | Deposit | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9645 | 12747 | 0.76 | -0.06 | 0.0036 |
| 2005 | 9627 | 12126 | 0.79 | -0.03 | 0.0009 |
| 2006 | 8479 | 13015 | 0.65 | -0.17 | 0.0289 |
| 2007 | 9159 | 9464 | 0.97 | 0.15 | 0.0225 |
| 2008 | 10411 | 10883 | 0.95 | 0.13 | 0.0169 |
| Total |  |  | $\sum \mathrm{X}=4.12$ |  | $\sum(X-\bar{X})^{2}=0.0728$ |

Loan and Advances to Total Deposit $=\frac{\text { Loan and Advances }}{\text { Total Deposit }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.12}{5}=0.82$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0728}{5-1}}=0.13$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.13}{0.82}=0.16$
Where,
L\&A = Loan and Advances
Deposits $=$ Total Deposits
S.D $=$ Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XIII

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Fixed Deposit (FD) to Loan and Advances (L\&A)

| YEAR | L\&A | FD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8548.66 | 2310.60 | 0.27 | -0.02 | 0.0004 |
| 2005 | 10946.74 | 2078.60 | 0.19 | -0.1 | 0.01 |
| 2006 | 13278.78 | 3450.20 | 0.26 | -0.03 | 0.0009 |
| 2007 | 15903.00 | 5435.20 | 0.34 | 0.05 | 0.0025 |
| 2008 | 21365.05 | 8464.90 | 0.39 | 0.1 | 0.01 |
| Total |  |  | $\sum \mathrm{X}=1.45$ |  | $\sum(X-\bar{X})^{2}=0.0238$ |

Fixed Deposit to Loan and Advances $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{1.45}{5}=0.29$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0238}{5-1}}=0.07$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.07}{0.29}=0.24$
Where,
L\&A = Loan and Advances
FD = Fixed Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX - XIV

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Fixed Deposit (FD) to Loan and Advances (L\&A)

| YEAR | L\&A | FD | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 2914 | 0.48 | 0.06 | 0.0036 |
| 2005 | 7900 | 3445 | O.44 | 0.02 | 0.0004 |
| 2006 | 10155 | 4298 | 0.42 | 0 | 0.0000 |
| 2007 | 14100 | 5659 | 0.40 | -0.02 | 0.0004 |
| 2008 | 18836 | 6397 | 0.34 | -0.08 | 0.0064 |
| Total |  |  | $\sum \mathrm{X}=2.08$ |  | $\sum(X-\bar{X})^{2}=0.0108$ |

Fixed Deposit to Loan and Advances $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{2.08}{5}=0.42$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0108}{5-1}}=0.05$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.05}{0.42}=0.11$
Where,
L\&A = Loan and Advances
N.P = Net profit
S.D= Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XV

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Fixed Deposit ( FD ) to Total Loan and Advances (L\&A)

| YEAR | L\&A | N.P. | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 2,083 | 0.56 | 0.01 | 0.0001 |
| 2005 | 4,909 | 2,931 | 0.60 | 0.05 | 0.0025 |
| 2006 | 6,659 | 4,065 | 0.61 | 0.06 | 0.0036 |
| 2007 | 9,129 | 4,075 | 0.45 | -0.1 | 0.1 |
| 2008 | 11,465 | 5,876 | 0.51 | -0.04 | 0.0016 |
| Total |  |  | $\sum \mathrm{X}=2.73$ |  | $\sum(X-\bar{X})^{2}=0.1078$ |

Fixed Deposit to Loan and Advances $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{2.73}{5}=0.55$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.1078}{5-1}}=0.16$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.16}{0.55}=0.29$
Where,
L\&A = Loan and Advances
F.D = Fixed Deposits
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XVI

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Fixed Deposit (FD) to Loan and Advances (L\&A)

| YEAR | L\&A | FD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9,645 | 4,876 | 0.51 | 0.21 | 0.0441 |
| 2005 | 9,627 | 3,537 | 0.37 | 0.07 | 0.0049 |
| 2006 | 8,479 | 2,867 | 0.34 | 0.04 | 0.0016 |
| 2007 | 9,159 | 1,578 | 0.17 | -0.13 | 0.0169 |
| 2008 | 10,411 | 1,104 | 0.10 | -0.2 | 0.04 |
| Total |  |  | $\sum \mathrm{X}=1.49$ |  | $\sum(X-\bar{X})^{2}=0.1075$ |

Fixed Deposit to Loan and Advances $=\frac{\text { Fixed Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{1.49}{5}=0.30$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.1075}{5-1}}=0.16$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.16}{0.30}=0.53$
Where,
L\&A = Loan and Advances
FD = Fixed Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XVII

Work sheet for the calculation of mean, standard deviation and coefficient of Nabil Bank considering Saving Deposit (SD) to Loan and Advances (L\&A)

| YEAR | L\&A | SD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8,549 | 8,796 | 1.03 | 0.11 | 0.0121 |
| 2005 | 10,947 | 10,368 | 0.95 | 0.03 | 0.0009 |
| 2006 | 13,279 | 12,622 | 0.95 | 0.03 | 0.0009 |
| 2007 | 15,903 | 14,149 | 0.89 | -0.03 | 0.0009 |
| 2008 | 21,365 | 16,159 | 0.76 | -0.16 | 0.0256 |
| Total |  |  | $\sum \mathrm{X}=4.58$ |  | $\sum(X-\bar{X})^{2}=0.0404$ |

Saving Deposit to Loan and Advances $=\frac{\text { Saving Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{4.58}{5}=0.92$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0404}{5-1}}=0.01$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.01}{0.92}=0.010$
Where,
L\&A = Loan and Advances
SD = Saving Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XVIII

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Saving Deposit (SD) to Loan and Advances (L\&A)

| YEAR | L\&A | SD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6,096 | 4,296 | 0.70 | -0.02 | 0.0004 |
| 2005 | 7,900 | 5,511 | 0.70 | -0.02 | 0.0004 |
| 2006 | 10,155 | 8,223 | 0.81 | 0.09 | 0.0081 |
| 2007 | 14,100 | 10,597 | 0.75 | 0.03 | 0.0009 |
| 2008 | 18,836 | 11,883 | 0.63 | -0.09 | 0.0081 |
| Total |  |  | $\sum \mathrm{X}=3.59$ |  | $\sum(X-\bar{X})^{2}=0.0179$ |

Saving Deposit to Loan and Advances $=\frac{\text { Saving Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{3.59}{5}=0.72$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0179}{5-1}}=0.07$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.07}{0.72}=0.09$
Where,
L\&A = Loan and Advances
SD = Saving Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XIX

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Saving Deposit (SD) to Loan and Advances (L\&A)

| YEAR | L\&A | SD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 2,697 | 0.72 | 0.1 | 0.01 |
| 2005 | 4,909 | 3,016 | 0.61 | -0.01 | 0.0001 |
| 2006 | 6,659 | 4,257 | 0.64 | 0.02 | 0.0004 |
| 2007 | 9,129 | 5,402 | 0.59 | -0.03 | 0.0009 |
| 2008 | 11,465 | 6,322 | 0.55 | -0.07 | 0.0049 |
| Total |  |  | $\sum \mathrm{X}=3.11$ |  | $\sum(X-\bar{X})^{2}=0.0163$ |

Saving Deposit to Loan and Advances $=\frac{\text { Saving Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{3.11}{5}=0.62$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0163}{5-1}}=0.06$
$\mathrm{CV}=\quad \frac{\sigma}{\bar{X}}=\frac{0.06}{0.62}=0.09$
Where,
L\&A = Loan and Advances
SD = Saving Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XX

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Saving Deposit (SD) to Loan and Advances (L\&A)

| YEAR | L\&A | SD | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9,645 | 6,435 | 0.67 | -0.12 | 0.0144 |
| 2005 | 9,627 | 7,246 | 0.75 | -0.04 | 0.0016 |
| 2006 | 8,479 | 8,778 | 1.04 | -0.25 | 0.0625 |
| 2007 | 9,159 | 6,739 | 0.74 | -0.05 | 0.0025 |
| 2008 | 10,411 | 7,601 | 0.73 | -0.06 | 0.0036 |
| Total |  |  | $\sum \mathrm{X}=3.93$ |  | $\sum(X-\bar{X})^{2}=0.0846$ |

Saving Deposit to Loan and Advances $=\frac{\text { Saving Deposit }}{\text { Loan and Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{3.93}{5}=0.79$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0846}{5-1}}=0.15$
$\mathrm{CV} \quad=\quad \frac{\sigma}{\bar{X}}=\frac{0.15}{0.79}=0.19$
Where,
L\&A = Loan and Advances
SD = Saving Deposits
S.D = Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XXI

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Current Deposit to Loan and Advances (L\&A)

| YEAR | L \&A | CD | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8,549 | 2,992 | 0.35 | 0.07 | 0.0049 |
| 2005 | 10,947 | 3,141 | 0.29 | 0.01 | 0.0001 |
| 2006 | 13,279 | 3,276 | 0.25 | 0.03 | 0.0009 |
| 2007 | 15,903 | 3,758 | 0.94 | 0.04 | 0.0016 |
| 2008 | 21,365 | 5,284 | 0.24 | 0.03 | 0.0009 |
| Total |  |  | $\sum \mathrm{X}=1.38$ |  | $\sum(X-\bar{X})^{2}=0.0084$ |

Current Deposit to Loan and Advances $=\frac{\text { Current Deposit }}{\text { Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{1.38}{5}=0.28$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0084}{5-1}}=0.04$
$\mathrm{CV}=\quad \frac{\sigma}{\bar{X}}=\frac{0.04}{0.28}=0.14$
Where,
CD= Current Deposits
L\&A= Loan and Advances
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX - XXII

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Current Deposit (CD) to Loan and Advances (L\&A)

| YEAR | L\&A | CD | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 854 | 0.14 | 0.53 | -0.01 |
| 2005 | 7900 | 1142 | 0.14 | 0.44 | -0.01 |
| 2006 | 10155 | 1282 | 0.13 | 0.01 | -0.02 |
| 2007 | 14100 | 2842 | 0.20 | -0.43 | 0.05 |
| 2008 | 18836 | 2865 | 0.15 | -0.55 | 0.00 |
| Total |  |  | $\sum \mathrm{X}=0.76$ |  | $\sum(X-\bar{X})^{2}=0.0031$ |

Current Deposit to Loan and Advances $=\frac{\text { Current Deposit }}{\text { Loan and advances }}$
Mean, $\quad(\bar{X})=\frac{\sum X}{N} \quad \frac{0.76}{5}=0.15$
5
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0031}{5-1}}=0.03$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.03}{0.15}=0.19$
Where,
L\&A = Loan and Advances
CD = Current Deposits
S.D $=$ Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -XXIII

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Current Deposit (CD) to Total Loan and Advances (L\&A)

| YEAR | L\&A | CD | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 367 | 0.10 | -0.4 | 0.0016 |
| 2005 | 4,909 | 297 | 0.06 | 0.0 | 0.0000 |
| 2006 | 6,659 | 445 | 0.07 | 0.01 | 0.0001 |
| 2007 | 9,129 | 592 | 0.06 | 0.00 | 0.0000 |
| 2008 | 11,465 | 608 | 0.05 | 0.01 | 0.0001 |
| Total |  |  | $\sum \mathrm{X}=0.34$ |  | $\sum(X-\bar{X})^{2}=0.0018$ |

Current Deposit to Loan Advances $=\frac{\text { Current Deposit }}{\text { Loan Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{0.34}{5}=0.06$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0018}{5-1}}=0.02$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.02}{0.06}=0.33$
Where,
L\&A = Loan and Advances
CD= Current Deposits
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XXIV

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Current Deposit (CD) to Total Loan and Advances (L\&A)

| YEAR | L\&A | CD | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9,645 | 1,437 | 0.15 | 0.01 | 0.0001 |
| 2005 | 9,627 | 1,343 | 0.14 | 0.00 | 0.0000 |
| 2006 | 8,479 | 1,369 | 0.16 | 0.02 | 0.0004 |
| 2007 | 9,159 | 1,147 | 0.13 | -0.01 | 0.0001 |
| 2008 | 10,411 | 1,542 | 0.14 | 0.00 | 0.0000 |
| Total |  |  | $\sum \mathrm{X}=0.72$ |  | $\sum(X-\bar{X})^{2}=0.0006$ |

Current Deposit to Loan Advances $=\frac{\text { Current Deposit }}{\text { Loan Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{0.72}{5}=0.14$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0006}{5-1}}=0.01$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.01}{0.14}=0.07$
Where,
L\&A = Loan and Advances
CD= Current Deposits
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX - XXV

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Non Performing Loan (NPL) to Total Gross Loan (TGL) Ratio

| YEAR | L\&A | NPL | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8549 | 287 | 3.36 | 0.15 | 0.0225 |
| 2005 | 10947 | 145 | 1.32 | -1.89 | 3.5724 |
| 2006 | 13279 | 166 | 1.25 | -1.96 | 3.8416 |
| 2007 | 15903 | 178 | 1.12 | -2.09 | 4.3681 |
| 2008 | 21365 | 193 | 9.03 | 5.82 | 33.8724 |
| Total |  |  | $\sum \mathrm{X}=16.08$ |  | $\sum(X-\bar{X})^{2}=45.6767$ |

Non Performing Loan to Total Gross Loan $=\frac{\text { Non Performing Loan }}{\text { Total Gross Loan and Advances }}$
$(\bar{X})=\frac{\sum X}{N}=\frac{16.08}{5}=3.21$
5
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{45.6767}{5-1}}=3.38$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{3.38}{3.21}=1.05$
Where,
L\&A = Loan and Advances
NPL =Non Performing Loan
S.D= Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX - XXVI

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Non Performing Loan (NPL) to Total Gross Loan (TGL) Ratio

| YEAR | L\&A | NPL | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 105 | 1.72 | 0.53 | 0.2809 |
| 2005 | 7900 | 129 | 1.63 | 0.44 | 0.1936 |
| 2006 | 10155 | 122 | 1.20 | 0.01 | 0.0001 |
| 2007 | 14100 | 107 | 0.76 | -0.43 | 0.1849 |
| 2008 | 18836 | 120 | 0.64 | -0.55 | 0.3025 |
| Total |  |  | $\sum \mathrm{X}=5.95$ |  | $\sum(X-\bar{X})^{2}=0.962$ |

Non Performing Loan to Total Gross Loan $=\frac{\text { Non Performing Loan }}{\text { Total Gross Loan }}$
$(\bar{X})=\frac{\sum X}{N}=\frac{5.95}{5}=1.19$
5
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.962}{5-1}}=0.49$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.49}{1.19}=0.41$
Where,
L\&A = Loan and Advances
NPL =Non Performing Loan
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XXVII

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Non Performing Loan (NPL) to Total Gross Loan (TGL) Ratio

| YEAR | L\&A | NPL | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 147 | 3.93 | -0.05 | 0.0025 |
| 2005 | 4,909 | 185 | 3.77 | -0.21 | 0.0441 |
| 2006 | 6,659 | 173 | 2.60 | -1.38 | 1.9044 |
| 2007 | 9,129 | 100 | 1.10 | -2.88 | 8.2944. |
| 2008 | 11,465 | 98 | 8.54 | 4.56 | 20.7936 |
| Total |  |  | $\sum \mathrm{X}=19.94$ |  | $\sum(X-\bar{X})^{2}=31.039$ |

Non Performing Loan to Total Gross Loan $=\frac{\text { Non Performing Loan }}{\text { Total Gross Loan }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{19.94}{5}=3.98$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{31.039}{5-1}}=2.78$
$\mathrm{CV} \quad=\quad \frac{\sigma}{\bar{X}}=\frac{2.78}{3.98}=0.69$
Where,
L\&A = Loan and Advances
NPL= Non Performing Loan
S.D= Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XXVIII

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Non Performing Loan (NPL) to Total Gross Loan (TGL) Ratio

| YEAR | L\&A | NPL | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9645 | 1042 | 10.80 | -11.01 | 121.2201 |
| 2005 | 9627 | 1833 | 19.04 | -2.77 | 7.6729 |
| 2006 | 8479 | 1040 | 12.27 | -9.54 | 91.0116 |
| 2007 | 9159 | 3218 | 35.13 | 13.32 | 177.4224 |
| 2008 | 10411 | 3312 | 31.81 | 10.00 | 100.0000 |
| Total |  |  | $\sum \mathrm{X}=109.05$ |  | $\sum(X-\bar{X})^{2}=497.327$ |

Non Performing Loan to Total Gross Loan $=\frac{\text { Non Performing Loan }}{\text { Total Gross Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{109.05}{5}=21.81$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{497.327}{5-1}}=11.15$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{11.15}{21.81}=0.51$
Where,
L\&A = Loan and Advances
NPL= Non Performing Loan
S.D= Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XXIX

Work sheet for the calculation of mean, standard deviation and coefficient of Banking Industry as a whole considering Non Performing Loan (NPL) to Total Gross Loan (TGL) Ratio

| YEAR | L\&A | NPL | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 127,065 | 28,933 | 22.77 | 8.46 | 71.57 |
| 2005 | 147,201 | 27,878 | 18.94 | 4.63 | 21.43 |
| 2006 | 188,309 | 26,770 | 14.22 | -0.09 | 0.0081 |
| 2007 | 229,783 | 22,183 | 9.65 | -4.66 | 21.71 |
| 2008 | 287,381 | 17,203 | 5.98 | -8.33 | 69.38 |
| Total |  |  | $\sum \mathrm{X}=71.56$ |  | $\sum(X-\bar{X})^{2}=184.09$ |

Non Performing Loan to Total Gross Loan $=\frac{\text { Non Performing Loan }}{\text { Total Gross Loan }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{71.56}{5}=14.31$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{184.09}{5-1}}=6.78$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{6.78}{14.31}=0.47$
Where,
L\&A = Loan and Advances
NPL= Non Performing Loan
S.D $=$ Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX - XXX

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Interest Income (int. Inc) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | Int Inc | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8,549 | 1,002 | 11.72 | 1.6 | 2.56 |
| 2005 | 10,947 | 1,069 | 9.77 | -0.35 | 0.1225 |
| 2006 | 13,279 | 1,310 | 9.87 | -0.25 | 0.0625 |
| 2007 | 15,903 | 1,588 | 9.99 | -0.13 | 0.0169 |
| 2008 | 21,365 | 1,978 | 9.26 | -0.86 | 0.7396 |
| Total |  |  | $\sum \mathrm{X}=50.61$ |  | $\sum(X-\bar{X})^{2}=3.5015$ |

Interest Income to Loan and Advances Ratio $=\frac{\text { Intrest Income }}{\text { Total LOan And Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{50.61}{5}=10.12$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{3.5015}{5-1}}=9.35$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{9.35}{10.12}=0.9$
Where,
L\&A = Loan and Advances
Int. Inc $=$ Interest Income
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX - XXXI

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Interest Income (int. Inc) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | Int Inc | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 657 | 10.78 | 1.77 | 3.1329 |
| 2005 | 7900 | 719 | 9.10 | 0.09 | 0.0081 |
| 2006 | 10155 | 903 | 8.89 | -0.12 | 0.0144 |
| 2007 | 14100 | 1144 | 8.11 | -0.9 | 0.81 |
| 2008 | 18836 | 1548 | 8.2 | -0.81 | 0.6561 |
| Total |  |  | $\sum \mathrm{X}=45.08$ |  | $\sum(X-\bar{X})^{2}=4.6215$ |

Interest Income to Loan and Advances Ratio $=\frac{\text { Intrest Income }}{\text { Total LOan And Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{45.08}{5}=9.01$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{4.6215}{5-1}}=1.07$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{1.07}{9.01}=0.11$
Where,
L\&A = Loan and Advances
Int. Inc $=$ Interest Income
S.D $=$ Standard Deviation
C. $V=$ Coefficient of Variance

## APPENDIX -XXXII

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Interest Income (Int. Inc.) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | Int.Inc. | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 363 | 9.70 | 0.94 | 0.8836 |
| 2005 | 4,909 | 458 | 9.33 | 0.57 | 0.3249 |
| 2006 | 6,659 | 580 | 8.71 | -0.05 | 0.0025 |
| 2007 | 9,129 | 726 | 7.95 | -0.81 | 0.6561 |
| 2008 | 11,465 | 931 | 8.12 | -0.64 | 0.4096 |
| Total |  |  | $\sum \mathrm{X}=43.81$ |  | $\sum(X-\bar{X})^{2}=2.2767$ |

Interest Income to Loan Advances Ratio $=\frac{\text { Intrest Income }}{\text { Total LOan And Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{43.81}{5}=8.76$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{2.2767}{5-1}}=0.75$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.75}{8.76}=0.85$
Where,
L\&A = Loan and Advances
Int.Inc. $=$ Interest Income
S.D $=$ Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -XXXIII

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Interest Income (Int. Inc.) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | Int.Inc. | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9645 | 1096 | 11.36 | 2.22 | 4.9284 |
| 2005 | 9627 | 877 | 9.11 | -0.03 | 0.0009 |
| 2006 | 8479 | 785 | 9026 | 0.12 | 0.0144 |
| 2007 | 9159 | 998 | 10.90 | 1.76 | 3.0976 |
| 2008 | 10411 | 530 | 5.09 | -4.05 | 16.4025 |
| Total |  |  | $\sum \mathrm{X}=45.72$ |  | $\sum(X-\bar{X})^{2}=24.4438$ |

Interest Income to Loan Advances Ratio $=\frac{\text { Intrest Income }}{\text { Total LOan And Advances }}$
Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{45.72}{5}=9.14$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{24.4438}{5-1}}=2.48$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{2.48}{9.14}=0.27$
Where,
L\&A = Loan and Advances
Int.Inc. $=$ Interest Income
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XXXIV

Work sheet for the calculation of mean, standard deviation and coefficient of Nabil Bank considering Net Profit (NP) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | NP | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 8549 | 455 | 5.32 | 0.81 | 0.6561 |
| 2005 | 10947 | 519 | 4.74 | 0.23 | 0.0529 |
| 2006 | 13279 | 635 | 4.78 | 0.27 | 0.0729 |
| 2007 | 15903 | 674 | 4.24 | 0.27 | 0.0729 |
| 2008 | 21365 | 747 | 3.49 | -1.02 | 1.0404 |
| Total |  |  | $\sum \mathrm{X}=22.57$ |  | $\sum(X-\bar{X})^{2}=1.8952$ |

Net Profit to Loan Advances Ratio $=\frac{\text { Net Profit }}{\text { Total loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{22.57}{5}=4.51$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{1.8952}{5-1}}=0.69$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.69}{4.51}=0.15$
Where,
L\&A = Loan and Advances
NP= Net Profit
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX - XXXV

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Net Profit (NP) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | N.P. | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 6096 | 144 | 2.36 | 0.1 | 0.01 |
| 2005 | 7900 | 168 | 2.13 | -0.13 | 0.0169 |
| 2006 | 10155 | 2372 | 2.33 | 0.07 | 0.0049 |
| 2007 | 14100 | 2964 | 2.10 | -0.16 | 0.0256 |
| 2008 | 18836 | 4512 | 2.39 | 0.13 | 0.0169 |
| Total |  |  | $\sum \mathrm{X}=11.31$ |  | $\sum(X-\bar{X})^{2}=0.0743$ |

Net Profit to Loan and Advances Ratio $=\frac{\text { Net Profit }}{\text { Total Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{11.31}{5}=2.26$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.0743}{5-1}}=0.13$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.13}{2.26}=0.05$
Where,
L\&A = Loan and Advances
N.P = Net profit
S.D $=$ Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -XXXVI

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Net Profit (NP) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | NP | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 3,743 | 68 | 1.82 | -0.07 | 0.0049 |
| 2005 | 4,909 | 114 | 2.32 | 0.43 | 0.1849 |
| 2006 | 6,659 | 97 | 1.46 | -0.43 | 0.1849 |
| 2007 | 9,129 | 158 | 1.73 | -0.16 | 0.0256 |
| 2008 | 11,465 | 243 | 2.11 | 0.22 | 0.0484 |
| Total |  |  | $\sum \mathrm{X}=9.44$ |  | $\sum(X-\bar{X})^{2}=0.25983$ |

Net Profit to Loan Advances Ratio $=\frac{\text { Net Profit }}{\text { Total loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{9.44}{5}=1.89$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.25983}{5-1}}=0.25$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.25}{1.89}=0.13$
Where,
L\&A = Loan and Advances
NP= Net Profit
S.D= Standard Deviation
C.V = Coefficient of Variance

## APPENDIX - XXXVII

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Net Profit (NP) to Total Loan and Advances (L\&A) Ratio

| YEAR | L\&A | N.P. | Ratio in \% (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 9645 | 2.64 | 0.03 | 3.57 | 12.7449 |
| 2005 | 9627 | $(7.82)$ | $(8.12)$ | $(4.58)$ | 20.9764 |
| 2006 | 8479 | $(1,797)$ | $(21.19)$ | $(17.65)$ | 311.5225 |
| 2007 | 9159 | 577 | 6.30 | 9.84 | 96.8256 |
| 2008 | 10411 | 549 | 5.28 | 8.82 | 77.7924 |
| Total |  |  | $\sum \mathrm{X}=17.7$ |  | $\sum(X-\bar{X})^{2}=519.8618$ |

Net Profit to Loan and Advances Ratio $=\frac{\text { Net Profit }}{\text { Total Loan and Advances }}$

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{-17.7}{5}=-3.54$
S.D $\quad(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{519.8618}{5-1}}=11.40$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{11.40}{-3.54}=-3.22$
Where,
L\&A = Loan and Advances
N.P = Net profit
S.D $=$ Standard Deviation
C.V = Coefficient of Variance

## APPENDIX -XXXVIII

Work sheet for the calculation of mean, standard deviation and coefficient of NABIL Bank considering Loan Loss Provision (LLP) to Non Performing Loan (NPL) Ratio

| YEAR | LLP | NPL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 359 | 286.68 | 1.25 | -0.7 | 0.49 |
| 2005 | 361 | 144.51 | 2.50 | 0.55 | 0.3025 |
| 2006 | 356 | 165.98 | 2.14 | 0.19 | 0.0361 |
| 2007 | 357 | 178.30 | 2.00 | 0.05 | 0.0025 |
| 2008 | 358 | 193.20 | 1.85 | -0.1 | 0.01 |
| Total |  |  | $\sum \mathrm{X}=9.74$ |  | $\sum(X-\bar{X})^{2}=0.8411$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{9.74}{5}=1.95$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.8411}{5-1}}=0.46$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.46}{1.95}=0.24$
Where,
LLP $=$ Loan Loss Provision
NPL= Non Performing Loan
S.D= Standard Deviation
C.V = Coefficient of Variances

## APPENDIX -XXXIX

Work sheet for the calculation of mean, standard deviation and coefficient of Everest Bank considering Loan Loss Provision (LLP) to Non Performing Loan (NPL) Ratio

| YEAR | LLP | NPL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 212 | 104.76 | 2.02 | -1.01 | 1.0201 |
| 2005 | 281 | 128.81 | 2.18 | -0.85 | 0.7225 |
| 2006 | 335 | 121.85 | 2.75 | -0.28 | 0.0784 |
| 2007 | 419 | 107.00 | 3.92 | 0.89 | 0.7921 |
| 2008 | 514 | 120.00 | 4.28 | 1.25 | 1.5625 |
| Total |  |  | $\sum \mathrm{X}=15.15$ |  | $\sum(X-\bar{X})^{2}=4.1756$ |

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

Mean, $\quad(\bar{X})=\frac{\sum X}{N}=\frac{15.15}{5}=3.03$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{4.1756}{5-1}}=1.02$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{1.02}{3.03}=0.33$
Where,
LLP $=$ Loan Loss Provision
NPL= Non Performing Loan
S.D= Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -XL

Work sheet for the calculation of mean, standard deviation and coefficient of NIC Bank considering Loan Loss Provision (LLP) to Non Performing Loan (NPL) Ratio

| YEAR | LLP | NPL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 182 | 147 | 1.24 | -0.29 | 0.0841 |
| 2005 | 198 | 185 | 1.07 | -0.46 | 0.2116 |
| 2006 | 246 | 173 | 1.42 | -0.11 | 0.0121 |
| 2007 | 187 | 100 | 1.86 | 0.33 | 0.1089 |
| 2008 | 200 | 98 | 2.04 | 0.51 | 0.269 |
| Total |  |  | $\sum \mathrm{X}=7.63$ |  | $\sum(X-\bar{X})^{2}=0.06768$ |

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

Mean, $\quad(\bar{X})=\frac{\sum X}{N}=\frac{7.63}{5}=1.5$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{0.6768}{5-1}}=0.41$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.41}{1.5}=0.26$
Where,
LLP $=$ Loan Loss Provision
NPL= Non Performing Loan
S.D= Standard Deviation
C.V $=$ Coefficient of Variance

## APPENDIX -XLI

Work sheet for the calculation of mean, standard deviation and coefficient of NB Bank considering Loan Loss Provision (LLP) to Non Performing Loan (NPL) Ratio

| YEAR | LLP | NPL | Ratio (x) | $(\mathrm{X}-\bar{X})$ | $(\mathrm{X}-\overline{\mathrm{X}})^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 2004 | 996 | 1,042 | 0.96 | -0.54 | 0.2916 |
| 2005 | 1,839 | 1,833 | 1.00 | -0.5 | 0.25 |
| 2006 | 3,336 | 1,040 | 3.21 | 1.71 | 2.9241 |
| 2007 | 3,634 | 3,218 | 1.13 | -0.37 | 0.1369 |
| 2008 | 3,911 | 3,312 | 1.18 | -0.32 | 0.1024 |
| Total |  |  | $\sum \mathrm{X}=7.48$ |  | $\sum(X-\bar{X})^{2}=3.705$ |

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

Mean, $(\bar{X})=\frac{\sum X}{N}=\frac{7.48}{5}=1.50$
S.D $(\sigma)=\sqrt{\frac{\sum(X n-\bar{X})^{2}}{n-1}}=\sqrt{\frac{3.705}{5-1}}=0.96$
$\mathrm{CV}=\frac{\sigma}{\bar{X}}=\frac{0.96}{1.50}=0.64$
Where,
LLP $=$ Loan Loss Provision
NPL= Non Performing Loan
S.D= Standard Deviation
C.V $=$ Coefficient of Variance

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[^0]:    Source: Field Survey

