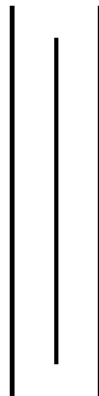


# **Lending Management of Nepalese Commercial Banks**

**(With reference to Nepal Bank Ltd and NABIL Bank Ltd)**

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**A Thesis Submitted to:**  
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**Faculty of Management**  
**Tribhuvan University**



**In partial fulfillment of the requirements for the Degree of  
Master in Business Studies (M.B.S.)**

**March, 2011**  
**Putalisadak, Kathmandu**

## **RECOMMENDATION**

This is to certify that the thesis

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Lending Management of Nepalese Commercial Banks  
(With reference to Nepal Bank Ltd and NABIL Bank Ltd)

*Has been prepared as approved by this department in the prescribed format of the  
faculty of Management. This thesis is forwarded for examination.*

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And found the thesis to be original work of the student and written according to the prescribed format. We recommend the thesis to be accepted partial fulfillment of the requirement for

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## **DECLARATION**

I hereby declare that the work reported in this thesis entitled” Lending Management of Nepalese Commercial Banks (With reference to Nepal Bank Ltd and NABIL Bank Ltd) " submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master Degree in Business Study (M.B.S.) under the supervision of Prof. Shilu Bajracharya, Associate professor of Shanker Dev Campus.

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## ABBREVIATIONS

AD	Annon Dominy (Latin Word)
ADB	Agriculture Development Bank
AGM	Annual General Meeting
AMC	Asset Management Company
APEC	Asia Pacific Economic Cooperation
ATM	Automatic Teller Machine
B.S.	Bikram Sambat (Nepali Year)
CBs	Commercial Banks
CIB	Credit Information Bureau
C&I	Commercial and industrial
CPM	Credit Portfolio Management
DBL	Dubai Bank Ltd
DEA	Data Envelopment Analysis
DRT	Debt Recovery Tribunal
DSCR	Debt Service Coverage Ratio
EBIL	Emirates Bank International ltd
F/Y	Fiscal Year
GON	Government of Nepal
HBL	Himalayan Bank Limited
i.e.	That is
IRR	Internal Rate of Return
LLP	Loan Loss Provision
Ltd.	Limited
MBS	Master Degree in Business
Nabil	Nabil Bank Limited
NBL	Nepal Bank Limited
NBLB	National Bank ltd, Bangladesh
NEPSE	Nepal Stock Exchange
NIBL	Nepal Investment Bank Limited
NIDC	Nepal Industrial Development Corporation
NGOs	Non-governmental Organizations
NPA	Non Performing Assets

NPL	Non-performing Loan
NRB	Nepal Rastra Bank
P.E.	Probable error
PSL	Priority sector lending
Pvt.	Privet
r	Correlation
$r^2$	Coefficient of Determination
$R_{z.xy}$	Multiple Correlation
RBB	Rastriya Banijya Bank
ROI	Return on Investment
Rs	Rupees
SWOT	Strength, Weakness, Opportunity and Threat
SCBNL	Standard Chartered Bank Nepal Limited
T.U.	Tribhuvan University

# **CHAPTER- I**

## **INTRODUCTION**

### **1.2 Background of the study**

Nepal is a least developed and land locked country situated between the two biggest and highly populated countries India and China. Therefore, Nepal is known as a buffer state. Economically, Nepal is dominated by these countries financial and investing activities. Nepal is one of the very few countries in the world in terms of rich and unique cultural heritage, manifested in its architecture, temples, sculptures, monuments etc. Aside from this, it is also richly gifted with natural resources like vast forests, many perennial rivers and minerals.

Despite of the above natural resources and attributes, Nepal is still a developing country characterized by high population growth rate, low per capita income and low rate of capital formation. Nepal remained in self-imposed isolation for more than a century until it saw the dawn of democracy in 1951. The Nepalese economy relies heavily on short-term domestic debt and highly concession foreign aid loans of long maturity. Many reasons are there for the slow pace of development such as landlocked position, misuse of resources, absence of economic infrastructure, political instability, poor economic policy and institutional weaknesses. For this to overcome, the process of capital accumulation among other perquisites should be enhanced.

As most of the labor forces are unemployed, it is necessary to transform the huge labor force in to industrial sector. Only few percentage of total population is involved in industrial sector and service sector. The economic development of nation is on initial stage. Nepal has adopted mixed and liberal economic policy with the implicit objective to help the state and the private sector. For the economic growth and development, government has now initiated various economic policies such as industrial policy, foreign investment policy, privatization policy and trade and transit policy.

Due to difficulties and lack of infrastructure development of financial sector, the growths of financial sector are badly affected. Domestic crisis create huge problem in development of financial sector in Nepal. Besides that the concept of borderless country took rapid motion in these days. Liberalization, globalization as well as

privatization are most common and essential part of investment and other activities in financial sector of Nepal. Prior to the restoration of democracy, when the government has not liberalized its economic policy, there are only few numbers of industries in Nepal. Especially after restoration of the democracy, the concept of the liberalization policies has been incorporated as directive principal and state policies. The open market concept creates several opportunities and threats. Rapid development in information-technology sector is also milestone for increasing investment activities. Thus, competitive environment was formed in national market as well as international market. The liberalization policy attracts foreign investor as well as national investor to invest financial sector and commercial sector, which help to raise the life standard of people.

Capital accumulation plays an important role in accelerating the economic growth of a nation, which in turn is determined among other, by saving and investment propensities. However, the capacity to save in developing countries is quite low with a relative higher marginal propensity of consumption. As a result, such countries are badly entrapped into the vicious circle of poverty. Therefore, the basic problem for the developing countries is in raising the level of saving and thus investments.

The banking sector is largely responsible for collecting household saving in terms of different types of deposit and regulating them in the society by lending different sectors of economy. The different sector has now reached to the most remote areas of the country and has experienced a good deal in the growth of the economy. By lending their resources in the small-scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy.

Banking concept existed even in the ancient period when goldsmiths and the rich people used to issue the common people against the promised of safekeeping of their valuable items on the presentation of the receipt; the depositors would get bank their gold and valuables of the paying a small amount for safekeeping and saving.

Banking institutions are inevitable for the recourse mobilization and all round development of the country. It is necessary for economic development; it maintains economic confident of various segment and extend credit to the people. Bank and banking activities have prominent role in the development of our country. The pace of development of the country grew as bank and its activities gradually developed. The

Nepalese financial sector is composed of banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) commercial banks development banks, micro credit development banks, finance companies. Other financial institutions comprise of the insurance companies, employees provident fund, citizens investment trust, co-cooperative financial institutions, nongovernmental organizations (NGOs) performing the limited banking activities postal saving offices and Nepal stock exchange (NEPSE). Nepal bank Limited and Rastriya Banijya Bank were the only commercial banks operating over the last three decades in Nepal before the opening of foreign joint venture banks. Today there are many commercial banks, development banks, finance company and co-operatives operating in the Nepali financial market. There has been a tremendous growth in banking traction in terms of their length and breadth due to these commercial joint venture banks.

## **1.2 Origin of Banks in Nepal**

Banks help in uplifting the industry, agriculture and business in the country. It is said to be concerned with the economic development of the country. According to the history, it is found that people of our country have been involved in business and trade since long time back. Though the production of copper utensils had been started during the 7<sup>th</sup> century, business relationship could not be established with India since India was involved in the production of copper utensil. However, the craft concerned with copper, wood and metal in our country did attract the Chinese and the Tibetan a lot, thus resulting in the establishment of business relationship with China and Tibet.

History relates that Nepal had its own coin since long time back. Since there was no system of having the dates of issuance of the coin it still remains a mystery in our country. However, it has been found that coins have been used in the times of the King Mandev and King Gunakamadev. The history also states that King Gunakamadev had received loans from the public in the 8<sup>th</sup> century to renovate "Kathmandu City". By the end of the 8<sup>th</sup> century, it is said that the businessperson named Shankhadhar Shakha had paid back all the loans taken from the public and since then Nepal Sambat had started in our country. This tells us that the system of lending money and paying back started long time back in our country.

After the issuance of coins, credit system started in our country. Merchant and big business-men started lending out money based on collateral provided by the creditors and charge them with higher interest rates.

Around the 12<sup>th</sup> century Sadssivade brought out silver coins that were called ' Daam'. Later on in the 14<sup>th</sup> century, King Jayasthiti Malla divided the people into 64 castes according to their occupation, amongst which 'TANKADHARI' one is that dealt with the lending of money to the public. Since the main objective of the 'TANKADHARI' was to earn profit, they used to charge people at higher interest rate.

In order to protect people from higher interest rate, Prime Minister Ranadeep Singh established 'TEJARATH ADDA' in the 19<sup>th</sup> century. The 'TEJARATH ADDA' was responsible for providing loans to the people working in the government offices based on the security and the public based on the collateral they deposited in the 'TEJARATH ADDA' was not to earn profit, it charged its creditors with a low interest rate of 5% per annum. It had no other sources besides the government so it limited in serving a certain area. Again, it was only subjected to lend but did not accept deposits, hence it could not be counted as a bank. However, it can be said that 'TEJARATH ADDA' was the main financial institution that led to the development of modern banking system into the country. As a basic need, cottage industries were started in the country thus establishing business relationship with India. When Chandra Shamsheer became the Prime Minister of our country in 1980 B.S., a treaty was signed which stated that Nepal could establish business relationship with countries beyond India as well. This led to the need of modern banking system in the country. This led the establishment of Nepal Bank Limited was established as the first modern bank in our country in B.S. 1994 Kartik 30<sup>th</sup> according to the Nepal Bank Act 1993. Thus, the year B.S. 1994 is said to be the Golden year for modern banking system in Nepal.

In this way, in 1944 AD, International monetary conference held in Brussels had formally recommended that each country should possess a central bank of its own. Central bank will control and manages banking activities in the country. Moreover, there will be no direct control of government on it and will be an autonomous institution.



Nepal Rastra Bank as a central bank of Nepal has been established under “Nepal Rastra Bank Act 2012” on 14<sup>th</sup> Baisakh, 2013 BS to perform the function of the central banking in Nepal.

In 2016 BS, an industrial bank namely Nepal Industrial Development Corporation (NIDC) was established under NIDC act 2016.

Subsequently another fully state owned commercial bank “Rastriya Banijya Bank” was established on 10<sup>th</sup> Magh, 2022 BS under Rastriya Banijya Bank act 2021 which was the second commercial bank of Nepal.

In 2024 BS Agriculture Development Bank was established under Agricultural Development Bank act 2024 BS.

In 2042 BS, Nepal also adopted liberal free economic policy and allowed to establish Joint venture bank under collaboration with foreign bank as well as on private sector. Only after this, there came the hoard of the commercial banks widening vertically as well horizontally.

#### **1.4 Lending Management**

Lending is regarded as the one of income generating sources in commercial banks. Lending is the credit provided by financial institutions to their client. Further, lending is regarded as the heart of the commercial banks in the sense that; it occupies large volume of transactions; it covers the main part of investment; the most of the investment activities based on lending; it is the main factor of the creating profitability; it is the main sources of creating profitability; it determines the profitability. It affects the overall economy of the country. It also affects on national economy to some extent. Since, it provides loan to corporation and industry, government. It is proved from very beginning that lending is the shareholder’s wealth maximization derivative. Thus, effective management of lending should seriously be considered by commercial banks.

The lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. With respect to performance, banks now use various measures to assess bank

efficiency and related functions in the bank lending process. Traditionally, banks determined operating efficiency by using measures of bank profitability, such as return on equity, return on assets, and return on investment; also, banks used operational ratios, such as monetary output per staff member, and total operating expenses per unit of output.

Lending management is the system, which helps to manage lending effectively. In other words, lending management refers management of credit exposures arising from loans, corporate bonds, and credit derivatives. Lending exposures are the main source of investment in commercial banks and return on such investment is supposed to be main source of income.

## **1.4 Introduction to sample banks**

### **1.4.1 Nepal Bank Limited (NBL)**

The modern banking system started in Nepal after the establishment of Nepal Bank Limited (NBL), which commenced its operations on 30th Kartik, 1994 B.S. (1938) during the period of Prime Minister Randip Singh under the Nepal Bank Act 1994 B.S. (1938). As NBL is the first bank in Nepalese banking history, it was established as joint venture between the government and private sector and replaced by Tejarath Adda by taking over its operation and overcoming its limitation. Accordingly, NBL had a Herculean responsibility of attracting people towards banking sector from predominant Sahu Mahajan's transaction and of introducing other banking services as well

In opening ceremony, late King Tribhuvan inaugurated the NBL. It is the bank with the largest number of branches reaching every part of urban and rural areas of the country.

The NBL established its banking operations from the initial authorized capital of Rs.10 million, issued capital 25 lakhs, and paid up capital of 8 lakhs 42 thousand out of 51% of the shares were from government of Nepal (GON) and remaining 49% from equity partition of the public. At the time of establishment, the deposits and loan of Nepal Bank Limited were Rs.17 lakhs and 20 lakhs respectively.

After suffering huge loss & facing many problems by NBL, that time GON decided to give the bank in the foreign management team. At the same time, World Bank

decided to give loan of U.S.\$24 million on 1st phase and U.S. \$75 million on 2nd phase under highly popular Financial Sector Reform Program (FSRP). The agreement was done between that time GON & the World Bank on Oct. 28th 1999. From July 22nd, 2002(2059 Ashad 17), NBL was taken on contract for two years with an agreement to improve financial position .As per contract the agreement was extend for plus one year in August, 2004. As per agreement, International Development Agency (IDA) provide loan amounting to U.S. \$ 550000 toward the restructuring & privatizing. The contract period of the management team, which expired on 21 July 2004 was renewed initially for one more year. Later, the contract period has been extended up to 21 July 2007.

The management contractor of NBL:

- J The International Chamber of Commerce (I.C.C.)-Management Team- Bank of Scotland-Ireland
- J International Business and Technical Consultant Inc.-U.S.A
- J R.Bajracharya and Co. (Chartered Accounts)-Nepal
- J P.P. Pradhan and Co. (Chartered Certified Accounts)-Nepal
- J Human Resource Development Center HURDEC(Pvt.) Ltd.-Nepal

After unilateral termination of contract by ICCMT with the NRB and GON on 2007/07/27, NRB again took over the management of NBL. On the same date, the central bank, NRB sent three officers to look after the top-level management of NBL. On the leadership of Dr.Binod Attarya with Mr.Laxmipant Niraula and Mr. Numnath Poudyal took over the management of NBL and started to do day-to-day activities as the top-level management.

Under the Financial Sector Reform Program (FSRP), ICCMT was given the management of the NBL for the restructuring. From 2007/07/22, after the ICCMT left the bank, there was no top-level management in NBL. NRB had agreed to extend the contract for further 6 months but the chief executive officer (CEO) from the ICCMT, Mr. J. Craig McAllister put the opinion that they did not get the sufficient cooperation from NRB in the restructure program of NBL.

At the same World Bank had also threatened the GON that if it does not call back the foreign management in NBL it will block the grant and loan amount of U.S. \$15 corer under the FSRP for Nepal. In the process of computerization of NBL, it has installed

LIVE NEWTON system in its 44 branches until July 2006. Nepal bank limited has lunched new services such as SMS banking and Web Remittance.

Of the total Rs.7 Arab loan and grant from World Bank to Nepal, the cost of Rs.6 Arab has been already spent on FSRP.

Share Capital of Nepal Bank Limited as at 2009

Authorized Capital	Rs.1000 Million
Issued Capital	Rs.500 Million
Paid-up Capital	Rs.380, 382,600

#### **1.4.2 Nabil Bank Limited (Nabil)**

Authorized Nabil Bank Limited, the first joint venture bank of Nepal, started operations in July 1984 as the name of Nepal Arab Bank Ltd under the company act. Dubai Bank Ltd was the initial foreign joint venture partner of this bank with 50% equity investment. The shares owned by DBL were transferred to Emirates Bank International Ltd (EBIL), Dubai. Later EBIL sold its entire holding go National Bank Ltd, Bangladesh (NBLB). Hence 50% of equity shares of Nabil Bank Ltd are held by NBLB and out of remaining, financial institutions have taken 20% and 30% were issued to general public of Nepal. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 28 points of representation across the nation and over 170 reputed correspondent banks across the globe.

Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Highly qualified and experienced management team manages operations of the bank, including day-to-day operations and risk management. Bank is fully equipped with modern technology, which includes ATM's, credit cards, state-of-art world-renowned software from Infosys Technologies System, Bangalore, India, and Internet banking system and Tele-banking system.

## Share Capital of Nabil Bank as at 2009

Authorized Capital	Rs. 1,600,000,000
Issued Capital	Rs. 965,747,000
Paid-Up Capital	Rs 965,747,000

### **1.5 Focus of the study**

Financial institutions are currently viewed as catalyst in the process of economic growth of country. A key factor in the development of an economy is the mobilization of the domestic resources. As intermediaries, the financial institution helps the process of resources mobilization. The importance of financial institutions in the economy has of late growth to an enormous extent. The government in turn is required to regulate their activities so that the financial policies are implemented as per the requirement of the country. Policy such as lending to priority and deprived sectors, lending to the educated unemployed people, lending for creation of entrepreneurs in the society are certain examples which the government in developing economy try to implement with the help of financial institutions. The importance of financial intermediation has R.C. Brayent in these words, “Economists and historians agrees has been closely associated with the expansion and increasing diversification of financial intermediation”.

With the growing activities of bank after the NBL and RBB, new banking policy was introduced for establishment of international investment banks and joint venture banks in foreign investment with Nepalese co-operation. Its objective was to create healthy competitive banking system and provide cheap banking facilities to people.

Commercial banks are the heart of financial system. They hold the deposits on many persons, government institutions and business units. They make funds available through their lending and investing activities to borrowing; individuals, business firm and government establishments. In doing so, they assist both the flow of goods and services form the products to consumers and the financial activities of the government. These facts show the commercial banking system of nation is important to the functioning of the economy.

Bank creates funds from its client to saving and lends the some to needing person or business institutions in terms of loan, advances and investment. So, proper financial decision making is more important in banking transaction for its efficiency and profitability. Most of the financial decision making are concerned with lending policy and lending management. It plays the vital role in the business succession, so efficient lending management is needed. This study deals with the lending position, non-performing loan, lending portfolio management and relation of lending in profitability of the selected bank.

### **1.6 Statement of the Problem**

Capital resource is the prime source of the economic development of the country. Economic development of a country succeeds only when the development of the capital formation mechanism exists. The major cause of this chronic problem is the lack of economic development or the slow rate of the national economic growth. With the increased sophistication and liberalization of financial markets, this has made the problem of debt management one of the most important issues in economic policy. More than 60% of the domestic debt have maturities of one year or shorter and less than 9% of domestic debt has maturities of 10 years or longer.

Banking, especially the commercial banking sectors can flourish the capital resources in the country. Commercial banks collect or deposit necessary capital from the people in the different parts of the country. They powerfully help in the creation of the capital resources for the national investment. Effective utilization of capital is depends up on creditability position of the bank.

Commercial banks suffered from various types of problem such non-performing loan. They do not mobilize their deposit properly in terms of development of the nation. It is no debate that high profitable institutions can easily get their goals and can serve the society. To improve the profitability situation of the bank, it is necessary to establish the higher creditability position of the bank. Credit is the most effective area in commercial bank. While granting the loan, banks which do not analyze the documents submitted by the borrowers, are resulting increasing non-performing loan. Thus lending management is considered as the main issues is Nepalese banking sector. Commercial bank's investment has been found to be have lower productive

due to the lack of supervision regarding whether there is a proper utilization of their investment or not.

Lending management concept has appeared as a major research gap in Nepalese commercial banks. There is lack of scientific research that could identify the issues of Lending management in commercial banks. In this regard, the performance of the commercial banks is to be analyzed in terms of lending. Some research questions regarding to the credit practices, liquidity position, economic and industrial environment, management quality are considered as a clear evident in present situation.

1. Is the lending practices adopted by sampled commercial banks in good position?
2. What is the lending efficiency of the sampled Nepalese commercial banks?
3. Is credit position of bank influences the profitability?
4. Does internal performance caused for increase in non-performing loan?
5. How does the commercial bank manage lending portfolio?

### **1.7 Objectives of the Study**

This research study entitled “Lending Management of commercial banks” covers following objectives.

- ) To analyze the portfolio of lending of selected banks
- ) To examine position of the priority sector lending of selected banks
- ) To examine the impact of loan and deposit on profit of the selected banks
- ) To explore the relationship of total loan with deposit and non-performing loan and profitability

### **1.8 Limitations of the Study**

The main limitations of this study are presented below.

- 1.) The findings of this study depend upon the data and information of a Five Years time horizon.
- 2.) This study concentrates only on the portfolio of lending, impact of deposit, loan and non performing loan in profit. Also, data and information of the sampled commercial banks only are used by the researcher.
- 3.) The research study based upon the secondary data and information mostly. Hence, the validity of results depends upon the accuracy of data supplied.

## **1.9 Organization Structure of the study**

The present study is organized in such a way that the stated objectives can easily be fulfilled. The structure of the study will try to analyze the study in a systematic way. The study report is designed in five chapters which are as follows.

### **Chapter-I: Introduction**

This chapter includes the basic concept and background of the study. It has served orientation for readers to know about the basic information of research area, various problem of the study, objectives of the study, significance of the study and limitation of the study.

### **Chapter-II: Review of the Literature**

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

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

Research methodology refers to the various steps to adopt by researcher in studying a problem with certain objectives in view. It incorporates various source of data related with the study and various tools techniques such as statistical and financial employed for presenting the data.

### **Chapter-IV: Presentation and analysis of data**

This chapter is the main part of the research. This chapter analyses the data related with study and presents the finding of the study and also comments briefly on them.

### **Chapter-V: Summary, Conclusion and Recommendation**

This chapter deals with the summary and conclusion. It also recommend to the concerned organization for the better improvement.



## **CHAPTER-II**

### **Review of Literature**

Several research works have been conducted in various aspect of commercial banks for instance financial performance, investment policy, resource mobilization compliance of Nepal Rastra Bank directives by banks, risk and return analysis etc. This chapter focuses on reviewing prior researches, books and journals so that the theoretical framework can be built.

#### **2.1 Conceptual Review**

##### **2.1.1 Meaning and Function of the Commercial Banks**

Commercial banks are those banks that pool together the saving of the community and arrange for their productive use. They supply the financial needs of modern business by various means. They accept deposits from the public on condition that they are repayable on demand or on short notice. In other words, a bank is a financial intermediary, a dealer in loans and in debts. It borrows from one set of people and lends to hiring money and hiring out again. Some banks draw their capital mainly from their shareholders, other's mainly from depositors. Some lend mainly to industry, others mainly to government, central and local. Some deal in short loans, borrowings and lending for short periods, others deal in long periods. However the business of individual bank may differ, their essential function is to gather saving together and lend out what they collect.

The primary economic function of the commercial bank is to hold demand deposits and to honor cheques drawn upon them. In short, to provide us, the economies, with the most important component of the money supply.

Commercial bank plays an important role in directing affairs of the economy in various ways. The operations of commercial banks record the economic pulse of the economy. The size and composition of their transaction mirror the economic happenings in the country. For instance, the mass failure of commercial banks during 1980 has reflected the phenomenon of several global depressions around the world. Commercial banks have played a vital role in giving direction financing the requirements of trade and industry in the country. In a planned economy, bank make

the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector, joint sector or in the private sector or combination of the organization or another. They endeavor to promote enterprise development by investing loans and sometimes through the investment in shares and debentures. Therefore, they support the country's overall economic development process by financing in various ways.

In the Nepalese context, the Nepal Commercial Bank Act 2031 B.S. defines a commercial bank as one, which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions.

As an outcome of, the economic liberalization policy, government of Nepal (GON) has put its face in the international arena so many investment opportunities are evolved within the nation that foster integrated and speedily development of the nation is possible, only when competitive banking services reach the nook and corners of the nation. Commercial banks occupy an important place in the framework of every economy by providing required capital for the development of industry trade and business out of the saving collected as deposits, besides, commercial in view of facilitating the economic & social life. Banks are the essential part of the business activities, which are established to safeguard people's money and utilizing the money in making loans and investments. With respect to Nepal, there are several commercial banks operating in various regions especially in the kingdom with foreign collaboration or joint investment.

The American Institute of Banking has laid down the four major functions of the commercial banks such as receiving and handling deposit, handling payments for its clients, making loans and investments and creating money by extension of credit. Nepal Commercial Bank Act 2031 BS has emphasized the major functions of commercial bank which are mentioned below.

- They accept custody of funds with or without interest and open fixed accounts and saving accounts in the name depositors.
- They make available credit in the form of loan, overdraft and co-financing to the industry, commerce, agriculture, export and service.

- They help to issue shares and debentures of any company or any other corporate body, guarantee or underwrite such shares or debentures and undertake any agency business but do not become a managing agent.
- Conduct transactions in bonds, provisional notes or bills of exchange, foreign exchange relating to commerce or corporation.
- Collection, sale and purchase of bills, collection and dissemination of trade information, provide service of opening and making payment of letter of credit, help industry and business by providing bank guarantee.
- They issue letter of credit, draft and traveler's cheque. They remit or transit funds to different places within or outside the nation. They purchase, sell or accept the securities of government.

### **2.1.2 Meaning and Definition of Lending**

Commercial bank as of its primary function makes 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 or interest availed to the borrowers against the security. Debt means money that owes or will lend to individual or person (Ghimire, 2005).

Further the term loan is defined as a lending. Delivery by one party and receipt by another party, a sum of money upon agreement expressed or implied, to repay it with or without interest. Anything furnished for temporary use to a person at his request, on that condition it shall be returned or its use. Therefore, loan includes-

- The creation of debt by lender's payment of or agreement to pay money to the debtor or to a third party for him account of the debtor
- The creation of debt by a credit to an account with the lender upon which the debtor is entitled to draw immediately
- The creation of debt pursuant to a lender credit card or similar arrangement
- The forbearance of debt arising from a loan: Uniform consumer credit code: 3-106.

With respect to alternative view, debt means 'principal and interest' provided to debtor by banks or financial institutions, with the pledge of immovable or movable property or other securities or guarantee or without guarantee and the word also means over dues of the transaction beyond balance or fees, commission and interest incurred in that relation.

The supreme court of India has defined the debt during the decision of the case United Bank of India vs. DRT (1999 ISJ Banking). Sudhir Gupta stated that in the case of his hand, there cannot be any dispute that the expression 'debt' has to be given the widest amplitude to mean any liability which is alleged as due from any person by bank during the course of any business activities undertaken by bank either in cash or otherwise, whether secured or unsecured, whether payable under a decree or order of any court or otherwise and legally recoverable on the application. (Gupta, 2002)

### **2.1.3. Objectives of Lending Policy**

The credit policy should be carefully established properly communicated to the lending officers and implemented effectively by the lending officers. The basic objective of credit policy is to maintain credit management and control over it. Moreover it is specified as follows:

#### **a) To have a good assets**

Loans are the risky assets though a bank invests the most of its resources in granting loans and advances. The increasing of non-performing loan causes the non-existence of banks. It is very quality of assets that led bankruptcy of many banks in South East Asia. The objective of sound loan policy is to protect depositors' interest and maximize returns to the shareholder by striking a balance between liquidity and profitability.

#### **b) To contribute to economic development**

A sound credit policy is required to ensure that the loans are given to the productive sector, which contributes to capital formulation and employment generation.

#### **c) To give guidance to lending officials**

A borrower should be assured that there would be no discrimination whether he/she deals with one officer or another. A sound credit policy is imperative to achieve a uniform standard procedure throughout the organization.

#### **d) To establish a standard for control**

Every policy requires periodic follow-up to ensure its proper implementation. A sound credit policy helps to determine the variance between actual performance and practice and to take corrective actions. A sound policy is always flexible and works as

a guideline. If the variation between the practice and policy is observed, proper education to lending officer of amendment of the policy will become inevitable.

#### **2.1.4. Principle of Lending Policy**

One of the basic functions, of commercial banks is provide credit. Out of their total income, on an average 60-70% of income consist from lending activities. Such income based on lending is known as exposure based income because banks are exposed to default risk. In order to mitigate default risk, it would be wise to follow the principles of good lending.

##### **a) Seven Principles of Good Lending**

###### **i. Principle of Safety**

When lending is made, a banker must ensure that the advance made is safe. This means the money will definitely come back. It demands that loan should be granted only to reliable borrowers. It must be ensured that the reputation of the borrower is impeccable in the business community. The integrity of the borrower must be undoubted, particularly where the security is inadequate to cover the advance. If the borrower is a dishonest person, he might divert borrowed fund to some other purpose other than initially projected to the bank. He might invest in unproductive purpose (such as daughter's marriage) or on speculative purpose (like hoarding goods), which can put the advance in jeopardy. In the same way, due to incompetence of the borrower, if loss is suffered, the advance may never be recovered. A good banker should know his customers and be able to judge not only his integrity but also his ability to use the bank's money to his advantage and repay it within the stipulated period. By all means, the loan extended by the bank, must be safe and secure. The banker is only a custodian of deposit of the public. Hence the banker must ensure that the advance made is not only on safe hands but also remains so, throughout the period of lending and is repaid with interest when it is due (Shrestha, 2009:82).

###### **ii. Principle of Liquidity**

When a banker demands his money back, the borrower must be in a position to repay within a reasonable period. This is possible if the borrower has invested in short-term requirements and not on the purchase of fixed assets. Banks often make a tuning of their deposit with their lending such as long-term deposit with long term lending and short-term deposit with short lending. The major portion of bank's deposit are payable

on demand on short time. If the bankers lend only to borrower who would make the payment slowly, bank may not they retain the ability to meet the daily demands of the depositors. Hence, this will blemish the bank image, which can even lead to failure. Therefore, bankers attach great importance to liquidity (Shrestha, 2009:83).

### **iii. Principle of Purpose**

Banker allow loans and advances to the customers only for productive purpose and not for horsing or for speculative business, the banker must avoid such a customer as the client may drag the bank along with it, at the time of downfalls. The funds should be utilized for increasing production turnover or for starting new business venture only, which generates employment. The business of the borrower should be a legal one and in consonance with the government's policies. If the client is involved in a business, which is against the government's policies, against the environmental policies or which bring may health hazards to the community it operates in, through the proposal may look lucrative, it must be turned down outright, as such units will finally be thrown the market. Directives of the government with regard to any restriction, quantity, quota or value wise imposition, should be kept in view. If any permit or license is required, the party should be in possession of that. Purpose of the advance must not only be productive and safe stated; it must have a definite source of repayment. By lending in short term requirements, liquidity must be ensured. Bank must never lend for speculative activities or for the purpose of hording stocks. Bankers must never forget their liability and responsibility towards the society. Hording of the goods and speculations are transactions of anti social nature.

Normally banks do not entertain advances for marriages, personal expenses and pleasure tours or for the settlement of some old outstanding loans, as these are purpose of unproductive nature. However, banks in Nepal have started to invest money for pleasure tours to service holders or who has a small but regular income (Shrestha, 2009:83).

### **iv. Principle of Profitability**

Profitability is very important element, which influences the banking activities. Commercial banks are established like any other commercial institutions for the sake of market profit. Without profit, no one can expect banks to make payment of interest on deposits maintained by them. Banks incur large administrative expenses in the

course of maintaining service efficiency and attractive premises. Default risk is always high in the banking business as bank deal in loans and advances. Loan loss provisioning is maintained according to the classification of loans. Banks have to make provision for depreciation of fixed assets. Profit alone ensures all such expenses. Hence, profitability is one of the most important factors to be considered, before extending any credit facility. However, bankers must not look only from one angle of profitability while appraising a credit proposal; other ancillary business may be lying ahead, which can prove lucrative (Shrestha, 2009:84).

**v. Principle of Spread**

Another equally important principal of good lending is to spread the advance in various sectors, many firms and industries, and against different securities. It would be appropriate to quote the saying, “Do not put all your eggs in one basket.” A successful banker is the person who can assess such risk and spread the lending over a large number of borrower, different industries and areas and against different types of securities. If lending is made only against one type of securities and if that type of security depreciates steeply, he will run a great risk of losing the advance. If the bank had many branches across the country, in some places they might lend on sugarcane and in some other place they might lend against the stock of rice or jute. This way, when one type of security devaluates, the others might remain the same, which will keep the major portion of exposure safe. In the same way, if one industry collapses others might do well in the economy. For example, let us take garment industry, hotel industry and carpet industry, which had flourished well once but due to the economic turmoil of our country, these sectors have not been able to sustain. Other industries are doing well. Hence, if bankers had invested only on these sectors, they would have been dragged towards closure. As banks have spread their exposure in various industries, that major portion of lending is still safe (Shrestha, 2009:84).

**vi. Principle of Security**

A prudent banker will always endeavour to obtain maximum security available from the borrower. There should usually be sufficient margin to provide against fluctuations in value. The customer should be asked to provide everything available and acceptable to the bank so that he may not borrow against those securities from other sources. No compromise should be made in obtaining maximum securities from the client. At the time of distress situation also, the securities must be sufficient to

cover the bank's loan. At all times, bank must be in a safe position to realize its lending. It should however be noted that a loan proposal should not be judged merely on the basis of realizable value of the assets owned by the unit but it should primarily be considered in terms of its earning capacity. This is so because much depends on the earning capacity of the borrower for timely repayment of loan and not mere assets holding of the borrower (Shrestha, 2009:85).

**vii. Principle of National Interest, Suitability**

Bankers must ascertain on what type of business the customer is involved, whether it serves the National interest or not, whether the firm is acting responsibly towards the society that it is operating in, like brick industry or the cement industry and the precautions taken by it against environment pollution. Central bank issues directives, prohibiting banks to invest in various sectors such as the import of arms and ammunitions etc. In addition, bankers must remain vigilant of the law and order situation where the borrower carries its business (Shrestha, 2009:85).

**b) Other Equally Important Principles**

**i. Technical Competence**

The proprietor, partners should be technically qualified persons or they should have practical experience in the concerned line of activity. This is necessary so as to ensure that the entrepreneur would be able to manufacture the item of good to withstand the competition in the market. If the borrower lacks technical knowledge how to use the installed machine, the way it operates or the combination of the inputs and its ratios, it will certainly result in low production or low capacity utilization, which will cause great financial losses to the unit and its impact will naturally affect the bank also (Shrestha, 2009:85).

**ii. Economic Viability**

The project should be an economically viable one. The unit must generate surplus cash, sufficient to repay the loan installment in time. The infrastructures such as availability of raw materials, power, labor, communication and transport facilities should be considered. The layout of the factory site must be in a place where it can benefit at the optimum level. If the unit is a service-oriented organization, its location is one of the most important factors to be considered (Shrestha, 2009:86).



### **iii. Marketability**

The market demand of the product is an important factor. Unless the product is profitably sold, the unit will not be in a position to function smoothly. The alternative markets of the product such as local, national or international, seasonal or regular, short-term market or long-term market should be identified. The alternative users also must be identified, such as old aged people, youngsters, children, ladies or gents, various communities like people living in terrain or the hillside, who can possibly use the product. A product can have multiple of uses. All the uses of the product should be indentified so that the product can be utilized in the production of the commodity, which can generate optimum revenue. Hence such alternative users and its uses must be identified beforehand. Careful consideration should be given on issues such as the marketing arrangements made, or plans to be made for the disposal of the products (Shrestha, 2009:86).

### **iv. Managerial Ability**

Apart from the technical competence, the entrepreneur should have business acumen the affairs of the unit in a coordinated manner. He should be able to maintain an uninterrupted schedule and handle labor, financial and other matters effectively. Quality of management is displayed in many ways. By asking question to others involves in similar business will also help in assessing a company management quality (Shrestha, 2009:86).

### **v. Quantum of Finance**

The loan applied for, should be adequate enough to meet the projected level of production capacity, it will suffer in many ways. For example, the unit is derived from economy of scale, bears unnecessary high cost due to idle machine though fixed cost remain same, profit falls low below resulting in fund erosion and leads the unit towards the path of closure. Hence, while assessment of fund requirement is made, sufficient fund must be provided to meet all its regular expenses, which will allow the unit to exploit the business opportunities. The quantum of finance depends upon:

- ) Total cost of project/business (which includes cost of equipments etc. plus working capital requirement).
- ) Investment by the borrower.
- ) Borrowing from other sources.

**vi. Quality of Credit**

“Any fool can lend money, but it takes a lot skill to get it back.” The bulk of the bank’s (resources) deposits are short-term deposits from people, who trust the bank to keep their money safe. This type of money is not for risky lending of even equity type if investment. In analyzing the degree of risk, which a bank will assume in a credit, careful consideration should be giving to the borrower’s management experience, capabilities, policies, profitability, cash flow and net worth. The banker must decide how much money the borrower borrows, how long it will take before repayment is completed, and the true purpose of the loan (Shrestha, 2009:87).

**vii. Two Ways Out**

Every loan should have two out. First way out is successful completion of the project or transaction and the second way out is: in the event of failure of the project, the alternative means through which the borer settles the loan. In case the business fails, still the borrower must have other ways to settle the borrowed sum.

**viii. Integrity of the Borrower**

If there is any question as to the integrity, or honesty or good intention of the borrower, one should not approve the loan. Bankers, who associate with people of less than acceptable character, damage their own reputation far beyond the profit obtained on the large firms.

**ix. Paradox of spread**

Lending to smaller borrowers is riskier than lending to larger ones. In small firms, managerial resources are fewer. In large firms, there can be many decision makers, all running their own divisions or subsidiaries. In this way, there can be more jobs for good managers and thus greater depth of management than in small management. In small firms, financial resources are more limited. Thus, size favors the large firms.

**x. The Business Cycle is Inevitable**

“Bad loans are made at good times.” Bankers must be always conscious of the current point in the business cycle so that one can evaluate the risks likely to arise when economic conditions change in the future.

**xi. Quick Answer**

If the borrower wants a quick answer: It should be in “No.”

**xii. Local Bankers should be Participants in Lending to Local Borrowers**

It is often a danger sign if the local banks are not the lenders to local firms. They may be already known too much about the risk of such credit. In the same way, bankers should be cautious with those who seek to change to a new bank because they are dissatisfied with their present bank. It is said “New accounts go bad more often than old ones.”

**xiii. First Thought For the Bank**

Risk increases when credit principles are violated. Good judgment and common senses are the marks of good banker.

**xiv. Understanding the Business**

If the banker does not understand the industry of sector, how can one evaluate the risk? Furthermore, customers have respect only for the bankers who take the trouble to understand their business.

**xv. Common Sense and Good Judgment**

Each lending officer must exercise common sense and good judgment. One must ensure not to be unduly influenced by anyone. Being a respected member of the society, one must act responsibly in evaluating risk, in negotiating terms and competitive position. It is clear then, as a lending officer one must anticipate and not react to situations. One must be comfortable with his decision because one has to live with it. Main intention of the credit analyst surfaces eventually.

**2.1.5. Key characteristics of lending policy**

Every policy has own characteristics. The lending policy has the following characteristics:

**a) Approved by top management**

The lending policy is always prepared by the top management of an institution and is approved by the board of directors. It may be revised time to time.

**b) Practical and manageable**

The lending policy, prepared by the bank is not for theoretical rather it is for practical and manageable to apply.

**c) Flexibility**

Rigid lending policy is not practical. It has to be flexible according to the demand of customer.

**d) Compliance**

Lending policy is compliance with NRB policy as well as economic, political condition of the country.

**2.1.6. Systems and Procedure of lending management**

A sound lending management interact all the areas of lending effectively that ultimately helps to operate the organization successfully. Basically, a bank has to follow the following systems and procedures in lending management (Shrestha, 2009).

**a) lending organization**

Banks must operate within a sound and well-defined criteria for new lending as well as the expansion of existing lending. The lending should be extended within the target markets and lending strategy of the institution. Before allowing a credit facility, the banks must make an assessment of risk profile of the customer transaction. This may include:

- i) credit assessment of the borrower's industry, and macro economic factors
- ii) The purpose of credit and source of repayments
- iii) The track record/repayment history of borrower
- iv) Assess/ evaluate the repayments capacity of the borrower
- v) The purpose terms and conditions and covenants
- vi) Adequacy and enforceability of collaterals
- vii) Approved from appropriate authority

In case of new relationships consideration should be given to the integrity and repute of the borrower of counter party as well as its legal capacity to assume the liability. Prior to entering into any new credit relationship, the bank must become familiar with the borrower or counter party and be confident that they are dealing with individual or organization of sound repute and cordite worthless. However, a bank must not grant credit simply on the basis of the fact that the borrower is perceived to be highly reputable, i.e. name lending should be discouraged.

While structuring credit facilities institutions should appraise the amount and timing of the cash flows as well as financial position of the borrower and intended purpose of the funds. It is utmost important that due consideration should be priced to cover all embedded costs. Relevant terms and conditions should be laid down to protect the institution's interest.

Institutions have to make sure that the credit is used for the purpose it was borrowed. Where the obligor has utilized funds for purpose not shown in the original proposal, institutions should take steps to determine the implications on credit worthiness. In case of corporate loans where borrower own group of companies such diligence becomes more important. Institutions should classify such connected companies and conduct credit assessment on consolidated/group basis.

In loan syndication, generally the lead institution does most of the credit assessment and analysis. While such information is important, institutions should not over rely on that. All syndicate participants should perform their own independent analysis.

Institutions should not over rely on collaterals/covenants. Although the importance of collaterals as a buffer providing protection in case of default, primary focus should be on obligor's debt servicing ability and reputation in the market.

**b) Limit setting**

An important element of credit risk management is to establish exposure limits for single obligors and group of connected obligors. Institutions are expected to develop their own limit structure while remaining within the exposure limits set by the central bank (Nepal Rastra Bank). The size of the limits should be based on the credit strength of the obligor, genuine requirement of credit, economic conditions and the institution's risk tolerance. Appropriate limits should be set for respective products and activities. Institutions may establish limits for a specific industry, economic sector or geographic region to avoid concentration risk. Sometimes, the obligor wants to share its facility limits with its related companies, institutions should review such arrangements and impose necessary limits if the transactions are frequent and significant. Credit limits should be reviewed regularly at least annually or more frequently if obligor's credit quality deteriorates. All request of increase in credit limits should be substantiated.

**c) lending administration**

Ongoing administration of the credit portfolio is an essential of the lending process. Lending administration function is basically a back office activity that support and control extension and maintenance of lending. A typical lending administration unit performs following functions:

**i) Loan Documentation**

When loans and advance are extended to the customers, various types of securities are obtained against the loan amount, as a safeguard measure in case the customer fails to repay the loan amount or the interest on due date. For creating charge on various securities, different types of documents are extended. Different documents serve different purposes and are mainly categories into two types, namely standard documents and non-standard documents. These are point out below:

**a) Standard Documents**

- i) Promissory Note
- ii) Sanction letter (letter of agreements)
- iii) Assignment of Account Receivables
- iv) Power of Attorney
- v) Letter of Continuity
- vi) General Letter of Hypothecation
- vii) Supplementary agreements
- viii) General Letter of Trust Receipt
- ix) Subordination Agreement
- x) Letter of Guarantee
- xi) Letter of Indemnity
- xii) General Counter Guarantee
- xiii) Wealth Statement
- xiv) Cross Guarantee
- xv) Letter of set off
- xvi) Bill Purchase Agreement

**b) Non Standard Documents**

- i) Loan Deed
- ii) Mortgage Deed
- iii) Board Resolution of Borrower

**ii) Credit disbursement:**

The lending administration functions should ensure that the loan application has proper approval before entering facility limits into computer systems. Disbursement should be affected only after completion of covenants and receipt of collateral holdings. In case of exceptions necessary approval should be obtained from competent authorities.

**iii) lending monitoring:**

After the loan is approved and draw down allowed, the loan should be continuously watched over. These include keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity. Conducting periodic valuation of collateral and monitoring timely repayments.

**Loan repayment:**

The obligor should be communicated ahead of time as and when the principal/mark-up installment becomes due. Any exceptions such as non-payment of late payment should be tagged and communicated to the management. Proper records and updates should also be made after receipt.

**iv) Maintenance of lending files:**

Institutions should devise procedural guidelines and standard for maintenance of lending files. The lending files not only include all correspondence with the borrower but should also contain sufficient information necessary to assess financial health of the borrower and its repayment performance. It need not mention that information should be field in organized way so that external/internal auditors or NRB inspector could review it easily.

**v) Collateral and security documents:**

Institutions should ensure that all security documents are kept in a fireproof safe under dual control. Registers for documents should be maintained to keep track of their movement. Procedures should also be established to tack and review relevant insurance coverage for certain facilities/collateral. Physical checks on security documents should be conducted on a regular basis.

**2.1.7. Lending Monitoring and Control**

Lending risk monitoring refers to incessant monitoring of individual credits inclusive of off-balance sheet exposures to obligor as well as overall credit portfolio of the bank. Banks need to enunciate a system that enables them to monitor quality of the

lending portfolio of day-to-day basis and take remedial measures as and when any deterioration occurs. Such a systems would enable a bank to ascertain whether loans are being serviced as per facility terms, the adequacy of provisions, the overall risk profile is within limits established by management and compliance of regulatory limits. Establishing an efficient and effective lending monitoring system would help senior management to monitor the overall quality of the total lending portfolio and its trends. Consequently the management could fine tune or reassess its credit strategy/policy accordingly before encountering any major setback. The banks' lending policy should explicitly provide procedural guideline relating to credit risk monitoring. At the minimum it should lay down procedure relating to:

- i) The roles and responsibilities of individuals responsible for lending risk monitoring
- ii) The assessment procedures and analysis techniques ( for individual loans and overall portfolio)
- iii) The frequency of monitoring
- iv) The periodic examination of collaterals and loan covenants
- v) The frequency of site visits
- vi) The identifications of any deterioration in loan.

**a) Financial Position and Business Conditions**

The most important aspect about an obligor is its financial health, as it would determine its repayment capacity. Consequently institutions need carefully watch financial standing of obligor. The key financial performance indicators on profitability, equity, leverage and liquidity should be analyzed. While making such analysis due consideration should be given to business/industry risk, borrowers' position within the industry and external factors such as economic condition, government policies, and regulation. For companies whose financial position is dependent on key management personal and/or shareholders, for example, in small and medium enterprises, institutions would need to pay particular attention to the assessment of the capability and capacity of the management/shareholders.

**b) Conduct of Accounts**

In case of existing obligor the operation in the account would give a fair idea about the quality of credit facility. Institutions should monitor case of repeat extensions of due dates for trust receipt and bills.



**c) Loan Covenants**

The obligor's ability to adhere to negative pledge and financial covenants stated in the loan agreement should be assessed and breach detected should be addressed promptly.

**d) Collateral Valuation**

Since the value of collateral could deteriorate resulting in unsecured lending, banks need to reassess value of collateral in periodic basis. The frequency of such valuation is very subjective and depends upon nature of collaterals. For instance loan granted against shares need revaluation on almost daily basis whereas if there is mortgage of a residential property the revaluation may not be necessary as frequently. In case of credit facilities secured against inventory or goods at the obligor's premises, appropriate inspection should be conducted to verify the existing the valuation of the collateral.

External rating and market price of securities purchase as a form of lending or long-term investment should be monitoring for any deterioration in credit rating of the issuer, as well as large decline in market price. Adverse changes should trigger additional effort to review the creditworthiness.

**2.1.8. Managing lending problems**

The institution should establish a system that helps to identify problem loan ahead of time when there may be more options available for remedial measures. Once the loan is identified as problem, it should manage under a dedicated remedial process.

A bank's lending risk policies should clearly set out how the bank will manage problems lending. Banks differ on the methods and organization they use to manage problem lending. Responsibility for such lending may be assigned to the originating business functions, a specialized workout sections or a combination of the two, depending upon the size and nature of the lending and the reason for its problems. When a bank has significant lending -related problems, it is important to segregate the workout function from the credit origination function. The additional resources, expertise and more concentrated focus of a specialized workout section normally improve collection results.

A problem loan management process encompass following basic elements:

**a) Negative and follow-up**

Proactive efforts should be taken in dealing with obligors to implement remedial plans, by maintaining frequent contact and internal records of follow-up actions. Often rigorous efforts made at an early stage prevent institutions from litigations and loan losses.

**b) Workout remedial strategies**

Sometimes appropriate remedial strategies such as restructuring of loan facility, enhancement in lending limits or reduction in interest rates help improve obligor's repayment capacity. However it depends upon business condition, the nature of problems being faced and most importantly obligor's commitment and willingness to repay the loan. While such remedial strategies often bring up positive results, institutions need to exercise great caution in adapting such measures and ensure that such a policy must not encourage obligors to default intentionally. The institution's interest should be the primary consideration in case of such workout plans it needs not mention here that competent authority, before their implementation, should approve such workout plan.

**c) Review of Collateral and Security Document**

Institutions have to ascertain the loan recoverable amount by updating the values of available collateral with formal valuation. Security document should also be reviewed to ensure the completeness and enforceability of contracts and collateral guarantee.

**d) Status Report and Review**

Problem of lending should be subject to more frequent review and monitoring. The review should update the status and development of the loan accounts and progress of the remedial plans. Progress made on problem loan should be reported to the senior management.

**2.1.9. Collection of Borrower Information**

Before developing a credit relationship with any customer, a banker finds out every possible detail about the borrower. Regarding borrower information, study of 5Cs i.e. character, capacity capital, collateral, condition and compliance is made. Under C6, credit worthiness of the borrower, payment capacity, managerial ability, security, sensitivity of cash flow to market situation and the corporate governance with compliance of rule and regulation formulated by the government etc. are studied. Borrower information is gathered from status report, various other bankers, from the

financial document and credit agencies, Nepal Rastra Bank, police office, law court etc (Shrestha, 2009: 77).

There are various methods of collecting borrower information, some of which are as follows:

#### **2.1.9.1 C6 Analysis**

While assessing the default risk of a unit, it becomes very necessary to evaluate the C6 i.e. character, capacity, capital, collateral, condition and compliance. The background of the management team is paramount for the success of a business unit. The age, qualification and creditability of the management team are very important. The past performance of the management team and the particular unit under study is scrutinized minutely. The C6 is studied through as mention below:

##### **a) Character**

The customer's willingness to pay back the loan amount is judged here. The financial or credit manager judges whether the customer would make honest efforts to honor their credit. Legal status, historical background, integrity and honesty of the promoters/controller are also studied. Under Character, answers are obtained on various questions such as: Does the bank know the control? What are the previous dealing records? Can the person be trusted? Does he stick to his words (promises)? Can assessment be made on his personal liabilities and resources?

##### **b) Capacity**

The customer's capacity to pay is judged here. Judgment is made by assessing the customer's capital and assets offered as security. It also refers to the availability and ability of the firm's cash flow, at level, high enough to pay off the loan.

##### **c) Capital**

This indicates applicant's capacity to inject his own money. By capacity analysis, it can be concluded that whether borrower is trying to play with lender's money only or is also injecting his own fund to the project. For capital analysis, financial statements, like certificate balance sheet, profit and loss accounts are the only tools.

##### **d) Collateral**

The movable or immovable assets offered for mortgage or pledge by the borrower to secure the loan is known as collateral. Compromise should not be made while obtaining immovable securities.

**e) Condition**

This refers to the sensitivity of the operating income and cash flows of the unit, to the market and the economy. The more sensitivity the cash flow to the economy more is the credit risk of the firm.

**f) Compliance**

Last but not the least, it must be ensured that the firm has complied with all the government laid down rules and regulation such as registrations, renewals, tax clearance, corporate government etc.

**2.1.9.2 Credit Agencies**

In foreign countries, there are specialized agencies, which collect status reports of the businesspersons. In England, Syed And Company Limited collects report of all business houses and keeps updating it. In America, Dun and Bradstreet collects report of more than 3.00 million business houses. They collect market report from sources such as market places, privet agencies and various newspapers. They analyze, arrange and incorporate the information on periodical report and it is made available to regulate subscribers. In the U.S.A., there are other agencies such as associated Credit Bureau of America (ACBA), the Retail Credit Company (RCC) which have thousands of branches doing the job of rating (Shrestha, 2009: 78).

**2.1.9.3 Status Report**

It is also called credit reports, financial reports, and banker's opinion of confidential reports etc. it is status report, where assessment of the borrower's character, capacity and capital is made from the point of view of a lending institution. The sources of such report are mainly from loan application, market reports, through friends of the borrower or competitors mostly from borrower's trade of business. Other sources for status report are the borrower's mode of living, borrower's statement of account with other banks, income tax statement, wealth tax and sales tax returns trade and other reports from the press, register's office, revenue office and municipal office. Similarly, from other bankers and branches, CIB and from personal interview also such information is gathered. The various sources for collecting status reports are as follows (Shrestha, 2009:79):

**a) Credit Enquiry/ CIB Report**

This is enquiry letter requesting all the local banks and CIB to furnish information regarding the credit standing, the past performance, banking relationship, type of facility (loan) and limits (amount) enjoyed respectability of the customer and any violation of credit arrangements with them. This is a confidential letter, which is sent to the credit administration department of other bank and Credit Information Bureau. Credit Enquiry is generally made before extending any credit.

**b) Loan Application**

While giving a loan application, the borrower provides a project report where all details of sources are mentioned. Some banks request to fill up a detailed questionnaire where all information is obtained.

**c) Market Reports**

Businesspersons carrying the same type of business know each other well. Some of them may be friends and some rivals and enemies. Friends may give exaggerated figures, whereas rivals and enemies try to run him down. Therefore, a prudent banker must weigh the information independently and from a balance opinion of character, capacity and capital of the borrower.

**d) Study of Account**

Borrower's account movement reveals many things, which will be useful in judging the customer's financial position, turnover of his business, the names of various parties with whom the borrower is dealing.

**e) Financial statements**

Audited financial reports (final accounts) at least of three consecutive years must be obtained, where a comparative study can be made to ascertain the growth pattern. In the absence of this, income tax returns could be useful in enabling to ascertain the details of his net income.

**f) Other Sources**

Other sources include press reports regarding purchase and sale of property, auction and decrees. Registration, Revenue and Municipal records can also be referred to, with advantages, to verify the properties owned by the limited company. Consultation

with the 'Office of the Registration' will be useful in finding many more details of the company.

#### **2.1.10. Project Appraisal**

Before providing credit to the customer, bank makes analysis of project from various aspects and angle. It will help the bank to see whether project is really suitable to invest. The purpose of project appraisal is to achieve the guarantee of reasonable return from the project. The project appraisal answers the following questions:

- ) Is the project technically sound?
- ) Will the project provide a reasonable return?
- ) Is the project in time with the overall economic objectives of the country?

Generally, the project appraisal involves the investigation from the following aspects (Gautam, 2004: 258):

- a) Financial aspects
- b) Economic aspect
- c) Management/ Organizational aspects
- d) Legal aspects

#### **2.1.11. Need of lending Policy in Commercial Banks**

In banks fund management, the cost of handling is, of course as important as the availability of funding. Competition, deregulation, economic conditions and increased sophistication in money management on the part of retail and wholesale depositors have increase the cost of bank fund tremendously.

Making an unsecured loan involves taking a risk and losses on some loans are to be expected. Commercial banks are increasingly facing lending risk (counter party risk) in various financial instrument other than loans, including acceptances, inter bank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the settlement of transactions. Thus the need of credit policy is the most as the banks should always try to mitigate the risk related to the loan provided. Steps that the banks can take to limit loan losses included obtaining sufficient information on loan and borrowers as well as establishing an internal system of loan review in addition to the loan review of regulatory agencies. Bank can also affect or offset credit risk in their loan portfolios by watching the business cycle,

varying loan rates against the degree of risk and recognizing risk in loan concentration. Although specific credit risk policy and practice may differ among banks depending upon the nature and complexity of their credit activities, a comparative credit risk management program should address the following areas:

- i) Establishing an appropriate credit risk environment,
- ii) Operating under a sound credit granting process,
- iii) Maintaining an appropriate credit administration, measurement and monitoring process
- iv) Ensuring adequate controls over credit risk.

Lending risk is a factor in all loans, but to varying degrees. Bank should recognize this variability by matching loan rates to risk. A bank that charges the same rates for many types of loan is not receiving adequate compensation for its riskier loans. In comparison a loan's total yield to its risk, a bank also should consider any supporting deposits balances required in conjunction with the loan and may also want to consider other profitability generated from the customer's relationship with banks (Basel Committee Consultative Paper, 1999).

#### **2.1.12. Loan disbursement and Classification**

One of the main functions of commercial bank is to create credit from its borrowed fund. Loan and advances are the assets coming from such activities. Loans and advances dominate the asset side of the balance sheet of any bank and also constitute the primary sources of income to the banks. They are also the least liquid of the bank's entire asset. Loans and advances may take different form and are allowed against various types of securities. Loans, overdrafts, discounting of bills of exchange etc are some of the forms of the bank lending. Granting loans and advances always carry a certain degree of risk. This loan and advances are also regarded as risky assets of banks.

Loan classification refers to categories or grade based on the perceived risk and other relevant characteristics of loan and as per guideline of central bank. The process of continual review and classification of loans enables banks monitor the quality of their loan portfolios and when necessary to take remedial actions to counter deterioration in the credit quality in this portfolios. In most of the countries, a number of days a past due payments represents a minimum condition for loan classification purposes.

However some criteria which exhibit forward looking features also considered. In the context of Nepal, as per guidelines of NRB loans are classified into four categories namely pass, substandard, doubtful and loss.

**Pass Category:** All loans and advances the principal of which are not past due or past due for a period up to three months. Only loans under pass category are termed as performing loan.

**Substandard Category:** All loans and advances the principal of which are past due for a period of more than three months and up to six months.

**Doubtful Category:** All loans and advances the principal of which are past due for a period more than six months and up to one year.

**Loss Category:** All loans and advances the principal of which are past due for a period of more than one year.

Performing loans are these loans that repay principal and interest timely to the bank from the cash flow it generates. In the context of Nepal, the loans classified as a pass category is termed as performing loan.

These are the loans that do not repay principal and interest timely to the bank. Non-performing loan (NPL) has many different meanings which vary from the country to country. In some countries non- performing loan means the loan impaired. In some countries it means that the payments are past due, but there are significant differences among countries how many days a payment period should be in arrears before past due status is triggered. Nevertheless, a rather common feature of non-performing loan appears to be that a payment of more than 90 days past due. In Nepal also, if the loan is past due for over 3 months it is non-performing loan. Hence the loans falling under substandard, doubtful and loss categories are regarded as non-performing loan.

### **2.1.13. Loan Loss Provision**

Loan loss provision is the accumulated amount or fund that is proved as a safeguard to cover possible losses upon classification of risk inherited by individual loans. There is risk inherent in every loan. Hence, provision is made as cushion against possible losses and to reflect the true picture of the bank's asset. There is practice of showing net loan (total loans- loan loss provision) in financial statements. The amount required for provisioning depends upon the level of non-performing asset and their quality.



High amount of provision is an indication of the bank's credit portfolio needs serious attention. One percent provision of total credit is an ideal position as it is the minimum requirement for all good loans. In Nepal 1%, 25%, 50% and 100% provision are made for pass, substandard, doubtful loan and losses respectively.

#### **2.1.14 Lending process**

Commercial bank follows several steps to disburse loan to the borrowers. The lending policies might be different from one bank to another. In general, these steps can be pointed out as follows.

Application: the needy are required to submit an application to the bank along with required documents. The documents required for credit proposal appraisal and processing by banks are as follows:

- Loan application
- Citizenship certificate of applicant
- Firm/ company registration certificate (if self employed)
- Income tax registration certificate (if self employed)
- Authenticated partnership deed in case of partnership firm, and memorandum and article of association in case of company
- Attested copy of board resolution in case of company resolved to avail loan and banking facilities from bank against the pledge, hypothecation, and mortgage of fixed property owned by company or property of third party named.
- Letter of authority authorizing to sign loan deed and other relevant document paper which are deemed necessary while dealing with bank on behalf of firm/company.
- Feasibility report/scheme ( for new project)

#### **Lending appraisal and processing**

Basically, appraisal of loan proposal is processing for the analysis of the variability of the scheme proposed. It also helps to assess the actual financial assistance needed to operate the scheme.

Commercial banks carry out loan appraisal on the basis of past performance, future forecast and information available from the documents submitted by aspirant borrowers.

The bank tries to ascertain the following during loan processing:

- The cost of estimate us examined so that the appropriate estimate can be accepted. Under and over estimates are rejected. Similarly, the specification of machinery should be proper.
- Working capital projection has to be reasonable as compared to past performance and on the basis of target for future expansion.
- The return rates should be adequate like return on investment (ROI), internal rate of return (IRR) and debt service coverage ratio (DSCR).
- The capacity, competency, integrity and commitment of promoters/partners/proprietors/directors/personnel should be intact.
- SWOT (strength, weakness, opportunity and threat) analysis of the proposed project must give reasonable assurance.

### **2.1.15 Portfolio Analysis**

In financial leverage, portfolio could be defined as the composite mixed of ownership to financial assets/investments in which a particular investor wishes to invest. Thus, portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. It helps an investor to make optimal investment decision minimizing overall risk and maximizing overall return. Portfolio theory was first developed by Markowitz in connection with the investment in stock market securities. The ground theory was that, if the correlation between the assets return is not perfectly positive, investing in two assets can minimize risk.

### **Portfolio Management**

In general, portfolio management is the process of selecting a combination of investment alternatives that provide the investor a maximum attainable return for a given level of risk or a minimum risk for a given level of return. Portfolio management can also be taken as the management of risk and return. It aims to determine an appropriate mix of investments that attains optimum level of risk and return depending upon the attitude of investor.

According to Lawrence J. Giman (1973), “Portfolio means a collection or group of assets.”

According to Weston and Brigham (1983), “A portfolio simply represents the practice among investors of having their funds in more than one asset. The combination of investment assets is called a portfolio.”

According to Sharpe, Alexander and Bailey (2000), “Portfolio construction involves identifying those specific assets in which to invest as well as determining the proportions of the investors wealth to put in to each one.”

Portfolio management of banks' loan investments basically are the allocation of funds to different types of consumption and investment loans having different degrees of risk and varying rates of return in such a way that balances the conflicting goal of maximizing return and minimizing risk. The process of managing banks' loan investments considers a number of relevant and influencing factors such as the availability of funds, liquidity required, central bank's rules and regulations that abide banks, risk associated with the respective industries, and the expected rate of return on respective loan sanctioned sectors. In addition, the banks should carefully examine the macroeconomic indicators such as interest rates, inflation, aggregate expected money multiplier, national income; saving ratio etc. effective management of banks' loan investments can lead the banks into the success as loan investments constitute the major portion of a traditional bank's total assets.

## **2.2 Review of Related Studies**

Crosse (1963), has mentioned in his book “Management Policies for Commercial Banks” that 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 inherent in any extension of credit. Before formulating a lending policy, many factors have to be taken into consideration because banks are not the real owners of deposits but rather the custodians of money. Crosse has further pointed out the various factors to be considered before planning for sound lending policy. The factors include community's need of money, determining the size of the loan portfolio and the character of loan payment, purpose and protection. Other factors for consideration for sound lending policy include credit worthiness, assets pledged to secure borrowing, interest rate policy etc. Crosse strictly

points out that the lending policy must be well spread. It should be of short-term character, repayable on demand, profitable and it should be with adequate securities.

Reed, Cotter, Gill and Smith (1980), in their book entitled “Commercial Banking” focus on the importance of loan in banking sector. As per their view, loans are the most important asset held by banks and bank lending provides the bulk of bank income. Lending is not important to the banks only, it is equally important to the community the banks serve. That’s why loan policies must be worked out carefully after considering many factors (Reed, Cotter, Gill and Smith.1980:75).

Bhattacharya (1998) in his book “banking strategy, credit appraisal and lending decision” has put the Committee. The Committee prepared this report in 1975; however, these recommendations still hold a great significance in this sector of credit appraisal and lending. Breaking away from the traditional methods of credit appraisal, the system proposed by the Committee enjoined upon the bank to assess the need based credit of the borrower on a rational basis. To ensure proper end-use of bank credit by keeping a close watch on the borrower’s business, to improve the financial discipline of the borrower and to develop healthy banker-borrower relationship.

The Committee examined the existing system of the lending and recommended the credit needs of the borrowers to be assessed on the basis of their business plans. It further recommended that the bank credit should only be supplementary to the borrowers’ resources and not in replacement of them without having the bank finance one hundred percentage of the borrowers’ requirements. The borrowers are required to hold inventory and receivable according to the norms prescribed by the central bank from time to time and credits are to be made available in different components only, depending upon the nature of various current assets.

Gitman and Jochnk (1972) in their book “Fundamentals of Investing” compare the bank investment with a vehicle. He says that it is such vehicle into which funds can be placed with the expectation that will preserve or increase in a value and generates positive results. A banker seeks optimum combination of earning, liquidity and safety while formulating investment policy (Gitman and Jochnk, 1972:1).

Singh and Singh (1983) put forth their view in the book written by them entitled “financial Analysis for Credit Management in Banks” that the investment (credit)

policies of banks are conditioned to great extent by the national policy framework. Every banker has to apply his own judgment for arriving at a credit decision, keeping his banker's credit policy also in mind. (Singh and Singh, 1983:57)

Beckman (1962) in his book "Credit and Collections" writes that the need to borrow is greater today than ever before, partly because of the dependence of people upon complex money and credit economy that is subject to many uncertainties and partly as a result of desire for a constantly rising standard of living.

He has also expressed his view on loan collection. "The weaker the credit granting function is, the greater the task on the collection end of business", writes Beckman. He says that collection functions arise only because credit has been used. The credit granting and collection functions are not only interdependent but also interwoven. The more lenient the deliberate policy of risk selection, the more formidable is the collection task and the stricter the granting of credit, the less the burden on the collection function.

Chaplin and Ehasset (1963) describe collection as the final leg of the credit journey. In their book "Credit and Collection Principles and Practice" describes that an effective system will embody prompt action and follow up at regular intervals. A good collection will permit the assistants in the collection department to do much of the routine work without consulting the collection manager. System in the collection department will include some methods of following up accounts, sending collection notices, and typing letters converting the early stages of collection. Results will be obtained more or less automatically, leaving the collection manager free to direct the action to be taken upon cases that are more difficult.

Mather (1984) in his book "Securities Acceptable to the Lending Banker" describes an ideal advance as one which is granted to a reliable customer for an approved purpose in which the customer has adequate experience, safe in the knowledge that the money will be used to advantage. Repayment will be made within a reasonable period from trading receipt or known maturities due on or about given dates (Mather, 1984:114).

The article of Ready (2005) provides an overview of the credit portfolio management function, structural alternatives, the skill necessary for its effective implementation, and a final word on training and compensation. The focus is on corporate credit

portfolios, as these often present the largest concentration challenges though they can be easily modified.

Modern portfolio management of bank assets has fundamentally changed the requirements for individuals using this technique: their backgrounds, their training, and their skills on using available resources. While traditional credit training remains necessary, today's portfolio manager augments this background with knowledge of early-warning systems, alternative structures to better set risk/return parameters, and more.

Traditional training focused on the individual loan. Traditional credit training focused on the analysis of a firm's management, operations and financial structure as the basis for determining a borrower's creditworthiness; now training programs incorporate not only these techniques, but also that elusive element called a bank's credit future.

In essence a bank's credit culture was a series of written and unwritten rules about which types of customers, industries and credit profiles were acceptable. This culture ultimately dictated the structure and composition of the bank's total portfolio.

Protection measures against portfolio losses focused on loan loss reserves based on moving-average formulas. Concentration risk was to be avoided, but there were always those special customers for whom exceptions could be made. If the formulas were correct, then overall expected losses in the portfolio would be covered by reserves. But those formulas and expectations were not always so accommodative. As a result, certain concentrations would invariably lead to extraordinary, or incorrect, losses that were charged to income in the previous year of their income.

Portfolio management looks at the impact of loans individually, collectively, and comparatively. Modern portfolio management techniques have supplemented these unwritten rules with portfolio analysis and policies that establish limits on exposure by country, by obligor, by industry, and so on. These limits are derived from a specific focus on the technical aspects of this asset class segmentation of credit product and an analysis of the effect of combining credits into portfolios. Credit portfolios can now be evaluated on the basis of fundamental as well as quantitative portfolio analysis. (This is now being further institutionalized in terms of capital as defined in the updated Basel Capital Accords.)

Functionally, credit is now segmented into four parts.

1. Origination and determination of the required level of customer commitment: The sales/relationship function in credit portfolio management is often separate from the analysis/underwriting function. This allows for an efficient use of resources for client development as well as analytical discipline and consistency. The relationship manager determines the commitment level that will maximize relationship income.
2. Fundamental analysis of the individual credit: the underwriting function in credit portfolio management is charged with the more traditional responsibility of individual credit analysis and monitoring. But this function is being driven more and more toward a specialization based on industry, so that the full benefits of analyzing alternative borrowers within an industry can be achieved. The more specialized structure enables credit portfolio management (CPM) to provide key value-added analysis to relationship and product managers in complex customer support for example, merger and acquisition analysis. It also provides for a centralized, efficient use of analytical resources.
3. Portfolio monitoring: Many more tools and information resources exist today than available in the past for portfolio monitoring. For examples, institutions now set various portfolio limits to shape the structure of the desired portfolio. Early-warning processes to portfolio deterioration have become an integral part of credit risk management. For large corporate portfolios, Merton based models relate information inherent in the equity markets to a firm's debt level. Bid spreads and credit derivative premiums provide a forward-looking credit view from the market that can be compared with a bank's own credit view.
4. The role of credit authorities: The credit approval function determines the desired exposure level for the institution's books within the context of pre-established limits by obligor and industry. As a result, credit approval manages expected loss and allocates capital to desirable transactions. CPM, as separate from credit approval, optimizes the use capital through alterations to the portfolio's profile.

#### Alternative Structures for CPM

The establishment of credit portfolio management is typically an evolutionary process for each banking institution. At start-up, CPM usually takes a defensive role-eliminating concentration risk and culling underperforming relationships from the risk/return point of view. As CPM develops, optimization of the selected portfolio is added to its role, adjusting exposures to take into account the best risk/return structure. The adjustments often use the credit derivatives markets in order not to

disturb the primary relationship with the customer. In its advanced form, CPM adds the bank's credit view to its role, with the intention of improving the portfolio's relative value performance among different asset classes.

The state of CPM along this development curve often dictates whether it is located inside the wall (subject to the possibility of receiving nonpublic information) or outside the wall (not subject to nonpublic information and freer to adjust positions.)

#### Functions of CPM

CPM achieves two principles goals:

1. To match required hold levels with desired hold levels.
2. To optimize the portfolio of assets ultimately held by the bank.

To do this effectively, CPM must perform all or some of the following key functions, depending on the state of the development curve discussed above.

- Serve as an analytical and advisory group to the line and to the approval authorities, plus serve as an integral part of critical deal teams.
- Prepare the credit approval package and advocate the transaction to the credit approval authorities.
- Closely monitor obligor risks, returns and concentrations.
- Evaluate, establish, and effectively use advanced modeling techniques to help determine the potential risk inherent in the portfolio and its assets correlations.
- Manage those same risks through the judicious use of loan sales and synthetic instruments such as credit default swaps.

In the article by Paul Van Mass (2002) head of the credit products Europe, Bank of America, title "Active loan Portfolio management through the use of credit derivatives" has to give the reader a brief overview of common derivatives the size and scope of their markets and their role on structured credit products. This case study uses as a reference a current deal that Bank of America has structured using credit derivatives. In his study researcher shows that credit derivatives market has grown and it continuing to grow at far greater rate.

According to the research, credit derivatives market is widely predicted that volumes will continue to increase dramatically. An increase in liquidity through new market participation has aided and will continue to aid growth. Moreover, there has been an increased use of credit derivatives by banks for managing credit risk, for example concentration risk which has improved liquidity. This activity is facilitating an



increased understanding of credit risk and investor willingness to accept structured transactions. The most frequently encountered one of the credit derivative is credit default swaps.

### Credit Default Swaps

Credit default swaps is a bilateral contract between two counter-parties, in which the “protection buyer” pays a periodic fee for protection a contingent payment on the default (or any other specified credit event) of a reference obligation, from the “operation seller”.

How is protection triggered?

A reference obligation is nominated in the credit default swap contract and, should a credit event occur on this obligation, the protection seller may be asked to compensate the protection buyer. The definition of “credit event” can vary between contracts and it is therefore imperative that both parties to a transaction agree and understand the scope of protection. Credit events are one or more of bankruptcy, failure to pay, obligation acceleration, repudiation/moratorium or restructuring, as specified in the related confirmation.

A contingent payment can take two forms depending on whether the transaction is cash settled or physically settled. In cash settlement, the contingent payment is calculated by taking the par price of the reference obligation and subtracting from it its current post-credit event market value. Physical settlement involves the protection seller taking delivery of the reference obligation versus the payment of par. An advantage of physical settlement is that potential disputes over the fair market price of a post-credit event reference obligation are avoided.

### Trade rationale

- Credit default swaps can be tailored to meet specific investment needs. Investors can choose the reference credit, term (typically one to five years), or notional amount and currency.
- Credit default swaps can be used to offload exposure whilst maintaining client relationships. An application of this would be a bank with a loan to a client buying default protection on the exposure to the client. This hedge need not necessarily be disclosed to the client.

- For investors with balance-sheet/funding constraints, being a seller of protection (hence a receiver of a periodic fee) can be used as an unfunded investment.
- Risk managers may use credit default swaps in order to hedge their risk. By purchasing default protection, they are decreasing their exposure to a potentially risky credit and freeing credit lines.

### Applying Credit Derivatives in Loan portfolio Management

Improved risk measurement systems have enabled banks to isolate specific components of portfolio risks. The credit derivative market has developed tools to effectively manage these specific risks. Loan portfolio management has driven a convergence among credit derivative and asset securitization market activity. This convergence has led to an array of solutions of loan portfolio management.

Researcher concluded that credit derivatives markets are still relatively new and the market is set to continue to grow rapidly in the next few years. An increased focus and better credit derivative valuation models will continue to exacerbate this growth. The existence of credit derivatives and their increasing use in loan portfolio management is exciting. Moreover, structure will seek to find new applications for credit derivatives, which help loan providers, dissect and identify the credit exposure they desire and transfer unwanted exposure to another party. The prospects for the further use of credit derivatives and the increase in structures in which they will feature deserve a watchful eye.

Barbara and Sotiris (2001) in the article title “Service failures and service Recovery in retail banking the customers’ perspective”, they focus on an empirical investigation of service failures and service recovery in retail banking. Different types of failures and recovery strategies used by Greek banks to them were identified using the critical incident technique.

The importance and benefits of providing service quality are well documented in the academic literature, and business participations strive to design and implements programs to ensure that the customer is satisfied with his/her encounters with a service firm and, in turn, with various dimensions of service quality. However, quality discrepancies and shortfalls are likely to occur, especially when human input is

largely responsible for the “Production” and delivery of the offering. The problem that arises for organizations are what happens when a service shortfall occurs; how can they recover from service failure?

In the article, Lin Peter Wei-Shong, Mei Albert Kuo-Chung (2006) “The internal performance measures of bank lending: a value-added approach” define the lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. Banks are learning to review their risk portfolios using the criteria laid down by Basel II. Greenspan has indicated that Basel’s goal is to induce bankers to improve their risk management capability, including how the institutions price products, reserve for loss, and control their operations (Rehm, 2002). This research is in line with the purpose of Basel II, i.e. to reduce a bank’s operational risk during the lending process through a better monitoring of the employees in the lending department.

According to them, with respect to performance, banks now use various measures to assess bank efficiency and related functions in the bank lending process. Traditionally, banks determined operating efficiency by using measures of bank profitability, such as return on equity, return on assets, and return on investment; also, banks used operational ratios, such as monetary output per staff member, and total operating expenses per unit of output.

Banks adopted data envelopment analysis (DEA) in the 1990s as the principal method for assessing bank efficiency. DEA is a linear-programming method initially developed by Charnes et al. (1978) to measure the comparative performance of homogeneous organizations. The objective of DEA was to build an efficiency frontier of inputs and outputs, where production is maximized under fixed costs or costs are minimized under restricted production. Thanassoulis (1999) concluded that banks were increasingly using DEA as a tool for assessing, monitoring, and improving performance. The system is widely discussed in recent literature containing banking performance studies. Sherman, Gold (1985), Berg et al. (1993), Ferrier, and Lovell (1990) adopted DEA as a tool for assessing corporate banking performance.

Grasing (2002) described the efforts of the Nolan Company to develop benchmarks for commercial banks involving many of the top performing banks. The goal of establishing the benchmarked banks was to establish drivers of high performance. The cost per each completed loan, the cost per thousand dollars of loans, the non-interest revenue from each loan per each thousand dollars, the total number of loans per employee, and the dollar amount of loans per employee were used as the performance measures for commercial banking.

As reported by Boucher (1996), measuring the productivity of a loan officer is the key to improving commercial lending performance. The productivity measure of a loan officer is quarterly loan sales. The manager can use this information to analyze the loan officers' quarterly productivity.

Perro and Ruoff (1997) used the value tree to depict some of the values and risk drivers for commercial lending. The drivers of lending revenue are operating fees and interest income that are driven by new loans and existing loan volumes. The drivers of lending expenses consist of interest expense, operating expense, loss revenues and unexpected losses in commercial loans.

In the studies of Grasing and Boucher, as well as those of Perro and Ruoff, all of the performance measures are final measures. Using final measures as the primary tools to evaluate lending performance, however, may result in the following problems:

- ) Final measures used to evaluate final outputs of the lending process cannot predict in advance whether a lending operation may become a problem loan. That is, the final measures cannot reduce the operational risk of lending in advance.
- ) In general, the period of lending will be long term – a minimum of three or five years. Performance measures of the lending should concentrate on the quality rather than the quantity of the loan. Therefore, when using final measures as indicators of evaluating loan performance, quarterly or yearly measures are not incompatible with regular performance measures.
- ) A borrower may pay in accordance with the bank's requirements for one period, but in the next period, he or she can violate or breach the agreement. The regular loan performance measure emphasizes cash flow in, but neglects

the quality of each lending process, leading to a possibly biased performance measure.

To resolve the problems that can occur when using final measures as performance indicators, we should choose internal performance measures of bank lending activities as the main analytical core for our study for various reasons. First, the internal measures used can evaluate internal outputs of the lending process. Therefore, these measures can prevent problems loans from occurring in the future. Second, the internal measures can be compatible with a bank's regular performance quarterly or yearly measures. Third, the internal measures are based on quality not quantity, and a quality-based measure can prevent a possible bias in measuring banking loan performance.

#### Analytical structure and value-added analysis

This research indicates the importance of using internal measures to evaluate lending performance and resolve any problems derived from using final measures. The main purpose is to monitor and assess the lending performance accurately and reduce probability of overdue loans and bad loans.

Before constructing appropriate internal measures, we utilize the concept of a value-added approach to analyze the process of lending activities, which are as follows.

1. Analyzing process of lending activities
2. Finding outputs of process of lending activities
3. Finding internal measures of output of lending activities
4. Finding internal sub-measures to improve the correctness of Capacity and Condition
5. Improving performance of banking loan

Then we find proper outputs of each lending activity and construct internal measures of outputs for those lending activities. Among these internal measures, the analysis of a borrower's capacity and condition is the key factor to estimate the probability of the borrower's ability to repay the loan and interest in the future. To improve loan performance, this research builds on internal sub-measures to monitor employees in the lending department.

In this research, a value-added approach uses a competitive strategy and the concept of the value chain developed by Porter (1985). The research has a specific goal; that is, to determine the appropriate internal performance measure for each activity along the route of the lending process. This production process can be described as a value-added process. The total value added, across the profit production process, can be measured by using the differences between the values of all outputs and inputs. The value-added analysis carefully counts only the incremental profit an activity generates during the production process. The final measure then is referred to as the total value created from this profit production process. The internal measure in this research is referred to as the value created from a specific activity during the process.

In order to increase the added value of each lending activity, the lending process is analyzed to find the appropriate internal performance measure for each activity along the lending production process. Schuler and Jackson (1996) revealed three basic types of performance measure criteria: trait-based, behavior-based, and outcome-based. The benefit represents the performance outcome of a lending-related employee, but not the trait, or the behavior. These internal measures are used to monitor and enhance the quality of each lending activity. Consequently, the characteristics of these internal measures become mainly outcome-based and quality-oriented.

Process and work analysis of bank lending activity Johnson and Johnson (1985), Hempel and Simonson (1999) and Koch and Macdonald (2000) all pointed out that the activities in the process of commercial and industrial(C&I) loans follow eight steps. These steps are application, credit analysis, decision, document preparation, closing, recording, servicing and administration, and collection.

The first step of the C&I loan process is the application, which is conducted by a loan officer. This step covers the initial interview and screening of a loan request. Initially, the loan officer obtains as much information as possible about the situation of the borrower, for example, his or her previous credit history, current outstanding loans, and current financial statement. The loan officer gathers company information, including legal status, principal employees, main products or services sold, production techniques employed, important competitors, and directors of the company.

The second step is the credit analysis conducted by the credit department. First, the analyst in the credit department receives the financial information of the borrower

gathered by the loan officer; then he or she conducts a comparative and historic analysis of the company's financial data. After finishing the financial comparative analysis, the analyst prepares a recommendation report for the loan officer about whether the loan should be granted, rejected, or qualified.

In the third step, the loan officer obtains the credit analysis report and determines whether the report accurately describes the borrowing capacity and characteristics of the borrower. The loan officer then grants the loan with or without considerations of collateral. The loan officer notifies the borrower of his or her decision and proceeds to negotiate loan terms if the loan is to be granted.

When the loan officer and the borrowing company are in agreement, the fourth step is the loan operation. Here it is necessary to prepare primary notes, agreements, collateral or non-collateral agreements. If collateral is required, the amount of collateral and additional collateral documentation are indicated.

In the fifth step, the loan officer obtains the borrower's signatures and receives collateral; then the loan operation is closed and the loan proceeds.

The sixth step is the recording of the loan conducted by the loan operation and credit department staff. A loan operation clerk classifies and codes the loan for entry into the commercial loan system, and he or she reviews the loan for compliance with the bank's loan policies. Finally, the loan operation clerk and credit department staff member file the loan notes, authorization, and receipts in designated files.

The seventh step is loan servicing and administration conducted by a loan operation operator, a loan officer, a credit department staff member, and a financial analyst. The loan operation staff person prepares the loan payment notices to notify the borrower and is responsible for receiving periodic payments. The loan officer makes periodic visits and customer calls to obtain new financial statements from the borrower and provides that information to credit department and reviews the loan for compliance with the loan agreement. A credit department financial analyst also receives and reviews the borrower's periodic financial statements.

In the eighth stage, the loan officer may receive periodic delinquency information and need to follow up on this with borrowers. The loan officer also needs to adjust loan

terms and conditions as deemed necessary, and to take legal action if non-collectible procedures and foreclosure on the loan are required.

After analyzing these lending activities, a value chain of lending activities can be identified, and the rationale for determining how values are created can be determined.

#### Outputs of bank lending activities

It can be observed from the work analysis in the previous section that the particular process of lending covers eight important activities – application, credit analysis, decision, document preparation, closing, recording, servicing and administration and collection. This study employs the work analysis for activities at each stage of the lending process using with a value-added approach, to find the appropriate outputs.

#### Internal measures before lending decision

As analyzed above, internal measures are used to monitor and enhance the quality of each lending activity. Hence, the internal measures become the measures of the value or quality of outputs. The visiting report is the output after the activity of application. The purpose of the visiting report is to help the loan officer understand the borrower's associated problems. The factors for evaluation generally used in this situation are in line with the 6C principles of basic lending. These 6C's are character, capacity, capital, collateral, conditions and control (Rose, 1991), which are also important reference indexes for banks when making a credit analysis to decide whether or not a borrower is worthy of a loan.

Viewed overall, according to the 6C principles, the internal measure for measuring the value or quality of the output at this stage, regarding the visiting report, can be determined by whether the collection of information by the loan officer concerning the 6C's is accurate and complete, or not.

By analyzing a borrower's situation using the 6C principles, the comparatively more difficult situations encountered by a loan officer become capacity and condition because in addition to the understanding and analysis of the information about capacity and condition. It is also necessary to determine whether any future changes will affect the financial situation and the loan repaying ability of an enterprise.



Therefore, if an excellent, professional loan officer can accurately and completely collect information in these capacity and condition, the value of the visiting report will be high.

When a loan officer completes the visiting report, he or she enters the activity of credit analysis. The primary outputs of this activity are the financial analysis report and the recommendation report. The credit analyst has to proceed with financial analysis first in accordance with the business financial reports and related documents collected the loan officer, and turn them into relevant financial reports.

At this stage, the internal measure is used to measure the quality of the analysis the loan recommendation report, as prepared by the analyst at the credit department using the 6C information. In other words, a comprehensive description and explanation must be provided regarding how to carry out the analysis and whether to approve object to the loan.

During the analytical process of this stage, there are two difficulties:

(1) How to analyze and predict the borrower's recent financial situation and loan repaying ability according to the collected information regarding capacity and condition of the borrower; and

(2) How to provide an appropriate recommendation as to the interest rate of the loan, since only good recommendations will cause the bank not to incur a loss

Thus, if the associated staff at the credit department can conquer these two difficulties, the value and quality of the financial analysis report and recommendation report can be enhanced.

When the above two reports are complete, they are submitted to the loan officer who proceeds with the decision-making process of the loan. The outputs after entering the third activity, the decision-making, consist of the report of the decision and the final C&I loan terms. When a loan officer proceeds with the lending decision in accordance with the recommendation offered by the credit department, there will be three follow-up circumstances. The first is where both the credit department and loan officer object to the lending. The second is where both approve of the loan. The third is where either entity objects to the lending. If one party objects, the objecting party must explain his

or her reasons in the report regarding that decision. Generally speaking, main differences of opinion regarding the loan can arise from different opinions and viewpoints held about the estimation of the future development of the borrower. Under these circumstances, the internal measure used to measure the outputs at this stage the loan process relates to the quality of the 6C information used in the report of the decision provides an explanation and prediction of the future financial condition of the corporate enterprise seeking the loan.

When both object to the lending, the entire lending process comes to an end, and there will be no activity and output at the next stage. On the other hand, when both approve of the loan, the loan officer will notify the borrower and move on to the negotiation of the lending conditions, the next step. The interest rate of the loan is then used as the internal measure for the outputs at this stage. The interest rate is based the estimated risk of a particular borrower, therefore, the higher the lending interest rates after negotiation, the higher the value of the outputs. To avoid the adverse selection problem, i.e. that the higher lending interest rates are associated with higher loan risk, the internal performance measure approach here tries to reduce the asymmetric information between borrower and bank by monitoring the employees and accurately assess the borrower's management capability and its strategic fit.

### **Internal measures for lending documentation**

When the lending is confirmed and related lending terms are negotiated, the stage of document preparation begins. The outputs of this stage are the documents and contracts related to this loan. The internal measure for assessing the outputs refers to the accuracy achieved in the preparation of the loan-related documents and contracts. The purpose here is to avoid differences in the terms of negotiation set down in the relevant documents. After this step, the completed documents and contracts are submitted to the loan officer for processing and signing by the borrower. Following this exercise, the entire lending process moves to the closing stage.

The output of the closing stage is the received document or collateral. The internal measures here will indicate whether the documents and contracts selected and received are complete, and whether the amount and quality of the collateral conform to the executed decision report. Next, the person in charge needs to submit relevant documents and information to the loan operation and credit department for the

recording stage. The important outputs of this stage are the operating files and credit files. The internal measure at this stage is a determination of whether any documents are missing. The bank must be prevented during the document review and loan information stages from inaccurate assessments of the borrower because of incomplete information, as well as inaccurate assessments of the entire lending process at hand, again because of missing documents.

### **Internal measures for loan review**

The pre-operation of the entire loan comes to an end upon the completion of the recording of the lending document. Following this stage is the servicing and administration for lending processes executed by the bank, such as loan review, the most crucial aspect. The main purposes now are to understand the borrowing enterprise and to continue supervising and monitoring for any possible future changes and difficulties that the enterprise may experience. Such administration and monitoring will ensure that the entire lending process will be accomplished successfully.

The output upon the completion of the loan operation is the term report of payment, and the aim of which is to determine regularly all aspects of the borrower's loan payment costs. Thus, the internal measure selected for assessment at this stage is whether and when to make a timely reaction to any irregular payment by the borrower. In the next stage, the loan officer has to pay regular visits to acquire an understanding of the borrower's current and future situation and collect related information. The output of this stage is the term report after a periodic inspection visit. This collection of information should follow the 6C principles at the application stage and involve a comparison of differences in the corresponding information that was involved at successive stages of the loan process. The internal measure for assessing the output of this stage rests on the accuracy and completeness of the 6C information collected during the periodic inspection process.

After the visits, the report made by the loan officer is submitted to the credit department for financial review and for new or renewed recommendations. Thus, the term report of financial analysis and recommendation become the outputs. The aim is to truly understand whether the borrower's own financial situation and structure have

altered and if the originally promised value of collateral differs from later assessments.

Consequently, the internal measure for assessing the output of this stage takes on the nature of the former stage of credit analysis as reference, that is, the quality of the analysis of recommendation report regarding 6C information.

In this stage, the loan officer and credit department staff can still face problem described previously that has been identified, i.e. that either entity objects to the continuing lending. When these two persons in charge recognize that changes in the borrower's current financial situation have occurred and result can be a slump in the entire industrial environment and market, the possibility of collecting the loan back early must be addressed. Certainly, a wrong decision here will affect the profit earnings of this loan.

When the entire lending process has come to an end, the output of this stage represents the profit earning status of the loan, which is also the final measure of the loan in terms of lending performance assessment.

The researcher concluded that the final measures were mainly used to carry out performance assessment in evaluating bank lending performance. However, these methods usually created problems, such as the incapability of predicting whether a particular lending operation might turn into a problem loan; the inconsistency in the point of timing during performance assessment, the problematic length of time for routine assessment; and the neglecting of internal quality control in the entire lending process.

To prevent such problems, an internal measure approach can be used to monitor the value added at each stage along the vertical chain of lending activity. The internal measure at each stage is the output of the employee's service at each stage. The main concern then becomes the quality of these outputs. Among these measures, the specific internal measures used to evaluate the accuracy of a loan officer's analysis of the borrower's capacity and condition are critical to reducing overdue loans and bad debts.

Such measures are mainly adopted in order to analyze the borrower's strategies and organizational architecture. Considerable research has proved that the borrower's

strategies and organizational architecture to be the most important determinants of firm profitability and the firm's ability to repay the banking loan. To this end, we have constructed a comprehensive analytical framework that will improve the accuracy of analyzing a borrower's capacity and condition.

Compared with final measures (DEA, benchmark, and productivity measures), the internal measures proposed in this research are more subjective. Such subjectivity is the characteristic of quality-oriented measure. The best we can do in this research instance is to provide a monitoring direction, not the exact scale of these measures. To implement such internal measure system, we offer two suggestions:

- (1) to enhance the ability of a lending department to review a borrower's capacity and condition, the bank should provide more training programs in business strategy and organizational management to the employees in the lending department; and
- (2) To evaluate the job performance of these department employees, banks should select their performance evaluators from those with superior knowledge in business strategies and organizational management.

The major benefit of using an internal measure to monitor the output quality of the employees in a lending department is a reduction in the likelihood of employee moral hazard behaviors. This reduction in turn would ease the lending operational risk, one of the main purposes of Basel II. To cope with employee fraud, a monitoring system of double checks from upper level managers about the rightness of any loan is a must. However, the asymmetric information between senior manager and the employee in a lending department about the employee's wrong doing always will exist. To effectively use local knowledge about possible fraud from a particular employee, assigning loan decision rights to teams might effectively prevent individual fraud. The final decision for a loan should be made through consensus or some type of voting mechanism among any team members who have participated in the evaluation process for the loan. Further study regarding team decision as well as the separation of decision management and control of lending inside a bank organization might be two of the directions future research can take regarding the prevention of employee fraud.

Corsby, Nick French and Meilanie Oughton (2003), in the article "Bank lending valuation on commercial property, Does European mortgage lending value add

anything to the process?” researchers try to find out mortgage lending value in term in Europe should be based on sustainable values and this recommendation is compared to the current basis used for bank lending valuations mainly market value. According to them, the mortgage lending value shall mean that the value of the property as determined by a valuer making a product assessment of the future marketability of the property by taking into account long-term sustainable aspects of the property, the normal and local market conditions, the current use and alternative appropriate uses of property. Speculative elements shall not be taken into account in the assessment of the mortgage lending value. The mortgage lending value shall be documented in a transparent and clear manner.

In very simplistic term, bank lending falls into two categories: asset specific and corporate loan. These loans, in turn, can be divided into two further categories of secured and unsecured lending. It is in the case of secured lending that valuations are most directly and commonly used. In unsecured lending valuations are frequently relied on indirectly.

In secured lending, the underlying philosophy has been to determine the value of the assets on which the loan is based and to ensure that the former is greater than the amount borrowed. The degree by which the asset value exceeds the loan provides the margin of assets cover assessed thorough the loan to value ratio. The lender is interested in the position should be the borrower default and have an idea on the amount that the sale of the property asset would realize were the borrower, lender or receiver to sell the asset.

Another principal use of valuations is for assessments of corporate cash flow projections, used in most forms of lending. Here, the valuation figure and liquidity of assets are of equal importance. The valuations are relied on might be directly commissioned by the lender or could have been produced by the borrower other third parties for other reasons for requiring valuation might include calculations of net asset value, justification for granting the second charge; verification of the borrower’s veracity decisions on action following the default of the borrower.

However, the changing influence of different types of information does not seem to have reduce lenders’ desires for a valuation of the security and a number of initiatives

have occurred which attempt to improve the ability of the valuation to underpin the loan decision. According to their view three main aspects of valuation are:

- i) Improve the communication between lender and valuer and agree more detailed relevant instructions.
- ii) Develop new concepts and bases of valuation
- iii) Improve the quality of information provision in valuation reporting

They concluded that the problem in valuation is quite straightforward. The banking communities are trying to identify a basis of value to which they can apply a loan value ratio and thus project their loan in the future should the borrower default. A simplistic understanding of value would therefore suggest that the figure provided should be a figure which has a life for the length of the loan. However, this very concept is economically impossible in any market with volatility. Values can only be snapshots in time. They do not have a shelf life. For this reason European mortgage lending valuation is conceptually and particularly redundant in real estate markets. It appears on the surface to be a solution to the banks' requirement for reduced risk property lending. In reality it may indeed transfer that risk by demanding a level of protection to the bank that valuation cannot give. But if valuers agree to it, it could be the very too successful negligence claims in the aftermath of poor lending decision. This is because to concept appears to be determination of the virtually certain level of value below which the value will not fall for an indeterminate time into the future.

The investor or whether banks, financial institutions, individuals, private or government sector, must not take the proposal by making decision without having adequate judgment because sometimes they perform out of norms, related studies, policies and techniques. A project appraisal will be best viable only if it has been accessed through conscious analysis as well as through investment decisions to make its macro and micro level viability effective.

(Lamichhane, 2002)

In the article by Mr. Dipendra B Chhetri, (2000) titled "Non Performing Assets: A need for Rationalization" the writer has attempted to provide connotation of the term NPA and its potential sources, implications of NPA in the financial sector in the South East Asian Region. He has also given possible measures to contain NPA. Loans and advances of financial institutions are meant to be serviced either part of principal of

the interest of the amount borrowed on stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loan becomes non-performing asset. The book of the account with lending institution should be effectively operated by means of real transaction effected on the part of the debtor in order to remain loan performing.

As stated by the writer, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been arrear for at least 6 months. Similarly, it is after three months, in India. Loans thus defaulted are classified into different categories having their differing implication on the asset management of financial institution. He also stated that NPA are classified according to international practice into three categories namely substandard, doubtful and loss depending up on the temporal position of loan default. Thus the degree of NPA assets depends solely on the length of time the asset has been in the form of none obliged by the loaner. The more time it has elapsed the worse condition of the asset is being perceived and such assets are treated accordingly. As per Mr. Chhetri's view, failure of business for which loan was used, defective and below standard credit appraisal system credit program sponsored by government, slowdown in economy recession, diversion of fund is some of the factors leading to accumulation of NPAs.

He said that there is serious implication of NPAs, on financial institution. He further added that the liability of credit institution does not limit to the amount declared as NPA but extend to extra amount that required for provisioning depends upon the level of NPAs and their quality. As per his view, rising level of NPA create a psyche of worse environment especially in the financial sector. He mentioned that by reviewing the activities of the financial institution like waving interest, rescheduling the loan, writing off the loan, appointing private recovery agent, taking help of tribunals and law of land etc NPA can be reduced.

Finally he concluded that financial institutions are beset with the burden of mounting level of NPAs in developing countries. Such assets debar income flow of the financial institution while claiming additional resources in the form of provisioning thereby hindering gainful investment. Rising level of NPAs cannot be taken as stimulus but the vigilance demanded to solve the problem like this, eventually will generate vigor



to gear up the banking and financial activities in more active way contributing to energizing growth.

Mr. Him Prasad Neupane (2062) in his article titled “Bad loans of Banking Sector- Challenges and Efforts to resolve it” has thrown some views regarding bad loans of banking sector. As mentioned by him there was various types of risk inherent in the credit. One, who manages risk, earns profit. He further added that the recent financial crisis in banking sector is due to weak accounting procedures, defect in loan classification, lack of transparency, loss control measures etc.

Like the other writers, Mr. Neupane has also stated that NPL is the indicator of financial crisis and the factors leading to NPL is economic slowdown, recession, bad intention of borrower, lack of credit policy, increase in interest rate etc. NPL increases resource mobilization cost and reduce profit-earning capacity of the bank. He has also mentioned that the international standard of acceptable NPA is 4% but there us about 16% NPL in Nepalese banking sector which is due to high level of NPL of two nationalized banks, as stated by the writer, the major implications of NPL are banks cannot return depositors money on demand and it limits lending capacity of the bank. The writer has suggested internal measures for reducing NPL and its effect. Internal measure comprises classification of loans and advances and providing provisions for probable loss and external measures comprises of help from Credit Information Bureau (CIB), appointment of Asset Management Company (AMC) and Debt Recovery Tribunal (DRT).

Writer concludes, “Banks must give priority for reducing NPA. He has also mentioned that many countries are adopting various measures for reducing loan loss. Recently the president of Philippines has announced tax rebate system for reducing NPA. Cow it is high time to improve bad debts of banking sector with firm determination.”

### **2.3 Review of NRB Directives**

Nepal Rastra Bank has issued unified directives to banks and financial institutions for implementation effective Shrawan 1 2062 (16 July 2005). This also contains the new directive concern in loan portfolios and provisioning. Except a few important changes, this directive has retained most of the previous provisions.

## **Classification of Loan and Advance**

### **The classification criteria are as follows:**

Pass Category: All loans and advances the principal of which are not past due or past due for a period up to three months. Only loans under pass category are termed as performing loan.

Substandard Category: All loans and advances the principal of which are past due for a period of more than three months and up to six months.

Doubtful Category: All loans and advances the principal of which are past due for a period more than six months and up to one year.

Loss Category: All loans and advances the principal of which are past due for a period of more than one year.

Lending institutions are not restricted from classifying the loan and advance from low risk category to high-risk category. For instances, loans falling under sub standard may be classified into doubtful or loss and loans falling under doubtful may be classified into loss category.

### **Additional Arrangement in Respect of 'Pass loan'**

All loans and advances extended against gold and silver, fixed deposit receipts, credit card and against security of government securities and NRB bonds shall be included under pass category. In other words, loan against these collateral shall be eligible for placing under pass category irrespective of the past due period. However, where collateral of fixed deposit receipt or government securities or NRB bonds is placed as additional security against loan for other purposes, such loans have to be classified as required for other loans. As per the classification issued by Nepal Rastra Bank earlier, loan against fixed deposit receipts of other banks shall also qualify for inclusion under pass loan. However, this is not clarified in the Unified Directives.

Renewal of working capital loan having one year maturity period only may be classified as pass loan. Loans of working capital nature on which the service of interest is not regular shall be classified on the bases of total amount due period. Means, where the interest on working capital loan is not serviced regularly, such loans will be considered as 'overdue' and qualify for classification on the basis of the overdue period. Accordingly, working capital loan will simple become pass loan on

renewal of the facility provided interest is serviced regularly. The directive has not prohibited renewal of working capital facility with extended amount and outstanding interest amount is assumed collected by accommodating the same within that extended facility.

### **Additional Arrangement in Respect of 'loss' Loan**

Irrespective of whether the loan is past due or not, loans having any of the following discrepancies shall be classified as loan loss.

a) Loan with inadequate securities

This is very subjective and may lead to a difference in opinion between the lending institutions and auditors/NRB inspectors.

b) The borrower has been declared bankrupt

The bankruptcy law is yet to be enacted in the absence of the same; definition of bankrupt person may be imported from the 'Civil Code'.

c) The borrower is absconding or cannot be found

d) Purchased of discounted bills not realized within 90 days from the due date and non-fund base facilities like letters of credit and guarantee converted into fund base credit not realized within 90 days from the conversion date.

e) Misuse of credit

For this purpose, term 'misuse' means the credit has not been used for the purpose originally intended, non-operation of project, income earned from the project/business are not used in repaying loan and advances but used for other purposes, certified misuse of credit and facilities by the supervisions and auditors in course of the supervision or audit. As per the clarification provided by NRB earlier, even partial diversification of the credit is allowed.

h) Project/ Business are not condition to operate or not in condition to operate.

Accordingly, loan to entities not in operation but condition exists as to their operation may not qualify for loss categorization under this clause. Once restructuring process is considered, classification into loss category may not be necessary for temporarily closed down business.

i) Credit and loan is not written-off within 90 days from the due date.

Additional Arrangement in respect of Term Loan

In respect of loans (having the maturity period of more than one year period), the classification shall be made against the entire outstanding loan on the basis of the past due period of overdue installment of principal/interest.

As a matter of fact, this provision is seen as the most discouraging factor on the part of banks and financial institutions to lend to the projects. Even in the event of non-payment of a small installment within the stipulated period, the entire project loan, which may be excessively large, shall require classification. This may have huge negative effect in the profitability of the financial institution. Accordingly, with a view to facilitate project lending particularly in this hour of insecurity feeling some relent in the rule is suggested.

Prohibition to recover principal and interest by exceeding overdraft limit

Principal and interest on loans and advances shall not be recovered by overdrawing the borrower's current account exceeding the limit of overdraft facility.

However, this arrangement shall not be considered as prohibitive for recovering the principal and interest by debiting the costumers' account. Whereas the system of recovery of principal and interest by debiting the costumers' account exists and recovery is made as such resulting in overdraft, which is not settled within one month, then such overdrawn principal amount shall also be liable to be included under the outstanding loan. Such loans shall be downgraded by one step from its current classification. In respect of recognition of interest, the same shall be as per the clause relating to income recognition mentioned in NRB directives 2006 no 4.

Income recognition directives require that all interest accruals on loans shall be recognized on cash collection basis only. The above directive allowing the settlement of overdrawn account within one-month period has led to believe that such accrued interest may be recognized if paid within a month's time.

Under this clause, banks and financial institutions may debit the borrower's current account, irrespective of the balance available, for recovery of interest and principal. By doing so, it may buy a month's time for collecting the same. This may save the lending institutions from requiring classifying the loan to a higher category. However, in respect of the interest, the cushion is not available since the directive has expressly mentioned that the recognition of interest shall be on cash basis only (NRB, 2006: directive no 4 and 15).

## Loan Rescheduling and Restructuring

Loans may be rescheduled or restructured only upon submission of a written plan on action by the borrower, which is restructuring on the Following grounds.

- a) Evidence of existence of adequate loan documentation and securities.
- b) The lending institution is assured as to the possibility of recovery of restructured or rescheduled loan. The term reschedule means process of extending repayment period/time of credit taken by the borrower. And, restructuring means process of changing the nature or conditions of loan/facility, adding or deleting of conditions and change in time limit.

In addition to submission of the written plan of action for rescheduling or restructuring of loan as above, at least 25% of accrued interest outstanding on date of restructuring or rescheduling should have been collected. Renewal of loan by collecting all interest can be classified as pass loan.

In case of restructuring or rescheduling of loan of an industry which is recommended by the sick industry preliminary enquiry and recommendation committee formed under the ministry of industry of Nepal, commerce and supply after recovery of 12% accrued interest and completion of all necessary procedure, provision for loan loss at a minimum of 25% will be required. However, where the loan is restructured or rescheduled by collecting less than 12% interest, such loan shall require loan loss provisioning on past due period basis as is applicable to all.

The term of rescheduling and restructuring may be as per the understanding between the loan provider and borrower. This is true even in the case of recommended sick industries.

At least 25% of total accrued interest up to the date of rescheduling of restructuring should have been collected. In such a case, the classification of the loan will remain in the current position. However, where rescheduling or restructuring is done against collection of all interest meaning all outstanding interest, the loan (principal) will be eligible for classification under pass category. However, it is not dear as to the requisite treatment where portion of interest is waived and balance is collected in full. Where the lending institutions agree to waived interest accruals, the same have to be accounted first to facilitate calculation of 25% interest on reduced outstanding balance.

In the case of sick industries recommended by the committee, rescheduling or restructuring is allowed with collection of less than 12% interest with the condition that loan shall be classified and normal provision is made. In other cases, collection of at least 25% is mandatory for restructuring and rescheduling.

#### Loan Loss Provisioning

The loan loss provisioning on the outstanding loans and advances and bills purchases shall be done on the basis of classification, as follows:

Classification of Loan	Loan Loss Provision
Pass	1 percent
Substandard	25 percent
Doubtful	50 percent
Loss	100 percent

(Source: NRB unified directives 26 July 2006)

Provisions on restructured or rescheduled loans made as follows:

- a) A minimum of 12.5% provision shall be made on restrict or restructured loans.
- b) In interest of restructuring or rescheduling of deprived sector loan and guaranteed or insured priority sector loan, the requisite provisioning shall be only 25% of the rates stated above.
- c) Where the installment of principal and interest if restructured or rescheduled loan is serviced regularly for two consecutive years, such loan can be converted into pass loan.

Rescheduling/restructuring of loan resulting in improvement of classification to lowest risk category (pass) is not prohibited. However, such rescheduled loan shall require provisioning of at least 12.5%. The upper limit of such provisioning requirement is not specified even if a loss loan is reclassified and categorized as pass loan. However, adjustments to loan loss provisioning is allowed only on satisfactory service of the loan up to 2 consecutive years.

Loan loss provisioning on rescheduled/restructured sick industries recommended by sick industry preliminary enquiry and recommendation committee, upon recovery 12% outstanding interest is fixed at minimum 25%. Meaning, restructured loss loan can be provided provisioning at 25% (upper limit is not prohibited though). The only

concession provided in this case is rescheduling is made possible against collection of 12%. At the same time, the provisioning is required at minimum 25% (in other cases it is 12.5%).

Full provisioning shall be made against the uninsured priority, deprived sector loans and small and medium scale industrial loans

#### Provisioning against Priority Sector Lending

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

Pass	0.25%
Substandard	5%
Doubtful	12.5%
Loss	25%

## **2.4 Review of Thesis**

Lila Prasad Ojha (2002), in his dissertation about “lending practices” has found that the high volume of liquidity reveals that a degree of lending strength has been prevailing in all of the commercial banks. The lack of reliable lending opportunities and fear of losing the principal in rural sector has been keeping these banks less oriented towards the lending function. Hence, the government should take appropriate action to initiate these banks to attract to flow credit in rural economy. Posing the compulsions by directives does not create long-term healthy lending practices unless the commercial banks are not self-motivated to flow credit in this sector.

He has found out that following the normal guidance of Nepal Rastra Bank and acting upon reduces many on the credit risk arising from borrower’s defaulter, lack of proper credit appraisal, defaulter by blacklisted borrowers, and professional defaulter. The over confidence of commercial banks regarding credit appraisal efficiency and negligence taking information from Credit Information Bureau has caused many of the bad debts in these banks. He thinks that these banks have to follow the directives of NRB strictly and be more cautious and realistic while granting loans and advances.

Ojha has written that the commercial banks have to expand their credit in the area of rural economy so as to compromise between the liquidity and credit need of such economy. This helps in minimizing the idle funds in business and at the same time contribute to the national economy. The banks should also increase the volume of credit in the sector of agriculture as the ratio of contribution made by the banks in this priority sector is decreasing.

Khadka (2002) has carried out research on “A Comparative Study on Investment Policy of Commercial Banks NBL, NABIL, SCBNL and NIBL” with objective to find out the relationship between deposits, investments, loans and advances and net profit. She found that NBL is comparatively less successful in on balance sheet as well as off-balance sheet operations than that of other CBs. It predicts that in the coming days if it could not mobilize and utilize its resources as efficiently as other CBs to maximize the returns, it would lag behind in the comparative market of banking. Profitability positions of NBL are comparatively worse than that of other CBs. It predicts that NBL may not maintain the confidence of shareholders, depositors and its all customers if it cannot increase its volume even in future.

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

Shrestha (2004) conducted a thesis “A Study on non-performing loans and loan loss provisioning” of commercial banks” revealed that SCBNL had risk averse attitude on the management or they have policy of investing low in the risky assets i.e. loans and advances as compared to NBL and Nabil because the loans and advance to total asset ratio of NBL, Nabil and SCBNL during the study period was appeared to be 52.3%, 47% and 29.24% respectively.

SCBNL has the higher consistent and variability on ratio during the study period where as the NBL has the lower consistent and variability as comparison to other two banks. Nabil has the moderate level of consistent and variability. In the same way, the proportion of non-performing loan with to loans of NBL was to found higher than other two banks. Not only has the public sector bank, even private sector bank as Nabil has higher proportion of non-performing loan (i.e, 10.67%). However, in recent



time Nabil has shown significant decrement in non-performing asset, which are the result of effective credit management and its efforts of recovering bad loans through the recovery of establishment of recovery cell.

Tamang (2005) conducted a research “A comparative study on credit management of HBL and Nabil bank Ltd” has found out that the credit practices of Nabil in terms of loan advances to deposit ratio was found relatively low mean scores than HBL. It indicates that Nabil has been strong to mobilize its total deposit as loan and advance in comparison to HBL. Efficiency in terms of loan and advances to current asset ratio was found higher in Nabil which indicates that short term lending practices of Nabil was relatively good position in his study period. HBL has the best performance to generate interest income. This mean the HBL earned more profit than the Nabil. Lending policy of Nabil bank in terms of loss provision to total loan and advances was found relatively better than that of HBL because the mean score of the result was relatively low (i.e,  $0.0451 < 0.0777$ ). The finding also showed meaningful that quality of management in both banks was good.

Ghimire (2005) explored in his research “Non-performing assets of commercial bank: cause and effect” found that Nepalese banking sector in recent days are facing several problems. With the level of increasing NPA profitability performance of the bank has been badly affected. To find out the cause of NPA increment with commercial banks basis of loan floatation procedure, follow up practice carried out by the bank for the recovery of overdue loan outstanding, internal responsible factor causing NPA growth have been tried to sort out.

Analysis shows that relationships of borrowers with top level of management as the most adopted basis for floating loan in Nepalese commercial banks. Similarly, respondent identified portfolio management consideration the second basis for floating loan in the certain sectors. Monitoring and control, security offered and financial strength were given average emphasis. It was found that commercial banks are giving least weight on personal integrity of the borrower whole giving loan.

About the internal responsible factor, that contributes turning good loan into bad loan. It was found that bad intension, weak monitoring and miss management are the most responsible factor for NPA growth. Similarly, weak legal provision and credit concentration are found as the least preferred factor in turning good loan ion to bad.

Some factors such as lack of portfolio analysis, not having effective credit policy and shortfall on security were identified as having average effect on NPA growth.

In connection to the external factors, it has been found that recession, political and legal issues factors that are more relevant in turning good loan into bad. Likewise, legal provision for recovery as a reason of increment in Non-performing assets in Nepalese banks was found the factor having least impact. Supervision and monitoring system have been identified as average factor. It is therefore can be generalized that economic and industrial recession and not having strong legal provision for loan recovery are the major external factors that have major contribution for the increasing level of NPA.

It was tried to find out the economy sector the commercial bank are giving emphasis for lending. After analysis it was found that more emphasis industry and commercial sectors for lending in Nepalese commercial banks. However, less than 35% weights are given to service and other sector. One way ANOVA was analyzed to find out the difference among three commercial banks. Result could not identify any significant differences among three commercial banks. Thus, the conclusion can be drawn that Nepalese commercial banks give most priority to trade sector for lending its resources. Same time it is found that service sector are not being given that much emphasis.

Gurung (2006) explored in his research “lending policy and recovery management of Standard Chartered Bank Nepal ltd and Nabil bank ltd” has found out that the deposit collection by the banks shows that increasing but in a fluctuating trend. The trend analysis of deposit collection the increase in deposit collection in the forthcoming years will continue. Out of different types of deposit collection account, higher account has been collected in saving deposit account. Out of the total deposit collection, SCBNL has disbursed 36% of average as a loan and Nabil has disbursed 52% of its deposit collection as a loan disbursement to deposit collection ratio of commercial banks, it is around 60%. Thus this ratio is quite low incasing of sample bank especially of SCBNL. It is further proved by the calculation of correlation coefficient, which is 0.75 and 0.23 of SCBNL and Nabil respectively.

In order to analyze the recovery management of these banks, their loan loss provision and NPL were analyzed. While looking at the loan loss provision of SCBNL it is in decreasing trend from 2002. The correlation coefficient of loan loss provision and loan disbursement of SCBNL is 0.36. While looking at the future trend of loan loss provision it shows the increasing trend in case of SCBNL and the trend of Loan loss provision is decreasing every year in case of Nabil, which is proved by the trend analysis. The correlation of loan loss provision and loan disbursement of Nabil is negative.

Neupane (2006) conducted the research “Non-performing loan and loan loss provisioning of NBL, RBB and NABIL” has found that measurement of lending strength in relative term has revealed that the loan and advance to total assets of NBL is highest but issued loan and advances are not generating the desired income. RBB shows the highest degree of deviation and variation while Nabil has the most consistent ratio throughout the study period. RBB and NBL have highest proportion of the non-performing loan in the total loan portfolio, which exhibit the critical condition of the banks. After taking the management by the foreign management groups NPL is decreasing but its rate is very low as compare to the expenses made for them. Keeping the view of international standard, not only the public sector bank even private sector bank as Nabil has higher proportion of NPL. Nabil has shown significant decrement in NPL, which are the results of banks effective management and its efforts of recovering bad loans through establishment of recovery cell. Correlation between loan and advances and deposit has found that RBB and NBL have negative where as Nabil found positive correlation.

He concluded that tremendously increasing non-performing loan with higher rate is one of the burning problems of Nepalese commercial banks. NBL and RBB has almost more than 50% of market share of deposit and resource, but these two banks are facing vicious circle of NPL resulting high provision. These banks have higher percentage of market share in lending too, which are the most income generating assets but operating in loss since long time. Ineffective credit policy, overvaluation of collateral in disbursement of loan are the major causes of mounting nonperforming assets in government owned banks NBL and RBB. In addition, leading factors of accumulating NPAs are also improper credit appraisal system; ineffective credit monitoring and supervision system, economic slowdown, borrower’s misconduct etc

are the major factors leading to non-performing assets. Proper classification of and close review of loans enable banks to monitor loan portfolio and take remedial step to safeguard deterioration of its credit equality. Furthermore, setting up recovery cell, hiring assets Management Company, fair and highly skilled management for lending and monitoring of credit are some of the majors to solve the problem of nonperforming assets in Nepalese financial sector. Present NRB unified directives are more effective than previous as a result proper classification of loans and adequate provisioning for the further loss, which reduces profit in short term but can be use a cushion for future distress situation.

## **2.5 Research Gap**

Previous researchers analyzed the lending policy in term of credit practices, credit management or lending practices. The past researches in measuring the performance of bank lending have focused on the final measures that are incapable of solving the problems of overdue loans and bad debts. Actually speaking, lending management is determined by various factors. Researchers are not properly analyzed about portfolio of lending and its impact on the profitability in Nepalese context. In this study portfolio of lending is measuring by lending practices, trend analysis and various statistical tool as well as financial tools are used for analyzing survey data. Bank's internal performance for its lending is crucial and it has great value in lending management. Other factors such banking environment, quality of management in terms of lending may be the strong determinant for lending management in banks. Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts. This study tries to define lending management by applying lending portfolio management, priority sector lending, non-performing loan analysis and financial condition analysis. Probably this will be the new research in the area of lending management.

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. Research is the process of a systematic in depth study or search of any particular topic, subject or area of investigation backed by the collection, compilation, presentation and interpretation of relevant details or data. Methodology refers to the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind it. So that research methodology is a systematic way of conducting the research in an effective and practical so that it can explain how the research is done.

This chapter describes the employed in this study. Research methodology is a way to systematically solve the research problem. In other words, research methodology describes the methods processes applied in the entire aspect of the study. This chapter describes research design, population and sample procedure, and sources of data and analysis of data.

#### **3.1 Research Design**

This study follows the descriptive as well as analytical method of the analysis to meet the stated objectives of the study. Descriptive studies are primarily concerned to find out 'what is'. The secondary data were analyzed as the part of the analytical study. Few financial statements of selected commercial banks were tabulated using spreadsheet.

#### **3.2 Sources of Data**

The research is based on secondary source of data. Published financial statements of commercial banks were collected. Similarly, financial statement of selected banks and NRB related information were collected and tabulated in spreadsheet. Such secondary information was gathered from the concerning department of the concerned banks.

### **3.3 Population and Sample Survey Design**

A small portion chosen from the population for studying its properties is called sample and the number of units in the sample is known as the sample size. The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection on part of the population on the basis of which a judgment or inference about the universe is made.

In this research only two banks are taken out of 21 commercial banks (2064 Ashbin). The first bank of Nepal and first private sector joint-venture bank are taken for study. The sample organizations are follows:

Nepal Bank Limited

Nabil Bank Limited

### **3.4 Methods of data collection**

The required data i.e. relevant reposts and statements for analysis are directly collected from the credit administration department, account department of NBL, annual report of Nabil collected form website of the bank, statistical bulletin published by NRB and other publication from NRB, magazine, newspaper and other relevant materials and information were collected from the Central Library, Shanker Dev Campus library and NRB library and other related website.

### **3.5 Data processing technique**

First of all raw information have been received. After collection of raw information the processing has been done. Then after, all collected data have been grouped accordingly to their nature in their tabular and chart y selecting relevant data. The collected data are presented and refined for the purpose of the study. This processing procedure is required for sequential analysis of data to meet the objective of this research.

### **3.6 Tools and techniques employed**

To make the study more specific and reliable, the following types of tools were used for analysis of data

- a. Financial tools

b. Statistical tools

To meet the objectives of the study data were analyzed by using financial tools such as ratio analysis, percentage etc. Graph chart and table were used to support analysis

**Financial tools used**

The financial ratio has been to examine the financial strengths and weaknesses of the bank. The financial ratios used in this study are as follows

- i. Loan and advances to deposit ratio
- ii. Non-performing loan to loan and advance ratio
- iii. Priority sector lending to loan and advance ratio
- iv. Total profit to loan and advance ratio

**Statistical tools used**

The statistical tools are used in this study is follows

1. Coefficient of correlation analysis (r): Correlation coefficient is used to define the relationship between deposit, NPL and LLP with loan and advance.

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

2. Coefficient of determination (r<sup>2</sup>)

3. Probable Error (P.E) =  $0.6745 \sqrt{\frac{\sum r^2}{n}}$

4. Multiple correlation (R) =  $\sqrt{\frac{r_{xz}^2 + r_{yz}^2 - 2r_{xz}r_{xy}r_{yz}}{1 - r_{xy}^2}}$

## **CHAPTER-IV**

### **DATA PRESENTATION AND ANALYSIS**

Presentation and analysis of data is very important stage of research. Its main purpose is to change the unprocessed data into understandable form. It is the process of organizing the data by tabulating and then placing that data in presentable form by using various tables, figures and sources.

Lending management is one of the most important factors that have developed to facilitate effective performance of bank management. Lending management is the formal expression of the commercial banks' goals and objectives stated in financial terms for a specific future period. Credit is the very basic indicator for determining profit. This chapter deals with the various aspects of lending management such as financial analysis, portfolio of lending, priority sector lending, non-performing loan correlation and trend analysis.

#### **4.1 Financial condition analysis of Nepal bank limited and Nabil bank limited**

Financial analysis assists in identifying the major strengths and weaknesses of any institutions. It indicates whether a company has enough cash to meet its obligations and ability to utilize properly their available resources. Financial analysis can also be used to assess the company's liability as an ongoing and determine whether a satisfactory return is being earned for the risks return. Thus, financial condition of the banks in terms of lending management is necessary to find out the comparative credit practices between the competitors.

The financial conditions are normally examined by comparing various types of financial tools such as loan deposit ratio, profitability to loan ratio, profit to total assets etc between two more forms.



**Below are the comparative analysis of the NBL and Nabil.**

**i) Total loan and advance to total deposit ratio**

The main sources of bank's lending depend on its deposit. This ratio is calculated to find out how successfully the banks are utilizing their deposits on loan and advances for profit generating activities greater ratio indicates the better utilization of total deposits. The ratios are presented in the following table.

**Table 4.1**  
**Total loan and advances to total deposit ratio**

Year	2004/05	2005/06	2006/07	2007/08	2008/09
NBL	0.4854	0.3510	0.3553	0.3805	0.4393
Nabil	0.7505	0.6863	0.6813	0.6821	0.7387

*Source: Annual Report and concerning department of respective banks.  
(See Annex no. 1.1)*

**Figure 4.1**  
**Total loan and advances to total deposit ratio**

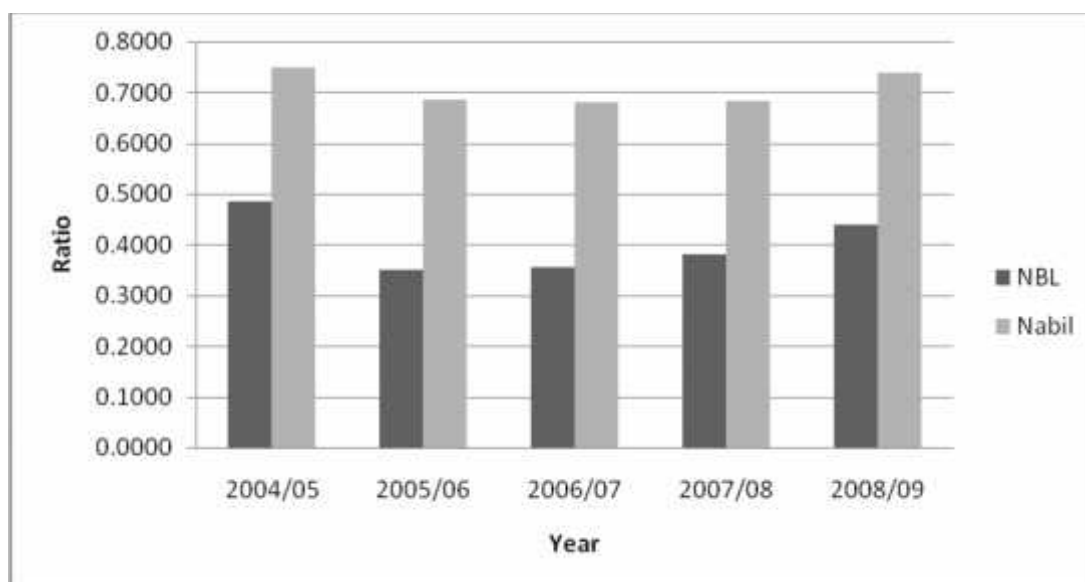


Table 4.1 shows total deposit, total loan and lending deposit ratio of NBL and Nabil. The ratio of NBL decrease in the year of 2005/06 but after this year is in increasing trend. Ratio of Nabil has declined in 2006/07 and then is in increasing trend. From this ratio both bank ratios are in same trend. It seems that Nabil has utilized the most of its collected funds than NBL.

Further Nabil has higher loan and advances to total deposit ratio than NBL. It indicates that Nabil seems to be efficient in mobilizing its total deposit in the form of loan and advances. NBL has not more utilizing its collected funds. There are many reasons like the political crisis and instability for the lesser ratio of total loan and advance and deposit. Borrower intention of not paying interest and principal in time is another reason for less utilizing collected funds of NBL.

**ii) Non-performing loans to total loan and advance ratio**

Non-performing loan is the financial burden for the financial institution. In Nepal, NRB has classified nonperforming loan as substandard, doubtful and loss. NRB has directed all commercial banks to create loan loss provision against the different types of nonperforming loan in different ratio. The following table represents the non-performing loan to total loan ratio.

**Table 4.2**  
**Non-performing loan to total loan and advances ratio**

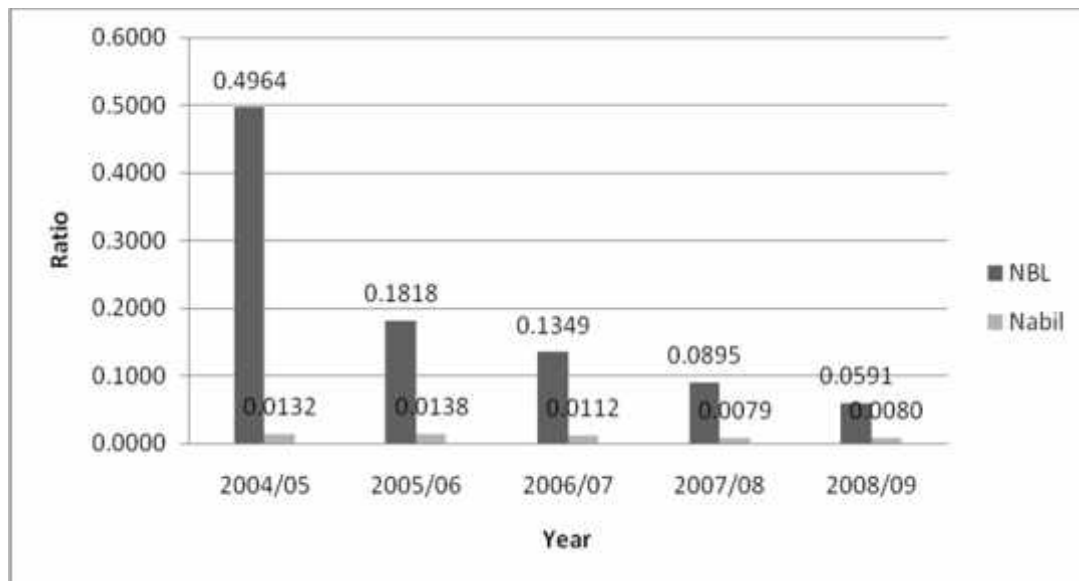
Year	2004/05	2005/06	2006/07	2007/08	2008/09
NBL	0.4964	0.1818	0.1349	0.0895	0.0591
Nabil	0.0132	0.0138	0.0112	0.0079	0.0080

*Source: Annual Report and concerning department of respective banks*

(See Annex no. 1.2)

**Figure 4.2**

**Non-performing loan to total loan and advances ratio**



The table 4.2 indicates the ratio of nonperforming loan to total loan and advance of Nepal bank ltd and Nabil bank ltd. In comparison government, owned bank NBL has more proportion of NPL than private Bank Nabil. Non-performing loan of both banks seem decreasing in trend. NBL was able to decrease the ratio of NPL during the period, for instance in 2004/05 it was 0.4964 NPL out of total loan but in 2008/09 it is only 0.0591. After the privatization of Management, NPL of Nepal bank has tremendously decreased. However, NPL of Nepal bank was decreased, yet it was beyond international standard ratio of 3%. But Nabil bank had maintained its NPL in international standard over the year 2004/05 to 2008/09.

The result showed Nepal Bank is seriously affected by the non-performing loan. The higher volume of non-performing loan results increased in loan loss provision amount and then it eventually reduces the profit.

**iii) Priority sector lending (PSL) to total loan and advance ratio**

Commercial banks invest some part of loan to the priority and deprived sector. For example, banks grant loan on agriculture, domestic industries, services, and power sector and machine and import raw materials is called priority sector lending. There are two categories of priority sector credit such as insured and uninsured. The table 4.1 represents priority sector lending to total loan and advance ratio.

**Table 4.3**

**Priority sector lending (PSL) to total loan and advance ratio**

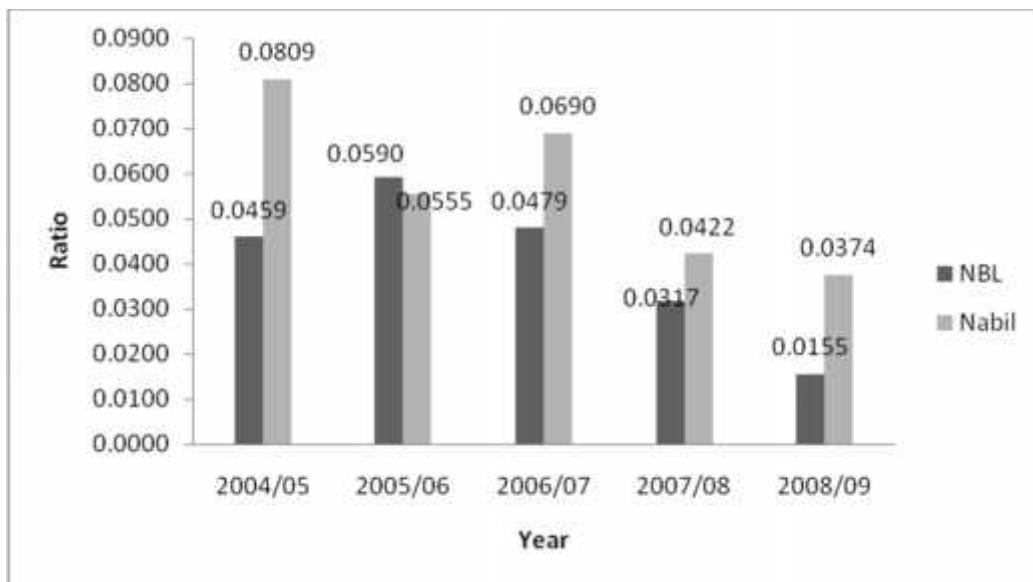
Bank	2004/05	2005/06	2006/07	2007/08	2008/09
NBL	0.459	0.0590	0.0479	0.0317	0.0155
Nabil	0.809	0.555	0.0690	0.0422	0.0374

Source: Annual Report and concerning department of respective banks

(See Annex no. 1.3)

**Figure 4.3**

**Priority sector lending (PSL) to total loan and advance ratio**



Nabil has maintained higher PSL to total loan and advance ratio with compare NBL. Therefore, Nabil is more conscious about priority sector investment for the economic development of the country. It seems that both banks reduced their investment in priority sector.

**iv) Total profit to total loan and advance ratio**

This ratio measures the percentage of total income against loan and advances. The high ratio indicates the more earnings. The following table represents ratio of total profit over total loan and advance.

**Table 4.4**

**Total profit to loan and advance ratio**

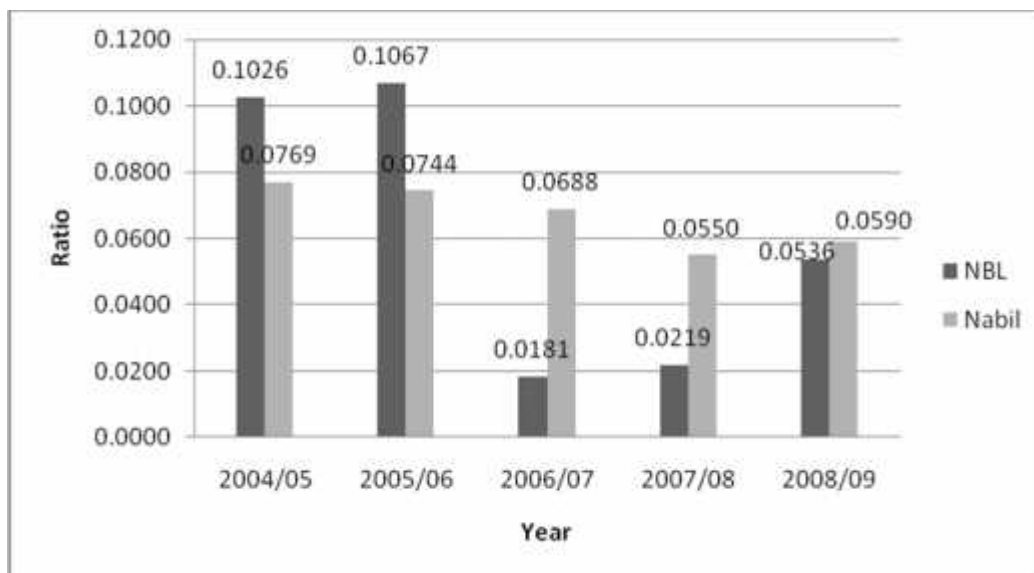
Bank	2004/05	2005/06	2006/07	2007/08	2008/09
NBL	0.1026	0.1067	0.0181	0.0219	0.0536
Nabil	0.0769	0.0744	0.0688	0.0550	0.0590

*Source: Annual Report and concerning department of respective banks*

(See Annex no. 1.4)

**Figure 4.4**

**Total profit to loan and advance ratio**



In the year 2004/05 to 2005/06 NBL's profit tremendously increased and in the year 2006/07 profit was diminished in high ratio. The main cause of high profit ratio accordance to Loan and advances is collecting of NPL and due interest after privatization of management. The reason high diminished in the year 2006/07 is termination of ICCMT and political situation. Nabil had decreasing trend of profit ratio till F/Y 2007/08 then after smoothly increased. Profit trend of NBL is more fluctuated than the Nabil.

## **4.2 Lending portfolio analysis**

Portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. Commercial banks lending portfolio covers auto loan, bills purchase, hire purchase, constructions, productions, consumer loan, deprived sector loan, priority sector loan, margin lending, industrial overdraft, term loan etc. In this portfolio of lending means different types of loan granted by commercial banks. According to the NRB schedule there are twelve heading of portfolio of lending (sector wise lending). This include agriculture, consumable loan, service industries, wholesaler and retailer, productions, constructions, finance insurance and fixed assets, transportation communication and public services, mining, metal production machinery and electrical tools, transportation equipment production and fitting and others. The following table represents the portfolio of lending:

**Table 4.5**  
**Percentage of portfolio of lending of NBL and Nabil**

Year	2004/05		2005/06		2006/07		2007/08		2008/09	
	NBL	Nabil	NBL	Nabil	NBL	Nabil	NBL	Nabil	NBL	Nabil
Portfolio of lending										
Agriculture	4.93	0.47	4.95	0.38	3.48	0.34	1.67	0.53	0.66	0.7
Consumable loan	11.09	0.71	22.09	0.65	26.49	0.53	18.72	0.54	15.67	0.42
Service industries	10.98	12.67	4.24	7.64	3.43	7.93	2.65	7.14	3.89	7.17
Wholesaler and retailers	22.63	18.18	20.52	15.58	18.6	15.46	18.92	16.47	18.66	18.47
Productions	36.39	39.97	31.48	38.46	24.85	35.85	24.87	30.5	21.18	28.02
Constructions	1.97	6.08	2.21	10.38	2.71	12.09	6.19	13.71	8.53	14.55
Finance, insurance & fixed assets	4.68	3.05	5.3	3.62	5.04	5.16	5.21	5.77	5.48	7.12
Transportation, communication & public services	1.79	2.64	5.65	5.07	6.28	5.77	5.67	8.2	6.26	4.76
Mining	0.07	0.26	0.1	0.16	0.05	0.09	0.14	0.08	0.11	0.06
Metal production machinery & electrical tools	1.88	1.29	1.11	0.75	0.58	1.03	2.71	1.08	2.53	1.06
Transportation equipment production & fitting	0.43	9.17	0.24	9.86	0.61	9.23	1.96	8.23	1.54	8.69
Others	3.16	5.51	2.12	7.43	7.88	6.52	11.29	7.75	15.49	8.98
Total	100	100	100	100	100	100	100	100	100	100

*Source: Annual Report and concerning department of respective banks*

(See Annex no. 2.1 and 2.2)

Table 4.5 shows the percentage of portfolio of lending of Nepal bank ltd. and Nabil bank ltd. In agriculture sector investment NBL dominated Nabil. NBL invest more percentage in agriculture where Nabil invest less than one percent in each year. NBL's investment in consumable loan is increasing trend to 2006/07 and then decreasing trend. But Nabil bank invests less than one percent. It seems that NBL invest more amounts in consumable loan than the Nabil. Loan disbursement of NBL to service industry was higher than the Nabil. Both banks investment in service industries was highly decreased in July 2006, than both banks slightly change in investment on service industry. NBL dominated Nabil in wholesaler and retailers loan. Both Bsnk's investment in wholesale and retail is in decreasing trend to 2006/07 than increasing trend. This sector is major part of investment of both banks. In production lending it seems that Nabil dominated NBL. Both banks invest around 30% in this sector. Investment made in productions sector by both banks is in decreasing trend. The production sector is most major sector investment of both banks. Both bank's investment was in constructions sector is increasing in trend year by year. Nabil invest more percentage in constructions sector than NBL. Lending granted in finances insurance and fixed assets both banks had nearly same ratio. Both banks investment trend in this sector was increasing and fluctuating. In first four year Nabil was increasing trend in transportation, communication and public sectors than it highly decreasing in 2008/09 but NBL was increasing trend in transportation, communication and public sector whole the period. NBL and Nabil invested less than 1% in mining sector. NBL and Nabil invest in metal production machinery and electronic tools by slightly fluctuate trend. Both banks granted lower volume of lending in this sector. Investment made by NBL in transportation equipment production and fitting was lower than the Nabil. It seems that NBL increases its loan highly in this sector.

Both banks made portfolio through investing all twelve sectors. But productions sector is the dominant sector because it covered more percent of loan out of total loan granted by both banks. Nabil invested around 30% in this sector during the study period. Both banks have given second priority for wholesaler and retailer. It seems that NBL gives more priority than Nabil in agricultural investment. Agriculture being the back bone of the economy, Nabil is seems less contributing. Nabil invested less than one percent in consumable loan than the NBL. Both banks gave priority to the



service industries but investment made in this sector was in decreasing trend. Furthermore, both banks made optimal portfolio for getting more return by minimizing the risk.

### 4.3 Priority sector lending (PSL) analysis

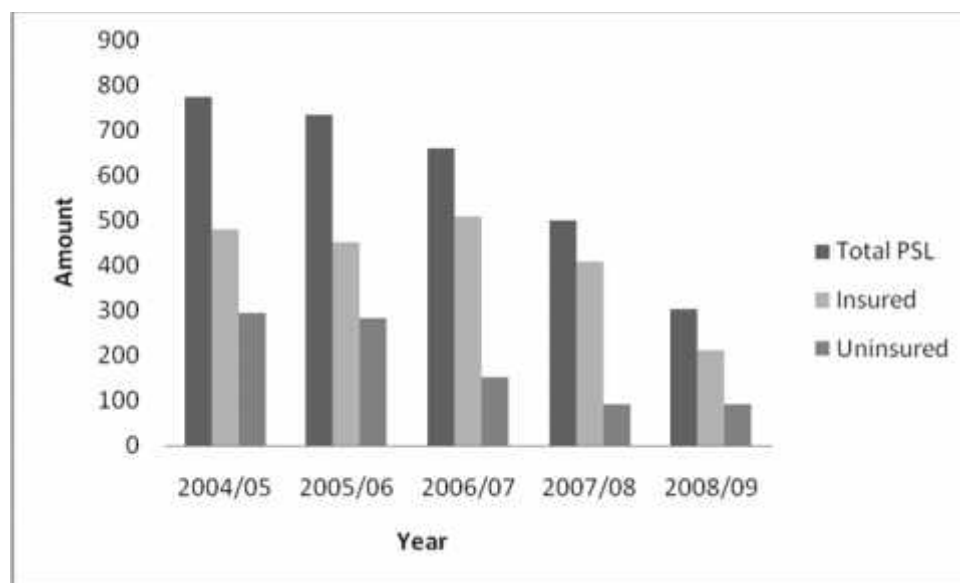
All commercial banks must invest at least 3% in priority sector out of total loan and advances. The small loan amount directly and indirectly invest in agriculture, domestic industries, services, power sector and machine and import raw materials is called priority sector lending. There are two categories of priority sector loan insured and uninsured. Uninsured PSL shall need full loan loss provision. However, in case of insured loans, the provisioning requirement will be 25% of the prescribed normal rates.

**Table 4.6**  
**Priority sector lending of NBL**

Year	Total PSL	Rs in million	
		Insured	Uninsured
2004/05	774.24	479.28	294.96
2005/06	734.48	452.12	282.36
2006/07	659.46	507.46	152
2007/08	500.54	409.23	91.31
2008/09	302.84	211.55	91.29

*Source: Annual Report and concerning department of respective banks*

**Figure 4.5**  
**Priority sector lending of NBL**



Above table 4.6 and figure 4.5 shows the priority sector lending under insured and uninsured. Insured PSL is higher than uninsured in the research period. Insured PSL requires small percentage of loan loss provision i.e. 0.25%, 5%, 12.5%, 25% respectively for pass, substandard, doubtful and loss category. Uninsured loan requires 100% loan loss provisioning. It indicates that NBL performed well while making investment in priority sector.

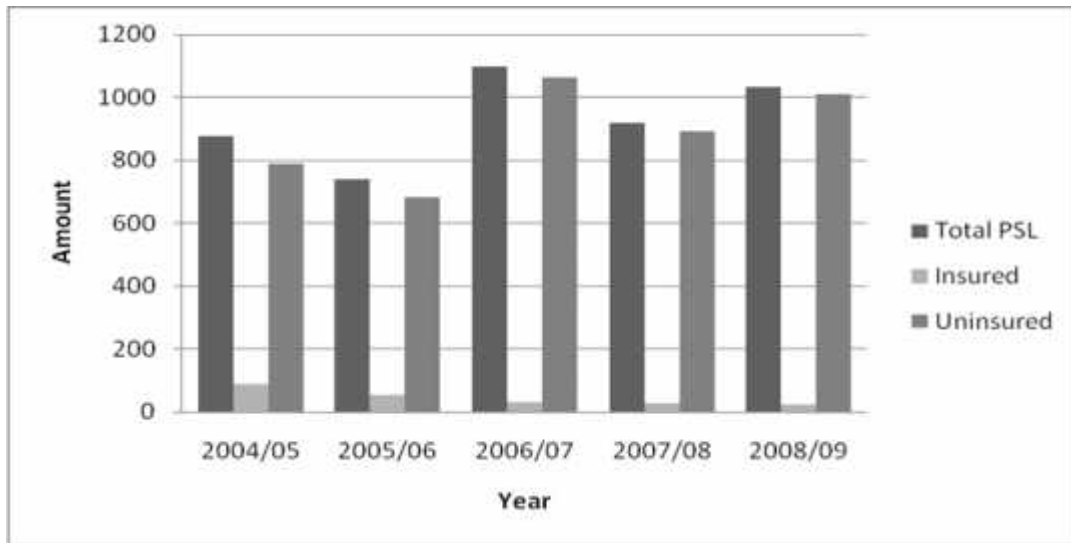
The table 4.7 represents the total, insured and uninsured priority sector lending of Nabil.

**Table 4.7**  
**Priority sector lending of Nabil**  
Rs in Million

Year	Total PSL	Insured	Uninsured
2004/05	875.28	86.77	788.51
2005/06	737.26	55.07	682.19
2006/07	1096.96	32.25	1064.71
2007/08	918.64	26.91	891.73
2008/09	1032.62	23.94	1008.68

*Source: Annual Report and concerning department of respective banks*

**Figure 4.6**  
**Priority sector lending of Nabil**



Above table and figure shows the PSL under insured and uninsured of Nabil. Nabil has higher volume of uninsured PSL in each of the study period. Above figure shows that Nabil's insured PSL is lesser than uninsured.

It is apparent from table and figure 4.7 and 4.6 NBL invest high volume in insured priority sector and Nabil invest high volume in uninsured priority sector. Uninsured priority sector investment reduces profit because it requires full loan loss provisioning. So, NBL performed well while making investment in PSL.

#### **4.4 Non-performing loan analysis of NBL and Nabil**

Non-performing loan is one of the growing problems for the loan granting institution in Nepal as well. Due to unfair intension of borrower and the economic and political crisis in Nepal NPL has become major problem since last 10 year. In Nepal NRB has classified nonperforming loan as substandard, doubtful and loss. NRB has directed all commercial banks create loan loss provision against the types of nonperforming loan in different ratio as 25%, 50% and 100% respectively for the substandard, doubtful and bad loan.

The following table represents the NPL of NBL

**Table 4.8**  
**Non-performing loan of NBL**

Rs in million

Year	NPL	Substandard	Doubtful	Bad
2004/05	8,372.00	128.10	249.90	7,994.00
2005/06	2,262.18	47.60	87.90	2,126.68
2006/07	1,856.00	17.00	30.00	1,809.00
2007/08	1,410.80	63.97	20.00	1,326.83
2008/09	1,151.40	67.76	17.88	1,065.76

*Source: Annual Report and concerning department of respective banks*

**Figure 4.7**  
**Non-performing loan of NBL**

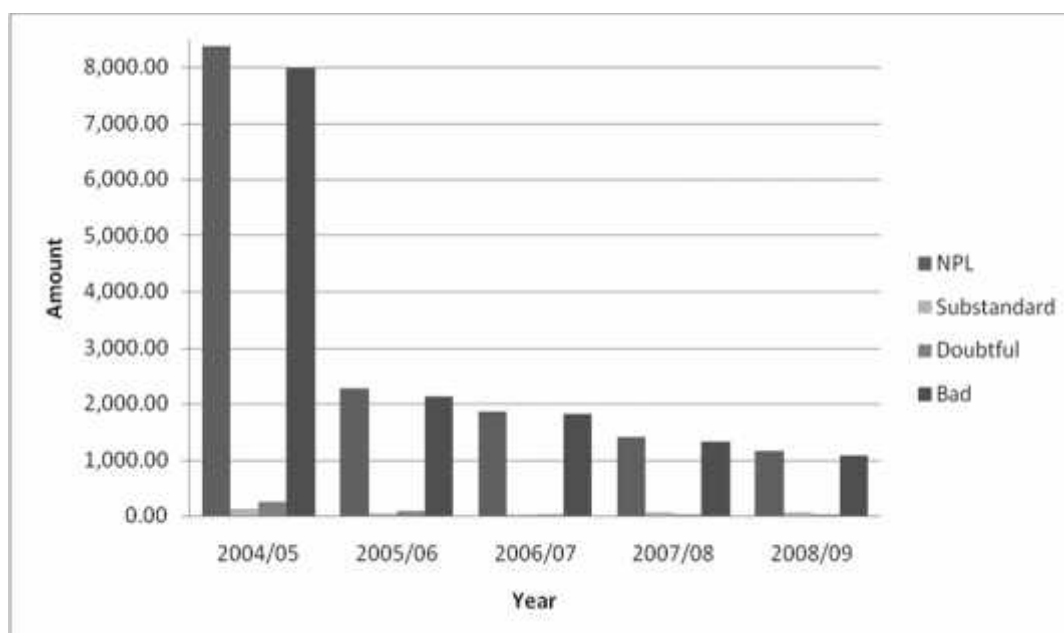


Table and figure 4.7 shows the total NPL, substandard, doubtful and bad loan. Out of total NPL, NBL has high volume. Nepal bank ltd has higher volume of loan loss provision. Higher loan loss provision reduced the total profit because it requires 100% loan loss provision. Doubtful loan is also more than substandard in every year of the study period. NBL has lower substandard loan than Nabil. Above figure shows that total NPL of NBL is decreasing highly in year by year.

Following table represents the NPL of Nabil bank ltd

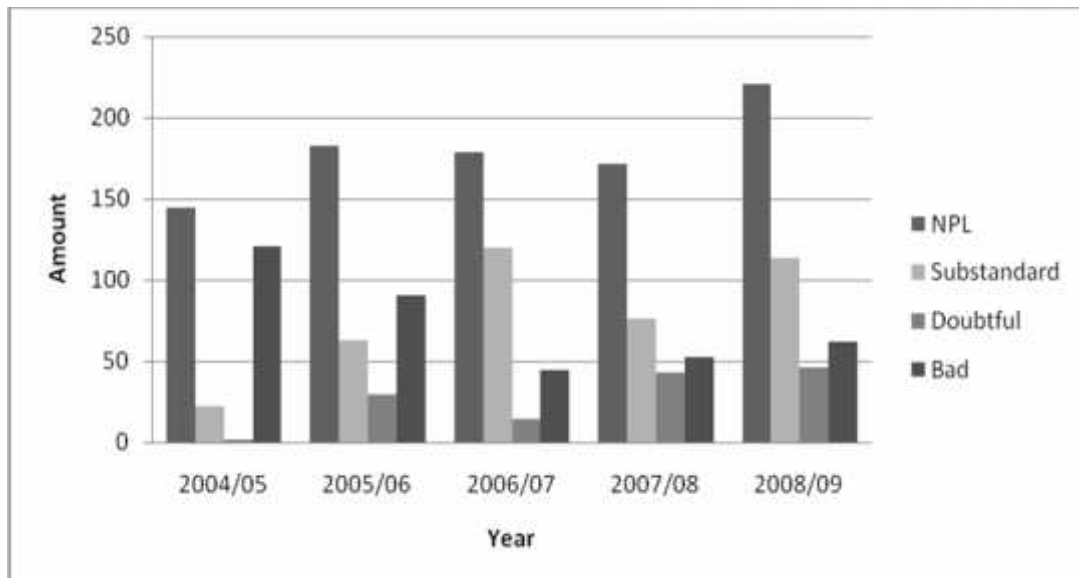
**Table 4.9**  
**NPL of Nabil Bank Ltd.**

Rs In Million

Year	NPL	Substandard	Doubtful	Bad
2004/05	144.5	22.1	1.93	120.47
2005/06	182.6	62.7	29.5	90.4
2006/07	178.3	119.7	14.5	44.1
2007/08	171.4	76.54	42.57	52.29
2008/09	220.72	113.3	45.76	61.66

*Source: Annual Report of respective Banks*

**Figure 4.8**  
**NPL of Nabil Bank Ltd.**



Above table and figure shows the total nonperforming loan and substandard, doubtful and bad loan. Nabil has higher bad loan in the year 2004/05 to 2005/06. In first two of the study period Nabil has high volume of bad loan. In the last year of the study period it has higher substandard loan.

Form the table 4.9 and 4.8 figure analysis NBL has higher volume nonperforming loan and it has higher bad loan than others. Higher bad loan indicates that the poor performance and ineffective credit policy of the bank. In sum NPL, NBL has also more volume doubtful loan. Higher the bad and doubtful loan higher volume of loan loss provision (100% and 50% respectively). In comparison Nabil perform better while making credit policy. From the analysis, it is shows that Nabil has effective

recovery system than the NBL. NBL is not taking proper legal action to recover its bad loan.

#### 4.5 Correlation analysis

Correlation coefficient is used to define the relationship between two or more variable. In this study it is used to see the close consistency between two banks.

##### 4.5.1 Correlation coefficient between deposit and loan and advances of NBL

The correlation and coefficient of partial determination of NBL is presented in the table 4.10

Coefficient of correlation determination between deposit and loan and advances of NBL

**Table 4.10**  
**Correlation coefficient between deposit and loan and advances of NBL**

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.6215	0.3862	0.1851	1.1106

(See Annex no. 3.1)

The above table shows that the correlation coefficient between deposit and loan and advances is 0.6215. There is highly positive correlation between loan and advances and deposit collection. The coefficient of determination is 0.3862 which depicts that 38.62% of loan has been explained by the deposit collection. It shows that increase in deposit does lead to increase loan and advances. In accordance to increase in deposit NBL's loan and advances is increasing in trend.

Probable error (P.E.) is calculated to be 0.1851 and 6 P.E. is 1.1106. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is smaller than 6 P.E. then there is evidence of insignificant correlation between loan and deposit. That further reveals there is insignificant relationship between loan and advances and deposit.

##### 4.5.2 Correlation coefficient between deposit and loan and advances of Nabil

The correlation and coefficient of determination of Nabil is presented in the table 4.10

**Table 4.11**

**Correlation coefficient between deposit and loan and advances of Nabil**

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.9921	0.9843	0.0047	0.0283

(See Annex no. 3.2)

The table shows the correlation coefficient deposit and loan and advances are 0.9921. There is significant (very high) positive correlation between loan and advances and deposit collection. It means there is significant relationship between deposit and loan granted. The coefficient of determination is 0.9843 which depicts that 98.43% of loan has been explained by the deposit collection. It shows that increase in deposit leads to increase loan and advances. In accordance to increase in deposit Nabil's loan and advances is increasing trend.

The correlation is statistically significant. Whether it is or not probable error has been calculated too. Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. Here, 'r' is greater than 6 P.E. then there is evidence of significant correlation between loan and deposit. That reveals there is significant relationship between loan and advances and deposit. It indicates that credit manager of the bank consider deposit collection to determine the lending.

**4.5.3 Correlation coefficient between non-performing loan and loan and advances of NBL**

The table 4.12 shows represents the correlation coefficient between NPL and loan and advances

**Table 4.12**

**Correlation coefficient between non-performing loan and loan and advances of NBL**

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.1142	0.0130	0.2672	1.6032

(See Annex no. 3.3)

Table 4.12 shows that correlation coefficient between the non-performing and loan is 0.1142. There is insignificant positive correlation between NPL and loan. That indicates the both NPL and loan decreasing simultaneously. The coefficient of determination is 0.0130 which depicts 1.30% of NPL has explained by the loan. Here “r” is less than 6 times value P.E., meaning that the correlation coefficient is insignificant.

**4.5.4 Correlation coefficient between non-performing loan and loan and advance of Nabil**

The correlation and coefficient of determination of NPL and loan of Nabil is presented in table 4.12

**Table 4.13**

**Correlation coefficient between non-performing loan and loan and advance of Nabil**

Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
0.81	0.6561	0.1037	0.6222

(See Annex no. 3.4)

The table 4.13 explains the relationship between non-performing loan and loan and advances of Nabil. The correlation coefficient of Nabil is highly positive. It shows that there is positive relation between loan and NPL. Here correlation coefficient is greater than 6 times value, it is statistically significant. Coefficient of determination is 0.6561 which mean 65.61% total NPL is explained by loan and advances.



#### 4.5.5 Correlation coefficient between loan loss provision (LLP) and loan and advances of NBL and Nabil

The table 4.14 indicates the correlation and coefficient of determination of LLP and loan of NBL and Nabil.

**Table 4.14**  
**Correlation coefficient between loan loss provision (LLP) and loan and advances of NBL and Nabil**

Banks	Correlation Coefficient	Coefficient of determination	Probable error	6 P.E
NBL	0.1410	0.0199	0.2957	1.7742
Nabil	0.9533	0.9088	0.0275	0.165

(See Annex no. 3.5 and 3.6)

Table 4.14 shows the correlation coefficient between loan loss provision and loan and advances of NBL and Nabil. Here correlation coefficient of NBL is 0.01410 i.e insignificant positive relation between loan loss provision and loan and advance. Correlation coefficient is lesser than 6times value of P.E., the correlation coefficient is insignificant. The correlation coefficient of Nabil is 0.9533 and 6 time value of P.E. is 0.165. There is highly positive relation between loan loss provision and loan of Nabil. Here “r” is greater than 6 times value of P.E. the relationship is significant. It seems that Nabil has lower volume of LLP; this indicates it has lower volume of NPL.

#### 4.5.6 Multiple correlation analysis between profit, loan and deposits of NBL and Nabil

**Table 4.15**

Multiple correlation of NBL	Multiple correlation of Nabil
0.5382	0.9802

(See Annex no. 3.7 and 3.8)

For multiple correlation analysis we assumed profit is dependent variable and loan and deposits are independent variable. From table 4.15 we show that the correlation of coefficient of NBL profit with loan and deposits is high positive profit. And the correlation coefficient of Nabil profits with loan and deposits is significant positive. Both banks have positive correlation of profits with loan and deposits.

#### **4.6 Major findings**

The major findings of the study are as follows:

- ) The deposit collected of both banks during the five year period is in increasing but fluctuating trend. The lending deposit ratio of NBL is in increasing trend; ratio of Nabil is in decreasing trend up to 2006/07, and then grows. It seems that Nabil has utilized the most of its collected funds in the year 2004/05.
- ) Nabil seems to be efficient in mobilizing its total deposit in the form of loan and advances. Nabil seems to be the best performer in utilizing its collected fund in the form of loan and advances efficiently where as NBL has not more utilizing its collected funds.
- ) The ratio of nonperforming loan to loan and advances of Nepal bank ltd is higher than that of Nabil bank ltd. In the year 2004/05 about 50% of loan of NBL was NPL. Non-performing loan of both banks seem decreasing in trend. NBL was able to decrease the ratio of NPL during the period, in 2004/05 it has 0.4964 NPL out of total loan but in 2008/09 it is only 0.0591. After the privatization of Management, NPL of Nepal bank has tremendously decreased. The result showed banking sector is seriously affected by the non-performing loan.
- ) The ratio of priority sector to loan and advances, Nabil has maintained higher PSL to total loan and advance ratio as compare NBL. Therefore, Nabil is more conscious about priority sector investment for the economic development of the country. It seems that both banks reduced their investment in priority sector in year by year.

- J) While analyzing of total profit to loan and advance ratio, in the year 2006/07 NBL profit ratio highly decreased than smoothly increased. Nabil had decreasing trend of profit ratio in the research period.
  
- J) In lending portfolio analysis, both bank invested in different sector. Productions sector is the dominant sector because it covered more percent of loan out of total loan granted by both banks. Nabil invested around 30% in this sector every year of the research period. Production represents industry and more investment in industrial sector helps to economic development of the nation. Both banks give second priority for wholesaler and retailer. It seems that NBL gives more priority than Nabil in agricultural investment. Agriculture is the back bone of the economy; Nabil invested less than one percent in consumable loan than the NBL in this study period. Both banks give priority to the service industries but investment made in this sector is in decreasing trend. Furthermore, both banks made optimal portfolio for getting more return from then by minimizing the risk.
  
- J) While analyzing the priority sector lending, Insured PSL is high over the research period of NBL and Nabil has higher volume of uninsured PSL. NBL invest high volume in insured priority sector and Nabil invest high volume in uninsured priority sector. Uninsured priority sector investment reduces profit because it requires full loan loss provisioning. So, NBL performed well while making investment in PSL.
  
- J) The analysis of non-performing loan in categorized NBL has high volume of bad loan in every year of the study period and Nabil has higher bad loan in the year 2004/05 and 2005/06. NBL has higher volume nonperforming loan and it has higher bad loan than others. Higher bad loan indicates that the poor performance and ineffective credit policy of the bank. In total NPL, NBL has also more volume doubtful loan. Higher the bad and doubtful loan higher volume of loan loss provision (100% and 50% respectively). In comparison Nabil perform good while making credit policy. From above analysis, it is shows that Nabil has effective recovery system than the NBL.

- ) The correlation coefficient deposit and loan and advances of NBL and Nabil are 0.6215 and 0.9921 respectively. There is high positive correlation between loan and advances and deposit collection of NBL. Nabil has highly positive correlation between loan and advances and deposit collection. After the correlation analysis, both banks show that increase in deposit does lead to increase loan and advances.
- ) The correlation coefficient between the non-performing and loan of NBL 0.1142 and 0.81 respectively. The correlation coefficient of Nabil highly positive and NBL has low positive between NPL and loan. This mean both NPL and loan of advance of NBL is in decreasing trend.
- ) Correlation between loan loss provision and loan and advances of NBL and Nabil are 0.1410 and 0.9533 respectively. There is highly positive relation between loan loss provision and loan of Nabil. This mean Nabil has lower volume of NPL and loan and advances.
- ) Multiple correlation of coefficient of NBL profit with loan and deposits is high positive profit. And the correlation coefficient of Nabil profits with loan and deposits is significant positive. Both banks have positive correlation of profits with loan and deposits.

## **CHAPTER-V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Banks & financial institutions are the backbone of the economic development of a country. They have promoted industrialization & economic development by channeling the public deposit into industrial as well as agricultural sector. Commercial banks play an important role in the economic development of the country as they provide capital for the development of industry, trade as well as agriculture by disbursing the saving collected as deposits from the people. Commercial banks investment strongly support for the economic condition of the country. Loan granted to small sector and agricultural sector support to increment of per capita income of the rural people. Banks loans help the growth of trade and commerce, energy sector as well as agriculture and empower the economic activities of the country.

The research is about the lending management of commercial banks with reference to NBL and Nabil. The first chapter of the study deals about basic assumption. Basically it highlighted the concept, problems, significance, objectives of the study. Second chapter help the researcher to provide the knowledge about the conceptual review and national and international researches review. Third chapter deals with various methodology used for the study such as sources of data, population and sample of data, data collection technique and procedure and tools used.

Fourth chapter deals with data presentation and analysis. In this chapter financial condition, nonperforming loan, portfolio of lending, correlation and regression are analyzed. The analysis is conducted with the data collected from various sectors. The cursory looking for the two banks in terms of lending deposit ratio Nabil seems dominant. Out of total deposit collection Nabil has disbursed more than 68% as loan where as NBL has disbursed around 44% of its deposit collection as a loan. It seems that Nabil is the best performer while utilizing its collected fund. NBL is hugely suffering from the high NPL. This would be the one reason of least ratio of lending to deposit. In the first year of the study period, about 50% of loan out of total was

nonperforming loan of NBL. It means that Nepal bank did not take any action to its lending customers. But after second year NBL decreased its NPL year by year it is the positive signal for develop its lending policy. In comparison Nabil has lower ratio of NPL and Nabil meet international standard after the year 2004/05. Political crisis of the nation, political leader famousness to the borrower, borrower intention, trade deficit, owner worker worse relationship for industry failure are the main causes for the increment of the NPL.

Form analyzing PSL to lending ratio Nabil is more conscious about the development of small industrial sector because it has more lending ratio in priority sector. In the analysis of profitability ratio Nabil is the straight income trend generator than NBL.

Both banks made optimal portfolio for getting more return from then by minimizing the risk. It seems that both banks invest around 30% as production loan out of total. For the development of nation banks must be investment their fund in the rural area. But in the analysis of the portfolio of lending both banks invest lower percentage in agriculture which represents rural investments. Private sector banks are not interested to open their branch in the rural area.

The correlation coefficient deposit and loan and advances of NBL is 0.6215. There is high positive correlation between loan and advances and deposit collection. The correlation coefficient deposit and loan and advances of Nabil is 0.9921. The correlation coefficient between the non-performing loan and total loan is 0.1142 of NBL. The correlation coefficient of Nabil is highly positive (i.e.0.81). Correlation between loan loss provision and loan and advances of NBL and Nabil are 0.1410 and 0.9533 respectively. From the correlation analysis Nabil manage its lending effectively and efficiently. Multiple correlation of coefficient of NBL and Nabil profit with loan and deposits is 0.5382 and 0.9802 respectively. Both banks have positive correlation of profits with loan and deposits.

An overall analysis Nabil bank manages its lending effectively and efficiently and it recovers its bad loan taking necessary action in time. NBL is not managing its lending properly and suffered from the high volume of nonperforming loan.

## **5.2 Conclusion**

Banks & financial institutions in Nepal will have to benchmark themselves against some of the best in the world, for a strong and resilient banking and financial system. Therefore, banks need to go beyond peripheral issues and tackle significant issues like improvements in profitability, efficiency and technology, while achieving economies of scale through available cost effective solutions. These are some of the major issues that need to be addressed by banks in recent scenario, for their success and not just survival, in the changing milieu.

Lending function is considered by the banking industry as the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. Indeed, the large number of non-performing loans is the main cause of bank failure. Non-performing loan is seems to be major problems for Nepalese commercial banks. Banks are learning to review their risk portfolios. Lending is the most income-generating sources for Nepalese commercial bank but there is risk inherent in bank's lending portfolio. In order to cover the risk inherent in the lending portfolio, banks have to make loan loss provision by categorizing the loans into different category as per the NRB directives.

It has been found that NBL has high portion of non-performing loan need higher provision results lower profit. Out of total NPL, NBL has more volume of loss loan. Analysis of variance indicated that all indicators are not found significant difference at 0.1 levels of significance of NBL. Form these indicators it can be said that to preserve its position as a successful and dominant commercial bank NBL has to give attention on its lending and recovery device. It can be concluded that government owned bank NBL is not able to manage lending efficiently. After conducting this study, private sector bank Nabil perform better in managing lending. It indicates most of the private sector banks of Nepal bitterly manage their lending.

## **5.3 Recommendation**

The high portion of non-performing loan accompanied by higher provision of these banks which reduced the profitably and competency of the bank in this competitive environment. NPL of NBL is higher in the ratio and recommended to take remedial

actions for recovering bad loans. To reduce the NPL they are also recommended take following action while granting the loan.

- The banks analyze the borrower's strategies and organizational architecture to be the most important determinants of firm profitability and the firm's ability to repay the banking loan. So, banks have constructed a comprehensive analytical framework that will improve the accuracy of analyzing a borrower's capacity and condition.
- The banks should provide more training program in business strategy and organizational management to the employees in the lending department. Training is the most important for the employees to make them efficient and professional in credit appraisal, monitoring and proper risk management.
- The efficient employees properly evaluate proposal of borrower and monitor his or capacity and condition. So it is recommended for the banks to evaluate the job performance of employees of lending department.
- Banks should measure internal performance. The major benefit of using an internal measure to monitor the output quality of the employees in a lending department is a reduction in the likelihood of employee moral hazard behaviors. To effectively use local knowledge about possible fraud from a particular employee, assigning loan decision rights to teams might effectively prevent individual fraud. The final decision for a loan should be made through consensus or some type of voting mechanism among any team members who have participated in the evaluation process for the loan. To reduce the individual fraud, team decision is more effective. So, it is recommended that team decision should be followed while the loan should be disbursed.

Following the directives of NRB is also reduces many of credit risks. Hence both banks are recommended to adhere to the directives and they are also suggested to come up with a stronger internal audit department to ensure that the directives are properly implemented.

Portfolios are composition of investments in various sectors which in turn are composed of expected risk and return of their component investments. It helps an investor to make optimal investment decision minimizing overall risk and maximizing

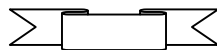


overall return. So, both banks make optimal lending portfolio to reduce its bad loan risk, maximizing profit and development of economy of the nation.

NBL's contribution to loan and advance is relatively low. Entire economy is largely dependent upon the proper execution of lending function by commercial banks. Low level of lending means, low level of investment resulting to low level of productivity, which may ultimately affect negatively on the national economy. Loan and advance on one hand is the highest income generating asset and on the other hand it also helps to upgrade the economic position of the country. Hence NBL increase its in productive sector in the form of loan and advance.

Nabil is concentrating its operation in urban areas. Most of the people who live in rural areas are not benefited from it. To making investment in agricultural sector which is need to development for the economic growth of the nation Nabil strengthen its branches in rural areas. Financial support from the bank helps to improve the financial condition of the rural people. To meet the poverty alleviation objectives the banks helps by expanding their branches in rural areas.

The government has to encourage the coming up new entrepreneurs, encourage the small-scale industries, give priority to export business, encourage foreign investors. The bank in turn should extend support from their side in every possible way.



## BIBLIOGRAPHY

- American Institution of Banking (1972), *Principal of Banking Operation*, New york, The Dryden Press
- Athanassopoulos, A.D. and Giokas, D. (2000), "*The use of Data Envelopment Analysis in Banking Institutions: Evidence from the Commercial Bank of Greece*", *Interfaces*, Vol. 30, pp. 81-95
- Barbara R. Lewis and Sotiris Spyropoulos, (2001) "*Service Failures and Service Recovery in Retail Banking the Customers' Perspective*" pp 15-68
- Beckman, N. Theodore, (1962), "*Credit and collections*", New Jersey: Prentice Hall Inc.
- Besanko, D., Dranove, D. and Shanley, M. (1996), "*Economics of Strategy*", New York, Wiley
- Berg, S., Forsund, F., Hjalmarsson, L. and Suominen, M.(1993), "*Banking Efficiency in the Nordic Countries*, *Journal of Banking and Finance*", Vol. 17, pp 3.71-88
- Bhattacharya, H. (1998), "*Banking Strategy, Credit Appraisal and Lending Decisions-A Risk Return Framework*", New Delhi: Oxford University Press.
- Boucher, J. (1996), *Management: Maximizing Loan Officer Productivity with Sales Analysis*, "Commercial Lending Review", and Vol. 11 pp.89-94
- Bricky, J.A., Smith, C.W. Jr. and Zimmerman, J.L. (2001), "*Managerial Economics and Organizational Architecture*", Second Edition, New York, McGraw-Hill
- Chaplin, A. and George Ehasset, (1963), "*Credit and Collection Principles and Practices*", New York: Mac Grew Hill Book Inc.
- Charnes, A., Cooper, W.W. and Rhodes, E. (1978), *Measuring the Efficiency of Decision making Units*, "European Journal of Operational Research", Vol. 2, pp. 429- 44
- Chettari D.B., (2000) "*Non-performing Assets: A Need for Rationalization*", Nepal Rastra Bank Samachar p 017, Kathmandu, Nepal Rastra bank
- Crosse, H.D. (1963), "*Management Policies for Commercial Banks*", New Jersey: Prentice Hall Inc.
- Francis, J.K. (1995), "*Investment Analysis and Management*", New York, McGraw Hill

- Ferrier, G. and Lovell, C.A.K. (1990), *Measuring Cost Efficiency in Banking: Econometric and Linear Programming Evidence*, "Journal of Econometrics", Vol. 46 pp 229-45.
- Gautam U.K. (2004) *Rastrya Baniyya Bank Pratiyogita Digdarshan*, Kathmandu Makalu Books and Stationery P. Ltd.
- Ghimire G. (2005), "*Non-performing Assets of Commercial Banks: Causes and Effect*", Unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Ghimire M. (2005) "*Comparative Analysis of Financial Transaction of RBB*" Nepal Rastra Bank Samachar, Vol 19, p 113, Kathmandu, Nepal Rastra Bank
- Gitman, L.J. and Jochnk, (1972), "*Fundamentals of Investing*", New York: Harper and Row Publishers.
- Gitman. L.J (1994), "*Principal of Mangerial Finance*", Fifth Edition, New York: Harper and Row Publishers.
- Golany, B. and Storbeck, J.E. (1999), "*A Data Envelopment Analysis of the Operational Efficiency of Bank Branches*", Interfaces, Vol. 29, pp 14-26
- Grasing, R. (2002), *Measuring Operational Efficiency: a Guide for Commercial Bankers*, "Commercial Lending Review", and Vol. 17 pp. 45-52
- Gupta S.N. (2002), "*Problem in recovery a Debt in India*", report of SAARC Law Conference, Kathmandu
- Gurung A. K. (2006), "*Lending Policy and Recovery Management of Standard Chartered Bank Nepal Ltd and Nabil Bank Ltd*", unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Hempel, G.H. and Simonson, D.G. (1999), "*Bank Management: Text and Cases*," Fifth Edition, New York, Wiley.
- Johnson, F.P. and Johnson, R. D. (1985), "*Commercial Bank Management*", Chicago Dryden Press
- Khadka, A. (2002), '*Comparative Study on Investment Policy of Commercial Banks*', NBL, Nabil, SCBNL and NIBL, Unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Koch, T.W. and Macdonald, S.S. (2000), "*Bank Management*", Fourth edition, Chicago, Dryden press,
- Kothari, C.R., (1990), "*Money and Banking*", Brighton, Southwestern Publishing House.

- Lamichhane, K.N., (2002), *“Forty six year of NRB”*, Nepal Rastra Bank Samachar, Kathmandu, Nepal Rastra bank.
- Lin Peter Wei-Shong, Mei Albert Kuo-Chung (2006), *“The internal performance measures of bank lending: a value-added approach”*, pp 272-288
- Mather, L.C. (1984), *“Securities Available to the Lending Banker”*. New Delhi: Mac millam India ltd.
- Mass, Paul Van (2004), *“Active Loan Portfolio Management through the Use of Credit Derivatives”*, Bank of America pp 47-52
- Nabil bank limited (2004/05 to 2008/09), *“Annual reports”*, Nabil bank limited, Kathmandu.
- Nepal Bank Ltd (2004/05 to 2008/09), *“Annual reports”*, Kathmandu, Nepal Bank Ltd.
- Neupane, Him Pd., (2060), *“Bad Loans of Banking Sector-Challenges and Efforts to Resolve it”*, Nepal Rastra Bank Samachar 14, Kathmandu, Nepal Rastra Bank
- Neupane, J.L (2006), *“Non-performing Loan and Loan Loss Provisioning of NBL RBB and Nabil”*, Unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Ojha, L. (2002), *“Lending Practices, A Study on Nabil SCBNL and HBL”*, Unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Orlando, FL, Perro, V.C. and Ruoff, S.C. (1997), *Improving Accountability in Bankin*”, *“Commercial Lending Review”*, Vol.12 pp. 44-50
- Porter, E.M. (1985), *“Competitive Advantage”*, New York, Free Press
- Reed, Edward, Richard, V. Cotter, Edward K. Gill and Richard K. Smith, (1980), *“Commercial Banking”*, New Jerseyz: Prentice Hall Inc.
- Reidy, Patrick F. (2005), *“Corporate Credit Portfolio Management: Changing Skills Requirements”* RMA Journal vol pp 42-56
- Rose, P.S. (1991), *“Commercial Bank Management: Producing and Selling Financial Services”*, Irwin, Homewood, IL
- Sharpe, W. F. Alexander, G.J. Bailey, J.V (2000), *“Investment”*, Fifth Edition, New Delhi, Prentice Hall of India Pvt Ltd.
- Shrestha M. S. (2009) *“Fundamental Of Banking”* Kathmandu, Buddha Academic Publisher and Distribution P. Ltd.

- Shrestha, N. (2004), “*A Study on Non-performing Loan and Loan Loss Provisioning of NBL, Nabil and SCBNL*”, Unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Singh S.P. and S. Singh, (1983), “*Financial Analysis for Credit Management in Banks*”, New Delhi, Vikas Publishing House.
- Sthapit A. B.,Goutam H, Joshi P.R. and Dongol P.M. (2009) “*statistical Method*” Kathmandu, Buddha Academic Publisher and Distribution P. Ltd.
- Tamang, D. (2005), “*A Comparative Study on Credit Management of HBL and Nabil Bank Ltd*”, unpublished thesis submitted to research department, Tribhuvan University, Kathmandu
- Thanssoulis, F. (1999), “*Data Envelopment Analysis and its use in Banking*”, Interfaces, Vol. 29 pp.1-13
- Western, J.F. and Brigham, E.F. (1983), “*Managerial Finance*”, Seventh Edition, Chicago, The Dryden Press.
- Wolff, H., and Pant, Prem R. (2002), “*Social Science Research and Thesis Writing*”, Kathmandu, Buddha Academic Publishers and Distributors Pvt. Ltd.
- Zenios, C.V., Zenios. S.A. Agathocleous, K. and Soteriou, A.C.(1999), “*Benchmarks of the Efficiency of Bank Branches*”, Interfaces, Vol. 29 pp. 37-51 .

Website:

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

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

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

[www.lawcommission.gov.np](http://www.lawcommission.gov.np)

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

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

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

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

## ANNEX

### Financial ratios

#### Annex: 1.1

#### Total loan and advances to total deposit ratio

Rs. in million

Year	Total loan		Total deposit		Ratio	
	NBL	Nabil	NBL	Nabil	NBL	Nabil
2004/05	16866.5	10946.74	34744.2	14586.8	0.4854	0.7505
2005/06	12441.59	13278.78	35444.9	19348.4	0.3510	0.6863
2006/07	13756.6	15903	38715.2	23342.4	0.3553	0.6813
2007/08	15770.7	21769.8	41451.7	31915	0.3805	0.6821
2008/09	19482.25	27589.93	44346.1	37348.3	0.4393	0.7387
	<b>78317.64</b>	<b>89488.25</b>	<b>194702.1</b>	<b>126540.9</b>		

*Source: Annual Report and concerning department of respective banks*

#### Annex: 1.2

#### Total nonperforming loan (NPL) to total loan and advances ratio

Rs in million

Year	Total NPL		Total Loan		Ratio	
	NBL	Nabil	NBL	Nabil	NBL	Nabil
2004/05	8372	144.51	16866.5	10946.74	0.4964	0.0132
2005/06	2262.18	182.6	12441.59	13278.78	0.1818	0.0138
2006/07	1856	178.3	13756.6	15903	0.1349	0.0112
2007/08	1410.8	171.4	15770.7	21769.8	0.0895	0.0079
2008/09	1151.4	220.72	19482.25	27589.93	0.0591	0.0080
	<b>15052.38</b>	<b>897.53</b>	<b>78317.64</b>	<b>89488.25</b>		

*Source: Annual Report and concerning department of respective banks*

**Annex: 1.3**  
**Priority sector lending (PSL) to total loan and advances ratio**

Rs in million

Year	PSL		Total Loan		Ratio	
	NBL	Nabil	NBL	Nabil	NBL	Nabil
2004/05	774.24	885.27	16866.5	10946.74	0.0459	0.0809
2005/06	734.48	737.26	12441.59	13278.78	0.0590	0.0555
2006/07	659.46	1096.96	13756.6	15903	0.0479	0.0690
2007/08	500.54	918.64	15770.7	21769.8	0.0317	0.0422
2008/09	302.84	1032.62	19482.25	27589.93	0.0155	0.0374

*Source: Annual Report and concerning department of respective banks*

**Annex: 1.4**  
**Total profit to total loan and advances ratio**

Rs in millions

Year	Total Profit/Loss		Total Loan		Ratio (R)	
	NBL	Nabil	NBL	Nabil	NBL	Nabil
2004/05	1730.13	841.98	16866.5	10,946.74	0.1026	0.0769
2005/06	1327.99	987.81	12441.59	13,278.78	0.1067	0.0744
2006/07	249.65	1094.6	13756.6	15,903.00	0.0181	0.0688
2007/08	345.93	1197.89	15770.7	21,769.80	0.0219	0.0550
2008/09	1044.57	1626.54	19482.25	27,589.93	0.0536	0.0590

*Source: Annual Report and concerning department of respective banks*

**Portfolio of lending**  
**Annex: 2.1**  
**Portfolio/sector wise of lending of Nepal Bank Ltd**

Rs in million

Portfolio of lending	2004/05		2005/06		2006/07		2007/08		2008/09	
	Rs	%	Rs	%	Rs	%	Rs	%	Rs	%
Agriculture	831.1	4.93	615.9	4.95	478.3	3.48	263.3	1.67	128.7	0.66
Consumable loan	1871.2	11.09	2748.3	22.09	3644.1	26.49	2953	18.72	3052.7	15.67
Services industries	1852.3	10.98	527.5	4.24	470.1	3.43	418.7	2.65	756.9	3.89
Wholesaler and retailers	3817.7	22.63	2553.3	20.52	2558.6	18.6	2983.2	18.92	3636	18.66
Productions	6137.9	36.39	3916	31.48	3419.1	24.85	3922.3	24.87	4126.7	21.18
Constructions	332.4	1.97	275.3	2.21	372.9	2.71	975.6	6.19	1662.5	8.53
Finance, insurance & fixed assets	788.4	4.68	659.1	5.3	693.3	5.04	822.3	5.21	1067.25	5.48
Transportation, communication & public services	301.7	1.79	703	5.65	864.2	6.28	893.9	5.67	1220.2	6.26
Mining	11.9	0.07	12.3	0.1	7.4	0.05	21.8	0.14	21.5	0.11
Metal production machinery & electrical tools	316.3	1.88	137.6	1.11	80.2	0.58	427	2.71	493.5	2.53
Transportation equipment production & fitting	73.1	0.43	29.9	0.24	84	0.61	309.3	1.96	299.1	1.54
Others	532.6	3.16	263.4	2.12	1084.4	7.88	1780.3	11.29	3017.2	15.49
<b>Total</b>	<b>16866.6</b>	<b>100</b>	<b>12441.6</b>	<b>100</b>	<b>13756.6</b>	<b>100</b>	<b>15770.7</b>	<b>100</b>	<b>19482.25</b>	<b>100</b>

Source: Concerning department of respective banks and banking and financial statistics of NRB



**Annex: 2.2**  
**Portfolio/sector wise of lending of Nabil Bank Ltd**

Rs in million

Portfolio of lending	2004/05		2005/05		2006/07		2007/08		2008/09	
	Rs	%	Rs	%	Rs	%	Rs	%	Rs	%
Agriculture	51.9	0.47	51.1	0.38	54.5	0.34	115.9	0.53	192.9	0.70
Consumable loan	77.2	0.71	86.7	0.65	84.6	0.53	116.8	0.54	116.2	0.42
Services industries	1387.3	12.67	1014.3	7.64	1260.7	7.93	1553.5	7.14	1979.4	7.17
Wholesaler and retailers	1990.1	18.18	2068.5	15.58	2458.5	15.46	3586.5	16.47	5094.6	18.47
Productions	4375.8	39.97	5107.1	38.46	5701.5	35.85	6640.7	30.50	7729.5	28.02
Constructions	665.2	6.08	1378.8	10.38	1923.3	12.09	2985	13.71	4014.5	14.55
Finance, insurance & fixed assets	333.5	3.05	480.2	3.62	821.1	5.16	1255.6	5.77	1964	7.12
Transportation, communication & public services	289.3	2.64	673.7	5.07	917.7	5.77	1785.3	8.20	1313.2	4.76
Mining	28.9	0.26	21.9	0.16	13.9	0.09	18.5	0.08	15.4	0.06
Metal production machinery & electrical tools	140.9	1.29	100	0.75	163.2	1.03	234.9	1.08	291.1	1.06
Transportation equipment production & fitting	1003.7	9.17	1309.6	9.86	1467.9	9.23	1791	8.23	2398.13	8.69
Others	602.9	5.51	986.8	7.43	1036.1	6.52	1686.1	7.75	2481	8.99
<b>Total</b>	<b>10946.7</b>	<b>100</b>	<b>13278.7</b>	<b>100</b>	<b>15903</b>	<b>100</b>	<b>21769.8</b>	<b>100</b>	<b>27589.93</b>	<b>100</b>

Source: Concerning department of respective banks and banking and financial statistics of NRB

### Correlation

#### Correlation coefficient between deposit and loan and advances of Nepal Bank Ltd

#### Annex: 3.1

Rs in million

Year	Deposit (X)	Loan (Y)	X <sup>2</sup>	Y <sup>2</sup>	XY
2004/05	34,744.20	16,866.50	1207159433.64	284478822.25	586013049.30
2005/06	35,444.90	12,441.59	1256340936.01	154793161.73	440990913.39
2006/07	38,715.20	13,756.60	1498866711.04	189244043.56	532589520.32
2007/08	41,451.70	15,770.70	1718243432.89	248714978.49	653722325.19
2008/09	44,346.10	19,482.25	1966576585.21	379558065.06	863961806.73
<b>Total</b>	<b>194,702.10</b>	<b>78,317.64</b>	<b>7647187098.79</b>	<b>1256789071.09</b>	<b>3077277614.93</b>

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

$$= \frac{5 \times 3077277614.93 - 194702.10 \times 78317.64}{\sqrt{5 \times 7647187098.79 - (194702.10)^2} \sqrt{5 \times 1256789071.09 - (78317.64)^2}}$$

$$= 0.6215$$

$$\text{Coefficient of determination (r}^2\text{)} = (0.6215)^2 = 0.386228593$$

$$\text{Probable Error (P.E)} = 0.6745 \times \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.1851$$

$$6 \text{ P.E.} = 6 \times 0.1851 = 1.1106$$

**Annex: 3.2**

**Correlation coefficient between deposit and loan and advances of Nabil**

**Rs. In Million**

<b>Year</b>	<b>Deposit (X)</b>	<b>Loan (Y)</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2004/05	14,586.80	10,946.74	212774734.2	119831116.6	159677907
2005/06	19,348.40	13,278.78	374360582.6	176325998.3	256923147
2006/07	23,342.40	15,903.00	544867637.8	252905409	371214187.2
2007/08	31,915.00	21,769.80	1018567225	473924192	694783167
2008/09	37,348.30	27,589.93	1394895513	761204237.4	1030436983
<b>Total</b>	<b>126,540.90</b>	<b>89,488.25</b>	<b>3545465692</b>	<b>1784190953</b>	<b>2513035391</b>

Correlation (r) = 0.9921

Coefficient of determination (r<sup>2</sup>) = (0.9921)<sup>2</sup> = 0.9843

Probable Error (P.E) = 0 .0047

6 P.E. = 0.0283

**Correlation coefficient between loan and advances and NPL of NBL**

**Annex: 3.3**

<b>Year</b>	<b>Loan (X)</b>	<b>NPL (Y)</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2004/05	16,866.50	8,372.00	284478822.3	70090384	141206338
2005/06	12,441.59	2,262.18	154793161.7	5117458.352	28145116.07
2006/07	13,756.60	1,856.00	189244043.6	3444736	25532249.6
2007/08	15,770.70	1,410.80	248714978.5	1990356.64	22249303.56
2008/09	19,482.25	1,151.40	379558065.1	1325721.96	22431862.65
<b>Total</b>	<b>78,317.64</b>	<b>15,052.38</b>	<b>1,256,789,071.09</b>	<b>81,968,656.95</b>	<b>239,564,869.88</b>

Correlation (r) = 0.1142

Coefficient of determination (r<sup>2</sup>) = (0.1142)<sup>2</sup> = 0.0130

Probable Error (P.E) = 0 .2672

6 P.E. = 1.6032

**Annex: 3.4**  
**Correlation between loan and advance and NPL of Nabil**

<b>Year</b>	<b>Loan (X)</b>	<b>NPL (Y)</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2004/05	10,946.74	144.51	119831116.6	20883.1401	1581913.397
2005/06	13,278.78	182.60	176325998.3	33342.76	2424705.228
2006/07	15,903.00	178.30	252905409	31790.89	2835504.9
2007/08	21,769.80	171.40	473924192	29377.96	3731343.72
2008/09	27,589.93	220.72	761204237.4	48717.3184	6089649.35
<b>Total</b>	<b>89,488.25</b>	<b>897.53</b>	<b>1784190953</b>	<b>164112.0685</b>	<b>16663116.6</b>

Correlation (r) = 0.81

Coefficient of determination (r<sup>2</sup>) = (0.81)<sup>2</sup> = 0.6561

Probable Error (P.E) = 0 .1037

6 P.E. = 0.6222

**Annex: 3.5**  
**Correlation between LLP and loan and advances of NBL**

<b>Year</b>	<b>Loan (X)</b>	<b>LLP (Y)</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>	<b>XY</b>
2004/05	16,866.50	8647.6	284478822.3	74780985.76	145,854,745.40
2005/06	12,441.59	2685.4	154793161.7	7211373.16	33,410,645.79
2006/07	13,756.60	2698.14	189244043.6	7279959.46	37,117,232.72
2007/08	15,770.70	2513.01	248714978.5	6315219.26	39,631,926.81
2008/09	19,482.25	1945.19	379558065.1	3783764.136	37,896,677.88
<b>Total</b>	<b>78,317.64</b>	<b>18,489.34</b>	<b>1,256,789,071.09</b>	<b>99,371,301.78</b>	<b>293,911,228.59</b>

Correlation (r) = 0.1410

Coefficient of determination (r<sup>2</sup>) = (0.1410)<sup>2</sup> = 0.0199

Probable Error (P.E) = 0 .2957

6 P.E. = 1.7742

**Annex: 3.6**  
**Correlation between LLP and loan and advances of Nabil**

Year	Loan (X)	LLP (Y)	X <sup>2</sup>	Y <sup>2</sup>	XY
2004/05	10,946.74	358.7	119831116.6	128665.69	3,926,595.64
2005/06	13,278.78	360.6	176325998.3	130032.36	4,788,328.07
2006/07	15,903.00	357.2	252905409	127591.84	5,680,551.60
2007/08	21,769.80	394.4	473924192	155551.36	8,586,009.12
2008/09	27,589.93	409.08	761204237.4	167346.4464	11,286,488.56
<b>Total</b>	<b>89,488.25</b>	<b>1,879.98</b>	<b>1,784,190,953.36</b>	<b>709,187.70</b>	<b>34,267,972.99</b>

Correlation (r) = 0.9533

Coefficient of determination (r<sup>2</sup>) = (0.9533)<sup>2</sup> = 0.9088

Probable Error (P.E) = 0 .0275

6 P.E. = 0.165

**Annex: 3.7**

**Multiple correlation coefficients of Loan, Deposits and Profit of NBL**

Where Profit is depended variable and loan and deposits are independent variable

Year	Deposits (X)	Loan (Y)	Profit (Z)	d <sub>1</sub> =X- $\bar{X}$	d <sub>2</sub> =Y- $\bar{Y}$	d <sub>3</sub> =Z- $\bar{Z}$
2004/05	34744.20	16866.50	1730.13	-839.24	240.59	158.10
2005/06	35444.90	12441.59	1327.99	-699.10	-644.39	77.67
2006/07	38715.20	13756.60	249.65	-45.04	-381.39	-138.00
2007/08	41451.70	15770.70	345.93	502.26	21.43	-118.74
2008/09	44346.10	19482.25	1044.57	1081.14	763.74	20.98
	<b>194702.10</b>	<b>78317.64</b>	<b>4698.27</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

d <sub>12</sub>	d <sub>13</sub>	d <sub>23</sub>	d <sub>1</sub> d <sub>2</sub>	d <sub>1</sub> d <sub>3</sub>	D <sub>2</sub> d <sub>3</sub>
704330.49	57885.67	24994.35	-201917.41	-132681.12	38037.01
488746.40	415235.38	6032.32	450493.95	-54298.01	-
2028.96	145454.98	19044.00	17179.13	6216.07	52631.21
252261.09	459.43	14100.14	10765.56	-59639.89	-2545.21
1168855.05	583305.51	440.33	825711.57	22686.56	16026.41
<b>2616222.00</b>	<b>1202340.96</b>	<b>64611.13</b>	<b>1102232.80</b>	<b>-217716.39</b>	<b>54101.14</b>

$$\text{Mean of Deposits } (\bar{X}) = \frac{\sum X}{n}$$

$$\text{Mean Of Loan } (\bar{Y}) = \frac{\sum Y}{n}$$

$$\text{Mean Of Profit } (\bar{Z}) = \frac{\sum Z}{n}$$

$$\text{Correlation } (r_{xy}) = \frac{\sum \frac{d_1 d_2}{Z}}{\sqrt{\sum \frac{d_1^2}{Z}} \sqrt{\sum \frac{d_2^2}{Z}}}$$

Correlation between Loan and Deposits ( $r_{xy}$ ) = 0.6215

Correlation between Loan and Profit ( $r_{xz}$ ) = -0.5295

Correlation between Deposits and Profit ( $r_{yz}$ ) = 0.1941

$$\text{Correlation of profit with Loan and Deposits } (R_{z.xy}) = \sqrt{\frac{r_{xz}^2 + r_{yz}^2 - 2r_{xz}r_{xy}r_{yz}}{1 - r_{xy}^2}}$$

$$= 0.5382$$

### Annex: 3.8

#### Multiple correlation coefficients of Loan, Deposits and Profit of Nabil

Where Profit is depended variable and loan and deposits are independent variable

Year	Deposits (X)	Loan (Y)	Profit (Z)	$d_1 = X - \bar{X}$	$d_2 = Y - \bar{Y}$	$d_3 = Z - \bar{Z}$
2004/05	14586.80	10946.74	841.98	-2144.28	1390.18	-61.56
2005/06	19348.40	13278.78	987.81	-1191.96	-923.77	-32.39
2006/07	23342.40	15903.00	1094.60	-393.16	-398.93	-11.03
2007/08	31915.00	21769.80	1197.89	1321.36	774.43	9.63
2008/09	37348.30	27589.93	1626.54	2408.02	1938.46	95.36
<b>Total</b>	<b>126540.90</b>	<b>89488.25</b>	<b>5748.82</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

$d_{12}$	$d_{13}$	$d_{23}$	$d_1d_2$	$d_1d_3$	$D_2d_3$
4597919.56	1932605.99	3789.25	2980933.90	131994.98	85575.29
1420759.11	853358.40	1049.17	1101097.96	38608.53	29921.87
154571.64	159145.14	121.72	156841.72	4337.65	4401.35
1746002.82	599741.82	92.64	1023303.92	12718.26	7453.97
5798579.58	3757611.66	9092.60	4667848.57	229617.37	184841.67
<b>13717832.72</b>	<b>7302463.03</b>	<b>14145.38</b>	<b>9930026.08</b>	<b>417276.79</b>	<b>312194.15</b>

Correlation between Loan and Deposits  $r_{xy}=0.9921$

Correlation between Loan and Profit  $r_{xz}= 0.9473$

Correlation between Deposits and Profit  $r_{yz}=0.9714$

Correlation of profit with Loan and Deposits  $R_{z.xy}=0.9802$