

CHAPTER I

INTRODUCTION

1.1 General Background

Financial institutions need to better satisfy various financial demands of customers and enhance profitability by continually improving the ways in which they manage risks and their business operations and to remain as the major contributing factors to the growth of the nation's economy, they themselves have to have sustainable existence and growth of themselves for which profitability is a must. Profitability is a deviation of the term profit, which explains the ability to make the profit. Profit is primary a measuring rod of a success of a business enterprises. Profit is essential for the

survival of the business. It is the difference between revenue generated and expenses occurred over the period of time but the term profit has several different interpretations. It is a basic test of the performance of any business concern. Without profit a firm could not attract the outside capital. Moreover, the owners and creditors would become concerned about the company's future and attempt to recover their funds. Owner creditors and management pay close attention for boosting profit due to the great importance placed on earning the market place.

Profitability is a technical term, used to compare performances analysis of different trading systems or different investments within one system. This is computed for each system or investments being compared over the same period long enough to include significant "ups" and "downs". So analysis of the profitability of the business is very essential which can be used to measure the overall efficiency of the business. Profitability of the business can be analyzed through the financial analysis which refers to the assessment of the viability and stability of the business.

Profitability of a company is usually based on the income statement. A properly conducted profitability analysis provides invaluable evidence concerning the earnings potential of a company and the effectiveness of management. While analyzing profitability different profitability ratios are calculated. Profitability ratios provide a definitive evaluation of the overall effectiveness of management based on the returns generated on sales and investment. The most widely used profitability measurements are profit margin on sales, return-on-investment ratios, and earnings per share.

Credit or loan giving is as easy as to roll down a stone from the top of hill, and recovery is equally difficult to take back the same stone to the top of hill. Credit Administration is a protection mechanism whereby bank teaches the traits and borrower teaches practices and both agree upon to keep the relationship going. A manager who assess and manage the credit risk should have expertise in the field of business, industry trend, and behavioral factor regarding the credit with connection to the credit policy of the banks.

As a matter of fact, there are two ends of the bow in giving and taking of loan process. Giver (the bank) always tries to strengthen the security aspects, always tries to keep high interest rate, high commission, transparency in the business for which bank wants periodic reports like monthly progress report of sales, inventory, receivable position, market outlook, veracity in the internal external market conditions, whereas the taker (borrower or party) always wants relaxation of all above, such as lowest interest rate, no security, no reporting on progress or waiver of loan if it is permissible (by the bank). However the party or the borrower agrees for the former but later wishes for the latter.

In recent years many banks have for sake of economy, pared down the credit analyst function and rely increasingly on using outside sources of information such as broker's report and credit rating agency reports to rationalize their credit decision. It nevertheless remains important for bankers to learn about and understand the framework of credit analysis within the framework of credit risk management. Aside from the arguments of due diligence which means that every banks ultimately is responsible for the safekeeping of depositors funds and accordingly effecting its own credit analysis, is the issue of comprehension. Credit risk management is not only about the information gathering and analytical process; it is using that information to set in place effective policy guidelines that are the bank's constant tools to ensure portfolio quality.

Increasing establishment of numerous financial institutes and lending portfolios of the banks and financial institutions in many occasion defaulters has been increasing day by day. Whatsoever the driving factor, we have read the payback notice everyday in many daily newspapers. Even the spirit of the credit facility offer letter tries to invest the loan amount in the proposed project, many financial institutions have been facing problem of non performing loan.

The main objective of this study is to present the risk exposure of the sample banks and its management of risk by the commercial banks with the help of collected data and also provide recommendation.

1.2 Nepalese Financial System

The banks and financial institutions licensed by NRB are classified as A, B, C and D class institutions. Commercial banks are 'A' class institutions, whereas development banks are categorized as 'B', finance companies as 'C' and micro finance development banks as 'D'. There are some Cooperatives and Non Government Organizations licensed for limited financial activities as non classified financial institutions. Besides, there are significant numbers of co-

operatives and postal saving offices that undertake limited banking and near banking financial services. Similarly, substantial amount of financial assets is created by non-bank financial sector; which comprises saving funds and trusts like Employee Provident Fund, Citizen Investment Trusts and insurance companies in the Nepalese financial system. With the shift in the trend in banking industry, Nepal has also experienced so many ups and downs in the financial system. Many new issues are emerging creating shorter and longer-term impact in the system. Banks need to proactively assume their responsibilities and work on strengthening their capacity, bearing in mind the 21st century global struggle in the financial sector.

The face of commercial banking is changing rapidly. Competition is getting tougher with financial liberalization. For a strong and resilient banking and financial system, therefore, banks need to go beyond peripheral issues and tackle major issues like improvements in profitability, efficiency and technology, while achieving economies of scale through consolidation and exploring available cost-effective solutions. These are some of the issues that need to be addressed if banks are to succeed in the days to come. Below depicts the number of financial institutions licensed by NRB as on mid-Jan 2010 with comparison to mid July 2008 in the Nepalese Financial System.

Table: 1.1

Number of Financial Institutions licensed by NRB (Mid-Jan 2010)

S.N.	Type of financial Institutions	Class	In Number
1	Commercial Banks	A	26
2	Development Banks	B	73
3	Finance Companies	C	78
4	Micro Finance Development Banks	D	17
5	Saving and Credit Co-operatives	Non-classified	16
6	Non-Government Organizations	Non-classified	45

	Total		172
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Source: NRB, Banking and Financial Statistics Mid-January 2010, No 54

1.3 Credit Market in Nepal

Commercial banks are facing difficulties in recovery of loan due resilient credit availability and loss loans due to the borrower's defaults of loan obligations. Sometimes it is not possible for the bank to have 100 percents success in selecting the good clients. The table given below shows the Total Loans, Loan Loss Provision, Non-banking Assets, and Write Back of Provision for Possible Loss of commercial banks in Nepal since fiscal year 2005/06 to 2009/10 i.e. 2063/64 to 2066/67.

1.4 Lending Criteria for the Commercial Banks

Commercial banks have been involved for diversified financial solution since its inception. Likely, lending is one of the major and pivotal functions of commercial banks. They made available the credit facilities in many forms of funded and non-funded credit lines. To ensure the quality of loan; commercial banks follow the following criteria on its own expertise. Most common things to be analyzed before to availing credit to person or entity are Character, Capital, Capacity (Cash Flow), Collateral, Coverage and Condition. Besides this banks have to analyze the profitability of the paying the loan, banking function, maximization of the total yield, evaluate the credit worthiness, gestation period of the loan proposed etc.

1.5 Historical Review of Banks

The concept of banking developed from the very beginning of the economic activities. First of all, the effort was made by the ancient gold and valuables. Under such arrangements, the depositors would have their gold for safekeeping and in turn were given a receipt. Whenever receipt was presented, the depositors would return back their gold and valuable after receiving a small payment as fee.

The word “Bank” is orient in medieval age in 1171 AD from an Italian word “Banko.” That means the place where people come together for different transaction. The “Bank of Vanice” was the first bank, which established in Italy in 1157 AD as a first modern bank. Then after in 1401 AD “Bank of Barcelona” is established in Spain, Bank of Geneva established in 1407 AD, Bank of Amsterdam established in 1609 AD. But the credit of the development of modern banks goes to “The Bank of England” which was established in 1694 AD in London. The growth of banking accelerated only after the introduction of the banking Act 1883 in United Kingdom as it allowed opening joint stock company banks.

In Nepalese Context

The growth of banking in Nepal is not so old. The history states that King Gunakamadev had received loans from the public in the 8th century to renovate "Kathmandu City". The foundation of banking system in Nepal was established by a businessperson named Shankhadhar Shakhwa in 10th century. He 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. Later on in the 14th century, King Jayasthiti Malla divided the people into 64 castes according to their occupation, amongst them 'TANKADHARI' one is that dealt with the lending of money to the public. Main objective of the 'TANKADHARI' was to earn profit by providing money as a loan to people and taking certain interest rate. Prime Minister Ranadeep Singh established 'TEJARATH ADDA' in the 1933rd B.S In order to protect people from higher interest rate, 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

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.

The actual banking system of Nepal starts from the establishment of Nepal Bank Limited (NBL) as the first modern bank of Nepal in B.S. 1994 Kartik 30th according to the Nepal Bank Act 1993. NBL was the first bank established in Nepal and prior to this, there was no such organized banking system in the country. Therefore year B.S. 1994 is said to be the Golden year for modern banking system in Nepal. After two decades Nepal Rastra Bank established in 14th Baisakh, 2013 BS as a central bank of Nepal under “Nepal Rastra Bank Act 2012” to perform the function of the central banking in Nepal. It established to promote, control, direct, supervision and manages banking activities and to operate the country under the provision of Brussels International monetary conference (IMC). Main objective of Nepal Rastra Bank is to make economic assistance, issue and exchange of Nepalese note and currency, good govern of banking system etc. and use of own Nepalese note in whole country Nepal.

Nepal Industrial Development Corporation (NIDC) was established in 2016 BS under NIDC act 2016. It established to promote the industrialization in Nepal. Main objective of NIDC was to provide technical and financial assistant for industry and commerce. Subsequently another fully state owned commercial bank “Rastriya Banijya Bank” was established on 10th Magh, 2022 BS under Rastriya Banijya Bank Act 2021 which was the second commercial bank of Nepal. With the establishment of RBB, a noticeable progress could be seen in banking industry of Nepal. It brought a revolution in the banking industry. People could easily make business transactions with other countries. Both the banks have majority of shares owned by the government of Nepal. Rastriya Banijya Bank is fully owned by the

government. In 2024 Magh 7 BS Agriculture Development Bank (ADB) was established under Agricultural Development Bank Act 2024. ADB was established combined merge of cooperative bank and Bhumisudhar Bachat Corporation.

Commercial Banks in Nepal:

"A commercial bank refers to such type of bank other than specified banks related to cooperative, agricultural, industrial and other which deals in money exchange, accepting deposits and advancing loans etc." (Commercial Bank Act, 2031 B.S. Nepal). The commercial banks are those banks, which pool together the savings of the community and arrange them for the productive use. Commercial bank transfers monetary sources from the savers to users. They provide loans and advances from the fund, which they received through deposits.

The history of modern banking system is not so long in Nepal. Nepal's banking history had begun with the establishment of Nepal Bank Ltd. (NBL) in 1937 AD with Rs.10 million of authorized capital and Rs.842 thousand of paid up capital. It is the first commercial bank in Nepal with semi government equity i.e. 51% of government ownership. After establishment of NBL, it replaced Tejarath Adda by taking over its operation and over its limitation. It has done pioneering function in spreading the banking habits among people. To manage and control banking system development, monetary policy development, to regulate issue of currency and to mobilize capital for economic development "Nepal Rastra Bank" came into existence as central bank of Nepal in 2013 under Nepal Rastra Bank Act, 2012 BS. After this, NRB diverted its attention towards development of banking system by formulating relevant policies & procedure. Prior to this, there was no such formal organization to control and regulate the monetary system in the country. It is an autonomous body and fully owned by the government of Nepal, who works for the development of banking system in the country. NRB started issuing currency in 1959. To fulfill the growing credit requirement of the country, the commercial

bank "Rastriya Banijya Bank" was established in 1966 under RBB Act, 1964 with fully government equity that of authorized capital of Rs.10 million and paid up capital of Rs.2.5 million. In 1980, the government introduced "Financial Sector Reforms". Government allowed the entry of foreign banks in Nepal as joint venture bank entered to accelerate the economic development of nation & to service high banking system. The first joint venture is Nabil Bank Ltd. (Former Name – Nepal Arab Bank Ltd.) is established in 1984.

The financial scenario has changed with the introduction of joint venture banks in 1984. The number of commercial banks has been increasing since then. Since 1984, various financial institutions like Joint Venture Banks, Domestic Commercial Banks, Development Banks, Finance Companies, Co-operative society have come into existence to cater the financial needs of the country thereby assisting financial development of the country. The total number of commercial banks in Nepal has shown in Annex-1.

1.6 Profile of Sample Banks

Standard Chartered Bank Nepal Limited

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal.

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international

banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market.

With 18 points of representation, 23 ATMs across the country and with more than 350 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as well as the segment comprising of embassies, aid agencies, NGOs and INGOs.

The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

Corporate Social Responsibility is an integral part of Standard Chartered's ambition to become the world's best international bank and is the mainstay of the Bank's values. The Bank believes in delivering shareholder value in a socially, ethically an environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children,

particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organizations involving charitable community activities. The Group launched two major initiatives in 2003 under its 'Believing in Life' campaign- 'Living with HIV/AIDS' and 'Seeing is Believing'. Till date the bank have 13 branches and 4 extension counter located at the different part of the country.

Rastriya Banijya Bank

Rastriya Banijya Bank (RBB) is fully government owned, and the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 BS) under the RBB Act. RBB provides various banking services to a wide range of customers including banks, insurance companies, industrial trading houses, airlines, hotels, and many other sectors. As on fiscal year end 2066/67 the bank's paid-up capital is 1 billion 72 million. RBB has Nepal's most extensive banking network with over 125 branches, covering 51 branches in the mountainous region, 48 in Terai region, and 19 in the Kathmandu Valley. Moreover, The bank has five regional offices in all regions of the country. There are 34 branches in Kathmandu region, 29 branches in Biratnagar region, 15 branches in Birgunj region, 23 branches in Pokhara region and 25 branches in Nepalgunj region. Through its branch network, RBB has been contributing to Nepal's economic development by providing banking services throughout the country.

RBB has many correspondent arrangements with major international banks all over the world that facilitate trade finance, bank-originated personal funds transfers and inter-bank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two leading person-to-person funds transfer networks.

In addition RBB runs various programs i.e. Banking with the Poor, Micro Credit project for Women etc. to enhance the living standard of people as per the government directives. As well, RBB actively delivers various government programs to people living in remote parts of the country; these programs are intended to raise living standards of the local people.

RBB is committed towards the satisfaction of its customers by providing modern banking facilities. At the same time, the Bank is equally committed to the economic growth and development of the country. The Bank aims to reach every rural and urban corner of Nepal to accommodate the requirement of the people. The government nominates all board members including the Chairman. The executive power is vested in the Chief Executive Officer (CEO). A 5-member Executive Committee oversees the different departments at head office on a day-to-day basis. Ten Chartered Accountants have also been contracted as part of the Management Team to strengthen the financial controls of the Bank. The Bank has 15 departments in its head office and 5 regional offices across the five development regions of the country.

The bank's main objectives are to provide banking services throughout Nepal and contribute in the socio economic development of the country. The bank's major activities include accepting deposits, investment in government securities, lending to productive sectors, dealing with foreign currency, processing domestic and foreign remittances, merchant banking & correspondent banking services etc.

The bank has deposit base of with more than 1.2 million depositors. The depositors are individuals, institutions, private organizations, business houses, non-profit organizations, social organizations, industries, finance companies, co-operatives, etc. The bank has more than 300,000 clients who have used the bank's resources for their business and development activities. They vary from big

business houses to public sector enterprise, medium and small-scale industries to farmers and individuals.

Banking with Poor is an important development-oriented program to eliminate the absolute poverty of the country. The program is run under the priority sector credit program. Major Activities of the program include; Production Credit for Rural Women, Banking with the poor for the deprived people, Micro credit, Loan to unemployed graduates, Intensive banking program, Mini & microbus/clean Tampo credit program for environment protection, Biogas credit program etc.

1.7 Focus of the Study

The study deals with the Credit Risk Management of commercial banks of Nepal with reference to Rastriya Banijya Bank and Standard Chartered Bank Nepal Limited. What kinds of precautions on loans turning bad are taken by bank for its survival is crucial as it is the core banking which impact liquidity and profitability of the banks. But the most worry factor in banking industry is total management of loan and control measures. Due to the excessive amount of non-performing assets in commercial bank, there is the wide spread suspicion on the performance on the commercial bank. What types of risk exist in the credit selling, how can manage or avoid such risk, what are the punitive actions to the defaulters; will be studied with focus of the risk exposure of selected banks.

Hence the thesis focused on the following:

-) What is the status of nonperforming loan?
-) How loan portfolio has managed by investing the different sectors of the economy to diversify and minimize the credit risk?
-) What is the status of high risk weight assets and low risk weight assets in comparison with total assets?
-) What is the portion of investment in government securities to minimize the credit risk and status of margin lending?

1.8 Statement of the Problem

Due to cut throat competition in the financial market banks seem to be ready to grand much more loan, advances and other credit facilities against the spirit of credit policy guidelines. Unsecured loan and Investment may cause the liquidation of those commercial banks on the funds. One wrongly invested without thinking any financial risk, systematic risk and their related facts, the bank cannot obtain profitable return as well as it should sometimes lose its principle. Hence the thesis focused on the following:

-) What is the status of non-performing loan?
-) How portfolio is managed to diversify and minimize the credit risk?
-) What is the status of high risk weight assets and low risk weighted assets in comparison with total assets?
-) What is the portion of investment in government securities to minimize the credit risk and status of margin lending?

1.9 Objectives of the Study

The main objective of this study is to present the credit risk management situation and their strategy of those commercial banks with the help of collected data.

To achieve the above objective the specific objective are generated as follows.

-) To find the status and growth of nonperforming loan, total loan and loan loss provision of the respective bank
-) To analyze the lending portfolio i.e. concentration and sector-wise lending
-) To find out the position of investment in government securities
-) To find out the risky and low risk weighted assets of the banks
-) To find out relationship between total deposits and total lending

1.10 Significant of the Study

Credit risk management is vital to financial institutions to sustain the corporation. The proposed study would be of enormous assistance to the executives of commercial bank on how they should manage the loan portfolios. Most of the financial institutions have been successfully manage the credit risk and able to earn profit. On the other hand many have been facing problem of non-performing loan. The study would be important as it provide theoretical as well as conceptual framework of different aspect of credit risk management that can be useful to the credit risk managers of the financial institutions for corrective actions.

The study would provide information to the government agencies to formulate policies. Also be useful to the general public to keep their funds as a saving. Beside this the study will be useful to more people and organization they are, Trade Creditors, Investors, Stock brokers, Academicians, Policy formulators, General Public to know the credit risk and quality assets of the sample banks. Going through the study might be helpful to analyze the credit risk and financial performance of the banks.

1.11 Limitations of the Study

-) Like two sides of a single coin there are both benefits and limitations of the study. Some of the specific limitations that arose in the study are listed below.
-) Only secondary data have analyzed to interpret result emerging from decision. So the results depend on the reliability of secondary data.
-) The study concern only a period of last five year from the fiscal year 2062/63 to 2066/67 and conclusion drawn confines only that period.
-) There are too many factors that affect credit risk management. However only those factors related with credit risk will be considered in the study.
-) The accuracy of the study depends on the accuracy of the data available.

-) The figure after the decimal are kept as per requirement.
-) There is always a restraint of time and resource in the study.

1.12 Organization of the Study

Within the specified limitations the study focuses to analyze and figure out the clear picture of credit risk position of the sample banks. A research study should be always in a format of its own rules and guidelines. The entire study carried out to different stages and procedures as it needed. The overall study has been organized into five chapters i.e. Introduction, review of literature, research methodology, data presentation & analysis and finding, summary, conclusion & recommendation on the following way:

Chapter One: Introduction

It includes general background of the study, Nepalese Financial System, Credit Market in Nepal, Lending Criteria for the Commercial Banks, Historical Review of Banks, Profile of Sample Banks, focus of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study and organization of the study itself.

Chapter Two: Review of Literature

This chapter concerns about the concept of credit risk management and review of related thesis or articles to highlight the related terms and to present the available information about previous related studies. Especially it includes conceptual review, review of related studies and review of articles & journals.

Chapter Three: Research Methodology

This chapter includes research design, population and sample, nature and sources of data, data collection techniques, data processing procedure.

Chapter Four: Data Presentation and Analysis

Various data are gathered from the application of different methods and presented and tabulated as required by the research objectives. Data are interpreted and analyzed with the help of various analytical tools and technique. As per the availability and nature of data presentation has accomplished. The major aspects of the data presentation are analysis of non-performing loans, portfolio management in terms of sector-wise, security-wise & product-wise loans, position of risky assets, capital adequacy of the bank and investment in government securities.

Chapter Five: Summary, Conclusion and Recommendations

This chapter includes summary, conclusions and recommendation of the study.

CHAPTER II

CONCEPTUAL FRAMWORK & LITERATURE REVIEW

2.1 Conceptual Review

In Indian context it is defined like that "Non Performing Asset means an asset or account of borrower, which has been classified by a bank or financial institution as substandard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by the RBI. " In our context, credits need to be classified in to four categories, namely pass, substandard, doubtful & loss. Out of these classifications, the loan of the last three categories is called non-performing loan. In other words all loans classified as sub-standard, doubtful and loss categories are called NPL. Based on this, when the loan is classified as sub-standard due to non-payment of interest or installments for 3 months, it will convert in to NPL. In a business of banking, they normally exposed to credit risk. NPA is not fully avoidable in the banking industry. However it must be kept at a minimum level as far as possible. At the same time the possible loss must be provided immediately.

Credit is the main product of any banks. Credit risk is the major risk that banks are exposed to during the normal course of lending and credit undertaking. Credit risk management must identify such risk during the course of lending.

A descriptive definition of credit given by the Economist Dictionary of Economics, which states that "credit is use of possession of goods of services without immediate payment", that "credit enables a production to bridge the gap between the production and sale of goods" and that "virtually all exchange in manufacturing, industry and services is conducted in credit".

Loans and advances can be classified in the various types based on different criteria. Following are the classification of loans and advances bases on nature of loans, sector-wise lending, based on security and based on the fund.

Interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full".

2.2 Meaning of Risk

Risk refers to uncertainty on the investment faced by the investors. It is the possibility that actual outcomes may be different from those expected. Risk can be defined as the possibility of deviation of the actual return from the expected return. In other words risk can be defined as the volatility of corporation's market value. Risk management, on the other hand, is the process of measuring or assessing risk and then developing strategies to manage the risk. In general, the strategies employed include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk.

2.2.1 Credit Risk

Credit risk is most simply defined as the uncertainties that a banks' borrower or counterparty will fail to meet its obligations in accordance with agreed terms. Risk, in other words, can be called as "the risk that the promised cash flows from loans and securities held by Financial Institutions may not be paid in full". As per NRB Unified Directives: 'credit risk is the major risk that banks are exposed to during the normal course of lending and credit undertaking'. Credit risk involves inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions.

Credit risk is generally made up of transaction risk or default risk and portfolio risk. The portfolio risk in turn comprises intrinsic and concentration risk. The portfolio risk depends on both external and internal factors. The external factors are the state of the economy, wide swings in commodity/equity prices, foreign exchange rates and interest rates, trade restrictions, economic sanctions, Government policies, etc. The internal factors are deficiencies in loan policies/administration, absence of prudential credit concentration limits, inadequately defined lending limits for Loan Officers/Credit Committees, deficiencies in appraisal of borrowers financial position, excessive dependence on collaterals and inadequate risk pricing, absence of loan review mechanism and post sanction surveillance, etc.

Another variant of credit risk is counterparty risk. Counterparty risk comes from nonperformance of a trading partner. The non-performance may arise from counterparty's refusal to perform due to an adverse price movement caused by systematic factors, or from some other political or legal constraint that was not anticipated by the principals. Diversification is the major tool for controlling nonsystematic counterparty risk. Counterparty risk is like credit risk, but it is generally viewed as a more transient financial risk associated with trading than standard creditor default risk.

In addition, counterparty's failure to settle a trade can arise from other factors beyond a credit problem. So, the goal of credit risk management is to maximize a banks risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Bank should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to

risk management and essential to the long-term success of any banking organization.

Types of Risk Faced by Commercial banks

Risks or uncertainties are the integral part of banking business. In banking sector, risk refers to the possibility that the bank will turn into liquidation. There are several inherent risks in banking which can be classified into three broad categories i.e. Credit Risk, Market Risk and Operational Risk. Moreover, the banks face the systematic risk too. Primarily, risk in the banking context is credit risk through lending, which occupies about 60% of total risk portfolio. Therefore, this study is mainly focused on the credit risk. However, the brief introductions of Market Risk, Operational Risk and Systematic Risk have also been included.

2.2.2 Operational risk

Operational risk is associated with the problems of accurately processing, settling, and taking or making delivery on trades in exchange for cash. It also arises in record keeping, processing system failures and compliance with various regulations. The Basel Committee on Banking Supervision, Basel (September, 2000), defines operational risk as “the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.” Operational risk arises from inadequate control systems, operational problems and breaches in internal controls, fraud and unforeseen catastrophes leading to unexpected losses for a bank. Many of the operational-risk-related functions such as regulatory compliance, finance management, frauds, Information Technology, legal, and insurance are carried out by the staff and thus human resources itself becomes a cause for operational risk

2.2.3 Market Risk

Market risk is the risk incurred in the trading of assets and liabilities due to changes in interest rates, exchange rates, and other asset prices. So, Market risk is exposure to the uncertain market value of the firms asset. Major factors affecting Market risk are:

Liquidity Risk

Interest Rate Risk

Foreign Exchange Risk

2.2.4 Liquidity Risk

Liquidity risk arises whenever financial institutions liability holders, such as depositors or insurance policyholders, demand immediate cash for their financial claims. When liability holders demand cash immediately – that is, put their financial claims back to the FI – the FI must either borrow additional funds or sell off assets to meet the demand for the withdrawal of funds. An institution is said to have liquidity if it can easily meet its liability holders demand for cash either because it has cash on hand or can otherwise raise or borrow cash.

In banking sector, Liquidity risk is created when banks hold different sizes of assets and liabilities and mismatch occurs in maturity of the assets and liabilities. Less amount of liquid asset in bank may result in bankruptcy where as excess liquid asset may carry interest rate risk over the period of time. As it is fatal risk, prudent liquidity management is the primary function of banking sector. Liquidity management is also to make sure that expected shortfall amounts are funded at a reasonable cost, ensure excess fund are invested properly with reasonable returns and without carrying any interest rate risk to the bank

2.2.5 Interest Rate Risk

Interest rate risk is the risk incurred by a financial institution when the maturities of its assets and liabilities are mismatched. Interest Rate Risk is the probability of decline in earnings, due to the adverse movements of the interest rates in various markets. The applicable interest earned on assets and liabilities and hence net interest margin is the function of market variables and it may get changed overnight or over a period of time according to the market situation. Changes in the interest rate can significantly alter net interest income depending on the mismatch of assets and liabilities held by the bank. Changes in interest rates also affect the market value of banks equity.

2.2.6 Foreign Exchange Risk

Foreign exchange risk is the risk that exchange rate changes can affect the value of banks assets and liabilities denominated in foreign currencies. The bank is also exposed to foreign exchange risk, which arises from the maturity mismatching of foreign currency positions. In the foreign exchange business, banks also face the risk of default of the counterparties or settlement risk. While such type of risk crystallization will not cause principal loss, banks may have to undertake fresh transactions in the cash/spot market to replace the failed transactions. Thus, the bank may incur replacement cost, which depends upon the currency rate movements.

2.2.7 Systematic Risk

Some commentators define systemic risk as “the probability that cumulative losses will occur from an event that ignites a series of successive losses along a chain of financial institutions or markets comprising a system.” Others, however, define it as “the potential for a modest economic shock to induce substantial volatility in asset prices, significant reductions in corporate liquidity, potential bankruptcies and efficiency losses.”

A common factor in the various definitions of systemic risk is that a trigger event, such as an economic shock or institutional failure, causes a chain of bad economic consequences—sometimes referred to as a domino effect. These consequences could include (a chain of) financial institution and/or market failures. Less dramatically, these consequences might include (a chain of) significant losses to financial institutions or substantial financial-market price volatility. In either case, the consequences impact financial institutions, markets, or both.

2.2.8 Credit Risk Management

This process for extending credit has a multiplier effect on the money supply, so this is why credit is a powerful driver of our economy.

Extending credit would therefore be impractical today, if not impossible, without the events that have been brought on by deregulation, technology, and disintermediation in the financial services industry, all of which have actually changed the psychology of extending business and corporate credit. The potential systematic impact on other financial entities when one financial institution holds a significant aggregate exposure for a borrower, obligor, or counterparty is to be learned.

As the name implies, credit risk management is predicated on the existence of risk and uncertainty to leverage the earnings from lending to a borrower. Credit risk arises wherever a lender is exposed to loss from a borrower, counterparty, or an obligor who fails to honor their debt obligation as they agreed and contracted. Borrower demand credits that will be used to reinvest in their business for which they expect to earn return. At the same time, lenders or financial intermediaries supply credit to earn a return when these companies borrow.

Like wise, when exposures reach imprudent lending limits because of high credit concentrations, the losses may become too large relative to the institutions' capital and overall risk levels and the risk of credit defaulters can also occur from exposures based on the concentrations of correlated risk factors that are related to specific risk events.

Hence the credit risk management involves; risk assessment of a single obligor and then moving on the risk measurement of an entire portfolio, operational practices and structural process for implementing and creating a sound credit environment, credit selection process that is used to evaluate new business and describe how transaction risk exposure becomes incorporated into portfolio selection risk, techniques used in fundamental credit analysis, qualifying and integrating a transaction into the credit portfolio with the applications of credit risk management, credit rating system that have come to play a pivotal role in managing credit risk.

2.2.9 Credit Risk Mitigation

To mitigate the credit risk bank may use a number of techniques to which they are exposed. As such credit risks exposures may be collateralized or a loan exposure may be guaranteed by a third party. As a general rule, no secured claim should receive a higher capital requirement than an otherwise identical claim on which there is no collateral. Similarly, the effect of the Credit Risk Mitigation shall not be double counted and capital requirement will be applied to banks on either side of the collateralized transactions. There are certain conditions such as legal certainty, low correlation with exposure, maturity mismatch, currency mismatch, risk management and qualifying criteria for guarantees need to be fulfilled.

2.2 Principal of Risk Management

2.2.1 Principles for the Assessment of Banks' Management of Credit Risk

Establishing an Appropriate Credit Risk Environment

Principle 1: The board of directors should have responsibility for approving and periodically reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks. (Rose, 1997:301).

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, and monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels. (Sharpe, Alexander & Bailey: 2004:253).

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee. (Rose, 1997:403).

Operating under a sound credit granting process

Principle 4: Banks must operate under sound, well-defined credit-granting criteria. These criteria should include a thorough understanding of the borrower or counter party, as well as the purpose and structure of the credit, and its source of repayment. Rose.(1997:314).

Principle 5: Banks should establish overall credit limits at the level of individual borrowers and counter parties, and group of connected counter parties that aggregate different types of exposures, both in the banking and trading book and on and off balance sheet. (Khan & Jain, 1988:669)

Principle 6: Banks should have a clearly established process in place for approving new credits as well as the extension of existing credits.

Principle 7: All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be monitored with particular care and other appropriate steps taken to control or mitigate the risks of connected lending.

2.2.2 Fundamental Principles for the Management and Supervision of Liquidity Risk

Principle 1: A bank is responsible for the sound management of liquidity risk. A bank should establish a robust liquidity risk management framework that ensures it maintains sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources. Supervisors should assess the adequacy of both a bank's liquidity risk management framework and its liquidity position and should take prompt action if a bank is deficient in either area in order to protect depositors and to limit potential damage to the financial system. (Sharpe, Alexander & Bailey: 2004:253).

Governance of liquidity risk management

Principle 2: A bank should clearly articulate a liquidity risk tolerance that is appropriate for its business strategy and its role in the financial system. (Khan & Jain, 1988:669)

Principle 3: Senior management should develop a strategy, policies and practices to manage liquidity risk in accordance with the risk tolerance and to ensure that the bank maintains sufficient liquidity. Senior management should continuously review information on the bank's liquidity developments and report to the board of directors on a regular basis. A bank's board of directors should review and approve the strategy; policies and practices related to the management of liquidity at least annually and ensure that senior management manages liquidity risk effectively. (Radhaswamy & VasuDevan: 1979).

Principle 4: A bank should incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities (both on and off-balance sheet), thereby aligning the risk-taking incentives of individual business lines with the liquidity risk exposures their activities create for the bank as a whole. Joshi, and Shrestha, (2058:152).

Fundamental Principles for the Management and Supervision of Liquidity Risk

Measurement and Management of Liquidity Risk

Principle 5: A bank should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities and off-balance sheet items over an appropriate set of time horizons. (Khan & Jain, 1988:669).

Principle 6: A bank should actively monitor and control liquidity risk exposures and funding needs within and across legal entities, business lines and currencies,

taking into account legal, regulatory and operational limitations to the transferability of liquidity. (Radhaswamy & VasuDevan: 1979).

2.2.3 Principles for the Management of Operational Risk

There are some fundamental principles that all banks, regardless of their size or complexity, should address in their approach to operational risk management.

-) Ultimate accountability for operational risk management rests on the board, and the level of risk that the organization accepts, together with the basis for managing those risks, is driven from the top down by those charged with overall responsibility for running the business.
-) The board and executive management should ensure that there is an effective, integrated operational risk management framework. This should incorporate a clearly defined organizational structure, with defined roles and responsibilities for all aspects of operational risk management/monitoring and appropriate tools that support the identification, assessment, control and reporting of key risks.
-) Board and senior management should recognize, understand and have defined all categories of operational risk applicable to the bank. Furthermore, they should ensure that their operational risk management framework adequately covers all of these categories of operational risk, including those that do not readily lend themselves to measurement.
-) Operational risk policies and procedures that clearly define the way in which all aspects of operational risk are managed should be documented and communicated. These operational risk management policies and procedures should be aligned to the overall business strategy and should support the continuous improvement of risk management.
-) All business and support functions should be an integral part of the overall operational risk management framework in order to enable the bank to manage effectively the key operational risks facing the bank.

-) Line management should establish processes for the identification, assessment, mitigation, monitoring and reporting of operational risks that are appropriate to the needs of the bank, easy to implement, operate consistently over time and support an organizational view of operational risks and material failures.

2.3 Review of NRB Directives

NRB has been issuing the circulars based on various acts, rules, regulations and directives time to time to control and monitor the commercial banks. At present context, the directives are issued by NRB quite regularly. In 2005, NRB, by using the rights given by the Nepal Rastra Bank Act 2058, has issued unified directives to regulate all three categories of financial sectors in Nepal to ensure that the banking industry functions as per the international standard and also to have more effective control mechanism for overall financial sector. Latest NRB Unified Directives 2067 has in implementation. In this new unified directive, loan classification and provisioning of loans of financial institutions are mentioned with the objective to minimize the possible risks associated with credits extended by financial institutions in the form of overdraft, loans and advances, bills purchased and discounted. Therefore, as per this new unified directive banks should classify the loans and advances on the basis of aging of principal amount into the following four categories.

Classification of Loans and Advances:

Pass Loan

Loan and advances which principal amount payment are not due yet or if the due has not exceeded the due date for a period of three months are included under this category. Such loans and advances are defined as Performing Loan.

Substandard Loan

All the loans and advances, which due principal amounts have exceeded the due date for a period of three months to six months are included in this category.

Doubtful Loan

All the loans and advances, which principal amount is due for a period of six months to one year, are included under this category

Bad Loan

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

Pass Loans and advances are defined as Performing Loans. Loans and Advances falling under the category of Sub-standard, Doubtful, and Bad Loan are classified and defined as Non- Performing Loan.

There is no restriction to grade the loans and advances from low-risk category to high-risk category. For e.g. Substandard loans and advances can be graded to the Doubtful or Bad Loans Category; and the Doubtful loans and advances can be graded under the Category of Bad Loans on the basis of the internal discretion of the banks management.

The term “Loans and advances” also includes the Bills Purchase and Discounts.

Additional Arrangements in Respect of Pass Loan

The loans and advances that are fully secured by gold, silver, fixed deposit receipts and Nepal Government securities shall be included under “Good loan/Pass Loan” category. However, where the fixed deposit receipt or government securities or NRB Bonds is placed as secondary collateral for security against loan for other purposes, such loan has to be classified on the basis

of ageing. Loans against Fixed Deposit Receipts of other banks shall also qualify for inclusion under Pass Loan. If the working capital loans of one year maturity period is renewed that can be graded into pass loan category. In working capital loans, if the interest payments are not timely made, such loans can be graded as per the due days.

Additional Arrangements in Respect of “Bad Loan”

Even if the loan is not past due, loans having any or all of the following discrepancies shall be classified as “Bad Loan”

-) Insufficient collateral.
-) If the borrower has been declared bankrupt.
-) The borrower is absconding or cannot be found
-) Purchased or discounted bills are not realized within 90 days from the due date; and if the non-funded facilities like Letter or credit, guarantee, and other liabilities turn into funded facilities and is not repaid within 90 days.
-) Misuse of Loan: (*Here misuse of Loans means if the loan has not been used for the original purpose for which it was taken, the business for which is the loan is taken is not in operation, the incomes from the concerned business are used for other purposes instead of repaying of loan, and if the misuse of the funds are proved on inspection by the inspector or by the auditor.*)
-) Owing to non-recovery, initiation as to auctioning of the collateral has passed six months and if the recovery process is under litigation.
-) Loans provided to the borrowers who are blacklisted by the Credit Information Center Limited.
-) If the project or business for which the loan is provided is not in the condition of operating or if it is closed.
-) Credit card loan not written off which is due since 90 days.

) Trust Receipt Loans that not recovered within the maturity.

Rescheduling and Restructuring of Loan

) In respect of loans and advances falling under the category of Substandard, doubtful or loss, banks may reschedule or restructure such loans upon receipt of a written plan of action from the borrower citing the following reason:

- a) Evidence of adequate collateral and documentation regarding Loans.
- b) An evaluation of the borrower/ enterprises management with particular emphasis on efficiency, commitment and high standards of business ethics.

In the written plan of action, the borrower should mention the internal and external causes contributing to deterioration of the quality of loan. The reduced degree of risk inherent to the borrower/ enterprise determined by analyzing its balance sheet and profit and loss account in order to estimate recent cash flows and to project future one, in addition to estimate recent cash flows and to project future ones, in addition to assessing market conditions.

Note: Rescheduling means to extend the loan payment period that have been borrowing by the customer. Restructuring means to change the loan type and terms and conditions and including the changes in loan payment schedule.

) To reschedule or restructure the loans, it is mandatory that at least 25% of past dues up to rescheduled or restructured date should be paid by the borrower. If the loan will be regular for two years it can be categorized into Pass Loan.

Loan Loss Provisioning

) The loan loss provisioning on the basis of the outstanding loans, advances and Discounts are classified as per the new unified directives 2067, shall be provided as follows:

Table: 2.2
Loan Loss Provisioning

Classification of Loan	Loan Loss Provision
Pass Loans	1 %
Substandard Loans	25 %
Doubtful Loans	50%
Bad Loans	100%

Loan loss provision set aside for performing loan is defined as “General Loan Loss Provision” and Loan Loss provision set aside for Non-Performing Loan is defined as “Specific Loan Loss Provision”. Where the banks provide for loan loss provisioning in excess of the proportion as required under directives of NRB, the whole amount of such additional provisioning may be included in General Loan loss Provision under the supplementary Capital.

- J Loan Loss Provisioning in respect of reschedule, restructured or swapped loan a) for rescheduled/restructured loan, loan loss provision should be at least 12.5%. b) In Case of rescheduling or restructuring or swapping of insured or guaranteed priority sector credit, the loan loss provisioning shall be provided at one fourth of the percentage mentioned in clause (a) (c) If interest and principle of rescheduled / restructured loans have been served regularly for two years, such loans can be converted into “Pass Loan” Category.
- J Priority sector or deprived sector loans which are not insured should be provisioned as per above clause no. 1.
- J 4. Additional Provisioning in the case of Personal Guarantee Loans Where the loan is extended only against personal guarantee, a statement of the assets, equivalent to the personal guarantee amount not claimable by any other shall be obtained. Such loans shall be classified as per above and where the loans fall under category of Pass, Substandard and Doubtful, in addition to normal loan loss provision applicable for the category, an

additional provision by 20 percent point shall be provided. Classification of such loans and advances shall be prepared separately. Hence the loan loss provision required against the personal guarantee loan will be 100% for all categories of loans.

Capital Adequacy Ratio (Directive No. 1)

Capital Adequacy Ratio (CAR) is the proportion of Capital Fund or Shareholders equity on the total risk weighted asset of a bank. In other words, it is the capital portion, which is used to finance the asset. The total risk weighted asset, on the other hand, includes both on & off balance sheet items, which has been rated with certain percentage of risk. The risk weight of asset ranges from zero for cash, balance at NRB and investment in government bonds to 100 % for loans and advances. The higher the risk weighted asset means lower will be the capital adequacy ratio as Capital Adequacy Ratio is the ratio between Capital fund and Risk Weighted Asset. According to unified directive 2067, the capital fund includes two types of capital; primary and supplementary capital.

Core Capital (Tier 1)

Primary capital refers to core capital of a bank, which includes the share capital employed by the shareholders and all the reserve maintained by a bank. Primary capital includes:

Table: 2.3
Core Capital (Tier 1)

A	Paid up Equity Share Capital
B	Irredeemable Non-cumulative preference shares
C	Share Premium
D	Proposed Bonus Equity Shares
E	Statutory General Reserves
F	Retained Earnings
G	Un-audited current year cumulative profit
H	Capital Redemption Reserve
I	Capital Adjustment Reserve
J	Dividend Equalization Reserves
K	Other Free Reserve
L	Less: Goodwill
M	Less: Miscellaneous Expenditure not written off
N	Less: Investment in equity in licensed Financial Institutions
O	Less: Investment in equity of institutions with financial interests
P	Less: Investment in equity of institutions in excess of limits
Q	Less: Investments arising out of underwriting commitments
R	Less: Reciprocal crossholdings
S	Less: Other Deductions

Supplementary Capital (Tier II)

Supplementary Capital refers to all the reserves bank has made for specific purpose, such as loan loss, foreign exchange loss etc. The supplementary capital includes:

Table: 2.4
Supplementary Capital (Tier II)

A	Cumulative and/or Redeemable Preference Share
B	Subordinated Term Debt
C	Hybrid Capital Instruments
D	General loan loss provision
E	Exchange Equalization Reserve
F	Investment Adjustment Reserve
G	Assets Revaluation Reserve
H	Other Reserves

Capital Fund (Tier I and Tier II)

Capital Fund includes both the core and supplementary capital. It can be stated in equation as below:

$$\text{Capital Fund} = \text{Core Capital} + \text{Supplementary Capital}$$

Risk Weighted Asset

Risk Weighted Asset, on the other hand, refers to the all the on and off balance sheet assets, which has provided certain percent of risk weight that ranges from zero for cash, balance with NRB, investment in government securities to 100 percentage for loans and advances, fixed asset etc. Risk Weighted Asset includes both the on and off balance sheet assets.

On balance sheet asset includes three types of risk-weighted asset (i.e. 0 %, 20 % and 100%). Zero percentage risk weighted assets include cash and bank balance, gold (tradable), investment in NRB and Government Bonds, loan against own banks fixed deposit receipts and government bonds, Interest receivable on National Saving Bonds. 20 % risk weighted asset includes balance with local and foreign banks, loan against other banks fixed deposit receipts, money at call, loan

against internationally rated banks guarantee and other investment on internationally rated banks. 100 % risk weighted asset includes investment on shares and debentures, loans and advances, fixed assets, other investment, all other assets (excluding tax paid and accrued interest receivable).

Off balance sheet assets includes four types of risk-weighted asset (i.e. 0 %, 10%, 20%, 50 % and 100%). Bills collection has 0 % risk. Letter of credit with maturity period less than 6 months and guarantee against counter guarantee of international rated foreign banks have 20 % risk. 50 % risk weighted asset includes letter of credit with maturity period more than 6 months, bid bond, underwriting and performance bond. 100 % risk weighted items include advance payment guarantee, financial guarantee, other guarantee, irrevocable loan commitment, contingent liability on income tax and acceptance and other contingent liability.

The Capital Adequacy ratio of a bank is calculated as below:

Capital Adequacy Ratio for Core Capital

$$\text{Capital Adequacy Ratio} = \frac{\text{Core Capital}}{\text{Total Risk Weighted Assets}}$$

Capital Adequacy Ratio for Total Capital Fund

$$\text{Capital Adequacy Ratio} = \frac{\text{Capital Fund}}{\text{Total Risk Weighted Assets}}$$

According to NRB directive 2067, the statutory Capital Adequacy Ratio for core capital is 6 %; whereas CAR for total capital fund is 10 % for 'A Class' financial institutions.

2.4 Review of Related Studies

During this study different review of related books, review of related thesis, review of related articles, and review of related papers have done for the concrete findings.

2.4.1 Review of Previous Research Works

Shrestha, (2007) has conducted a research topic on “*A study of Credit risk management of Nepalese commercial banks comparative study between Kumari bank ltd. and Machhapuchchhre bank ltd.*” has made study about a part of credit risk associated with those banks. The study aims to examine and analyze how the selected commercial Banks have managed mainly credit risk in this competitive Nepalese banking industry.

His Main Objective:

-) Rates of commercial banks have been fluctuating. Deposits and lending rates were increased immediately after liberalization of the interest rate on August 31, 1989 but however, started to decline which have helped in increasing the credit flow.
-) Interest rate structure has direct influence on profitability of commercial banks. Decreasing lending rate helps to increase the profitability through increasing the credit.
-) Deposits are more interest rate conscious and positively co-related.

His Major Findings:

-) Loans and advances of commercial banks have been found to be continuously increasing with the decline in interest rates.
-) Effective interest rate structure helps in proper utilization of resources as measured by loan to deposit ratio.
-) Most of the banks are having similar interest rate structure which lessens the importance of liberalization of interest rate.

His Major Recommendation:

-) Relationship between interest rate and deposit.
-) Significance of interest rate on lending.
-) Impact of liberalization on banking performance, especially in terms of interest rates.

The study of credit risk management, following major findings have been obtained:

-) The major problems in credit risk are related to the broad areas of concentrations, credit processing, and market- and liquidity-sensitive credit exposures. From the analysis of primary data, it is found that the majority of the respondents of both banks have favored with the banks single sector, which is up to 10 % of total loan. However, the sector wise lending analysis portrays that KBL and MBL have extended up to 19.88 % and 30.12% of loan in a single sector respectively in FY 2005/06. Similarly, the exposure on the single sector of KBL and MBL exceeds 10 % of total loan in 3 and 5 sectors respectively. The single sector loan to core capital shows that the ratio crossed 100% in 2 sectors of both KBL and MBL. In regard to concentration risk, KBL has more risk in manufacturing and others sector where as MBL has more risk on manufacturing and Whole seller and sectors as the single sector credit to core capital ratio in these sectors is more than 100 %. MBL has very high loan concentration on manufacturing sector of 199.35% of the core capital. From the personal interview of the key respondents it was found that both banks have been extending credit in those highly concentrated sectors after getting approval from the board of director. This clarifies that concentration risk is the main source of credit risk for KBL and MBL.
-) ii. Similarly, lack of systematic and thorough credit processing is also the major source of credit risk in these banks. The problems in credit

processing include lack of thorough credit assessment, absence of testing and validation of new lending techniques, subjective decision-making by senior management, lack of effective credit review process, failure to monitor borrowers or collateral values, and failure of banks to take sufficient account of business cycle effects etc. Likewise the market-sensitive and Liquidity-sensitive exposures also increase the credit risk of these banks. Similarly, it is found that both banks have their own rating system of the credit client and the sectors. Both banks have ranked 1st to the manufacturing sector where as the Agriculture sector has been ranked the last on the basis of priority. KBL has chosen others sector and real estate business in 2nd and 3rd position respectively, where as the MBL has just opposite preference in these sectors.

) iii. Likewise, KBL has ranked Character, Collateral and Capacity of borrower first, second and third criterion for granting credit where as MBL ranked Character, Capacity and Capital first, second and third priority respectively. The hypothesis test on the preference of the banks staff also proves that there is no significant difference between observed and expected frequency of ranking.

iv. From the analysis of lending against various collaterals, it has been found that both the banks have lent highest amount of loan against the movable/ immovable property. The average lending over 5 years period of KBL and MBL against movable/ immovable property is Rs. 2,987 million and 2,673 million respectively. Similarly, the lending against others securities (i.e. other than prescribed by NRB) is second position for both banks, whereas the lending against guarantee of local banks and finance companies is in third position. However, MBL has also granted loan without any collateral. The average amount of loan without collateral is Rs. 3 million annually, which is in the 6th place on ranking. On the contrary, KBL has not granted any loan without backing any collateral.

Shrestha, (2009) has conducted a research topic on “*Credit Risk Management of Nabil Bank Limited And Nepal Investment Bank Limited*” has made study about a part of credit risk associated with those banks. The study aims to examine the status of the loan portfolio of the banks, problems and weakness in credit risk management. The study of credit risk management, following major findings have been obtained:

-) The overall aspect of liquidity position, Liquidity position of NIBL is comparatively better than NABIL. The mean current ratio of NABIL is 1.89 and NIBL is 1.99 the current ratio of NIBL is little higher than NABIL. Cash and bank balance to total deposit ratio of NIBL has higher than NABIL i.e. $10.65\% > 5.67\%$ which indicates that the bank has higher liquidity of NIBL as compare to NABIL. Cash and bank balance to current assets ratio of NIBL is higher than NABIL i.e. $10.99\% > 8.20\%$.

His Main Objectives:

-) To examine the relationship of interest rate with amount deposits and amount lent.
-) To examine the sensitivity of interest rate with inflation rate.
-) Most of the commercial banks contradict the general financial theories.

His Major Findings:

-) The relation between amount of deposits and interest rate on deposit, in general concept, must be positive. But deposits are increasing despite the decrease in the general level of interest.
-) The result of such phenomenon is that there are fewer investment opportunities for the banking sectors as well as general investors.
-) The relation between total amount of loan and the lending rate is negative and significant.

His Main Recommendation:

-) However, the change in the total amount of loan flow is not proportionate with the change in the lending rate.
-) Correlation between interest rate and inflation is not significant.

Not only interest rate is responsible to shape the profitability of banks but the profitability position of NABIL and NIBL are Return on loan & advances ratio of NABIL is higher than that of NIBL i.e. $4.64\% > 2.46\%$. Return on total assets ratio of NABIL is slightly higher than NIBL i.e. $2.61\% > 1.79\%$. However, NABIL seems successful in managing and utilizing the available assets in order to generate revenue. Return on equity of NABIL is higher than NIBL, which shows that NABIL is more successful to earn high profit through the efficient utilization of its equity capital. Total interest earned to total assets ratio of NABIL is relatively little higher than that of NIBL i.e. $5.85\% > 5.52\%$. Total interest earned to total operating income ratio of NABIL is lower than NIBL. It means the greater portion of total operating income is occupied by total interest for NIBL. Total interest paid to total assets ratio of NIBL is higher than NABIL i.e. $2.38\% > 1.76\%$. It shows NIBL has high interest expenditure to total assets. It supports NIBL to increase to interest paid to operating income. Overall findings of profitability ratios show that NABIL has utilized its fund in risk free asset and NIBL has earned profit by interest mobilization.

Review of Articles and Journals

Adhikari (2008) (Director, Bank Supervision Department, NRB) wrote an article on *Non-Performing Loan & its Management* which was published in NRB News letter Volume 4 (*Publication of Central Bank of Nepal*). In the article he describe the reasons of NPL and its resolution as under.

His Main Objectives:

-) Deposit rates of all sample banks under study are in decreasing trend; meaning that every year deposit rates of sample banks under study have decreased.
-) Lending rates of all sample banks under study are also in decreasing trend; means that every year lending rates of sample banks under study have decreased.
-) Analysis shows that interest rates on lending are far higher than deposit rates of sample banks.

His Major findings:

-) The correlation coefficient between these two variables, (deposit rate and lending rate) of sample banks comes highly positive.
-) The simple correlation coefficient between deposit rate and deposit amount of sample banks were highly negative. But out of them, correlation coefficient analysis of one sample bank is found to be negative.
-) To means that in that case the theory doesn't match the analysis.

His Major Recommendation:

-) So writer conclude that the result appears in that study was different than the theory.
-) The correlation analysis between lending rate and lending amount of all sample banks under study comes highly negative.
-) This relation between two variables (lending rate and lending amount) of sample banks matches with the theory which says with the increase in lending rate, lending amount decreases and vice-versa.

Reason behind High Level of NPA: The process of credit risk management starts from the formation of appropriate credit policy/guidelines/rules and also comprises of credit appraisal, mitigation of the credit, credit documentation, processing, credit control, monitoring, follow-ups, counseling, board oversight and timely recovery actions. When any of these steps is compromised, the loan may convert into NPL. Lack of guiding rules at the beginning, Inadequate project appraisal, Inadequate equity contribution, Inadequate credit risk mitigates especially for peculiar new projects, "Consortium financing" without the spirit, Business failure due to conflict and some other reasons, Lack of internal control on credit operation, Poor credit monitoring, Lack of special purpose vehicles to reduce NPA, Lack of timely recovery action, Traditional supervision in the past and Insider lending and other poor governance issue are the important factors that contributed for creating NPA and retention of high level of NPA for long period of time.

NPL Resolution: Once the loan is converted in to the NPL, it must be resolved on time with appropriate NPL management strategy and methodology. The following are some of the NPL management mechanism;

- Creation of special unit for NPA management to manage the NPA by specialized people concentrating on nonperforming loans.
- Formulation of special recovery policies for short period of time to resolve the accumulated NPA.
- Formation of National Credit Restructuring Cell to restructure the loan of those borrowers with national interest, which are feasible in future but not able to serve the loan and run the business due to debt trap.
- Formation of Special purpose Vehicles (SPVs) for a certain period of time and reduce the level of NPL substantially. It can be done by way of formation of specific Assets Management Company (AMC) for a bank or national level AMC.

- Timely recovery actions & timely write-offs of dead accounts. Un-due time for the recovery actions to the borrower further complicates the accounts. Once the account get defaulted starts recovery action immediately. It must be rule based. Similarly write-off should be done regularly. Once the account of a borrower gets dead, it's a business loss. It has to provide for and removed from the assets without bailing out the defaulted borrower.

On 2008 Takang, Felix Achou (University of Skövde, School of Technology and Society) Ntui, Claudine Tenguh (University of Skövde, School of Technology and Society) wrote an article on *Bank performance and Credit Risk Management*. The axle of his article is to have a clearer picture of how banks manage their credit risk. In this light, the study in its first section gives a background to the study and the second part is a detailed literature review on banking and credit risk management tools and assessment models. The third part of this study is on hypothesis testing and use is made of a simple regression model. This leads us to conclude in the last section that banks with good credit risk management policies have a lower loan default rate and relatively higher.

2.5 Research Gap

From the review of various literatures, it has been found many research works have been done on the study of NRB Directives and its compliance and analysis of credit management through loan loss provision, non-performing loans and capital adequacy. Very few theses have been found on the credit risk management and the analysis based on the financial ratios of liquidity risk, NPL and other trends. Sector-wise lending i.e. portfolio management, security-wise lending and product-wise lending was not analyzed which is the most important aspect of the credit risk management. So, the researcher can make further research on credit risk management based on the portfolio management in many ways. Liquidity, asset management, position of risk weighted assets, profitability and other risk and the

actual practices followed by the management of Nepalese commercial banks from its own side besides the NRB directives to manage and control the credit risks has also high-lightened.

Hence, the researcher had attempted to fill this gap by measuring the credit risk of SCBNL and RBB by studying their credit risk management system. This study also aims to find out the organizational structure of SCBNL and RBB for the proper implementation and compliance of NRB Directives and to manage the credit risk as per the risk management guidelines of NRB.

CHAPTER III

RESEARCH METHODOLOGY

The analysis of data will be done according to pattern of data available. Because of certain limitations simple analytical statistical tools such as graph, percentage, Karl Pearson's co-efficient of correlation and the method of least square are adopted in this study, similarly, some strong accounting tools such as ratio analysis and trend analysis has been used for financial analysis.

The various calculated result obtained through financial accounting and statistical tools tabulated under different heading. Then these will be compared with each other to interpret the results.

For the analysis, both the primary and secondary data of these banks are used collected from their quarterly reports, periodic annual reports issued. The NRB guidelines and reports are also studied in details; the views of customers are reviewed and interpreted for the study. For collecting the information different web sites are surfed frequently from where we can find out the latest information of each financial sector and so on.

3.1 Research Design

The research design was aimed to ensure the research can clearly answer the research problem and involved systematizing the research activity. The research is carried out as the basis of secondary sources data in which data already exists is the most appropriate for this research. Descriptive and analytical research design is used in this study and effective research techniques are employed to especially identify the weakness of these banks.

3.2 Universe and Sample

The universe of the study is all commercial banks of Nepal (private and public) operating and facilitating credit products to its customers. There are 28

commercial banks in Nepal. All the banks have been involving the banking activities since long and offering credit to its customers. Out of them, two commercial banks have been chosen on random sampling method. The aim to selection of a sample is one from public banks and another from any private sector banks. SCBNL and RBB are sample for the study.

3.3 Data Collection Procedures

The annual reports of the concerned banks were obtained from their head office and their websites. The main sources of data are annual report of concern financial institute. NRB publication such as Banking and Financial Statistics Economic Reports, Annual Reports of NRB etc has been collected from the personal visit of concerned department of NRB at Baluwatar. Besides, a details review materials are collected from the library of Shanker Dev Campus, Central Banks' Library and Central Library of T.U.

3.4 Sources of Data

The study is mainly based on the secondary data collected from the different published sources i.e. internal secondary data and external secondary data. The annual reports of RBB and SCBNL, various reports from NRB and other reports are used to collect the secondary data. Besides these, other essential data and information were collected from some published and unpublished documents. The research has also consulted the library to gather necessary data and information during the course of research work.

3.5 Data Collection Techniques

Both the technique of collecting secondary data internal and external have been used to obtained the necessary data/information from internal accounting, booklets, journals, thesis of previous researchers, periodic and annual report

published by NRB and articles of different bankers. Different websites have been used <http://www.nrb.org.np>, www.google.com

3.6 Tools and Techniques Used

"The analysis of data consists of organizing, tabulating, and performing statistical analysis" (Wolf and Pant: 127). In this study, various financial and statistical tools have been used to achieve the objective of the study. According to the pattern of data available, the analysis of data has carried out. Financial and statistical tools have been used and applied to find the objectives of the study.

Financial Tools/Ratios

The financial tool is one of the most important tool, which includes ratio analysis and the other one financial statement analysis have been used in this study. Financial tools are used to examine the financial strength and weakness of bank. Although there are many financial ratios, only selected ratios are used in this study.

Ratio analysis is a technique of comparative analysis and interpretation of financial statement. To evaluate the performances of an organization by creating the ratios from the figure of different accounts consisting in balance sheet and income statement is known as ratio analysis. Five types of ratios have been analyzed in this study, which are related to the credit risk management of the banks. They are presented below:

i) Credit to Deposits Ratio: - This ratio is calculated to find out how successfully the selected banks are utilizing their collections or deposits on loan and advances for the purpose of earning profit.

We have,

$$\text{Credit to Deposits Ratio} = \frac{\text{Total Credits}}{\text{Total Deposits}}$$

Where, Total Credits includes the loans, advances, discounts and advances

ii) Total Investment to Total Deposits Ratio: - Investment is one of the major sources of earning profit. It shows how properly firm's deposit has been invested on government securities and shares and debentures of other companies.

$$\text{Total Investment to Total Deposits Ratio} = \frac{\text{Total Investment}}{\text{Total Deposits}}$$

iii) Loan and Advances to Total Capital Fund Ratio: - This ratio shows the ability of selected banks in terms of earning high profit from loan and advances. Loan and advances to working fund ratio can be calculated by dividing loan and advances amount by total working fund.

$$\text{Loan and Advances to Capital Fund Ratio} = \frac{\text{Loans and Advances}}{\text{Capital Fund}}$$

iv) Portfolio at Risk: - This shows the portion of non-performing loans out of total loan portfolio. The ratio can be computed by:

$$\text{Portfolio at Risk} = \frac{\text{Total Non - performing Loan}}{\text{Total Loan}}$$

v) Loan Loss Provision to Total Loan: - The ratio indicates that is the position of provision for bad loans in the worst case scenarios.

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

$$\text{vi) Risk Weight Assets to Total Assets} = \frac{\text{Total Risk Weigh ted Assets}}{\text{Total Assets}}$$

vii) Investment on Government Securities to Total Deposits Ratio: - This ratio is used to find out the percentage of total assets invested on government securities, treasury bills, development bonds and other government securities. We can find out the ratio as:

$$\text{Investment on Government Securities to Total Deposits} = \frac{\text{Investment on Government Securities}}{\text{Total Deposit}}$$

viii) Capital Adequacy Ratios

Capital adequacy ratios are those where capital fund and risk weighted assets are compared. Those ratios are computed by:

$$\text{- Core Capital to Risk Weighted Assets} = \frac{\text{Core Capital}}{\text{Risk Weighted Assets}}$$

$$\text{- Supplementary Capital to Risk Weighted Assets} = \frac{\text{Supplementary Capital}}{\text{Risk Weighted Assets}}$$

$$\text{- Total Capital to Risk Weighted Assets} = \frac{\text{Total Capital}}{\text{Risk Weighted Assets}}$$

Statistical Tools

Some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, net profit and EPS are used to achieve the objective of the study.

i) Average/Mean

An average is a single value related from a group of values to represent them in some way, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group. There are various types of averages. Arithmetic mean (AM, Simple & Weighted), median, mode, geometric mean, harmonic mean are the major types of averages. The most popular and widely used measure representing the entire data by one value is the Arithmetic Mean. The

value of the Arithmetic Mean is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically, Arithmetic Mean (AM) is given by,

$$\bar{X} = \frac{\sum X}{n}$$

Where, \bar{X} = Arithmetic mean

$\sum X$ = Sum of all the values of the variable X

n = Number of observations

ii) Standard Deviation (SD)

Risk is defined as the variability of the returns of a period. The one-period rate of return is the basic random variable used in measuring an investment's risk. One such measure of risk is the standard deviation. Standard deviation is defined as the positive square root of the mean of the square of the deviation taken from arithmetic mean. Risk on individual assets or standard deviation for assets can be calculated using historical returns with this equation:

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

Where,

R = Rate of return on individual assets

\bar{R} = Average rate of return on individual assets

n = Number of years or observations

iii) Coefficient of Variation (CV)

The coefficient of variation reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviations known as coefficient of variation. The coefficient of dispersion based on standard

deviation multiplied by 100 is known as the CV. It is used for comparing variability of two distributions; the CV is defined as,

$$CV = \frac{SD}{Mean} \times 100 = \frac{\dagger}{\bar{X}} \times 100$$

Greater the CV, the more variable or conversely less consistent, less uniform, less sustainable and homogenous than the consistent more uniform, more stable and homogenous. This nature of CV uses that actual size of working capital.

iv) Karl Person's Coefficient of Correlation (r)

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is liner related to another. Coefficient of correlation is the measurement of the degree of relationship between two casually related sets of figure whether positive or negative. Its values lie somewhere ranging between - 1 to +1. If the both variables are constantly changing in the similar direction, the value of coefficient will be +1; two variables take place in opposite defection. The correlation is said to be perfect negative. In this study, simple correlation is use to examine the relationship of different factors with working capital and other variable. Karl Pearson's method, popularly known as Pearsonian coefficient of correlation, is most widely used in practice The correlation coefficient between two variables X and Y, usually denoted by r(X,Y), r_{xy} is a numerical measure of linear relationship between them and is define by

$$r_{xy} = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

v) Probable Error

Probable error of correlation is an old measure testing the reliably of an observed value of correlation coefficient. It is calculated to find the extent to which

correlation coefficient is dependable as it depends upon the condition of random sampling probable error of correlation coefficient denoted by P.E. (r) is obtained as,

$$\text{P.E. (r)} = 0.6745 \left| \frac{1 Z r^2}{\sqrt{n}} \right|$$

Where,

r = Calculated correlation coefficient

n = Number of observations

- If r P.E. (r), then the value of r is not at all significant.
- If r P.E. (r), then r is definitely significant.

vi) Multiple Correlation Coefficients

In real life there are so many independent variables do affect the dependent variables and study on degree of relationship between single dependent variables and number of independent variables in combination is called multiple correlation analysis. Such a relationship is measured by multiple correlation coefficients, which is denoted by $R_{1.23 \dots n}$. The subscript left to the dot is called the dependent variable and to right is the independent variables. Let us consider three variables say X_1 , X_2 and X_3 then $R_{1.23}$ is correlation coefficient between dependent variable X_1 and joint effect of the independent variables X_2 and X_3 on X_1 . The formula of $R_{1.23}$ can be presented as:

$$R_{1.23} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2r_{12}r_{23}r_{13}}{1 - r_{23}^2}}$$

The value of multiple correlation coefficient lies between 0 and 1, i.e. $0 \leq R_{1.23} \leq 1$.

vii) Trend Analysis

The easiest way to evaluate the performance of a firm is to compare its current ratios with past ratios. When financial ratios over a period of time are compared it

is known as the trend analysis. It gives an indication of the direction of change and reflects whether the firm's financial performance has improved, deteriorated or remain constant over time. The projections are based on the following assumptions: The least square method to trend analysis has been used in measuring the trend analysis. This method is widely used in practice. The straight-line trend of a series of data is represented by the following formula.

$$Y = a + bx$$

Here,

Y is the dependent variable, *a* is y intercept or value of y when x=0, b is the slope of the trend line or amount of change that comes in y for a unit change in x.

3.7 Method of Analysis & Presentation

All data will not be in readymade format or data obtained from various sources can not be directly used in their original form. Data should be manipulated according to needs. Data, information, figures and facts so obtained need to be checked, rechecked, edited and tabulated for computation. All data may not necessary, select essential data, classify them and tabulate them such a way that the will represent some qualitative as quantitative results. Then only tabulated data will be used in the research. For the purpose of study, collected and obtained data are scanned and tabulated under various heads. Selected suitable tools and proper analysis make data effective. The various calculated results obtained through financial and statistical tools are tabulated under different heading. Then they are compared, analyzed with each other to interpret results.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction, review of literature and research methodology is presented in the previous chapters that provide the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter collected data are analyzed and interpreted as per the stated methodology in the previous chapter. The main purpose of analyzing the data is to change it from unprocessed form to understandable presentation even for layperson. In this chapter, the collected secondary data have been analyzed and diagnosed by using financial and statistical tools.

The analysis of data consists of organizing tabulating and performing its financial and statistical analysis. Different tables and diagrams are shown to make the analysis simple and comprehensible.

4.1 Analysis of Non-Performing Loan

4.1.1 Status and Change in NPL

Table: 4.1
Change in NPL

Fiscal Year	RBB		SCBNL	
	Amount in Million	Percentage Change	Amount in Million	Percentage Change
2061/62	14470.52	-	252.19	-
2062/63	13,689.34	-5.40%	226.3	-10.27%
2063/64	8,622.24	-37.01%	195.93	-13.42%
2064/65	7,092.83	-17.74%	197.01	0.55%
2065/66	5,908.76	-16.69%	128.71	-34.67%
2066/67	4,942.58	-16.35%	91.04	-29.27%

The above table represents the status and change in NPL of RBB and SCBNL. It shows that the figure of NPL is in decreasing trend during the study period that result in negative growth rate. The highest NPL of RBB is 14470.52 million in the FY 2061/62 followed by the SCBNL by 252.19 million. NPL of both the banks are decreasing trend for remaining years of the study period. RBB has significantly reduced the NPL by 37.01 % in the FY 2063/64. Likewise SCBNL also reduced the NPL by 34.67% in FY 2064/65. In the FY 2063/64 NPL of SCBNL has increased by 0.55%.

Multiple Correlation Coefficients of NPL between RBB, & SCBNL

Let, the variable X_1 , X_2 , and X_3 denotes the Commercial Banks, RBB and SCBNL respectively. As Commercial Banks is dependent variable and RBB and SCBNL is independent variable, we calculate the multiple correlation coefficient of X_1 on X_2 and X_3 i.e. denoted by $R_{1.23}$

Table: 4.2
Multiple Correlation Coefficients of NPL between RBB, SCBNL &
Commercial Banks

X_1	X_2	X_3	x_1	x_2	x_3	$x_1 x_2$	$x_1 x_3$	$x_2 x_3$	x_1^2	x_2^2	x_3^2
2787	1368	226.	5898.	563	58.70	33255	3462	3309	3478	3178	3446.3
7.7	9.34	31	26	8.19	6	511	63.3	95.6	9471	9186	9
2558	8622.	195.	3601.	571.	28.32	20565	1020	1617	1296	3261	802.36
0.5	24	93	06	09	6	29	03.6	6.7	7633	43.8	
2421	7092.	197.	2236.	-	29.41	-	6578	-	5001	9183	865.30
5.85	83	02	41	958.	6	21431	6.24	2818	530	77.2	
				32		96		9.9			
1864	5908.	127.	-	-	-	71361	1328	8544	1109	4589	1590.7
8.5	76	72	3330.	214	39.88	73	51.2	7.08	5161	835	3
			94	2.39	4						
1357	4942.	91.0	-	-	-	26126	6435	2380	7064	9663	5862.0
4.64	58	4	8404.	310	76.56	909	05.1	04.6	0663	207	5
			8	8.57	4						
X_1 =109 897.2	X_2 =402 55.75	X_3 = 838. 02				$x_1 x_2$ = 66431 925	$x_1 x_3$ =129 0409	$x_2 x_3$ =642 434	x_1^2 =134 4944 58	x_2^2 =472 8675 0	x_3^2 12566. 84

Where, $x_1 = X_1 - \bar{X}_1$, $x_2 = X_2 - \bar{X}_2$, $x_3 = X_3 - \bar{X}_3$

Now, calculation of r_{12} , r_{23} and r_{13} we get

$$r_{12} = \frac{x_1 x_2}{\sqrt{x_1^2 x_2^2}} = \frac{66431925}{\sqrt{134494458} \sqrt{47286750}} = \frac{66431925}{79748390.65} = 0.833$$

$$r_{23} = \frac{x_2 x_3}{\sqrt{x_2^2 x_3^2}} = \frac{642434}{\sqrt{47286750} \sqrt{12566.84}} = \frac{642434}{770872.89} = 0.833$$

$$r_{13} = \frac{x_1 x_3}{x_3^2 x_1^2} = \frac{1290409}{\sqrt{12566.84} \sqrt{134494458}} = \frac{1290409}{1300065.51} = 0.9926$$

Now the multiple correlation coefficient of X1 on X2 and X3 i.e. $R_{1,23}$ can be calculated as

$$R_{1,23} = \sqrt{\frac{r_{12}^2 \Gamma r_{13}^2 Z 2 r_{12} r_{23} r_{13}}{1 Z r_{23}^2}}$$

$$R_{1,23} = \sqrt{\frac{0.833^2 \Gamma 0.9926^2 Z 2 | 0.833 | 0.833 | 0.9926}{1 Z 0.833^2}} = \sqrt{\frac{0.3016}{0.3061}}$$

= 0.9926 (which is highly correlated)

Therefore, the multiple correlation coefficient of X_1 on X_2 and X_3 is 0.9926 which indicates that it is highly positive correlated. It means that the association between the dependent variable of commercial banks and independent variables of RBB and SCBNL is perfect.

Again, we have

$$\text{Coefficient of multiple determination } (R_{1,23}^2) = 0.9926^2$$

$$= 0.9853$$

Therefore, $R_{1,23}^2 = 0.9853$ means that 98.53% of the total variation of the variable X_1 is due to the independent variable X_2 and X_3 and the remaining is due to other factors.

4.1.2 Yearly Write off

Banks write-off the loans unrecoverable/not-recovered yearly and adjust it in the profit and loss account. Hence it reduces the net profit of the bank. Such activity shows that the recovery policy and practice as well as loan monitoring part of the banks is weak.

Table: 4.3
Loan Write-Off of RBB and DCBNL

Bank	Fiscal Year				
	2062/63	2063/64	2064/65	2065/66	2066/67
SCBNL	-	-	-	33.9	39.1
RBB	-	0.1	15.1	4.2	0.7

Above table shows the write-off unrecoverable loans and advances during the study period. In FY 2062/63 both banks did not write-off the loans. SCBNL write-off loan 33.9 and 39.1 million on the year 2065/66 and 2066/67 respectively. Like, RBB write-off 0.1, 15.1, 4.2, 0.7 million loans in the FY 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

4.1.3 Portfolio at Risk/NPL Ratio

Credit risk ratio also known as *Portfolio at Risk or Non-Performing Loan to Total Loan Ratio* measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. Credit risk ratio expressed the percentage of Non-performing loan to total Loan & Advances.

Bank utilizes its collected funds by providing different line of credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. The credit risk ratio shows the proportion of no-performing assets in total Loan & Advances. Adequate analysis of credit clients or feasibility study of the project by the banks credit managers might cause the loans turning bad. Higher ratio indicates more risky assets in the volume of Loan & Advances of the bank and vice-versa.

Table: 4.4
Portfolio at Risk

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	2.78%	2.19%	1.88%	0.94%	0.67%	1.69%	0.88%	0.52
RBB	50.70%	37.09%	28.63%	21.43%	17.93%	31.16%	13.16%	0.42

Above table shows that NPL to total loan and advances of both banks are in decreasing trend which is the good sign of the credit management. In 2062/63 RBB ha 50.70% of loan and advances were in risk which is the extremely bad for the bank. As per NRB regulation there should not be more than 5% of non-performing loan out of its total loans. But RBB seems sound good since then because it has decreasing NPL and at the end of the study period is becomes 17.93%. From mean point of view, non-performing loan to total loan and advances ratio of SCBNL and RBB is 1.69% and 31.16% respectively during the study period. These Ratios indicate the more efficient operating of credit management of SCBNL in every aspect i.e. NRB directives or internal risk management or credit risk management or banks profitability. However, RBB could not be there in case of credit risk management.

S.D. of SCBNL and RBB is 0.88% and 13.16%. Likewise, C.V. of SCBNL and RBB is 0.52 and 0.42. The ratio show the more consistency in RBB but in reality SCBNL is in better position.

4.1.4 LLP to NPL Ratio

NRB regulation directed to banks and financial institutions to provide at least 1%, 25%, 50% and 100% provision for clean loans, substandard loans, doubtful loans and bad loans respectively. The ratio shows whether the NPL covered by the provision.

Table: 4.5
LLP to NPL Ratio

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	122.69%	138.24%	145.93%	190.64%	220.72%	163.64%	40.69%	0.25
RBB	99.13%	99.89%	104.99%	108.90%	109.63%	104.51%	4.90%	0.05

Above table depicts that both banks have adequate provision for loss of NPL. The mean ratio of RBB and SCBNL are 104.51% and 163.64% respectively. Likewise, standard deviation and CV of RBB and SCBNL are 40.69%, 4.90% and 0.25, 0.05 respectively. The ratio of SCBNL is higher for each year than that of RBB. In that sense SCBNL is safe and sound than RBB.

4.1.5 LLP to Total Loan

Every bank and financial institutions must keep some portion of money in the provision for the possible losses of assets. As there is no cent percent surety to payback of loans granted to customers banks required to make provision for such possible losses out of its profit. NRB categorizes four types of loans i.e. Pass, Substandard, Doubtful and Bad. Accordingly, banks required to make 1%, 25%, 50%, 100% provision for Pass, Substandard, Doubtful and Bad loans respectively. However, banks may keep more provision than regulatory requirement. Banks possess high Nonperforming loans need to make more provision and their profitability might be affected. Below table depict the LLP to total Loans of the sample banks.

Table: 4.6
LLP to Total Loan

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	3.41%	3.03%	2.74%	1.79%	1.47%	2.49%	0.83%	0.33
RBB	100.00%	58.86%	42.97%	30.44%	20.69%	50.80%	31.51%	0.62

From the analysis of above table RBB make provision on its assets than that of SCBNL. The highest ratio of SCBNL is 3.41% in FY 2062/63 and the lowest ratio is 1.47% in FY2066/67. Similarly, the highest ration of RBB is 100% in 2062/63 and lowest ratio is 20.69% in FY 2066/67. Both banks have decreasing ratio. However, RBB keep 100% provision in 2062/63. There might have some problem on its loans. Henceforth, their provision has been in decreasing trend. We can say that loan granted by RBB was extremely worse condition because it's non-performing loans and provision amount is very high.

Mean ratio of SCBNL and RBB are 2.49% and 50.80%. Likewise, S.D and CV of SCBNL and RBB are 0.83%, 0.33 and 31.51%, 0.62 respectively.

4.2 Analysis of Portfolio Management

Total loans and advances dispersed by the banks are in increasing trend and the Nepalese Banking system is riddled with a significant amount of NPL with regard to quality of the loan portfolio of some of the banks hold double digit NPL. To diversify the risk, banks have been providing the loans in different sectors of the economy.

4.2.1 Sector-Wise Lending of RBB and SCBNL

NRB prescribed thirteen (13) sectors of the economy in terms of reporting and publishing loans and advances extended by the banks and financial institutions. They are Agriculture, Mining, Productions, Constructions, Metal Productions, Machinery & Electrical Tools & fittings, Transportation Equipment Production & Fitting, Transportation, Communications & Public Services, Wholesaler & Retailers, Finance, Insurance & Fixed Assets, Service Industries, Consumable Loans, Local Governments, Others. These sectors also have its various small sectors which were not mentioned in the table.

Table: 4.7**Sector Wise Loans and Advances of RBB & SCBNL***'Rs in Million'*

S N	Sector	2062/63		2063/64		2064/65		2065/66		2066/67	
		RBB	SCB NL	RBB	SCB NL	RBB	SCB NL	RBB	SCB NL	RBB	SCB NL
1	Agriculture	1672.6	345.2	1368.7	420.4	963.4	465.8	843.3	416	378.1	311.5
2	Mining	38.3	22.1	51.7	30.7	166.5	97.3	251.4	141.9	280.5	220.3
3	Productions	6776.5	2259.1	6833	2183.6	5070.6	2175.3	5269.8	2981.9	5614.8	2516.3
4	Constructions	546.6	1061.2	677.4	1454.3	1369.2	2105.1	2461	3036.9	2862.2	3479.2
5	Metal Productions, Machinery & Electrical Tools & fittings	149.1	0	133	0	390.7	26	666.5	0	1219.5	34
6	Transportation Equipment Production & Fitting	459.4	2.6	186.1	8.4	265.3	5.8	477.6	7.9	919.2	2.8
7	Transportation, Communications & Public Services	895.4	15	756.6	1014.2	818.2	1001.5	1137.3	311.4	866.3	10.1
8	Wholesaler & Retailers	9074.4	1265	8612.4	776.1	6453	1080.3	6620.8	973.5	7477.8	1485.8
9	Finance, Insurance & Fixed Assets	83.2	397.4	2374.9	442.9	2342.4	567.7	2130.8	1399.7	2073.9	405
10	Service Industries	1908.3	641.8	1783.7	536.6	2078.9	405.8	2019.9	303.3	2407.5	242.2
11	Consumable Loans	734	52.5	983.1	56.7	2053.1	87.6	2290	76	3214.9	78.3
12	Local Governments	0	0	0	0	0	0	0	0	2.2	0
13	Others	4663.1	2044.1	3407.9	2282.4	3451	2771.8	3322.8	4315.8	4290.7	5095.3
		27000.9	8106.1	27168.5	9206.3	25422.3	10790	27491.2	13964.3	31607.6	13880.8

*Source: NRB; Banking and Financial Statistics, No 45, 47, 49, 51, 53 Mid-July**2006/207/2008/2009/2010*

Best management of portfolio will be possible if loans are diversified in all the sectors and the concentration of the loans should not be one sector of the economy. One option to portfolio diversification might be the upto 100% of capital fund shall disburse in one sector of the economy. Details analysis of the sect-oral loan outstanding is given below.

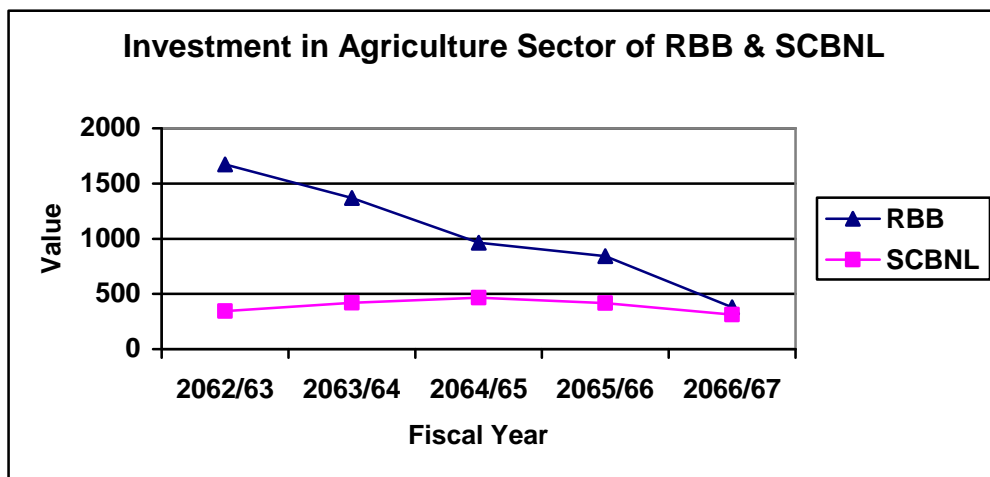
4.2.1.1 Agriculture Sector

Under this sector farming/farming sector, tea, animals farming, shlaughter and other agriculture and agricultural services are categorized.

Table: 4.8
Investments in Agriculture Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	1672.6	1368.7	963.4	843.3	378.1
	% of Total Loan	6.19%	5.04%	3.79%	3.07%	1.20%
SCBN	Amount <i>in million</i>	345.2	420.4	465.8	416	311.5
L	% of Total Loan	4.26%	4.57%	4.32%	2.98%	2.24%

Figure: 4.1
Investments in Agriculture Sector



The above figure shows that RBB has decreasing trend of lending on agriculture sector. The highest value of loan is 1672.6 million in FY 2062/63 and lowest amount is 378.1 million in 2066/67. SCBNL has consistent trend of lending in agriculture sectors than RBB. The highest amount of loan outstanding is 465.8 million in the FY 2064/65 and lowest amount is 311.5 million in the FY 2066/67. Nepal is agriculture based country. Thus this sector is the main and quit big sector.

4.2.1.2 Mining Sector

Metals (iron, lead etc), charcoal, graphite, magnesite, chalks, oil & gas extraction and about other mines are classified under this sector.

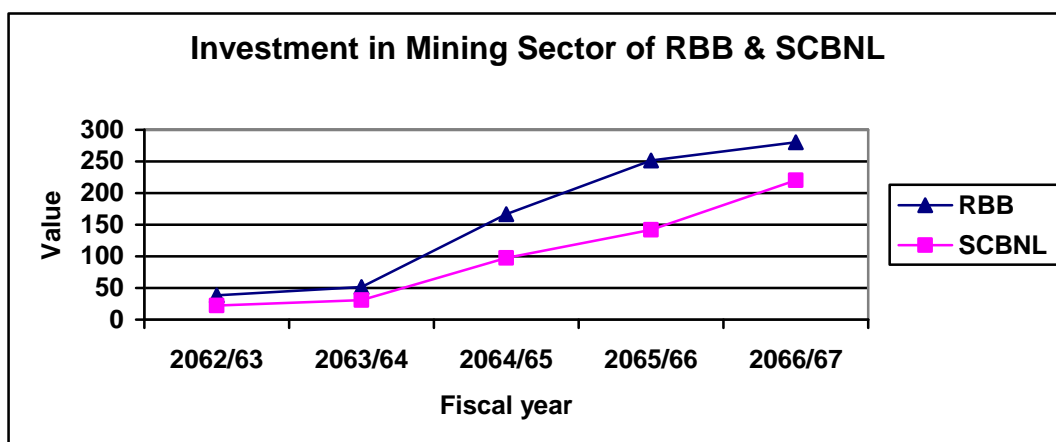
Table: 4.9

Investments in Mining Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	38.3	51.7	166.5	251.4	280.5
	% of Total Loan	0.14%	0.19%	0.65%	0.91%	0.89%
SCBNL	Amount <i>in million</i>	22.1	30.7	97.3	141.9	220.3
	% of Total Loan	0.27%	0.33%	0.90%	1.02%	1.59%

Figure: 4.2

Investments in Mining Sector



Above table shows the investment in mining sector of both the banks is in increasing trend. RBB has 38.3, 51.7, 166.5, 251.4, 280.5 million loan outstanding in FY 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 respectively the amount in percentage of total loan are 0.14%, 0.19%, 0.65%, 0.91%, 0.89% on the above order. In the same way SCBNL has 22.1, 30.7, 97.3, 141.9, 220.3 million loan outstanding in FY 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 respectively the amount in percentage of total loan are 0.27%, 0.33%, 0.90%, 1.02%, 1.59% in the corresponding year.

4.2.1.3Productions Sector

Food production (packaging, processing), sugar, drinking materials (bear, alcohol, soda etc), alcohol, non-alcohol, tobacco, handicrafts, sunpat, textile production & ready made clothing, logging & timber production/furniture, paper, printing & publishing, industrial & agricultural, medicine, processed oil & charcoal production, rasin & tarpin, rubber tyre, leather, plastic, cement, stone, soil & lead production, metal – basic iron, steel plants & other metals plants, miscellaneous productions are the details of this sector.

Table: 4.10

Investments in Productions Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	6776.5	6833	5070.6	5269.8	5614.8
	% of Total Loan	25.10%	25.15%	19.95%	19.17%	17.76%
SCBN	Amount <i>in million</i>	2259.1	2183.6	2175.3	2981.9	2516.3
	% of Total Loan	27.87%	23.72%	20.16%	21.35%	18.13%

Figure: 4.3

Investments in Productions Sector

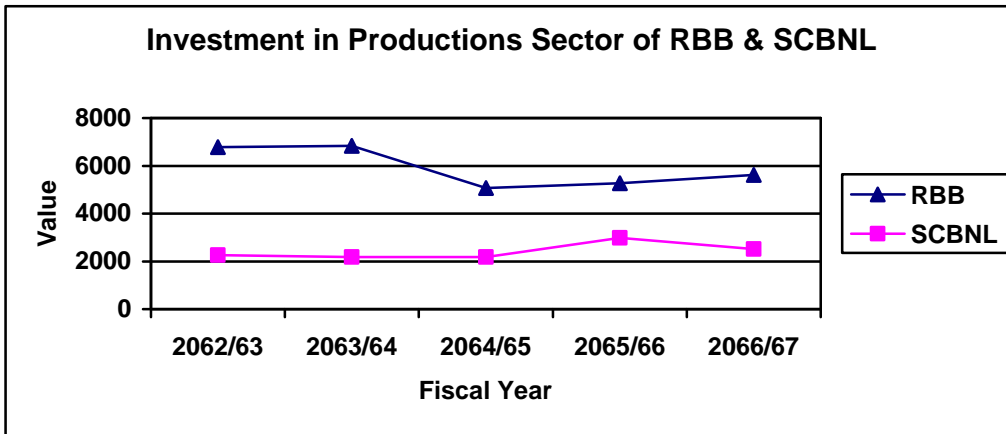


Table 4.11 and figure 4.3 depicts the clear picture of loan outstanding of RBB and SCBNL during FY 2062/63 to 2066/67. RBB has 6776.5 and 6833 million loan outstanding in the year 2062/63 and 2063/64 respectively. The figure has decreased to 5070.6 million and it has increased to 5269.8 and 5614.8 million in the year 2065/66 and 2066/67. The percentage of total loan outstanding during FY 2062/63 to 2066/67 are 25.10%, 25.15%, 19.95%, 19.17%, 17.76%.

SCBNL provided 2259.1, 2183.6, 2175.3, 2981.9, 2516.3 million loans in the production sector during FY 2062/63 to 2066/67. The percentage of total loan in this sector is 27.87%, 23.72%, 20.16%, 21.35% and 18.13% during the fiscal year 2062/63 to 2066/67 respectively.

4.2.1.4 Constructions Sector

Under this sector residential, non-residential heavy constructions (highway, bridges etc) are classified and loans provided to construct such sectors are considered total loans outstanding to construction sector by the respective banks.

Table: 4.11

Investments in Constructions Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	546.6	677.4	1369.2	2461	2862.2
	% of Total Loan	2.02%	2.49%	5.39%	8.95%	9.06%
SCBN	Amount <i>in million</i>	1061.2	1454.3	2105.1	3036.9	3479.2
	% of Total Loan	13.09%	15.80%	19.51%	21.75%	25.06%

Figure: 4.4

Investments in Constructions Sector

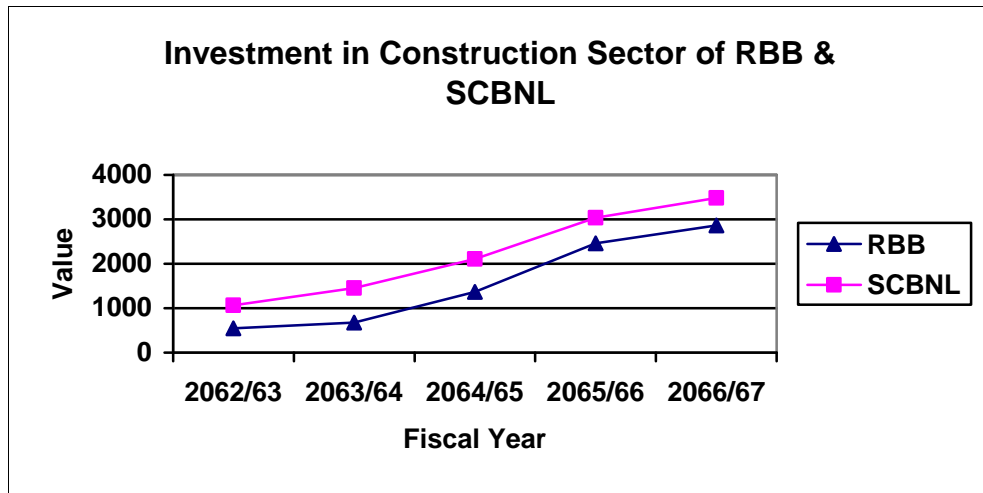


Table 4.12 and figure 4.4 shows the amount and percentage of loans to construction sector provided by RBB and SBNL. Both banks loan outstanding in this sector are in increasing trend. RBB provided 546.6, 677.4, 1369.2, 2461 and 2862.2 million loans in this sector during FY 2062/63 to 2066/67. The percentage of total loan is 2.02%, 2.49%, 5.39%, 8.95% and 9.06% in the respective fiscal year.

Likely, SCBNL has 1061.2, 1454.3, 2105.1, 3036.9 and 3479.2 million loan outstanding in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan outstanding is 13.09%, 15.80%, 19.51%, 21.75% and 25.06% in the respective fiscal year. SCBNL provided more loans in this sector than RBB during the study period.

4.2.1.5 Metal Productions, Machinery & Electrical Tools & Fittings Sector

Loans provided to promote the fabricated metal equipments, machine tools, machinery- agriculture, machinery-construction, oil, mines, machinery-office & computing, machinery others, electrical equipments, home equipments, communications equipments, electronic parts, medical equipments, generators, Turbines sectors are classified under this sector.

Table: 4.12

Investment in Metal Productions, Machinery & Electrical Tools & Fittings Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	<i>Amount in million</i>	149.1	133	390.7	666.5	1219.5
	% of Total Loan	0.55%	0.49%	1.54%	2.42%	3.86%
SCBNL	<i>Amount in million</i>	-	-	26	-	34
	% of Total Loan	0.00%	0.00%	0.24%	0.00%	0.24%

Table 4.13 depicts the loan outstanding and percentage of total loan outstanding of RBB and SCBNL in Metal Productions, Machinery & Electrical Tools & Fittings Sector. RBB has increasing trend of loan outstanding except fiscal year 2063/64. In the FY 2063/64 the loan amount has decreased to 133 million from 149.1 million in FY 2062/63. On the other side the percentage of total loan in this sector by the RBB are 0.55%, 0.49%, 1.54%, 2.42% and 3.86% during fiscal year

2062/63 to 2066/67. SCBNL has no loan outstanding in this sector in the FY 2062/63, 2063/64 and 2065/66. In the FY 2064/65 and 2066/67 it has 26 million and 34 million loan outstanding in this sector which is 0.24% and 0.24% of total loans respectively.

Figure: 4.5
Investment in Metal Productions, Machinery & Electrical Tools & Fittings Sector

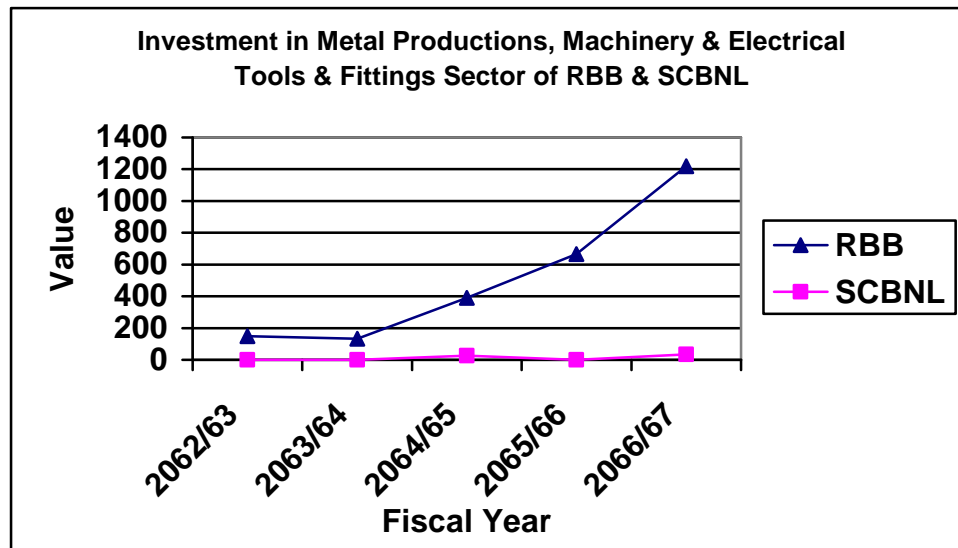


Figure No. 4.5 shows the investment in Metal Productions, Machinery & Electrical Tools & Fittings Sector of RBB and SCBNL during the FY 2062/63 to 2066/67 where we can see the increasing trend of RBB. However, SCBNL has not in such trend.

4.2.1.6 Transportation Equipment Production & Fitting Sector

Details of this sector are vehicles, vehicle parts, jet boat, aircraft & aircraft parts and other parts about transportation. Loan outstanding of RBB and SCBNL in this sector are shown in the table below.

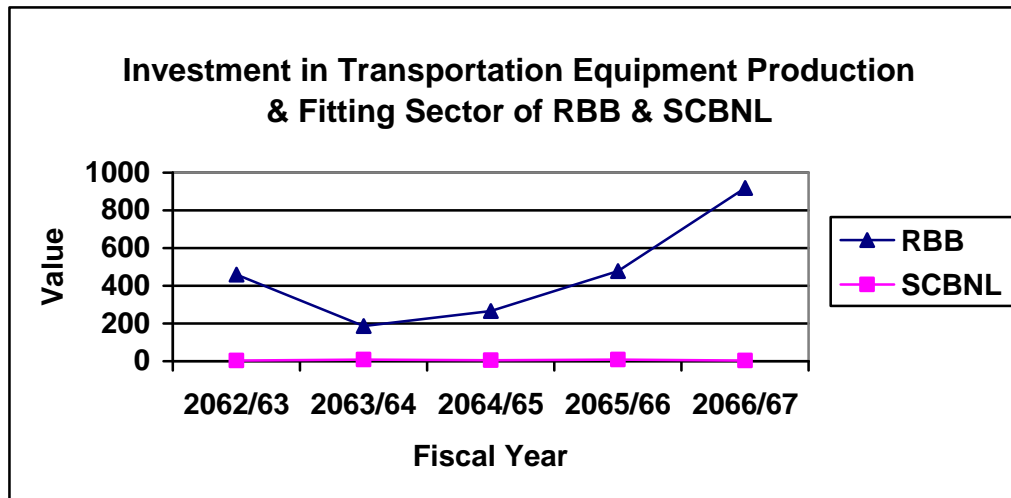
Table: 4.13

Investments in Transportation Equipment Production & Fitting Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	459.4	186.1	265.3	477.6	919.2
	% of Total Loan	1.70%	0.68%	1.04%	1.74%	2.91%
SCBNL	Amount <i>in million</i>	2.6	8.4	5.8	7.9	2.8
L	% of Total Loan	0.03%	0.09%	0.05%	0.06%	0.02%

Figure: 4.6

Investments Transportation Equipment Production & Fitting Sector



Investments in Transportation Equipment Production & Fitting sector RBB and SCBNL in the FY 2062/63 is 459.4 million and 2.6 million. The amount of loan invested in this sector by RBB has decreased to 186.1 million in the FY 2063/64. However, same figure of SCBNL has increased to 8.4 million in 2063/64. In the year ahead RBB has increasing trend i.e. 265.3, 477.6 and 919.2 million. But SCBNL has volatility i.e. 5.8, 7.9 and 2.8 million. The percentage of total loan in this sector of RBB and SCBNL are 1.70%, 0.68%, 1.04%, 1.74% & 2.91% and 0.03%, 0.09%, 0.05%, 0.06%, 0.02% in the FY 2062/63, 2063/64, 2064/65, 2065/66 & 2066/67 respectively.

4.2.1.7 Transportation Communications & Public Services Sector

Railways & passengers vehicles, truck services & store arrangement, water transportation, pipe lines except natural gas, communications, electricity, gas & gas pipe line services and other services are the details of this sector loan where RBB and SCBNL has following outstanding during the study period.

Table: 4.14

Investments in Transportation Communications & Public Services Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	895.4	756.6	818.2	1137.3	866.3
	% of Total Loan	3.32%	2.78%	3.22%	4.14%	2.74%
SCBNL	Amount <i>in million</i>	15	1014.2	1001.5	311.4	10.1
	% of Total Loan	0.19%	11.02%	9.28%	2.23%	0.07%

Figure: 4.7

Investments Transportation Communications & Public Services Sector

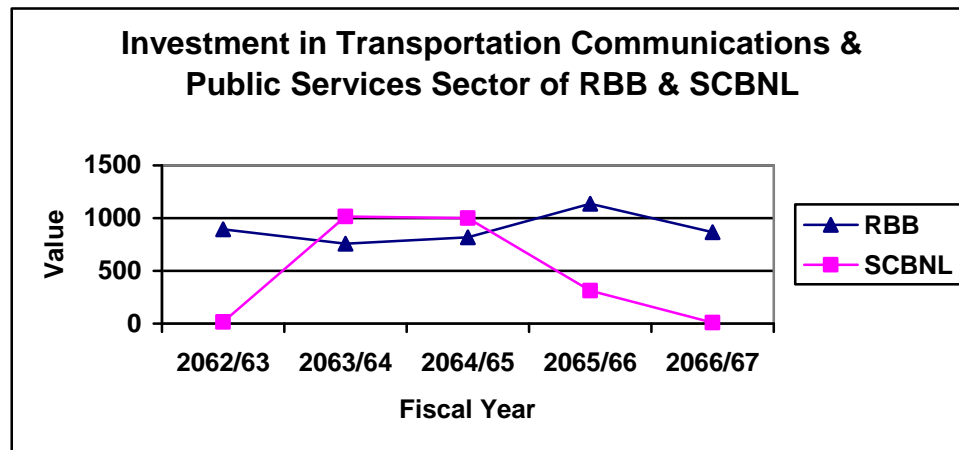


Table. 4.14 and Figure 4.7 shows the loan outstanding in Transportation Communications & Public Services Sector of RBB and SCBNL. RBB has 895.4, 756.6, 818.2, 1137.3 and 866.3 million loan outstanding in the year 2062/63,

2063/64, 2064/65, 2065/66 & 2066/67 respectively. The percentage of total loan is 3.32%, 2.78%, 3.22%, 4.14% and 2.74% in the respective year. On the other, SVBNL has 15, 1014.2, 1001.5, 311.4 and 10.1 million loan outstanding for the FY 2062/63, 2063/64, 2064/65, 2065/66 & 2066/67 respectively. The percentage of total loan of SCBNL is 0.19%, 11.02%, 9.28%, 2.23% and 0.07% in the corresponding year as above. RBB provide more percentage of its total loan in this sector o the economy than that of SCBNL.

4.2.1.8 Wholesaler & Retailers Sector

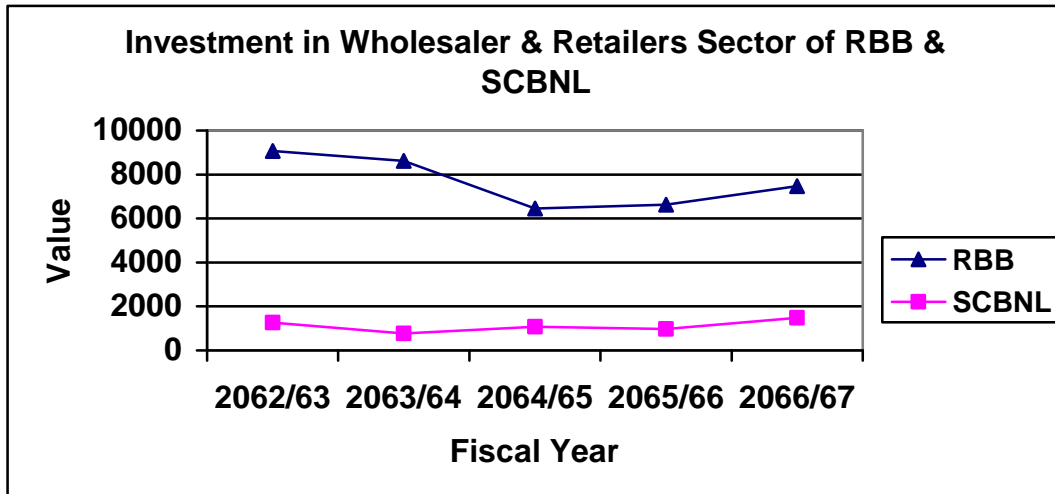
Loan outstanding to wholesale business of durable & nondurable commodities, automotive dealer/franchise, other retail business, import business, export business are classified under this sector where RBB and SCBNL has invested on the as per below presented table. The amount of loan has utilized for trading of goods. This type of loan is significant to promote and develop the marketing and expansion of new market and customer. Many of the trading houses are in operation since loan to conduct the business of durable and nondurable commodities.

Table: 4.15

Investments in Wholesaler & Retailers Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	<i>Amount in million</i>	9074.4	8612.4	6453	6620.8	7477.8
	% of Total Loan	33.61%	31.70%	25.38%	24.08%	23.66%
SCBN	<i>Amount in million</i>	1265	776.1	1080.3	973.5	1485.8
	% of Total Loan	15.61%	8.43%	10.01%	6.97%	10.70%

Figure: 4.8
Investments Wholesaler & Retailers Sector



Above table and figure shows the loan outstanding of RBB and SCBNL to wholesalers and retailer. The loan figure of RBB in this sector is changing every year during the study period. In figure RBB has 9074.4, 8612.4, 6453, 6620.8 and 7477.8 million loans in this sector during FY 2062/63 to 2066/67 respectively. The percentage of total loan is 33.61%, 31.70%, 25.38%, 24.08% and 23.66% in the corresponding year as above. Like that, SCBNL has 1265, 776.1, 1080.3, 973.5 and 1485.8 million loans in this sector. The percentage of total loan is 15.61%, 8.43%, 10.01%, 6.97% and 10.70% respectively.

Both the bank has remarkably high percentage of loan outstanding in this sector as compare to other sector.

4.2.1.9 Finance, Insurance & Fixed Assets Sector

Loans to commercial banks, finance companies, development banks, rural development banks, saving & debt cooperatives, pension fund & insurance companies, other financial institutions, non-financial government institutions, private non-financial institutions, real estates, other investment industries are

classified under this sector. Following table depicts the loan outstanding of RBB and SCBNL in this sector.

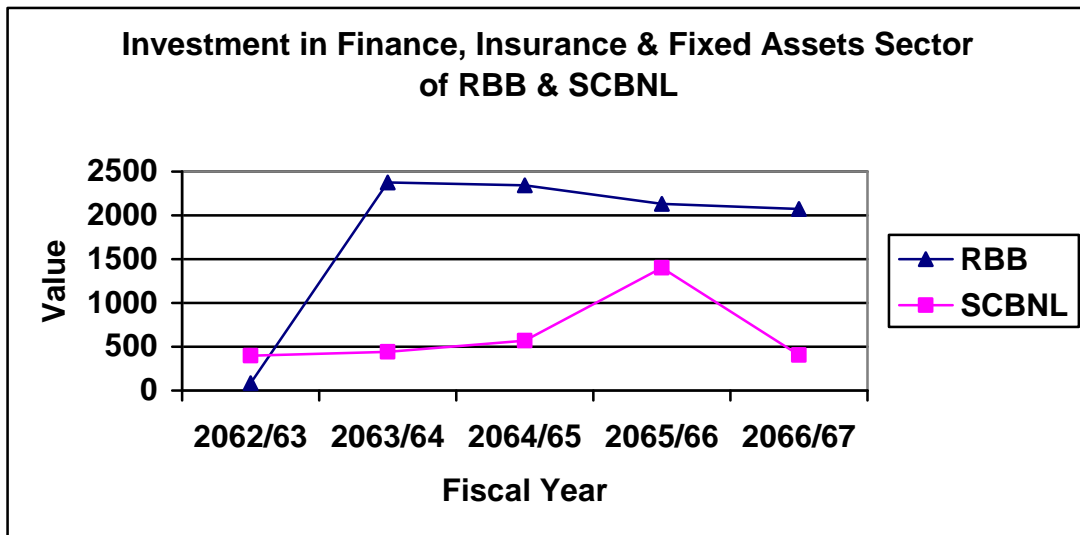
Table: 4.16

Investments in Finance, Insurance & Fixed Assets Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	83.2	2374.9	2342.4	2130.8	2073.9
	% of Total Loan	0.31%	8.74%	9.21%	7.75%	6.56%
SCBNL	Amount <i>in million</i>	397.4	442.9	567.7	1399.7	405
	% of Total Loan	4.90%	4.81%	5.26%	10.02%	2.92%

Figure: 4.9

Investments Finance, Insurance & Fixed Assets Sector



Above table and figure show the position and trend of loan outstanding of RBB and SCBNL in Finance, Insurance & Fixed Assets Sector. RBB has 83.2, 2374.9, 2342.4, 2130.8 and 2073.9 million loan outstanding in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan is 0.31%, 8.74%, 9.21%, 7.75% and 6.56% in the respective year as above. Like that,

SCBNL has 397.4, 442.9, 567.7, 1399.7 and 405 million loan outstanding in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan is 4.90%, 4.81%, 5.26%, 10.02% and 2.92% in the respective year as above. Both the banks have changing figure in every year. There is no constant growth and percentage maintained.

4.2.1.10 Service Industries Sector

Bank loan to tourism (trekking, maintaining, resort, rafting etc), hotel, advertising agency, automotive services, health services, hospitals, clinic, educational services, entertainment, recreations films and other finance companied are classified under this sector. The loan outstanding of RBB and SCBNL in this sector during the study period has presented as under

Table: 4.17

Investments in Service Industries Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	<i>Amount in million</i>	1908.3	1783.7	2078.9	2019.9	2407.5
	% of Total Loan	7.07%	6.57%	8.18%	7.35%	7.62%
SCBNL	<i>Amount in million</i>	641.8	536.6	405.8	303.3	242.2
	% of Total Loan	7.92%	5.83%	3.76%	2.17%	1.74%

Figure: 4.10
Investments in Service Industries Sector

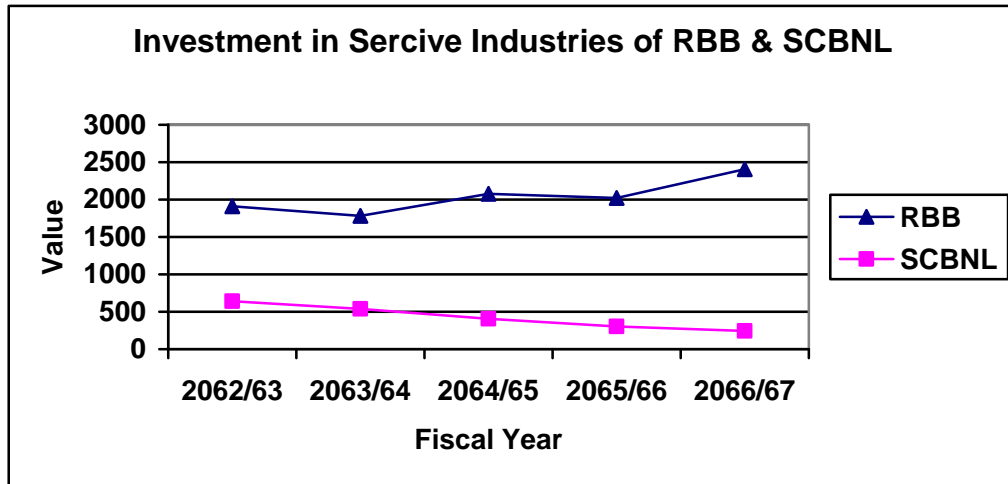


Table 4.17 and figure 4.10 clearly show the loans to Service Industries. RBB has increasing trend of providing such loans. However SCBNL has decreasing trend during the study period. The amounts outstanding of RBB and SCBNL during the period are 1908.3, 1783.7, 2078.9, 2019.9 & 2407.5 million and 641.8, 536.6, 405.8, 303.3 & 242.2 million in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loans of RBB is 7.07%, 6.57%, 8.18%, 7.35% and 7.62% in the corresponding year as above. Like that, SCBNL has 7.92%, 5.83%, 3.76%, 2.17% and 1.74% loan invested in the service industries in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

4.2.1.11 Consumable Loans

Under this sector gold, silver, fixed account receipt, guarantee bond, credit card and other consumable loans have considered. Both the banks provided the substantial loan in this sector. RBB has increasing trend of this loan but SCBNL has changing every year. Below table shows the clear picture of the loan outstanding and its percentage in consumable sectors.

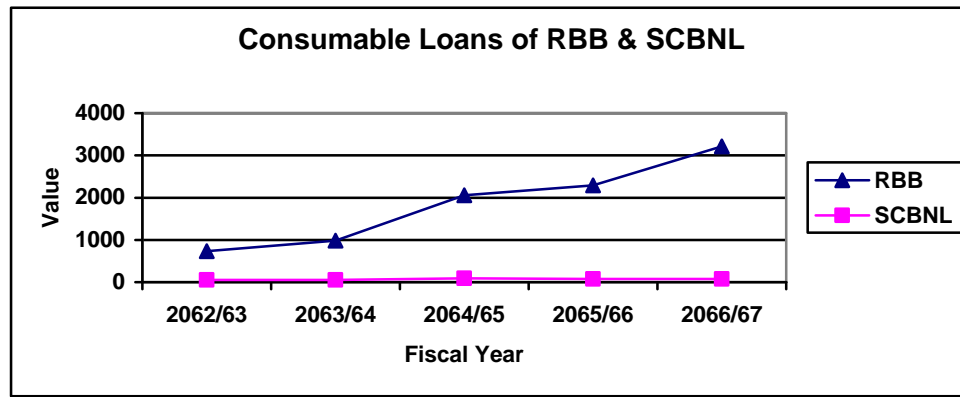
Table: 4.18

Investments in Consumable Loans

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	734	983.1	2053.1	2290	3214.9
	% of Total Loan	2.72%	3.62%	8.08%	8.33%	10.17%
SCBN	Amount <i>in million</i>	52.5	56.7	87.6	76	78.3
L	% of Total Loan	0.65%	0.62%	0.81%	0.54%	0.56%

Figure: 4.11

Investments in Consumable Loans



RBB has 734, 983.1, 2053.1, 2290 and 3214.9 million loan outstanding in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan of RBB in this sector is 2.72%, 3.62%, 8.08%, 8.33% and 10.17%. Like that, SCBNL has 52.5, 56.7, 87.6, 76 and 78.3 million loan outstanding in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan is 0.65%, 0.62%, 0.81%, 0.54% and 0.56% respectively during 2062/63 to 2066/67.

4.2.1.12 Local Governments

Loans provided to the local government (i.e. District Development Committee, Village Development Committee and Municipality) are categorized in this sector. Below table shows the amount of loan provided to local government by RBB and SCBNL.

Table: 4.19
Loans to Local Governments

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	-	-	-	-	2.2
	% of Total Loan	-	-	-	-	0.01%
SCBN	Amount <i>in million</i>	-	-	-	-	-
L	% of Total Loan	-	-	-	-	-

During the study period SCBNL has no loans and advances granted to local government at all. However, RBB has 2.2 million loans provided to local government in the fiscal year 2066/67 only which is 0.01% of total loan outstanding of 2066/67.

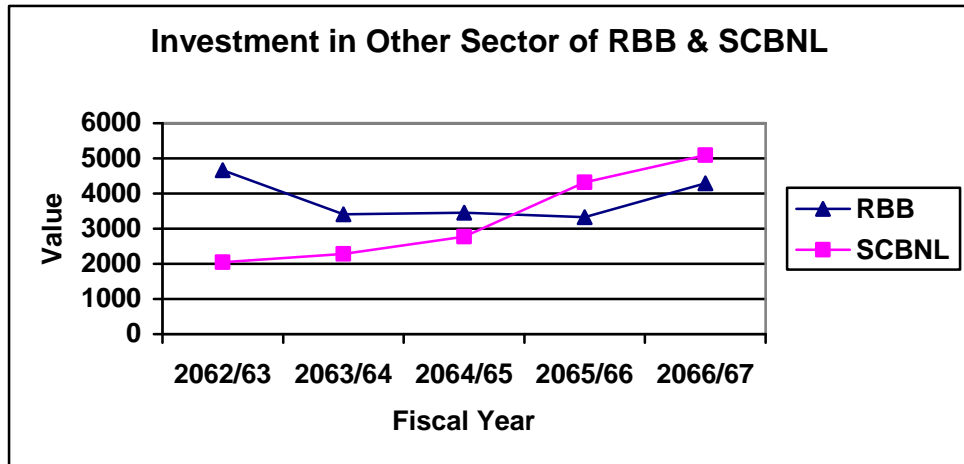
4.2.1.13 Others Sector

Remaining sectors and areas which are not included above are considered as other sector. Banks and financial institution provided the loans each and every industry where he feels less risky and profitable. Some of the area might household, personal loans and others. Below table shows the loan outstanding of RBB and SCBNL in other sectors.

Table: 4.20
Investments in Others Sector

Bank	Particulars	Fiscal Year				
		2062/63	2063/64	2064/65	2065/66	2066/67
RBB	Amount <i>in million</i>	4663.1	3407.9	3451	3322.8	4290.7
	% of Total Loan	17.27%	12.54%	13.57%	12.09%	13.57%
SCBN	Amount <i>in million</i>	2044.1	2282.4	2771.8	4315.8	5095.3
	% of Total Loan	25.22%	24.79%	25.69%	30.91%	36.71%

Figure: 4.12
Investments in Others Sector



SCBNL has increasing trend of providing loans to other sector. However, RBB has changing nature. The amount has decreased in the year 2063/64, and 2065/66. Total amount of loan provided to the other sector by RBB is 4663.1, 3407.9, 3451, 3322.8 and 4290.7 million in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan is 17.27%, 12.54%, 13.57%, 12.09% and 13.57% million in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

SCBNL provided 2044.1 million in this sector in the fiscal year 2062/63 which is 25.22% of total loan of that year. The amount of loan outstanding of SCBNL is in

increasing trend i.e. 2282.4, 2771.8, 4315.8 and 5095.3 million in the fiscal year 2063/64, 2064/65, 2065/66 and 2066/67 respectively which is 24.79%, 25.69%, 30.91% and 36.71% of total loan of the respective year.

The figure shows that SCBNL provided the more percentage loans to other sector than that of RBB during study period which might be more risky.

4.2.2 Security- Wise Loans and Advances OF RBB & SCBNL

Table: 4.21
Security- Wise Loans and Advances OF RBB & SCBNL

in Million'

S N	Security	2062/63		2063/64		2064/65		2065/66		2066/67	
		RBB	SCBNL	RBB	SCBNL	RBB	SCBNL	RBB	SCBNL	RBB	SCBNL
1	Gold/Silver	599.8	0	826	0	1474	0	2180.9	0	3045.6	0
2	Government Securities	30.5	1133.2	35.5	610.1	47	480.7	48.6	762.7	1139.5	301.3
3	Non Government Securities	1.5	158.9	30.9	194.9	497.8	206.4	1	446.6	14.3	150
4	Fixed A/c Receipt	101.2	318.8	90.7	441.6	59.2	805	52.9	1111.6	68.9	594.3
5	Asset Guarantee	23336.2	4872	21752.7	5040.2	19984	6361.5	22247	7941.7	24427.5	9159.7
	5.1 Fixed Assets	22239	4251.4	20823.3	4580.8	19610.1	5652	21793.3	7697.2	23981.6	8956.3
	5.2 Current Assets	1097.2	620.5	929.4	459.4	373.9	709.5	453.7	244.5	445.9	203.4
6	On Bills Guarantee	2759.5	14.2	2699.3	15.6	1094.3	1.8	1032.6	98.2	924.1	3.3
7	Guarantee(Gov, Institutional, Personal, Group, Other)	87.4	429.3	1579.8	883.5	1125	1084.9	802.4	354.2	360.1	426.4
8	Credit Card	0	50.7	0	55.2	0	62.7	0	74.6	0	78.3
9	Earthquake Victim Loan	46.7	0	4.1	0	0	0	34.1	0	18.4	0
10	Others	38.1	1129.1	149.5	1965.2	1141	1787	1092.6	3174.5	1609.2	3167.3
Total		27000.9	8106.1	27168.5	9206.3	25422.3	10790	27492.1	13964.1	31607.6	13880.6

Source: Banking and Financial Statistics, No 41, 43, 45, 47, 49, 51, 53 Mid-July 2003/4/5/6/7/8/9

** Total Loans vary with the same figures shown in other calculation table of respective banks because of availability of data for Loan Loss provision adjustment.*

Both banks have been providing loans and advances to its customers with diverse security back up. Both the bank providing loans against Gold, Silver, Government Securities, Non Government Securities, Fixed A/c Receipt, Asset Guarantee, Fixed Assets, Current Assets, On Bills Guarantee, Guarantee (Gov, Institutional, Personal, Group, Other), Credit Card, Earthquake Victim Loan, Others securities. SCBNL has not extended loans against gold and silver. However, RBB has been providing loans against gold and silver. During the study period RBB has no Credit Card loans but SCBNL has Credit Card loans in increasing trends. Major stake of loan outstanding of both banks is against assets guarantee. Instead some portion of loans has provided against the guarantee and other securities. There were very small amount invested against the risk free assets i.e. gold, silver, government securities and fixed deposits receipt.

Upon the devising the security-wise loan on the basis of nature of security/assets and/or securities and guarantee and/or other then 89.14%, 83.68%, 86.78%, 89.23% and 90.79% of loans of RBB have secured by Gold/Silver, Government Securities, Non Government Securities, Fixed A/c Receipt, Asset Guarantee (Fixed Assets and Current Assets) in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The rest amount has against Bills Guarantee, Guarantees, Credit Card, Earthquake Victim Loan and Others. Similarly, 79.97%, 68.29%, 72.79%, 73.49% and 73.52% of loans of SCBNL have secured by Gold/Silver, Government Securities, Non Government Securities, Fixed A/c Receipt, Asset Guarantee (Fixed Assets and Current Assets) in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The rest amount has against Bills Guarantee, Guarantee, Credit Card, Earthquake Victim Loan and Others.

Below table depicts the percentage of total loan extended against the different securities of the respective banks.

4.2.3 Percentage of Security Wise Loan Outstanding

Table: 4.22

Percentage of Security Wise Loan Outstanding

Security	2062/63		2063/64		2064/65		2065/66		2066/67	
	RBB	SCBNL	RBB	SCBNL	RBB	SCBNL	RBB	SCBNL	RBB	SCBNL
Gold/Silver	2.22%	0.00%	3.04%	0.00%	5.80%	0.00%	7.93%	0.00%	9.64%	0.00%
Government Securities	0.11%	13.98%	0.13%	6.63%	0.18%	4.46%	0.18%	5.46%	3.61%	2.17%
Non Government Securities	0.01%	1.96%	0.11%	2.12%	1.96%	1.91%	0.00%	3.20%	0.05%	1.08%
Fixed A/c Receipt	0.37%	3.93%	0.33%	4.80%	0.23%	7.46%	0.19%	7.96%	0.22%	4.28%
Asset Guarantee	86.43%	60.10%	80.07%	54.75%	78.61%	58.96%	80.92%	56.87%	77.28%	65.99%
On Bills Guarantee	10.22%	0.18%	9.94%	0.17%	4.30%	0.02%	3.76%	0.70%	2.92%	0.02%
Guarantee	0.32%	5.30%	5.81%	9.60%	4.43%	10.05%	2.92%	2.54%	1.14%	3.07%
Credit Card	0.00%	0.63%	0.00%	0.60%	0.00%	0.58%	0.00%	0.53%	0.00%	0.56%
Earthquake Victim Loan	0.17%	0.00%	0.02%	0.00%	0.00%	0.00%	0.12%	0.00%	0.06%	0.00%
Others	0.14%	13.93%	0.55%	21.35%	4.49%	16.56%	3.97%	22.73%	5.09%	22.82%

Table 4.22 shows the clear picture of status of security-wise loan outstanding of Rastriya Banijya Bank and Standard Chartered Bank Nepal Limited. RBB has provided the loan against assets guarantee in more than other security followed by SCBNL. Both the banks provided loans against guarantee only. Percentage of such loan of SCBNL and RBB are 5.30%, 9.60%, 10.05%, 2.54% & 3.07% and 0.32%, 5.81%, 4.43%, 2.92% and 1.14% in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. RBB has 10.86%, 16.32%, 13.22%, 10.77% and 9.21% loan outstanding against Bills Guarantee, Guarantee, Credit Card,

Earthquake Victim Loan and Others in FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Similarly, SCBNL has 20.03%, 31.71%, 27.21%, 26.51% and 26.48% loan outstanding against Bills Guarantee, Guarantee, Credit Card, Earthquake Victim Loan and Others in FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

4.2.4 Product Wise Loan outstanding of RBB & SCBNL

Table: 4.23

Product Wise Loan outstanding of RBB & SCBNL

SN	Particulars	FY 2065/66		FY 2066/67	
		RBB	SCBNL	RBB	SCBNL
1	Term Loan	4172.5	488.8	4165.2	692.2
2	Overdraft	4939.8	1129.6	5522.2	1505.6
3	Trust Receipt Loan / Import Loan	1683.3	947.4	1712	1001.1
4	Demand & Working Capital Loan	7534.2	2204	7702.8	2503.5
5	Real Estate Loan	2172	596.3	1348.8	662.3
6	Margin Nature Loan	867.1	150	665.1	150
7	Housing Loan	2718.7	3118.4	2795.4	3438.5
8	Hire Purchase Loan	1136.3	2999.4	977.7	3478.2
9	Deprived Sector Loan	451.9	443.4	504.2	463.6
10	Bills Purchased	143.5	762.1	301.6	204.9
11	Other Product*	5788.3	1041.1	8724.9	1407.1

* Credit Card, Education Loan, Small & Medium Industrial Loan, Gold & Silver, Fixed Deposit Receipt, Auto Loans and others.

In connection to the research objectives only the margin lending has described here. The amount of margin nature loan of RBB is 867.1, 665.1 million in the FY 2066/67 and 2066/67 respectively. The percentage of total loan is 2.74% & 1.93%

respectively. Similarly, SCBNL has 150 million loans in the year 2066/67 and 2066/67. The percentage of total loan is 1.08% and 0.97%.

4.3 Analysis of Risk Weighted Assets

4.3.1 Analysis of Risk Weighted Assets

In a simple manner this ratio shows the risky assets of the banks out of its total assets. Assets there exist risk are considered as risky assets. Figures have been taking from the annual reports of the bank.

Table: 4.24
Analysis of Risk Weighted Assets

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	47.95%	47.99%	49.55%	56.91%	46.22%	49.72%	4.19%	0.08
RBB	100.00%	83.88%	84.53%	77.22%	52.70%	79.67%	17.23%	0.22

Above table depict the risky assets of sample banks. The highest ratio of SCBNL is 56.91% in FY 2065/66 and the lowest ratio is 46.22% in FY 2066/67. Similarly, the highest ratio of RBB is 100% and the lowest ratio is 52.70% in FY 2066/67. The above figure shows high risk on the assets of RBB than that of SCBNL.

The mean ratio of SCBNL and RBB is 49.72% and 79.67% respectively. S.D. and CV of SCBNL and RBB are 4.19%, 0.08 and 17.23%, 0.22. the figure of SCBNL is more consistence than RBB.

4.3.2 Investment in Government Securities

Table: 4.25

Investment in Government Securities to Total Assets Ratio

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	32.90%	33.54%	24.86%	24.41%	24.64%	28.07%	4.71%	0.17
RBB	18.28%	22.25%	21.72%	19.49%	14.22%	19.19%	3.22%	0.17

The above table shows investment on government securities to total assets ratio of SCBNL and RBB. Both Banks has somehow fluctuating and somewhat decreasing type ratios. The table shows the highest ratio of SCBNL is 33.54% in FY 2063/64 and lowest is 24.41% in FY 2065/66. In the same way, the highest ratio of RBB is 22.25% in FY 2063/64 and lowest is 14.22% in FY 2066/67. The mean ratio of SCBNL is 28.07%, which is higher than the mean ratio of RBB 19.19%. It means SCBNL has invested more money in risk free assets than that of RBB. In another words RBB has emphases on more loan and advances and other short-term investment than investment in govt. securities. For minimization of investment risk, RBB should divert its investment in govt. securities. Similarly, S.D. is 4.71% & 3.22 and C.V is 0.17 and 0.17 of SCBNL and RBB respectively. The C.V. of both banks is same that shows the equal inconsistency in the ratios in comparison.

4.3.3 Capital Adequacy Ratio

Table: 4.26
Capital Adequacy Ratio

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	16.06%	14.93%	15.71%	13.15%	14.70%	14.91%	1.13%	0.08
RBB	-	-	-	-	-	-	9.15%	-
	33.71%	55.54%	43.79%	37.31%	33.98%	40.87%		0.22

As per NRB directives every bank has to maintain minimum 10% capital adequacy ratio. The highest ratio of SCBNL is 16.06% and the lowest ratio is 13.15%. Mean ratio of SCBNL is 14.91%. Likewise, S.D. and CV are 1.13% and 0.08 respectively.

RBB has negative capital adequacy ratio. Due to huge accumulated loss of the bank it has negative capital adequacy ratio. Mean S.D. and CV of RBB are - 40.87%, 9.15% and 0.22 respectively. However, RBB was able to reduce its accumulated loss since 2063/64 so that the capital fund ratio is in increasing trend. Previously the bank was failure to make profit and all the figures were in negative but in recent years the bank grows to some extent due to effort of foreign management in the bank for five year.

4.4 Total Loan to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize the total deposit on loan & advances for the purpose of profit generation. A higher ratio of loan & advances indicates better mobilization of collection deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table shows the loan & advances to total deposit ratio of SCBNL and RBB.

Table: 4.27
Total Loan to Total Deposit Ratio

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	42.12%	38.75%	42.61%	46.12%	38.14%	41.55%	3.24%	0.08
RBB	31.22%	31.68%	34.34%	36.23%	38.42%	34.38%	3.04%	0.09

The above table shows the loan & advances to total deposit ratio of SCBNL and RBB is fluctuating trends. The mean of SCBNL and RBB is 41.55% and 34.38% respectively. SCBNL has higher ratio than that of RBB. It indicates the better mobilization of deposit by SCBNL. It reveals that the deposit of SCBNL is quickly converted in to loan and advances to earn income. The bank will be able to better mobilization of collected deposit if there is above 70% to 90% of loan and advances to total deposit according to NRB. The S.D. and C.V of SCBNL are 3.24% and 0.08 similarly RBB has 3.04% and 0.09.

4.5 Total Investment to Total Deposit

Commercial banks and financial companies invest their collected funds in various government securities and other financial or non-financial companies in order to maintain risk weighted assets and liquidity position. This ratio measures how successfully and efficiently the banks are mobilizing their funds on investment in various securities. This ratio of SCBNL and RBB are calculated and presentation below.

Table: 4.28
Total Investment to Total Deposit Ratio

Bank	Fiscal Year							
	2062/63	2063/64	2064/65	2065/66	2066/67	Mean	S.D.	C.V.
SCBNL	50.18%	55.71%	54.99%	46.74%	56.41%	52.81%	4.18%	0.08
RBB	19.56%	25.01%	25.07%	24.77%	22.62%	23.41%	2.38%	0.10

The above table shows that total investment to total deposit ratio of SCBNL and RBB. Both banks have fluctuating trend of total investment to total deposit. Higher ratio of SCBNL is 56.41% in FY 2066/67 and lowest ratio is 46.74% in FY 2065/66 in the same way the highest ratio of RBB is 25.01% in FY 2064/65 and lowest ratio is 19.56% in FY 2062/63. Investment volume of RBB is lower than that of SCBNL. The mean of the ratio of SCBNL and RBB are 52.81% and 23.41% respectively so SCBNL has higher ratio. It signifies SCBNL has successfully allocated its deposit in investment portfolio to get higher investment return. It also implies that RBB has lower investment opportunities.

The S.D and C.V. of SCBNL is 4.18% and 0.08 and RBB has 2.38% and 0.1 respectively.

Major Findings

-) The highest value loan outstanding of RBB and SCBNL in agriculture sector is 1672.6 million in FY 2062/63 and 465.8 million in the FY 2064/65. The lowest amount is 378.1 million in 2066/67 and 311.5 million in the FY 2066/67. RBB has decreasing trend of lending on agriculture sector. SCBNL has consistent trend of lending in agriculture sectors than RBB.

-) The investment in mining sector of both the banks is in increasing trend. RBB has 38.3, 51.7, 166.5, 251.4, 280.5 million loan outstanding in FY 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 respectively the amount in percentage of total loan are 0.14%, 0.19%, 0.65%, 0.91%, 0.89% on the above order. In the same way SCBNL has 22.1, 30.7, 97.3, 141.9, 220.3 million loan outstanding in FY 2062/63, 2063/64, 2064/65, 2065/66, 2066/67 respectively the amount in percentage of total loan are 0.27%, 0.33%, 0.90%, 1.02%, 1.59% in the corresponding year.
-) In production sector RBB has 6776.5 and 6833 million loan outstanding in the year 2062/63 and 2063/64 respectively. The figure has decreased to 5070.6 million and it has increased to 5269.8 and 5614.8 million in the year 2065/66 and 2066/67. The percentage of total loan outstanding during FY 2062/63 to 2066/67 are 25.10%, 25.15%, 19.95%, 19.17%, 17.76%. Similarly, SCBNL provided 2259.1, 2183.6, 2175.3, 2981.9, 2516.3 million loans in the production sector during FY 2062/63 to 2066/67. The percentage of total loan in this sector is 27.87%, 23.72%, 20.16%, 21.35% and 18.13% during the fiscal year 2062/63 to 2066/67 respectively.
-) Loans to construction sector provided by RBB and SBNL are in increasing trend. RBB provided 546.6, 677.4 , 1369.2, 2461 and 2862.2 million loans in this sector during FY 2062/63 to 2066/67. The percentage of total loan is 2.02%, 2.49%, 5.39%, 8.95% and 9.06% in the respective fiscal year. Similarly, SCBNL has 1061.2, 1454.3, 2105.1, 3036.9 and 3479.2 million loan outstanding in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The percentage of total loan outstanding is 13.09%, 15.80%, 19.51%, 21.75% and 25.06% in the respective fiscal year. SCBNL provided more loans in this sector than RBB during the study period.

-) RBB has increasing trend of loan outstanding in Metal Productions, Machinery & Electrical Tools & Fittings Sector except fiscal year 2063/64. In the FY 2063/64 the loan amount has decreased to 133 million from 149.1 million in FY 2062/63. On the other side the percentage of total loan in this sector by the RBB are 0.55%, 0.49%, 1.54%, 2.42% and 3.86% during fiscal year 2062/63 to 2066/67. SCBNL has no loan outstanding in this sector in the FY 2062/63, 2063/64 and 2065/66. In the FY 2064/65 and 2066/67 it has 26 million and 34 million loan outstanding in this sector which is 0.24% and 0.24% of total loans respectively.
-) Investments in Transportation Equipment Production & Fitting sector of RBB and SCBNL in the FY 2062/63 is 459.4 million and 2.6 million respectively. The amount of loan invested in this sector by RBB has decreased to 186.1 million in the FY 2063/64. However, same figure of SCBNL has increased to 8.4 million in 2063/64. In the year ahead RBB has increasing trend i.e. 265.3, 477.6 and 919.2 million. But SCBNL has volatility i.e. 5.8, 7.9 and 2.8 million.
-) Loan outstanding in Transportation Communications & Public Services Sector of RBB has 895.4, 756.6, 818.2, 1137.3 and 866.3 million loan outstanding in the year 2062/63, 2063/64, 2064/65, 2065/66 & 2066/67 respectively. Similarly, SCBNL has 15, 1014.2, 1001.5, 311.4 and 10.1 million loan outstanding for the FY 2062/63, 2063/64, 2064/65, 2065/66 & 2066/67 respectively. RBB provide more percentage of its total loan in this sector o the economy than that of SCBNL.
-) The loan figure of RBB in wholesalers and retailer sector is changing every year during the study period. In figure RBB has 9074.4, 8612.4, 6453, 6620.8 and 7477.8 million loans in this sector during FY 2062/63 to

2066/67 respectively. The percentage of total loan is 33.61%, 31.70%, 25.38%, 24.08% and 23.66% in the corresponding year as above. Like that, SCBNL has 1265, 776.1, 1080.3, 973.5 and 1485.8 million loans in this sector. Both the bank has remarkably high percentage of loan outstanding in this sector as compare to other sector.

) RBB has 83.2, 2374.9, 2342.4, 2130.8 and 2073.9 million loan outstanding in Finance, Insurance & Fixed Assets in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Like that, SCBNL has 397.4, 442.9, 567.7, 1399.7 and 405 million loan outstanding in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Both the banks have changing figure in every year. There is no constant growth and percentage maintained.

) RBB has increasing trend of proving loans to Service Industries. However SCBNL has decreasing trend during the study period. The amounts outstanding of RBB and SCBNL during the period are 1908.3, 1783.7, 2078.9, 2019.9 & 2407.5 million and 641.8, 536.6, 405.8, 303.3 & 242.2 million in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

RBB has 734, 983.1, 2053.1, 2290 and 3214.9 million consumable loans in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. Similarly, SCBNL has 52.5, 56.7, 87.6, 76 and 78.3 million loan outstanding in the fiscal year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively.

During the study period SCBNL has no loans and advances granted to local government at all. However, RBB has 2.2 million loans provided to local

government in the fiscal year 2066/67 only which is 0.01% of total loan outstanding of 2066/67.

SCBNL has increasing trend of providing loans to other sector. However, RBB has changing nature. Total amount of loan provided to the other sector by RBB is 4663.1, 3407.9, 3451, 3322.8 and 4290.7 million in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. SCBNL provided 2044.1 million in this sector in the fiscal year 2062/63 which is 25.22% of total loan of that year.

The amount of loan outstanding of SCBNL is in increasing trend i.e. 2282.4, 2771.8, 4315.8 and 5095.3 million in the fiscal year 2063/64, 2064/65, 2065/66 and 2066/67 respectively which is 24.79%, 25.69%, 30.91% and 36.71% of total loan of the respective year. The figure shows that SCBNL provided the more percentage loans to other sector than that of RBB during study period which might be more risky.

) Out of total loan of RBB 89.14%, 83.68%, 86.78%, 89.23% and 90.79% of loans of RBB have secured by Gold/Silver, Government Securities, Non Government Securities, Fixed A/c Receipt, Asset Guarantee (Fixed Assets and Current Assets) in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The rest amount has against Bills Guarantee, Guarantees, Credit Card, Earthquake Victim Loan and Others. Similarly, 79.97%, 68.29%, 72.79%, 73.49% and 73.52% of loans of SCBNL have secured by Gold/Silver, Government Securities, Non Government Securities, Fixed A/c Receipt, Asset Guarantee (Fixed Assets and Current Assets) in the FY 2062/63, 2063/64, 2064/65, 2065/66 and 2066/67 respectively. The rest amount has against Bills Guarantee, Guarantee, Credit Card, Earthquake Victim Loan and Others.

-) The amount of margin nature loan of RBB is 867.1, 665.1 million in the FY 2066/67 and 2066/67 respectively. The percentage of total loan is 2.74% & 1.93% respectively. Similarly, SCBNL has 150 million loans in the year 2066/67 and 2066/67. The percentage of total loan is 1.08% and 0.97%.

Financial Analysis: The highest ratio of risky assets of SCBNL is 56.91% in FY 2065/66 and the lowest ratio is 46.22% in FY 2066/67. Similarly, the highest ratio of RBB is 100% and the lowest ratio is 52.70% in FY 2066/67. The above figure shows high risk on the assets of RBB than that of SCBNL. The mean ratio of SCBNL and RBB is 49.72% and 79.67% respectively. S.D. and CV of SCBNL and RBB are 4.19%, 0.08 and 17.23%, 0.22. The figure of SCBNL is more consistence than RBB.

-) The highest investment on government securities to total assets ratio of SCBNL is 33.54% in FY 2063/64 and lowest is 24.41% in FY 2065/66. In the same way, the highest ratio of RBB is 22.25% in FY 2063/64 and lowest is 14.22% in FY 2066/67. The mean ratio of SCBNL is 28.07%, which is higher than the mean ratio of RBB 19.19%. It means SCBNL has invested more money in risk free assets than that of RBB. In another words RBB has emphases on more loan and advances and other short-term investment than investment in government securities.

-) As per NRB directives every bank has to maintain minimum 10% capital adequacy ratio. The highest ratio of SCBNL is 16.06% and the lowest ratio is 13.15%. Mean ratio of SCBNL is 14.91%. Likewise, S.D. and CV are 1.13% and 0.08 respectively.

-) RBB has negative capital adequacy ratio. Due to huge accumulated loss of the bank it has negative capital adequacy ratio. Mean S.D. and CV of RBB

are -40.87%, 9.15% and 0.22 respectively. However, RBB was able to reduce its accumulated loss since 2063/64 so that the capital fund ratio is in an increasing trend. Previously the bank was in failure to make profit and all the figures were in negative but in recent years the bank grows to some extent due to the effort of foreign management in the bank for five years.

-) Loan & advances to total deposit ratio of SCBNL and RBB is fluctuating trends. The mean ratio of SCBNL and RBB is 41.55% and 34.38% respectively. SCBNL has a higher ratio than that of RBB. It indicates the better mobilization of deposit by SCBNL. It reveals that the deposit of SCBNL is quickly converted into loan and advances to earn income. The bank will be able to better mobilize collected deposits if there is above 70% to 90% of loan and advances to total deposit.
-) Both banks have fluctuating trends of total investment to total deposit. Higher ratio of SCBNL is 56.41% in FY 2066/67 and lowest ratio is 46.74% in FY 2065/66. In the same way the highest ratio of RBB is 25.01% in FY 2064/65 and lowest ratio is 19.56% in FY 2062/63. Investment volume of RBB is lower than that of SCBNL. The mean of the ratio of SCBNL and RBB are 52.81% and 23.41% respectively so SCBNL has a higher ratio. It signifies SCBNL has successfully allocated its deposit in investment portfolio to get higher investment return.
-) The mean ratio of loan & advances to total assets of SCBNL and RBB is 36.69% and 38.11% respectively that indicates that RBB has better mobilization of funds as loan and advances and it seems quite successful in generating higher ratios in each year in comparison of SCBNL.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

They collect money from public by providing attractive interest and can earn profit by lending it to business organization, industrial, agricultural sectors etc. Moreover, many financial institutions like commercial banks, development banks, insurance companies, co-operative societies and others have been set up with in the short period. However, in Nepal the investment are concentrated on selected sectors only. The economic development of the country largely depends on development of financial sector and uses of available resources in efficient way. Banks and financial institutions play important role in capital formation and effective flow of money in the form of various credit product. Hence, banks and financial institutions are the backbone of the economy.

Non-Performing Loan: During the study period both banks has decreasing nonperforming loan. The highest NPL of RBB is 14470.52 million in the FY 2061/62 followed by the SCBNL by 252.19 million. NPL of both the banks have decreases for remaining years of the study period. RBB significantly reduced the NPL by 37.01 % in the FY 2063/64. Likewise SCBNL also reduced the NPL by 34.67% in FY 2064/65. In the FY 2063/64 NPL of SCBNL has increased by 0.55%. The multiple correlation coefficient of NPL of X_1 (Commercial Banks), X_2 (RBB) on X_3 (SCBNL) is 0.9926 which indicates that it is highly positive correlated. It means that the association between the dependent variable commercial banks and independent variables RBB and SCBNL is perfect.

- J SCBNL write-off loan 33.9 and 39.1 million on the year 2065/66 and 2066/67 respectively. Like, RBB write-off 0.1, 15.1, 4.2, 0.7 million loans in the FY 2063/64, 2064/65, 2065/66 and 2066/67 respectively.
- J The more percentage of loan portfolios of RBB is on risk than SCBNL. From mean point of view, non-performing loan to total loan and advances ratio of SCBNL and RBB is 1.69% and 31.16% respectively during the study period. These Ratios indicate the more efficient operating of credit management of SCBNL in every aspect i.e. NRB directives or internal risk management or credit risk management or banks profitability. However, RBB could not be there in case of credit risk management.

5.2 Conclusions

Hence, credit portfolio has to be management through diversifying the loans to different sectors of the economy. Both banks have in satisfactory region in terms of management of portfolio. However, both banks have high percentage of loan outstanding to other sector. Loans to other of economy might not used to constructive purposes or that might null effect to economic development. SCBNL maintain the above regulatory capital adequacy ratio of 10% as per NRB directives throughout the year. But RBB has negative capital adequacy ratio during the study period 2063/64 to 2066/67. It shows the stronger and better position of SCBNL than RBB.

- J The more percentage of investment in government securities the more secured of assets and public fund. SCBNL has invested more money in risk free assets than that of RBB. In another words RBB has emphases on more loan and advances and other short-term investment rather investment in govt. securities. For minimization of investment risk, RBB should divert its investment in govt. securities.

) From the analysis of NPL of SCBNL and RBB we are in conclusion that both banks has decreasing trend of NPL which is the result of proper Credit Risk Management. In terms of yearly write off of un-recovered loans, SCBNL write-off 73 million and RBB write-off 20.1 million loans during the study period. Ratio of NPL to total loans indicates the more efficient operating of credit management of SCBNL in every aspect. On the other hand SCBNL is more secured in terms of providing LLP for NPL. Loan granted by RBB was extremely worse condition because it's non-performing loans and provision amount is very high. Almost more than 75% of total loans are secured by assets guarantee. SCBNL provided more loans against guarantee which shows that RBB is more secured than SCBNL in terms of security-wise exposure. The more concentration of loan outstanding in single sector of economy the more possibility of risk of failure.

5.3 Recommendation

The research has conducted with objective and spirit of analyzing credit risk management of SCBNL and RBB with respect to analysis of NPL, portfolio management (sector wise lending), position of risk weighted assets, investment in government securities and status of margin lending. Based on the research and analysis following recommendation has sketch out.

) Although both bank has decreasing trend of NPL RBB has high percentage than SCBNL. It is better to analyzing the cash flows, character, capacity, capital and adequate assets guarantee prior to disburse any credit lines. By decreasing the NPL amount RBB can increase its profit. Security-wise loan, on the other hand, SCBNL should focus on top up the loans by assets guarantee. Taken as a whole both banks have satisfactory state of portfolio

management. However, both banks more concentrate to the other sector of the economy. So that both banks have high percentage of loan outstanding to other sector which might not be used to constructive purposes or that might have null effect to economic development, it is better to invest the fund to the agriculture sector, information technology and other production sector.

-) In respect to maintain regulatory capital adequacy ratio SCBNL maintain the ratio but RBB has negative ratios. It is better to retain the profit instead of distributing dividend to the investor which helps to draw down the negative ratio to positive.
-) The more percentage of investment in government securities the more assets secured. SCBNL has invested more money in risk free assets than that of RBB. To minimize the risk, RBB should invest the collected fund in government securities. This helps to maintain the liquidity risk of the bank. Both banks have margin lending. However it is recommended to reduce the figure of such loan instead of reducing loans to other various sectors.
-) After all these analysis and conclusion, we realize the RBB's performance is weak in most of the issues. So this researcher recommends duly follow the guidelines of credit risk management. Accordingly the result of SCBNL shows that it is good in most of the analysis. So it is recommended to maintain current situation, be more analytical and less aggressive to provide loans.