

CHAPTER: 1

INTRODUCTION

1.1 GENERAL BACKGROUND

Every country has its own fiscal and monetary policies, which stabilizes and supervises the economy of its country. These two policies are like the two wheels of the same cart, which drives the economy and pushes it forward. Nepal falls under one of the least developed countries in the world and the reason behind its underdeveloped economy is due to its ineffective economic policies and improper utilization of its available resources. To attain the economic development, there should be a good environment for the establishments of cooperation between different sectors of the economy, and equally important are the effective and efficient utilization of its available resources.

The role of money in an economy is very important. Proper and well-planned management of money directs, determines and enhances the health and productivity of the economy. *Hence, Money is a subject to manage and the banks are managers thereof.*

The existence of bank has its root in economic development and the banks have a big role to play in fund mobilization to increase the pace of development. The improper infrastructure of Nepalese economy, slow paced industrial sector, low rate of employment, majority of non-organized financial sector, lack of organized capital market, have always been demanding an efficient, competent, and liberalized banking industries. Today banking sector has evolved itself as an integral part of the whole economy.

“Commercial banks have played expressive role to uplift the economic growth and to improve the standards of living. So it will not be exaggerated to say that rapid economic development is possible only when financial institutions like commercial banks are involved in the development activities of the country. There is not a step in business world where banks have no influence. Today’s so-called development countries also have fasted their economic development with the help of banking system” (Encyclopedia Americana).

1.2 ORIGIN OF BANKING

Present banking system has evolved through various phases and platforms. According to Geoffrey Crowther, “Merchants, Goldsmiths and Money Lenders are the ancestors of modern banking systems”. The etymology (origin) of the word “BANK” is related to the Latin word ‘BANCUS’, Italian word ‘BANCA’ and French word ‘BANQUE’ all of which means a “BENCH”. The medieval European moneylenders and money exchangers used benches to display their valuables and coins. During the early periods, although individuals mostly did the banking business, many countries established public banks either for the purpose of facilitating commerce or to serve the government.

The world’s first bank was established in Venice, Italy in 1157 AD as the “Bank of Venice”. During 1401, a public bank was established in Barcelona. It is used to exchange money, receive deposits and discount bills of exchange, both for the citizens and foreigners. During 1407 AD, The Bank of Geneva was established and The Bank of Amsterdam in 1609 AD. In spite of the establishment of “Bank of England” in 1694, the development of modern banking institutions had to wait for another four decades until the Banking Act was introduced in 1833 AD, which allowed freedom to open joint stock company banks. “The Bank of England” was the first central bank of the world.

The history of banking in Nepal is not so old. It is assumed that the unorganized lending and borrowing activities in the form of currency were dated back to “Mandev”. He was the first administrator to bring the coins in economic activities. The coin was called “Manangka”. Later the coin named “Gunangka”, “Baishnab”, “Pashupati” etc were also brought into transactions. However, it is tragic not to know the exact date of commencement of monetary units in the economic sphere in Nepal, since the date was not printed on the coins. The “Tejarath Addha” then established by the then Prime Minister Ranodeep Singh was the first financial institution of Nepal. The Addha used to provide loans against the security of Gold, Silver etc. although this Addha did not accept deposits from public. But, the banking in its true sense was first established in Nepal on 30th Kartik 1994 B.S. by the name of Nepal Bank Limited (NBL). This was the first step towards the modern institutional banking system in Nepal. The existing need of improvement in the economic, trade and industrial sector and requirement of financial reform gave the emergence of NBL. Sardar Bhim Bahadur Pandey stated two main reasons for establishment of NBL at that time. (*Timilsina, 2053 B.S: 4*)

- To capture the opportunities created by the establishment of Nepal Trade Corporation and to increase the trade with other countries.
- Nepal's first ambassador to England, Ka. Jha. Bahadur and first secretary Su. Gunjaman Singh established "Udhyog Parishad" and drafted company act and Nepal Bank Act upon their return to Nepal in the year 1993 B.S.

Nepal Rastra Bank, the Central Bank of Nepal was established in 2013 B.S. for the establishment of banking sector and to help the Government to formulate monetary policies as the establishment of NBL alone was not sufficient to control monetary and financial sectors of the country. The mobilization and implementation of efficient and effective monetary and financial policy was the necessity of the country to upgrade its banking system. Later, in the year 2022 B.S. Rastriya Banijya Bank (RBB) was established under the Banijya Bank Act 2021. The objective for the establishment of RBB was to touch the whole economic and financial sectors, to make the banking, a habit of people.

The subsequent tendency towards liberalization and the need of revolutionary change in the financial sector allowed the foreign banks to enter into the economy as "Joint Venture". As those Joint Venture Banks were expected to develop the banking with the pace of time and attract the foreign investments and technology. So, in this process, the establishments of Nabil Bank Limited was formed in the name of Nepal Arab Bank Limited in 1984 A.D under the company Act 1984. Nepal Arab Bank Limited was formed in collaboration with Emirates Bank International (Dubai). Following this, Nepal Indo-Suez Bank Limited in 2042, Nepal Grindlays Bank Limited in 2043, Himalayan Bank Limited in 2049 was subsequently established. Today there are twenty three commercial banks performing their operation in Nepal.

Though, banking system in Nepal has paced up in its development from the establishment of NBL in 1994 B.S. till now, Nepalese banking has not been very successful in bringing change in its economy, society and in its people. Still, a large portion of Nepalese economy is untouched from the present Nepalese Banking System. Even today, moneylenders are still playing the role of banks by granting loans to general public in many remote parts of the country. And this monopoly results in excessively high

interest rates than that of institutional bank, thus exploiting the general public of those remote areas, as banking in those areas has not been an easy access to the public.

Commercial banks are not interested in providing their service and product to the primary and deprived sector of the economy. Commercial banks have access in the major cities and municipalities only. So that, moneylenders are free to take any interest rates from public and take undue advantages from them. So it won't be misinterpreted when we say that integrated and speedy development of the country is possible only when the competitive banking services reach every nook and corner of the country.

For Nepal, Agriculture Development Bank (ADB), NBL and RBB are the main suppliers of rural credit. Other commercial banks have hardly supplied rural credit although they have supplied priority & deprived sector credit just to comply with the regulation of NRB. And the most probable reason for that, can be seen may be because, past experiences of ADB, NBL and RBB reveal an increasing outstanding loan and a rapid growth rate of over dues. Till 1991/92, ADB's total outstanding loan amounted to Rs.3655.2 million of which overdue loan was Rs.1535.4million. Similarly, the outstanding loan of commercial banks in priority sectors amounted to Rs.872.3 million in the same year, out of which Rs.220 million was overdue. Upon investigation, it was found that Rs.248.5 million was misappropriated in cooperatives by their staffs, members and other officials.

The recovery rate is very poor in rural and priority sector but the requirement of credits in these sectors is very large. And with recovery of disbursed loan, reinvestment of credits is, however, not possible. The payback situation and the volume of over dues of the credit supplied by the banks and cooperatives in rural sector represent disappointing trend. It is a difficult situation where neither the credit supply can be stopped, which will affect the economic development of the country, nor the supply of the loan can be continued without the recover of the past loans. And besides, the operational cost of rural credit and priority sector loan has been higher than it's earning. (Nepal Rural Credit Review Report 1994, NRB)

The poor structure of Nepalese economy, slow paced industrial sector, low rate of employment, majority of non-organized financial sector, lack of organized capital market

etc have always been demanding an efficient, competent and liberalized banking institutions. Nepalese banking if worked efficiently in pursuit of its ideology could be the people's hope towards prosperity and economic dynamism.

Table 1
LIST OF LICENSED COMMERCIAL BANKS IN NEPAL

S.N.	Commercial Banks	S.N.	Commercial Banks
1	Nepal Bank Ltd.	16	Kumari Bank Ltd.
2	Rastriya Banijya Bank	17	Laxmi Bank Ltd.
3	Agricultural Development Bank Ltd.	18	Siddhartha Bank Ltd.
4	NABIL Bank Ltd.	19	Global Bank Ltd.
5	Nepal Investment Bank Ltd.	20	Citizen International Bank Ltd.
6	Standard Chartered Bank Nepal Ltd	21	Prime Commercial Bank Ltd.
7	Himalayan Bank Ltd.	22	Sunrise Bank Ltd.
8	Nepal SBI Bank Ltd.	23	Bank Of Asia Ltd.
9	Nepal Bangladesh Bank Ltd.	24	Development Credit Bank
10	Everest Bank Ltd.	25	NMB Bank
11	Bank Of Kathmandu Ltd.	26	KIST Bank Ltd.
12	Nepal Credit & Commerce Bank Ltd.	27	Janata Bank Ltd
13	Lumbini Bank Ltd.	28	Mega Bank Ltd.
14	Nepal Industrial & Commercial Bank Ltd		
15	Machhapuchchhre Bank Ltd.		

Source: NRB website.

There are total of 28 Commercial Banks at present & couples of proposed commercial bank have also acquired letters of intent (log) Century Commercial Bank, Business Bank, Civil Bank and Commerce in Trust.

1.3 PROFILE OF CONCERNED BANKS:

For the purpose of this study, two commercial banks are taken as a sample banks among other 28 commercial banks, namely SCBNL and NICB. SCBNL is one of the pioneer financial institutions in the Nepalese banking sector having joint venture with one of the top banks in the world. NICB on the other hand is comparatively a new bank

promoted by local businessperson, but it is a growing financial institution. Therefore, short glimpses of these two financial institutions are mentioned here.

1.3.1 STANDARD CHARTERED BANK NEPAL LIMITED (SCBNL):

SCBNL has been in operation in Nepal since 1987 when it was initially registered as joint-venture operation in collaboration with ANZ Grindlays Bank in the name of Nepal Grindlays Bank Ltd. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership 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.

As an integral part of the only international banking group currently operating in Nepal, the bank enjoys the impeccable reputation of a leading financial institution in the country. With 11 points of representation and 9 ATMs across the Kingdom and with over 300 local staff, SCBNL is in a position to service its customers through a large domestic network. In addition to which the global network of Standard Chartered Group gives the Bank the unique opportunity to provide truly international banking in Nepal.

SCBNL offers a full range of banking products and services in Business and Consumer banking, catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, international agencies, airlines, hotels, and government corporations.

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 and highest level of service delivery. 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.

PRODUCTS AND SERVICES :

CONSUMER BANK	BUSINESS BANK
<ul style="list-style-type: none">) Current, Savings, Call and term deposit accounts in Local and Foreign currency) Fund Transfer Services- Local and International- Drafts, SWIFT) Credit Card Services- Issuances and Acquiring) 24 Hour ATM services-SCBNL debit card, VISA and Master Card) Safe Deposit Lockers) Foreign Exchange Services- Issuance/Purchase of Travelers Cheque) Extra Banking-365 days banking service) Priority Banking; Home Banking) Auto Loan) Home Loan; Home Advantage) Personal Loan) SMS Banking) Corporate Employee accounts 	<ul style="list-style-type: none">) Trade Finance) Letters of Credit: Issuance and acceptance) Guarantees: Issuance and acceptance) Commercial Lending (Working Capital Loan)) Term Lending) Loan Syndication) Forward Exchange Rates) Electronic Banking) Cash management) Operating Accounts) Quick Collection Services) Quick Payment Services) Cheque Writer

1.3.2 NEPAL INDUSTRIAL & COMMERCIAL BANK LIMITED (NICB):

NICB was incorporated in 30th May 1997 and commenced its business in 21st July 1998 by the distinguished business personalities of the country. NICB was established under Commercial Bank Act 2031 to promote and expand the banking activities

throughout the country with the approval of NRB. NICB has its head office in Biratnagar and its corporate office is situated at Kamaladi, Kathmandu.

NICB was established with the largest capital base with authorized capital of Rs.1 billion and the paid up capital of Rs.500 million then. The bank has been successful to register operating profit in the very first year of its operation. NICB is one of the banks with the largest number of shareholders, close to 33,000 shareholders.

Two years back, NICB had launched a Home Loan product called “NIC Ghar Subidha” with the never before interest rate starting from 6.99 percent. Whilst other banks were also offering this kind of product, it has different feature to accommodate the need of different customers from land purchase to equity finance (to finance against own land & building). This product has been a huge success and has boosted the image of the bank through the nation. The bank has booked loan amount of about Rs. 2 billion under NIC Ghar Subidha only. In the cut-throat competition between financial institutions, NICB brought such a product that could make possible for a middle class Nepali’s dream of living in one’s own home come true.

Before NIC Ghar Subidha, NICB had launched a successful “NIC Life Saving Account” on 8th August 2003. It is one of those prime saving account, which gives the highest interest rates (up to 5% p.a.) against the prime saving accounts of other commercial banks. Till date, NIC life saving account has reached over Rs.2 billion deposits.

Besides these NICB has been coming with new products both in deposits and lending frequently. NICB is the first bank to step in gold business with the product called “NIC Pure Gold”. The bank offers pure gold (99.9%) with certificate of purity and against this gold, customer can get loan also. NICB offers a whole set of banking products and services, a wide range of services to cater the every need of their customers, from individuals to corporate clients.

NICB is the first Nepalese commercial bank to be awarded ISO 9001 2000 certificate and also the first to be provided with a line of credit by IFC (International Finance Corporation), World Bank Group under its Global Trade Finance Program. IFC conducted a thorough due diligence of NICB by its team of experts based in Washington

DC and its South Asia Regional offices before the line of credit was approved. The Global Trade Finance Program will now enable NICB to have their Letter of Credit and Guarantees confirmed by more than 272 banks and their affiliates in more than 50 countries worldwide on the backing of IFC guarantee thus enabling NICB to be associated with these correspondent banks facilitating international banking transactions of their customers to and from any part of the world.

Subsequent to these achievements, NICB has been recently awarded “The Bank of the Year 2007” from Nepal by The Banker, Financial Times Group, London. NICB is the only bank in Nepal that has not been managed and/or owned by foreign banks one time or the other, to have been given this award.

PRODUCTS AND SERVICES :

CONSUMER BANK	WHOLESALE BANK
<ul style="list-style-type: none">) Current, Saving, Call and Fixed Accounts) NIC Life Saving Accounts) NIC Sikshya Kosh) Karmasil Bachat Khata) Personal USD Accounts) NIC Pure Gold) Consumer Loan <ul style="list-style-type: none"> o NIC Ghar Subidha o Auto Loan o Education Loan o Personal Overdraft) Purchase and Sale of Traveler’s Cheque) ATM/Debit Card) Collection/Clearing) Safe Deposit Lockers) Any Branch Banking System) Extended Counter Service) Telephone/Electricity Bill Payment 	<ul style="list-style-type: none">) Trade Finance <ul style="list-style-type: none"> o Bank Guarantee o Letter of Credit) Corporate Finance <ul style="list-style-type: none"> o Overdraft o Trust Receipt Loan o Short Term Loan o Demand Loan o Time Loan o Fixed Term Loan o Export Loan) Bills Purchase) Banking Service on SWIFT

1.4 STATEMENT OF THE PROBLEM:

Financial liberalization not only brings opportunities but also the risks to many countries. The East Asian crisis in 1997, the result of the liberalization of capital markets and globalization of the financial markets, not only led to massive inflows of capital into the Asian Countries, but also created financial fragility in the region. Huge capital inflows, lending booms, asset price bubbles, high domestic interest rates, an open capital account and relatively a fixed nominal exchange rate in these countries encouraged large amount of borrowings from abroad. The retreat of capital flows created problems in the banking sector. The poor institutional capacity and weak regulatory and supervisory structures could not cope with the unanticipated problems, resulting in further deterioration of the situation, which later on transformed into a political crisis in some countries. (Atreya, 2005: 58)

It has to be acknowledged that banking sector in many countries suffers from poor accounting and legal systems, excessive government involvement, poor banking environment, limited financial information to the general public and so on. Problems emanating from these weaknesses pose a great threat to the stability of financial systems. (Atreya, 2005: 58)

Appropriate investment policy and sound lending is the essence of all the banking institutions. In the context of Nepalese banking scenario, when there is a cutthroat competition between mushrooming commercial banks, banking institutions (commercial banks) are not able to formulating their investment policy and strategy in an organized manner. Investment problem has become a serious threat for the developing countries like Nepal.

Lack of far-sightedness regarding lending and investment policy formulation and absence of strong commitment towards its proper implementation has caused serious threats to commercial banks. Granting loans against insufficient funds, overvaluation of goods pledged, land and building mortgaged, risk averting decisions regarding loan recovery and negligence in recovery of overdue loans are some of the basic and ever so threatening loopholes and the result of unsound investment policy sighted in the financial scenario.

Non-performing loans are also one of the serious problems faced by the commercial banks. Non-performing loans can be the result of instable political condition, insecurity and many other factors. Due to these unforeseen and lack of farsightedness, industries are closing down and so are the investments and loans. Therefore, appropriate investment policy is the basic need of all the commercial banks.

Hence, some specific problems are as follows.

- How can investor examine financial position of commercial banks?
- What are the indicators to measure financial position and how can their relationship be measured?
- How can an investor evaluate fund mobilization and investment portfolio?
- How can an investor evaluate lending performance with quality?
- Efficiency and its contribution in total income ?

1.5 OBJECTIVES OF THE STUDY:

The main objective of the study is risk assets management in commercial banks in Nepal and the basic objectives of this study are as follows:

1. To examine the financial position of selected banks.
2. To find out relationship between financial indicators of selected banks.
3. To evaluate the fund mobilization and investment portfolio of the sample banks.
4. To evaluate the lending performances with quality, efficiency and its contribution in total income of the banks.

1.6 LIMITATIONS OF THE STUDY:

This study is mainly based on secondary data. In some aspects of the study, primary data are also collected.

- i. This study only covers the five years period.
- ii. This study is limited to the case study of SCBNL and NICB.
- iii. Of various factors, only factors relating to investment and lending policies are considered for the study.
- iv. Since two commercial banks are considered for the study, the results drawn for this study may not be applicable to other banks.

1.7 ORGANIZATION OF THE STUDY:

This study is carried out in different segments and procedures. In order to make more understandable and easy, this study is divided into following chapters:

Chapter: 1

Chapter one contains the basic introduction and the background of the study.

Chapter: 2

All the relevant books, journals, thesis and other valuable materials needed for the study are taken into account and are reviewed thoroughly in the second chapter.

Chapter: 3

Various financial and statistical tools are used in this chapter to find the end result.

Chapter: 4

This chapter deals with the presentation of the carefully collected and organized data, and the careful analysis of the collected data are being performed.

Chapter: 5

This is the last chapter of the study, where the total outcomes of the study are being presented in terms of summary, conclusions and recommendations.

CHAPTER: 2

REVIEW OF LITERATURE:

2.1 CONCEPTUAL FRAMEWORK

The number of commercial banks and other financial institutions has increased significantly over a period of years. On December 2009, the financial system in Nepal is composed of 28 commercial banks, 58 development banks, and 79 finance companies. The banking sector includes 28 commercial banks with three public banks, including ADBL, which was recently converted in to commercial bank. These commercial banks holds about 84 percent asset share of the total assets of Rs. 506,129 million in the financial sector. Though the Nepalese financial sector is reasonably diversified with institutional arrangement of varied nature of financial institutions including commercial banks to development banks to cooperatives, still commercial banks are the major players in this system and they occupy substantial share in the structure of the financial sector. But still the importance of lending in banks has remained virtually unchanged. Lending is still one of the essential and important functions where the whole banking business is rested upon. Many researchers have published their articles, papers regarding the lending policies and practices of commercial banks and other financial institutions. Review of such related books, articles and papers along with various dissertations done by senior scholars have been studied and analyzed, and results and conclusions generated from the analysis have been summarized in this chapter. (*Banking and Financial Statistics, NRB, Mid-January 2007, No. 46 and Banking Supervision Annual Report 2006*)

2.1.1 Commercial Bank:

“A bank is a government regulated, profit making business that operates in competition with other banks and financial institutions to serve the savings and credit need of its customers. The primary business of banks is accepting deposit and lending money. Banks accepts deposits from customer who wants the safety and convenience of deposits service and the opportunity to earn interest on their excess funds. Banks put their depositor’s funds to other individuals... to business... and to federal, state and local governments.” (Halter, 1999: 2)

A financial definition of commercial bank may be stated as “An institution which accepts deposits makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These definitions are run to make profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to business”. As financial intermediary, the commercial banks also play an important role as implementing body for central bank. The monetary structure involves analysis of the behavior of banking system. The variation in the size and composition of bank assets play an important role in transmitting the influence of monetary policy to the economy. The composition of bank portfolio, such as, reserve, investment and lending lead the money supply to vary.

2.1.2 Loans and Advances:

A loan is a type of debt. All material things can be lent but this article focuses exclusively on monetary loans. Like all debt instruments, a loan entails the redistribution of financial assets over time, between the lender and the borrower. The borrower initially receives an amount of money from the lender, which they usually pay back, but not always in regular installments, to the lender. This service is generally provided at a cost, referred to as interest on the debt. Acting as a provider of loans is one of the principal tasks for financial institutions. For other institutions, issuing of debt contracts such as bonds is a typical source of funding. Bank loans and credit are one way to increase the money supply.

Types of Loan:

I. Secured Loan:

Loans can be of two types “Secured” and “Unsecured”. A mortgage (secured) is a very common type of debt instrument, used by many individuals to purchase housing. In this arrangement, the money is used to purchase the property. The financial institution, however, is given security- a lien on the title to the house- until the mortgage is paid off

in full. If the borrower defaults on the loan, the bank would have the legal right to repossess the house and sell it, to recover sums owing to it.

In some instances, a loan taken out to purchase a new or used car may be secured on the car, in much the same way as a mortgage above, although the duration of the loan period is considerably shorter, quite often corresponding to the useful life of the car. Where this is not, it will be another form of consumer credit.

II. Unsecured Loan:

Another type of loan being processed by financial institution is “unsecured loan”. This type of loan may be available from financial institutions under many different marketing packages:

-) Credit card debt,
-) Personal loans,
-) Bank overdrafts,
-) Credit facilities or lines of credit
-) Corporate bonds

2.1.3 Performing Loans:

Loans where payments are being made in time, loan covenants are met, the collateral is priced right (at fair market value), such loans are termed as performing loans.

2.1.4 Non-Performing Loans:

A non-performing loan is a loan that is in default or close to being default. Many loans become non-performing after being in default for 3 months, but this can depend on the contract terms. “A loan is non-performing when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payment are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full”. (IMF)

2.1.5 Investments:

The common definition of investment is, “the sacrifice of certain present value for (possibly uncertain) future value”. (Sharp, 1999: 217) Investment is not a gamble rather it is

the systematic and scientific way of using the excess fund to get the maximum return at minimum level of risk. An investment forgives the present return for future profit. Now a day, investment opportunities are available in the market. These opportunities are in financial securities, real assets and other investment companies. However in financial terms, sources of investments are financial securities like common stock, bonds, preferred stock, T-bill, commercial paper, warrants etc. Real investments mean investment in tangible assets like land and building, plant and machinery, car etc. Other investment includes pension fund, provident fund etc.

Hrishikes Bhattacharya in his book 'Banking Strategy, Credit Appraisal and Lending Decisions' published by Oxford University Press, India, has put the recommendation of Tandon Committee from the report submitted to this committee. The committee has prepared this report in 1975, however these recommendation still deserve great significance in the sector of credit appraisal and lending. Breaking away from the traditional methods of credit appraisal, the system proposed by the committee enjoined upon the banker.

- a. To assess the need based credit of the borrower on a rational basis;
- b. To ensure proper end-use of bank credit by keeping a closer watch on the borrower's business and thus to ensure safety of the bank's funds;
- c. To improve the financial discipline of the borrower, and;
- d. To develop healthy banker-borrower relationship.

The committee examined the existing system of lending and recommended the following broad changes in the lending system: (*Hrishikesh, 1998: 309*)

- a. The credit of borrowers is assessed on the basis of their business plans.
- b. Bank's credit only is the supplementary to the borrower's resources and not in replacement of them, i.e. banks are not to finance one hundred percent of borrower's requirements.
- c. Borrowers are required to hold inventory and receivables according to norms prescribed by the Reserve Bank of India from time to time.
- d. Credit is made available in different components only depending upon the nature of holding various current assets.

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

The committee held that, at any time a business is required to hold the following current assets for operations of the business: (Hrishikesh, 1998: 309)

Raw materials including stores and other items uses in the manufacturing process

- Stock-in-process
- Finished goods
- Receivables
- Spares

“In India, the definition of the business of banking and the large number of permissible functions for banks are given in the banking regulations Act 1948 (BR Act).

1. According to Section 5(C) of the Banking Regulations (BR) Act, ‘a banking company is a company which transacts the business of banking in India’.
2. Section 5(B) of the Act defines banking as, ‘accepting for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and with-draw able, by cheque, draft, and order or otherwise’.

As per the definition, banking in India signifies:

- i. Accepting of deposits from public,
- ii. For the purpose of Lending and Investments,
- iii. Repayable on demand or otherwise, and
- iv. Withdraw able by cheque, draft and or otherwise.

Section 7 of the BR Act makes it compulsory for every company carrying on the business of banking in India to use as part of its name, at least, one of the following words- “Bank”, “Banking”, or “Banking Company”. (Khubchandani, 2000: 4)

“Banks growth and profitability are the result of carefully forecasting funding needs, competitively attracting funds, efficiently borrowing funds, and effectively investing funds in safe but profitable earning assets. Depending on banks’ size and location and on

local and national economic conditions, a bank may have adequate, relatively stable sources of low cost funds, or it may have to compete regularly and aggressively for funds at high market prices. For the increasing number of banks, the second situation is becoming the norm, as more and more banks face increasing pressures to attract adequate funds at reasonable costs". (Gerald, 1999, P: 76)

"The Investment (credit) policies of banks are conditioned to great extent, by the national policy framework; every banker has to apply his own judgment for arriving at a credit decision, keeping of, his banker's credit policy in mind". (Singh and Singh, 1983: 4)

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

"The traditional bread and butter market is no longer in a position to sustain the banking structure in an era of deregulation and globalization. The dismantling of cartels for interest rate determination or withdrawal of the administered rate regime, which provided an umbrella to the banks for long, are no longer there. Interest rate risk has emerged as one of the dominant risk elements with such a force that a number of well-known international banks suffered heavily due to mismanagement of this risk. Due to all these, commercial banking (lending and retail deposit taking) is now moving down to the third position with investment banking and asset management moving up respectively to number one and two activities of the banks. The accent is now on off balance sheet business, or "sweeteners", as is the current terminology in the banking market...

The irony of this decade was that competition coexisted with control. In order to withstand competition in the face of control, attempts were made to circumvent it by cartelization and subsidiarization on one hand, and dilution of credit on the other. The latter was possible because in most of the banks, whether they were global giants or country banks; well-documented loan policy did not exist. The next decade of banking beginning 1970 had to suffer from the follies of the past" (Bhattacharya, 1998: 6)

The function of capital in bank and other financial institutions is substantially different from that of most of other business enterprises. For example, in manufacturing concern, the capital funds is used primarily for acquisition of fixed assets, while in a banking organization the function of capital is primarily provide a guarantee fund, its usage in fixed assets acquisition is hardly more than 15 percent (and it should not be more than 20 percent). Capital performs a guarantee function in other enterprises too, but not so predominantly, the capital of a manufacturing concern is something of a cushion for a long and short-term creditor to fall back on, but is only of its purpose. Bank capital has almost no other purpose”.

“Of course, one of the primary functions of development in banking is deposit mobilization. Without deposits coming as they do from the public and the saver, banks will not have the resources to lend. With adequate resources, lending can have a wider average to meet the credit needs of all the sectors of the economy. Deposits and credit operations always go together and each is interconnected. Unless there are advances, deposits cannot rise”. (Rao, 1987: 4)

2.2 CONSUMER LOAN:

The history of consumer loan is not old in Nepalese market, which is started just a decade ago. The pioneer in consumer lending is SCBNL and Everest Bank Ltd. (EBL). Since both these banks are established under joint venture with foreign banks, they have tested these products in their home country. As SCBNL has global operation, they have a good and successful experiment in different parts of the world. With these success stories, they were encouraged to introduce such products in Nepal as well. EBL established in joint venture with Punjab National Bank, has also the similar edge over other local banks in such product development and experiment.

As a pioneer and risk taker, SCBNL has also been able to make good profit from consumer lending, which is comparatively secured than business loan and fetch good yield to the banks. SCBNL has about 25% RA in consumer lending. Following the squeeze in the business due to insurgency period, NICB has also introduced various consumer lending products. Among them, “NIC Ghar Subidha”, a home loan product launched by NICB two years back was grand success and the bank has been able to book about Rs. 1

billion RA under this loan within a short span of one year. Following the success of NIC Ghar Subidha, the bank has been launching various consumer lending products like Auto Loan, Travel Loan and “NIC Sajilo Karja”, a Personal overdraft. Consequence to this, now the bank has been able to diversify its portfolio in consumer lending about 25% of its total RA.

2.3 REVIEW OF NRB DIRECTIVES:

Nepal Rastra Bank (NRB) is an apex institution in money and capital markets in Nepal. It works as a central bank of Nepal. Being the nation’s central bank, it directs, supervises and controls the functions of commercial banks and other financial institutions. NRB has issued various directives in order to develop a healthy, competitive and secured economic systems to ensure overall national development. A unified directives was issued to all commercial banks and financial institutions licensed by NRB on 16th July 2005 in place of different directives issued earlier. The relevant things have been highlighted here.

NRB in the directives has directed all the national level commercial banks operating at present must increase their paid up capital to Rs. Two Billion proportionately by Ashad end 2070 BS. For this, the base year is fixed as at Ashad end 2064 BS and these commercial banks are required to increase the paid up capital proportionately from FY 2064/65 BS. Currently operating commercial banks can increase the minimum capital funds by at least 80 percent paid capital and rest 20 percent can be adjusted by the source that can be counted in the core capital like general reserve, share premium, non-redeemable preference share and retained earnings. If the commercial banks could not maintain a minimum capital fund or Rs. Two Billion, NRB will take following actions:

- a) By the end of the fiscal year 2064/65, they were not allowed to declare and distribute dividend.
- b) By the end of the fiscal year 2065/66, they were not allowed to accept deposit.
- c) By the end of the fiscal year 2066/67, they were not allowed to flow loans and advances.
- d) By the end of the fiscal year 2067/68, they were not allowed to all the transactions except recovery of loan and payment of deposit. After this time frame, the process of cancellation of license will be initiated.

(Economic Report, NRB 2000/01: 23 and licensing policy for banks and financial institutions).

Any two banks and financial institutions unable to increase the below mentioned minimum paid up capital within the stipulated time frame if apply for the merger, the existing capital of both organizations is added for the consideration of the paid up capital. NRB has made the provisions as per Table-2 regarding the capital requirement to establish a commercial bank and financial institutions based on their operational sector.

Table: 2

Classification of Bank and Financial Institutions and provision for Minimum Paid up Capital:

Types	National Level	Regional Level	4 – 10 district	1 – 3 district
“A”	Rs.2 Billion	-	-	-
“B”	Rs.640 Million	-	Rs.300 Million * Rs.200 Million	Rs.300 Million * Rs.100 Million
“C”	Rs.300 Million * Rs.200 Million	- -	- -	Rs.300 Million * Rs.100 Million
“D” #	Rs.100 Million	Rs.60 Million	Rs.20 Million	Rs.10 Million

* for financial institutions involved in leasing business

involved in micro finance

Regulation Relating to Maintenance of Minimum Capital Fund

Maintenance of Minimum Capital Fund:

The total capital fund is the sum of core capital and supplementary capital. On the basis of the risk-weighted assets, the bank should maintain the prescribed proportion of minimum funds from fiscal year 2062/63 as per the following timetable:

Table: 3

Required Capital Fund on the basis of Weighted Risk Assets (%):

Organization	Core Capital	Capital Fund
“A”, “B” & “C” category	6.0%	12.0%
“D” category	4.0%	8.0%

The core capital is comprised of Paid up Capital, Share Premium, Non Redeemable Preference Share, General Reserve and Retained Earnings, Capital Redemption Reserve, Capital Equalization Fund and Other Independent Fund. However, following heads should be deducted for the purpose of calculation of the core capital:

- a) Goodwill
- b) Investments in the shares and securities of the organized sector more than ceiling allowed by NRB.
- c) Investments in the shares and securities of the organized sector having financial interest.
- d) Fictitious assets

For the purpose of calculation of Capital Fund, the amount under the following heads, subject up to one hundred percent of the core capital, should be included under the supplementary capital.

Hybrid Capital Instruments

The instruments having the feature of both equity and debt are called hybrid capital instruments. This includes unsecured fully paid up instruments issued by the bank, instruments, which are non-redeemable at the option of the holder except with the approval of NRB, perpetual or long-term preference stock (shares) convertible into common stock if the profit and loss account becomes negative. However, banks and financial institutions cannot hold (purchases) hybrid capital instrument issued by any bank or financial institutions

General Loan Loss Provision:

Under this head, provision made only against the pass loan should be included. If excess provision is made for pass, sub-standard and doubtful loan as per direction of NRB, such excess provision and all the provisions made to restructure and reschedule loan can be included in the general loan loss provision under supplementary capital. But the amount should be limited up to 1.25 percent of the total risk weighted assets.

Assets Re-valuation Fund:

Assets re-valuation fund can be included not exceeding 2 percent of the supplementary capital.

Regulations relating to Loan Classification and Loan Loss Provisioning

Effective from FY 2058/059 (2001/02), banks should classify outstanding principal amount of Loans and Advances on the basis of aging. Loans and Advances should be classified into the following four categories:

Pass:

Loans and Advances whose principal amount are not past due for a period up to three months should be included in this category. These are classified and defined as performing loans.

Sub-Standard:

All loans and Advances that are past due for a period of three months to six months should be included in this category.

Doubtful:

All Loans and Advances that are past due for a period of six months to one year should be included in this category.

Bad:

All Loans and Advances which are past due for a period of more than one year as well as advances which have least possibility of recovery or considered unrecoverable or considered and those having thin possibility of even partial recovery in failure should be classified in this category.

Loans and Advances falling in the category of Sub-standard, Doubtful and Bad are classified and defined as Non-Performing Loans. Loans and Advances fully secured by Gold, Silver and Fixed Deposit receipts and HMG Securities should be included under "Pass" category. However, where collateral of fixed deposits or HMG securities or NRB bonds is placed as securities against loan for other purposes, such loans has to be classified on the basis of aging. If it is appropriate in the views of the bank management, there is no restriction in classifying the loans and advances from low risk category to high-risk category. For instance loans falling under Sub-Standard may be classified into Doubtful or Bad, and loans falling under doubtful may be classified into Bad category.

Principal and interest on loans and advances should not be recovered by overdrawing the borrower's current account or where overdrawing facilities has been extended by overdrawing such limit. However, this arrangement should not be constructed as prohibitive for recovering the principal and interest by debiting the customer's account. Where a system in the banks exists as to recovery of principal and interest by debiting the customer's account. And recovery is made as such resulting in overdraft. This is not settled within one month of such overdrawn principal amount should also be liable to be included under the outstanding loan and such loan should be downgraded by one step from its current classification.

Loan Loss Provisioning:

The loan loss provisioning on the basis of the outstanding loans and advances and bills purchases classified as per the Directives should be provided as follows:

Table: 4
Classification of Loan Required Provisioning:

Classification of Loan	Loan Loss Provision
Pass	1.00%
Sub-Standard	25.00%
Doubtful	50.00%
Bad	100.00%

Loan loss provisioning 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 loan is extended only against the personal guarantee, a statement of the assets, equivalent to the personal guarantee amount not claimed by any other should be obtained should be classified as per above and where the loan fall under the category of Pass, Sub-Standard, and Doubtful in addition to the normal loan provision applicable for the category, and additional provision by 20 percent point should also be provided. Classification of such loans and advances should be prepared separately.

Regulation Relating to Limit on Credit Exposure and Facilities to a Single Borrower, Group of Related Borrowers and Single Sector of the Economy:

Commercial banks may extend to as single borrower or group of related borrowers the amount of Fund Based Loans and Advances up to 25 percent of the Core Capital Fund and Non Fund based, off balance sheet facilities like Letters of Credit, Guarantee, Acceptances, Commitments up to 50 percent of its core capital fund.

Where a customer has once utilized the off-balance sheet facilities and such facilities have turned into Fund-based credit, directives relating to Fund-based credit limit should be applied for fixation of limit to such customer. In the following cases, the exemption in limit of credit and facilities is not applicable:

Credits and facilities, extended against fixed deposit receipts, deposits placed with the bank, HMG securities, NRB bonds as well as against unconditional guarantees issued by the World Bank, Asian Development Bank and International Finance Corporation including multi-lateral institutions and loan advances and facilities extended against unconditional guarantees issued by internationally rated banks having a rating of at least A+ by reputed rating agency or banks specified as first class banks by NRB from time to time.

Advances and facilities to be used for the purpose of importing specified merchandise by the following public corporation:

<u>Name of the Corporation</u>	<u>Merchandise</u>
Nepal Oil Corporation	Petrol, Diesel, Kerosene, LP Gas
Nepal Food Corporation	Cereal

For the purpose of the above prescribed exposure limits, “group of related borrowers” should be treated as a single group under the following circumstances:

1. Where a company holds 25% or more shares in another company then both of such companies, or

2. Director of a company, shareholders of a private company and husband, wife, son, daughter in law, son in law, adopted son, adopted daughter, father, mother, brother, brother's wife, sister of such director or shareholder residing jointly in the same house or separately as well as all other persons who are supported by such related persons. In addition, another companies in which such persons individually or by their relatives as above, separately or jointly hold 25% or more shares, then such companies, or
3. Firm, company stated to be associated as a group, or members of such group or
4. Even if the director, shareholder or other relatives as specified in sub-clause (b), holds, jointly or individually, less than 25% shares of another company, but the management of that company is controlled by the following ways, then such companies:
 - I. By being Chairperson of the Board of Directors
 - II. By being the Chief Executive of the Company
 - III. By appointing more than 25% of the Directors
5. Where one borrower or company gives a cross guarantee to another company, then such companies
6. The bank should prepare the records of the single borrower and related customers on half-yearly basis and submit to NRB, Banking operation department and inspection and supervision department.

Priority Sector Lending:

Thus, with the objective of mitigating the unemployment, poverty, economic inequality and thus upgrading the deprived and low income people, the project of national development and priority, micro and small enterprises were declared priority sector and the lending to such sector has been categorized as priority sector lending. (Aryal 2058: 54-62)

With a view to make bank credit available to small agricultural, industrial and service sector and promote income and employment opportunities, the NRB has directed the commercial banks to extend at 12 percent of their total outstanding loans to the priority sector. (Pandey, 2058: 80-90)

Deprived Sector Credit

Table: 5

Required Deprived Sector Credit to Different Commercial Banks:

Serial No.	Banks	Deprived Sector Lending
1	NBL	3.00
2	RBB	3.00
3	NABIL	3.00
4	NIBL	3.00
5	SCBNL	3.00
6	HBL	3.00
7	NSBIBL	2.50
8	NBBL	2.50
9	EBL	2.50
10	BKL	2.50
11	NCCBL	1.25
12	NICB	0.75
13	LBL	0.75
14	New Bank (if any)	0.25

The loan not exceeding Rs.30, 000.00, extended to a member of a group or member of a family, investments in shares of Gramin Bikas Bank, Rural Micro Finance Development Center and any other development banks established with the objective of extending the loan to deprived sector and lending made, conditioned to flow the loan to the deprived sector only, to the Gramin Bikas Bank, finance companies, co-operatives society and any other licensed non-governmental organization are categorized as Deprived Sector Loans.

The NRB has directed the commercial banks to extend some portion of their priority sector lending towards the deprived sector. The deprived sector lending requirement is discriminatory with the respect to the aging of commercial banks ranging from 0.25 percent to 3.00 percent of their six month total outstanding loans.

2.4 REVIEW OF JOURNALS:

Non-performing loans of the financial institutions have been crippling the nation for a long time. A study, performed by Kathmandu University of Management (KU), showed that in 1993-94, loans and advances of financial institutions to a private sector was about 19.04 percent of the GDP, which increased consistently over the period of ten years and reached to 40.98 percent in 2003-04. Similarly deposits collected by these institutions in 1993-94 accounted for about 27.30 percent of GDP and this reached to almost 50 percent in 2003-04. According to the study, commercial banks account for more than 80 percent of the total deposits collected by all the financial institutions and more than 70 percent of total loans and advances to all the financial institutions put together.

Both deposits, loans and advances of financial institutions have increased by almost 350 percent during the period between 2000 and 2006, indicating rising commercial banks lending over the period. Non Performing Loans of commercial banks came down to 14.2 percent in mid July 2006 from 18.7 percent in mid July 2005. The level of NPL has significantly come down in NBL from 49.0 percent to 25.1 percent a year ago at mid July 2006, resulting in a lower NPL of the financial system as a whole As mentioned earlier NBL wrote off Rs. 3.76 billion principal and Rs. 8.32 billion interests at the end 2005/06 .

The problem of NPL is quite acute in Nepal Bank Ltd. (NBL) and Rastriya Banijya Bank (RBB). NBL and RBB combined share in the total loan portfolio of commercial banks was almost 56 percent in 2000.

Over the period, their share, however, has declined and reached to 34 percent indicating that these banks got more conservative in extending loans.

According to the study, the cause of NPL is moral hazard, lenient project appraisal, political favor and interest of the vested groups. Not only have that, bank's policy to reward employees on the basis of loan targeted without considering the recovery aspect itself causes NPL. (NRB report of fiscal year 2005/06)

With more deregulation setting in, evaluation of risk appraisal is assuming more importance. Absolute quantitative credit deposit ratio has no relevance if the assets are not performing ones. Hence, it is felt that appraisal techniques of bank lending in competitive areas have to be more attuned towards risk evaluation. A major aspect of this work has been the development of more advanced methods for the quantitative measurement of market risk; the extensive trading in financial instruments provides a good supply of price statistics and this is a considerable instruments provides a good supply of price statistics and this is considerable help when it comes to estimating market risks. Much work is now being done in many places to construct models for a better management of credit risks, which are still by far the largest risk category for banks. However difficulties here are far greater than in the case of market risks. It changes in the nature of banking operations that have brought them more to the fore.

Financial legislation and regulation need to be sufficiently flexible to accommodate the rapid pace of developments in the financial sector. It tends to take considerably longer to amend rules than it takes to create new financial products. But there has to be a foundation of minimum requirement of risk management in addition, the authorities, must be increasingly involved in ensuring that institutions themselves possess a basic competence in and understanding of the risk that have to be managed, as well as adequate systems for their management, rather than issuing detail risk management instructions. In other words, it has become more important to inspect system. Defining in a wide sense, than to scrutinize particular commitment or market risk. Some supervision can be carried out with the market assistance. The authorities prescribe as well as different operation such a transparency emphasize the banks demand on each other as well as what customers requires of their bank.

Effective credit risk management allows a bank to reduce risks and potential Non-Performing Assets (NPA's). It also offers other benefits. Once banks understand their risks and cost, they will be able to determine their most profitable businesses and price products according to the risks. Therefore the banks must have an explicit credit risk strategy supported by organizational changes, risk measurement technique and fresh credit processes and systems.

There are five crucial areas that credit risk management should focus on:

- Credit sanctioning and monitoring process
- Approach to collateral
- Credit risks arise from new business opportunities
- Credit exposures relative to capital or total advances
- Concentration of correlated risk factors

Apart from these, the bank management should regularly review all asset quality issues including portfolio composition, big borrower exposures and development in credit management policy and process. Improving risk management will not be easy or quick. However, Nepalese bankers have little choice. Hopefully, the banks adopt good risk management practices and will be able to reap both strategic and operational benefits.

“Banking experts say that growing number of new commercial banks and their efforts to penetrate their investment in new sectors such as agro-based industries, college and schools, hydropower and hospitals, play a crucial role in boosting the flow of loans.”

Dr. Sunity Shrestha, in her study, *“Investment planning of Commercial Banks in Nepal”*, she has made a remarkable efforts to examine the investment planning of commercial banks in Nepal. On the basis of her study, she has concluded that the bank portfolio (loans and investment) of commercial banks have been influenced by variable security rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of central bank (NRB). So, the investments are not made in professional manners. Investment planning and operation of commercial banks in Nepal has not been satisfactory in terms of profitability. To overcome this problem she has suggested, “commercial banks should take their investment functions with proper business attitude and should perform lending and investment operation efficiently with the proper analyze of the project”.

2.5 REVIEW OF RELATED STUDIES (Unpublished Thesis):

During research for this study, various dissertations and thesis submitted by various students have been consulted and been thoroughly analyzed.

A study conducted by Mr. Upendra Shrestha regarding the Investment practices of joint venture banks in Nepal with special references to Nabil Bank Ltd., SCBNL and Nepal SBI Bank Ltd have figured out the following problems, conclusion and recommendations: “Commercial banks are more emphasized to be making loan on short term basis against movable merchandise. Commercial banks have a lot of deposits but very little investment opportunities. They are even discouraging people by offering very low interest rate and minimum threshold balances.

Commercial banks invest their funds in limited areas to achieve higher amount of profit. This is regarded as a very risky step, which may lead to lose in profit as well as principle. The credit extended by commercial banks to agriculture and industrial sector is not satisfactory to meet the growing need of the present day.

It was concluded that the liquidity position of Nabil and SCBNL have not been found satisfactory, it, is therefore, suggested to them to improve cash and bank balance to meet current obligations. Loans and advances to total deposits ratio of SCBNL is low, and it is recommended to follow liberal lending policy for enhancement of fund mobilization. It is recommended to NSBIBL that it has to invest its fund on shares and debentures of other companies. It is suggested to enhance off balance sheet transactions, diversifying their investments, open new branches, pay merchant banking role and invest their risky assets and shareholder’s fund to gain higher profit margin.

Nabil and SCBNL are recommended to increase their cash and bank balance to meet current obligations and loan demand. (*Shrestha, Upendra, T.U, 2002*)

A thesis prepared by Ram Prasad Sharma, with the objective of highlighting the priority sector Investment and repayment state of commercial banks in Nepal through intensive banking program and to show the repayment position of the sector has made a

conclusion, “All the three commercial banks covered in this study have contributed to the credit to priority sector. But the efforts made by different banks are not in the same proportion. Nabil has contributed highest amount of credit to agriculture and cottage industry. Nepal Bank Ltd. has contributed highest amount to service sector. So for the loan repayment from priority sector is concerned Nabil has very satisfactory performance whereas NBL has very low performance or loss repayment overdue loans have been observed more in agriculture”.

It was further suggested that, “Commercial Banks should improve the repayment loans by generating the income of rural farmers. Reinvestment and right utilization of bank loans are the cost of the commercial banks. Since they need to increase in assets by better arrangement of institutions and organization, the manager and loan staff of the branches should be provided with adequate training so that they could identify right borrowers, right project and ensure correct project appraisal. Reinvestment is the available sources to increase in paying capacity of the borrowers”. (Sharma, T.U, 2002)

Raja Ram Khadka, in a thesis, “A Study on the Investment Policy of Nepal Arab Bank Ltd. in comparison to other Joint Venture Banks of Nepal” has recommended, “The banks must utilize depositors’ money as loans and advances to get success in competitive banking environment. The largest item of the bank in the assets side is loans and advances. Negligence in administering this asset could be the main cause of a liquidity crisis in the bank and one of the main reasons of the bank’s failure”.

Anju Khadka, in a research on “A comparative Study on Investment Policy of Commercial Banks” has made the following conclusion while comparing the performance of NBL, with Nabil, SCBNL and NIBL.

“There is not much difference between the mean ratio of loans and advances to current assets of NBL and other commercial banks. The mean ratio of NBL is slightly higher than that of other commercial banks. However, NBL’s ratios are found to be less uniform in comparison to other commercial banks.”

It was concluded that, “NBL is comparatively less successful in on balance sheet as well as off balance sheet operation than that of other commercial banks. It predicts that, in

the forth coming days, if it could not mobilize and utilize its resources as efficiently as other commercial banks, to maximize the return, it would lag behind in the competitive market of banking.” (Khadka, T.U, 2002)

Uddhab Prasad Sapkota in a thesis, “Fund Mobilizing Policy of SCBNL in comparison to Nepal Bangladesh Bank Ltd. and Himalayan Bank Ltd. has found- “The main ratio of Loan and Advances to total deposit of SCBNL describe that it has not mobilize its collected deposit in Loans and Advances more than NBBL and HBL. Here, NBBL and HBL are success to profit oriented than SCBNL. Comparatively it can be concluded that SCBNL is weak in mobilizing the collected deposits in Loans and Advances than NBBL and HBL.

SCBNL has mobilized its collected deposit on Investment with better than NBBL and HBL because of the highest Mean ratio under five-year study period. SCBNL is successful in mobilizing its collected deposits on Investment more than NBBL and HBL.

The Loans and Advances is total marking fund ratio describes the SCBNL’s position with condition in comparison to NBBL and HBL. On the basis of Mean, SCBNL maintains lowest ration than NBBL position to mobilize its total working fund on loans and Advances.

The mean ratio of investment on government securities to total working fund of SCBNL describes its position better than NBBL and HBL. SCBNL has been more successful to invest its working fund in government securities than NBBL and HBL. So, it can be concluded that SCBNL has invested its fund effectively in productive activities more than NBBL and HBL.

In the mean ratio on Investment on share and debentures to total working fund, SCBNL seems in weak condition than NBBL is in slightly strong position than HBL.” (Sapkota, T.U., 2001)

2.6 RESEARCH GAP:

All the above-mentioned researchers did not present the required and precise financial tools that are most relevant and banks frequently use to assess the feasibility of project/businesses. None of the researcher has focused on the very lucrative business of banking sector i.e. “*Consumer lending*”, which has been the core focus of the banks since last one decade. Consumer loans comprise of home loan, auto loan, personal loan, travel loan etc. Most of the banks have about 15% - 25% of their RA in consumer lending and it is understood that the recovery is also quite satisfactory in this segment. The repayment system in consumer loan is through Equated Monthly Installments (EMI), which is the equal amount of installment including principle and interest calculated in diminishing balance.

The procedure of categorizing the quality of loan is slightly different from that of other business loan. If the customer fails to pay three EMI then the loan falls in sub-standard, if fails to pay six EMI then falls in doubtful, if fails to pay twelve EMI then the loan falls in bad category.

This research has overcome the weaknesses found in the earlier research done by the earlier researchers and has endeavored to capture the relevant study of the subject by focusing briefly on Consumer Lending of the sample banks.

CHAPTER: 3

RESEARCH METHODOLOGY

Research methodology is the systematic way of solving research problem. Research methodology refers to the overall research process, which a researcher conducts during his/her study. Research can be conducted on the basis of primary and secondary data. Research methodology depends on the various aspect of the research project. The size of the project, the objective of the project, importance of the project, time frame of the project, impact of the project in various aspect of the human life etc. are the variables that determine the research methodology of that particular project.

3.1 RESEARCH DESIGN:

Research design is the plan, structure, and the strategy of investigation conceived so as to obtain the answer to research question and to control variance. It includes the overall scheme or program of research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis of the data. The structure of research is more specific. It is the outline, the scheme, and the paradigm of the operations of the variables. Strategy includes the methods to be used to gather and analyze the data. In other words, strategy implies how the problems encountered in the research will be tackled.”

This study mainly depends on the secondary data. The research process includes collecting, verifying and evaluating the past evidence systematically and objectively to reach the final conclusion. Some statistical and accounting tools have been adopted to examine factors in this study and descriptive and analytical research designs have also been used.

3.2 NATURE AND SOURCES OF DATA:

The data presented in this study are of secondary type. The annual reports of the concerned banks are the major sources of the data for the study. However, besides the annual reports of the subjected banks, the following sources of data are being used in the respective corner of the study:

- a. NRB reports
- b. Various publications dealing in the subject matter of the study
- c. Various articles published in the Newspapers
- d. Dissertations

3.3 POPULATION AND SAMPLE:

There are 28 licensed commercial banks are available but due to Time limitation and unavailability of the relevant data here only two commercial banks are selecting, which is namely:

- 1 Standard Chartered Bank Nepal Ltd. (SCBNL)
- 2 Nepal Industrial and Commercial Bank Ltd. (NICB)

3.4 ANALYSIS OF DATA:

To achieve the desired objective of the study, various statistical and financial tools have been used. The data extracted from the financial statements of the concerned financial institutions are processed and tabulated in various tables and charts to find the end results of the study. Various mathematical tools like ratio analysis, arithmetic mean, coefficient of variation etc. are used to find out the strength and weakness of the concerned financial institutions.

3.4.1 FINANCIAL TOOLS:

RATIO ANALYSIS

Ratio analysis is a powerful tool of financial analysis. Ratio analysis is a technique of analysis and interpretation of financial statement, to evaluate the performance of an organization by creating the ratio from the figures of different accounts consisting in balance sheet and income statement is known as ratio analysis. (Dangol, 2052: 369)

The term ratio refers to the numerical or quantitative relationship between two variables. The rationale of ratio analysis lies in the fact that it makes related information comparable. A ratio is calculated by dividing one item of the relationship with the other. The primary purpose of ratio is to point out area for further investigation. Ratio helps the researcher to make quantitative judgment about the firm's financial position and performance. For the purpose of the study, following ratios are calculated and analyzed and interpreted:

A. **Liquidity Ratio:**

Liquidity is the ability to meet the anticipated and contingent cash needs. Cash needs arise from deposit withdrawals, liability maturity and loans disbursements (new loans and the draw down of outstanding lending commitments). It is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. Liquidity ratios are used to judge the ability of the bank to meet its short-term liabilities that are likely to mature in the short period of time. From them, much insight can be obtained into present cash solvency of the bank and its ability to remain solvent in the event of adversities. However, an excessive liquid asset refers to the idle and unproductively of the firm.

The conventional measures of liquidity ratio in Nepalese banking industry have less significant relevancy. Lack of investment opportunity and excess liquidity in the Nepalese economy demands low liquidity position for our financial institutions. Since, the commercial banks are concentrating on major liquid population, the present scenario of banking demands on low rate of liquidity. As a financial analytical tool, the following liquidity ratio has been used:

a) **Current Ratio**

$$\text{Current ratio: } \frac{\text{current assets}}{\text{current liabilities}}$$

b) **Liquid Fund to Current Liability Ratio**

$$\text{Liquid fund to current liability ratio: } \frac{\text{liquid fund}}{\text{current liabilities}}$$

c) Liquid Fund to Total Deposits Ratio

Liquid fund to total deposit ratio: $\frac{\text{liquid fund}}{\text{total deposit}}$

d) Cash to Interest Sensitive Deposits Ratio

Cash to interest sensitive deposit ratio: $\frac{\text{cash and bank balance}}{\text{saving deposits}}$

As far as the banking organizations are concerned, NRB has directed the commercial banks to maintain 2% of total deposits in its own vault and to maintain 7% of demand deposits and 4.5% of term deposits with the NRB. This requirement is not applicable in case of foreign deposits. Meeting at-least this criterion is considered satisfactory for commercial banks in normal business days.

B. Asset/Liability Management Ratio:

Asset/Liability Management Ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liabilities ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. Assets and liability management ratio measures its efficiency in multiplying various liabilities in performing assets. The followings are the various ratios relating to Asset Liability Management, which are used to determine the lending strength of the concerned financial institutions.

a) Total Assets to Total Liability Ratio

Total Assets to Total Liability Ratio: $\frac{\text{total assets}}{\text{total liabilities}}$

b) Loans and Advances to Total Assets Ratio

Loans and Advances to Total Assets Ratio: $\frac{\text{loans and advances}}{\text{total assets}}$

c) Investment to Loans and Advances and Investment Ratio

Investment to Loans and Advances and Investment Ratio:
$$\frac{\text{investment}}{\text{loans and advances and investments}}$$

d) Loans and Advances and Investment to Total Deposits Ratio

Loans and Advances and Investment to Total Deposits Ratio:

$$\frac{\text{loans and advances and investment}}{\text{total deposits}}$$

e) Total Liabilities to Net-worth Ratio (Leverage)

Total Liabilities to Net-worth Ratio:

$$\frac{\text{Total Liabilities}}{\text{Net Worth}}$$

f) Debt Service Coverage Ratio

Debt Service Coverage Ratio:

$$\frac{\text{Net cash after operation}}{\text{Total interest and term loan installments}}$$

C. Activity Ratio:

Activity Ratio measures the performance efficiency of a financial institution from different angles of its operations. These ratios indicate the efficiency of activity an institutions to utilize its available fund. The following activity ratios measure the performance efficiency of financial institutions to utilize its short-term funds. These ratios are used to determine the efficiency, quality and the contribution of loans and advances in the total profitability.

a) Performing Assets to Total Assets Ratio

$$\text{Performing Assets to Total Assets Ratio: } \frac{\text{performing assets}}{\text{total assets}}$$

b) Non-Performing Assets to Total Assets Ratio

$$\text{Non-Performing Assets to Total Assets Ratio: } \frac{\text{nonperforming assets}}{\text{total assets}}$$

c) Return on Loans and Advances Ratio

$$\text{Return on Loans and Advances Ratio: } \frac{\text{net profit (loss)}}{\text{loans and advances}}$$

d) Loan Loss Ratio

$$\text{Loan Loss Ratio: } \frac{\text{general loan loss provision}}{\text{total loans and advances}}$$

e) Interest Earned To Total Income Ratio

$$\text{Interest Earned To Total Income Ratio: } \frac{\text{interest earned}}{\text{total income}}$$

f) Interest Expenses To Total Deposit Ratio

$$\text{Interest Expenses To Total Deposit Ratio: } \frac{\text{interest expenses}}{\text{total deposits}}$$

g) Interest Income To Interest Expenses Ratio

$$\text{Interest Income To Interest Expenses Ratio: } \frac{\text{interest income}}{\text{interest expenses}}$$

h) Interest Coverage Ratio

$$\text{Interest Coverage Ratio: } \frac{\text{net profit before interest and tax}}{\text{total interest}}$$

i) Private Sector Loans To Total Loans And Advances

$$\text{Private Sector Loans To Total Loans And Advances: } \frac{\text{private sector loans}}{\text{total loans and advances}}$$

j) Government Sector Loans To Total Loans And Advances

$$\text{Government Sector Loans To Total Loans And Advances: } \frac{\text{government sector loans}}{\text{total loans and advances}}$$

k) Ratio Of Government Securities To Total Investments

$$\text{Ratio Of Government Securities To Total Investments: } \frac{\text{government securities}}{\text{total investments}}$$

l) Ratio Of Shares And Debentures To Total Investment

$$\text{Ratio Of Shares And Debentures To Total Investment: } \frac{\text{shares and debentures}}{\text{total investments}}$$

3.4.2 STATISTICAL TOOLS:

A. Standard Deviation:

The Standard Deviation measures the absolute dispersion. It is said that higher the value of standard deviation, the higher the variability and vice versa. Karl Pearson introduced the concept of Standard Deviation in 1823 and this is denoted by the symbol of small Greek Letter \dagger (read as “Sigma”).

The formula for the calculation of the Standard Deviation is as:

$$\dagger = \sqrt{\frac{(\bar{x} - \bar{x})^2}{N}}$$

B. Coefficient of Variation:

The Standard Deviation calculated in the above formulas gives us an absolute measure of dispersion. Hence, where the mean value of the variables is not equal, it is not appropriate to compare two pairs of variables based on standard deviation only. The coefficient of variation measures the relative measures of dispersion, hence capable to compare two variables independently in terms of their variability.

The Coefficient of Variation (C.V.) is given by the following formula and this gives the percentage.

$$\text{Coefficient of Variation (C.V.): } \frac{\dagger}{\bar{X}} \times 100$$

C. Measures of Correlation:

We examine the relation between the various variables. The correlation between the different variables of the financial institutions is compared to measure the performance of these financial institutions. The correlation coefficient between two variables describes the degree of relationship between those two variables. The reliability of the value of Coefficient of Correlation is measured by Probable Error.

Correlation refers to the degree of relationship between two variables. If two variables, increase or decrease, in one cause increase or decrease in another, then such

variables are correlated variables. Thus, measures of correlation calculate the mathematical relationship between two variables. “The measures of correlation called the correlation coefficient or correlation index summarizes in one figure the direction and degree of correlation”

The Karl Pearson Coefficient of Correlation is given by the following formula:

$$\text{Coefficient of Correlation (r)} = \frac{(\sum x - \bar{x}) (\sum y - \bar{y})}{N \sigma_x \sigma_y}$$

Where,

σ_x = Standard Deviation of Series X

σ_y = Standard Deviation of Series Y

N = Number of Pairs of Observations

And,

$$\text{Probable Error of “r” (P.Er.)} = 0.6745 \frac{\sigma_r}{\sqrt{N}}$$

The Karl Pearson Coefficient of Correlation (r) always falls between –1 and +1. The value of correlation in minus signifies the negative correlation and plus signifies the positive correlation. When the value of correlation coefficient reaches near to the value of zero, it is said that there is no significant relationship between the variables.

The coefficient of correlation shall be interpreted based on probable error (P.Er). If the value of correlation is greater than 6 times the value of probable error, the correlation coefficient is deemed as significant and reliable. If the value of correlation coefficient is less than probable error, the correlation coefficient is said to be insignificant and there is no evidence of correlation.

D. Time Series:

When a series of data pertaining to a series of continuing periods should be studied its characteristics and its future direction is best estimated by the time series. Time series analyses a series of data keeping in mind the various short term and long term fluctuations. The least squares method of trend analysis has been adopted to measure the

trend behaviors of these financial institutions. The method is widely used in practices. The straight-line trend of a series of data is represented by the following formula:

$$Y_c = a + bX$$

Here, “ Y_c ” is used to designate the trend values to distinguish them from the actual “ Y ” values, “ a ” is the “ Y ” intercept or the computed trend figures of the “ Y ” variables when “ $X=0$ ”, “ b ” represents the slope of the trend line of the amount of change in “ Y ” variable that is associated with a change of one unit in “ X ” variable in time series represents time.

E. Hypothesis Test

Null Hypothesis (H_0):

$\bar{x}_1 \sim \bar{x}_2$. That is, there is no significant difference in the averages between two banks.

Alternative Hypothesis (H_1):

$\bar{x}_1 \neq \bar{x}_2$. That is, there is significant difference in the averages between two banks.

Test Statistics:

Under H_0 , the test statistics is,

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of sample of SCBNL

\bar{x}_2 = Mean of sample of NICB

s_1 = Standard Deviation of sample of SCBNL

s_2 = Standard Deviation of sample of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2}$$

Degree of freedom = n_1+n_2-2

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306. That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. This means that, there is significant difference in the averages between two banks.

Since, calculated value of 't' is less than the tabulated value of 't'. It is not significant and H_0 is accepted. This means that, there is no significant difference in the averages between two banks.

CHAPTER: 4

DATA PRESENTATION AND ANALYSIS:

This chapter of the study represents the data, figures relating to different aspects of the concerned bank i.e. SCBNL and NICB.

4.1 MEASURING THE LIQUIDITY POSITION OF THE BANKS:

This chapter of thesis presents the data, facts, figures of the different aspect of the concerned commercial banks namely: SCBNL and NICB. These available data are translated, analyzed and interpreted so that financial forecast of the banks can be done easily. Hence, the financial ratios have been taken for this. Though there are many ratios but due to various shortcomings and constraints only related ratios have been taken for analyzing the strength and weakness of the concerned commercial banks.

4.1.1 Current Ratio:

This is a crude measurement of liquidity ratio. It measures the ratio between total current assets and total current liabilities. Since, the quality of the current assets and their proportion of total current assets are not considered, it gives only the short glimpses on the quality position of a firm. Current assets include cash and near to cash items (i.e. cash and bank balance, money at call and short notice loans and advances, cash credit, bills discounted, investment, interest receivables, miscellaneous current assets) and current liabilities are Deposits (i.e. saving, fixed, current call and short deposit, other bills payable and miscellaneous liabilities).

Table-6
Current Ratio (In times)

Banks	Fiscal Year (Mid of July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	1.05	1.04	1.05	1.03	1.04	1.04
NICB	1.08	1.09	1.07	1.09	1.08	1.08

For detail: See Appendix 2A)

Table-9 measures the current ratio of the two concerned banks for the five consecutive years. The ratio of NICB ranges from 1.08 in 2004/05 to 1.08 in 2008/09. Where as the current ratio of SCBNL ranges from 1.05 in 2004/05 to 1.04 in 2008/09. In

five consecutive years (from F/Y 2004/05 to F/Y 2008/09) the current ratio of SCBNL with an average of 1.04. The Mean Current ratio of NICB is 1.08 which is almost stable in the consecutive years.

Measuring through the respective means of the two commercial banks, the performance of NICB is better than SCBNL. The mean ratio of NICB is 1.08 while that of SCBNL is 1.04. The conventional measurement of liquidity is not applicable in banking business. Banking business holds a large portion of deposits as a core deposits (the minimum level of deposits which the commercial banks hold at all the times) and this deposits remains all the time throughout the years. This core deposits forms the fixed liability of the bank though it is current in nature. Since the deposits represented in the balance sheet is a date balance, and the core deposits of the banks does not theoretically fall or rise by its 25%, the ratio maintained by these banks can be regarded as good and sufficient to meet the normal contingencies.

4.1.2 Liquid Fund to Current Liability Ratio:

Since the current ratio gives only the short and crude idea of liquidity position of the organization, measuring its liquidity ratio depending on liquid fund is more significant. Liquid fund comprises of those assets, which can be converted into cash within a short period without any declination in their value. Cash in hand, Balance with NRB, Balance with other banks and money at call are included in calculating liquid funds. This ratio measures the bank's ability to discharge its current liability in an adverse condition without undergoing its liquidity risk.

Table-7
Liquid Fund to Current Liability Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.17	0.14	0.14	0.14	0.14	0.14
NICB	0.15	0.12	0.07	0.1	0.1	0.1

(For detail: See Appendix 2B)

Table-10 shows that the ratio is ranged from 0.15 of NICB in 2004/05 to the highest of 0.17 of SCBNL in the F/Y 2004/05. The table shows that SCBNL has higher ratio among the two. This indicates that the bank can better withstand even in an adverse condition. The ratio of SCBNL has the decreasing and stable trend. The table shows that in the F/Y 2004/05, the ratio was at 0.17 but upon reaching the F/Y 2007/08, the ratio

dropped to 0.10. On the other hand, the ratio of NICB has more of mixed trend. In the starting year, the ratio was 0.15 but in the F/Y 2007/08 the ratio decreased to 0.10, however in the F/Y 2008/09 the ratio again dropped to 0.10. Unlike current ratio, the liquid fund to current liability ratio has been in the declining trend.

The performance of NICB is inferior to SCBNL. The mean ratio of SCBNL is 0.14 while the mean ratio of NICB is 0.10. The ratio shows that SCBNL can better serve the unanticipated demand of current liability than NICB.

4.1.3 Liquid Fund to Total Deposits Ratio:

The deposits constitute the major part of the bank's liability. Flow of this liability is always uncertain in the bank's fund management. Hence, the ratio of liquid fund to total deposits indicates the bank's strength to meet uncertain outflow of the deposits.

Table-8
Liquid Fund to Total Deposits Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.17	0.14	0.15	0.14	0.14	0.15
NICB	0.16	0.13	0.08	0.1	0.09	0.11

(For detail: See Appendix 2C)

Table-11 shows that the ratio of SCBNL and NICB ranges from 0.08 of NICB in the F/Y 2006/07 to 0.17 of SCBNL in the F/Y 2004/05. The ratio of SCBNL as seen in the table has mixed and stable trend i.e. ratio of 0.17 in F/Y 2004/05, 0.14 in 2005/06, 0.15 in 2006/07 and 0.14 in the F/Y 2007/08-08/09. The ratio of NICB has witnessed decreasing trend in the first two fiscal years (from 0.16 to 0.13 to 0.08) but the ratio increases the next fiscal year, i.e. to 0.10. However, the ratio again decreases in corresponding fiscal years i.e. 0.09 in F/Y 2008/09. The trend of this ratio has not deviated far from liquid fund to current liability ratio and the ups and downs in this ratio have been caused by the same reason. The ratio implies that in adverse condition, SCBNL can better survive than NICB.

4.1.4 Cash and Bank Balance to Interest Sensitive Deposit Ratio:

Saving deposit is regarded as interest sensitive deposits. This deposit is deposited by public in a bank with an explicit objective of increasing their wealth. So, an interest rate plays a significant role in the follow of interest sensitive deposits. Unlike this deposit, other deposits like fixed and current are not interest sensitive. Fixed deposits have a fixed term to maturity and fluctuation in interest rate does not allow its movement in short run. Current deposits do not carry an interest rate. So, it is not interest sensitive. This ratio measures the ability of bank to meet its sudden outflow of interest sensitive deposits due to the change in interest rate.

Table-9
Cash and Bank Balance to Interest Sensitive Deposits Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.26	0.22	0.25	0.24	0.27	0.25
NICB	0.50	0.39	0.23	0.37	0.37	0.37

(For detail: See Appendix 2D)

Table-12 shows that SCBNL has comparatively lower ratio of cash and bank balance to interest sensitive deposits ratio. The ratio of SCBNL ranges from 0.26 in F/Y 2004/05 to 0.27 in F/Y 2008/09. The lowest ratio of SCBNL is 0.22 in F/Y 2005/06 where as this ratio of NICB is 0.23 in F/Y 2006/07. While on the other hand, the ratio of NICB ranges from 0.50 in F/Y in 2004/05 to 0.37 in F/Y 2008/09. The nature of this ratio has significant differences than other measures of liquidity ratio explained above. Unlike other ratio, the ratio of SCBNL has the lower and NICB has the higher ratio. The high volume of other deposits in the deposit mixture of SCBNL has caused its ratio to be the lowest and the high volume of saving deposits in NICB has caused this ratio to be higher.

Even though, the ratio of SCBNL is lower, it has its trend in less fluctuation trend i.e. in F/Y 2004/05 0.26 and after then 0.22, 0.25, 0.24, 0.27. While the trend of NICB is in decreasing manner dropping from 0.50 in F/Y 2004/05 to 0.23 in F/Y 2006/07 after then in increasing trend. The decreasing trend of cash reserve ratio stipulated by NRB and temptation towards increasing the assets in “Money at Call” and investing in government securities has caused this ratio to fall.

4.1.5 Total Assets to Total Liabilities Ratio:

The financial institution creates credit by way of lending activities and multiplies their assets many times, than their liability permits. Thus, this ratio measures the banks ability to multiply its liability into assets. It is always recommended to have higher ratio of total assets to total liabilities ratio, since it signifies overall increase of credit and overall development of the institution. In simpler term, the ratio of total assets to total liabilities measures the volume of total liability in total assets of the institution.

Table-10
Total Assets to Total Liabilities Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	1.08	1.07	1.08	1.08	1.08	1.08
NICB	1.1	1.08	1.09	1.09	1.1	1.09

(For detail: See Appendix 2E)

Table-13 shows that one unit of liability of the banks had tabulated value of assets in the respective years. The ratio ranges from 1.08 of SCBNL in four major of the fiscal years to 1.1 of NICB in the F/Y 2008/09. SCBNL has maintained its assets to liabilities ratio at the same level, differing by only 1 point in the five consecutive years. However, on the other hand, NICB assets to liabilities ratio has been on the fluctuating trend with 1.1 at the starting years but dropped down to 1.08 in the next F/Y 2005/06 and again increased in F/Y 2006/07 and after then.

The result generated from the above table, points out that performance of NICB is better than that of SCBNL. However, in context to our country, the performance of both the banks is not satisfactory. The ratio should not be less than 2 times in the developing country like ours. This point out that both the banks are not successful in converting their liability into assets, these institutions are not utilizing their fund to its fullest extent as their liability permits.

4.1.6 Loans and Advances to Total Assets Ratio:

Loans and advances represent the major portion in the volume of total assets in any financial institution. The ratio of loans and advances to total assets ratio measures the volume of loans and advances in the overall structure of its total assets. High degree of

ratio indicates the good performance of the financial institutions, in mobilizing its funds by means of Lending function. However, granting loans and advances, always carries, certain amount of risks to the bank; thus, it is regarded as risk assets too. In short, this ratio measures the management of risk assets by the bank. Low ratio indicates low productivity but high degree of safety in liquidity and vice versa.

Table-11
Loans and Advances to Total Assets Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.37	0.35	0.37	0.41	0.34	0.37
NICB	0.63	0.64	0.77	0.74	0.73	0.7

(For detail: See Appendix 2F)

Table-14 shows the five years trend of loans and advances to total assets ratio. The table shows that the ratio of both the banks has been fluctuating , with every passing years. The ratio ranges from 0.34 of SCBNL in the F/Y 2008/09 to 0.77 of NICB in the F/Y 2006/07. NICB has the best ratio compared to SCBNL.

Comparing the two financial institutions, we can identify the variations between the two banks, while NICB stands with 0.7; SCBNL on the other hand has 0.37 as its mean ratio. This ratio, in aggregate may indicate that SCBNL may be shifting its business to other fee based activities and lessening its volume of loans and advances. If so, we can see that SCBNL is successful in achieving its goal than the other one.

4.1.7 Investment to Loans and Advances and Investments Ratio:

The purpose of this ratio is to measure the involvement of investments in the total amount of loans and advances and investment. The ratio measures the proportion between investments (government securities, shares & debentures and NRB bond) and total loans and advances and investments and the attitude of management towards risk assets and safety assets. The high ratio measures the mobilization of bank's funds in the safe projects and vice versa. But, safety does not mean satisfactory returns to the financial institutions. This ratio does not however, provide the quality of assets the bank has invested into. The financial institution must maintain a balance between the risk and safe assets, like said earlier, safety does not necessary means profit.

Table-12
Investments to Total Loans and Advances and Investment Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.54	0.59	0.56	0.50	0.6	0.56
NICB	0.25	0.27	0.15	0.17	0.18	0.20

(For detail: See Appendix 2G)

Table-15 shows the picture of ratio between investments and loans and advances and investments of the banks. We can see that the ratio ranges from 0.15 of NICB in F/Y 2006/07 to 0.6 of SCBNL in F/Y 2008/09. The table shows that the ratio of both the banks has more of a mix trend. In the F/Y 2005/06, the ratio of SCBNL has increased by 5 points. Even though, the ratio of SCBNL has decreased in the middle year of the table, the overall ratio shows the mix trend. NICB, on the other hand has mix trend with increasing trend for first year after then decreasing in F/Y 2006/07 and increasing from the next year. The rationale behind the increasing trend of investments to loans and advances and investments may be due to lack of lending opportunities and deteriorating economic condition along with declining economic growth which may have led the financial institutions to search for more safe means to mobilize its collected funds.

The above table points out to the conclusion that SCBNL infers the lowest degree of investments in risk assets than NICB.

4.1.8 Loans and Advances and Investment to Total Deposit Ratio:

Loans and advances and investments are the major area of fund mobilization of the financial institutions. Loans and advances, which carries more risks than investments also gives more returns than the latter. Investments, on the other hand, contains lower lever of risk but also gives less amount of returns for the financial institutions. This ratio portrays the glimpse of institution's mobilizing power in total. Banks fulfills its lending and investment activity through the fund collected by means of deposits. Thus, this ratio tries to measure how efficiently and effectively the deposits so collected have been mobilized. Also this ratio measures the ability on the part of the bank to generate income from the bank's liability of deposits.

Table-13
Loans and Advances and Investments to Total Deposits Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.92	0.94	0.98	0.93	0.95	0.94
NICB	1.01	1.04	1.05	1.04	1.07	1.04

(For detail: See Appendix 2H)

Table-16 explains the relation between one unit of deposits along with the tabulated value of loans and advances and investments of both the banks. The ratio ranges from 0.92 of SCBNL in the F/Y 2004/05 to 1.07 of NICB in the F/Y 2008/09.

The above table portrays that NICB is better than SCBNL in utilizing its funds thus collected, irrespective of the area of its utilization and returns.

4.1.9 Performing Assets to Total Assets Ratio:

It is important for the bank that the fund it has collected through deposits, are invested in good projects. The purpose of this ratio is to measure how far the financial institutions are successful in turning their assets in profitable projects. Higher the ratio, higher is the profit for the financial institutions and vice versa. This ratio shows how far the financial institutions are successful in utilizing their assets for profit generating purpose.

Table-14
Performing Assets to Total Assets Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.85	0.89	0.88	0.87	0.85	0.868
NICB	0.63	0.65	0.77	0.67	0.66	0.676

(For detail: See Appendix 2I)

Table-17 shows how successful the financial institutions are in turning their funds in profit generating projects. The ratio ranges from 0.63 of NICB in F/Y 2004/05 to 0.89 of SCBNL in the F/Y 2005/06. The table shows that the ratio of NICB has very fluctuating trend whereas SCBNL has been able to maintain almost at the same level. SCBNL has almost increasing performing assets ratio. NICB has a increasing up to 2006/07 and after then decreasing rate.

The result shows that SCBNL is more successful in utilizing its assets in the profit generating projects than NICB.

4.1.10 Non-Performing Assets to Total Assets Ratio:

The purpose of this ratio is to measure what amount of the bank's fund is in loss. The ratio aims to find out how far the bank is successful in minimizing non-performing assets and maximizing its profit through other performing assets. Lower the ratio, higher will be the profit for the bank and vice versa.

Table-15
Non-performing Assets to Total Asset (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.15	0.11	0.12	0.13	0.15	0.132
NICB	0.37	0.35	0.23	0.33	0.34	0.324

(For detail: See Appendix 2J)

Table-18 explains how far the banks are successful in minimizing their non-performing assets and generating profits from their total assets. According to the table above, non-performing assets to total assets ratio ranges from 0.11 of SCBNL in the F/Y 2005/06 to 0.37 of NICB in the F/Y 2004/05. The table shows that the ratio of SCBNL has almost stable through out the review period while the ratio of NICB is very fluctuating up to the final year.

The ratio of SCBNL is better than NICB, so SCBNL has better utilization of their assets than NICB.

4.1.11 Return on Loans and Advances Ratio:

The purpose for the calculation of this ratio is to estimate the earning capacity of the financial institutions of the funds collected by the bank itself. The ratio aims to find out the amount of return generated by the bank against the fund mobilized as loans and advances. High ratio indicates the greater success to mobilize funds as loans and advances and vice versa.

Table-16
Return on Loans and Advances Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.07	0.07	0.07	0.06	0.07	0.07
NICB	0.02	0.01	0.02	0.02	0.02	0.02

(For detail: See Appendix 2k)

Table-19 explains how far the financial institutions are successful in gaining return from the funds that it has mobilized as loans and advances. The ratio ranges from 0.01 of NICB in the F/Y 2005/06 to 0.07 of SCBNL in the F/Y 2004/05, 2005/06, 2006/07, 2008/09. Looking at the ratio of both the financial institutions separately, the trend of SCBNL has almost stable trend, and NICB has also same trend. The return generated by these two has huge gap in between them. Where as, the ratio of SCBNL is around 0.07, the ratio of the other bank NICB is around 0.02. The return generated by the two banks has huge difference. We can clearly see that SCBNL is far more successful gaining return from the fund it has invested in comparison to NICB. So in conclusion, the NICB is suggested to invest its funds in profitable sector to increase its return.

4.1.12 Loan Loss Ratio:

This ratio describes the quality of the assets that the financial institutions are holding. NRB, the central bank has directed the banks to classify its loans and advances into different category (Pass, Substandard, Doubtful and Bad) and to make the provision (1%, 25%, 50%, and 100%) accordingly. NRB has classified Pass and Sub-Standard as performing loans and Doubtful and Bad as Non-Performing loans. The provision generated for compensating against performing loans is called general loan loss provision and the provision generated for doubtful and bad is called specific loan loss provision. The provision of loan loss reflects the increasing probability of Non-performing loans in the total volume of loans and advances. Loan loss provision signifies the cushion against the future contingency created by the default of the borrowers. The low ratio signifies the good quality of the assets in the total volume of loans and advances and vice versa.

Table-17
Loan Loss Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.03	0.03	0.03	0.02	0.01	0.03
NICB	0.04	0.04	0.02	0.02	0.02	0.03

(For detail: See Appendix 2L)

Table-20 indicates the amount of doubtful and loss loans against total loans and advances. The ratio of loan loss ranges from 0.01 in F/Y 2008/09 of SCBNL to 0.04 in the F/Y 2004/05, 2005/06 of NICB. The table indicates that the ratio of both the banks has decreasing trend.

Even though, both the banks has been able to decrease the ratio, SCBNL has been further improved its ratio compared to NICB in the final year of review period.

4.1.13 Interest Earned to Total Income Ratio:

The ratio measures the volume of interest earned in the volume of total income earned by the financial institutions. The ratio also helps to measure the financial institution's performance on other fee-based activities. The high ratio indicates, high contribution by the lending and investing activities and the vice versa.

Table-18
Interest Earned to Total Income Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.82	0.84	0.91	0.90	0.90	0.87
NICB	1.56	1.84	1.77	1.70	1.78	1.73

(For detail: See Appendix 2M)

Table-21 is the indication of the contribution made by the interest earned in the total volume of the income that the financial institution has earned. And the combined mean of both the financial institution stands at 78%. The ratio shows that 78% of the financial institution's income derives from the funds that it lends and invests. The ratio ranges from 0.82 of SCBNL in F/Y 2004/05 to 1.84 of NICB in F/Y 2005/06. SCBNL has maintained a steady growth from F/Y 2004/05 to 2006/07 after then declined. And NICB has not

maintained a steady growth in the income through out the review period. NICB, on the other hand has fluctuating ratio in all the years.

The above table points out that the ratio of NICB is the higher between the two financial institutions. The result shows that SCBNL has low dependency in fund-based activity whereas, NICB has higher dependency.

4.1.14 Interest Expenses to Total Deposit Ratio:

The purpose of this ratio is to calculate the expense of deposits in the relative term. The performance of financial institutions (commercial banks) is depended upon its ability to generate cheaper fund and thus generating more volume of loans and advances and investments and vice versa. The high ratio is the indicative of costly fund and this adversely affects the lending and investing activities of the financial institutions.

Table-19
Interest Expenses to Total Deposit Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.01	0.01	0.02	0.02	0.02	0.02
NICB	0.04	0.04	0.04	0.04	0.05	0.04

(For detail: See Appendix 2N)

Table-22 exhibits the cost of deposits for both the financial institutions. And it shows that the cost of deposits of SCBNL is lower than NICB in all of the fiscal years. SCBNL has witnessed an increment in the final year. Similarly, the ratio of NICB has witnessed a constant ratio in all the fiscal years except in the last reviewed year.

The above table points out that SCBNL is more successful in collecting low cost funds by its modern and personalized services than NICB.

4.1.15 Interest Income to Interest Expense Ratio:

The ratio of interest income to interest expense ratio is the gap between the interest rate that the financial institutions offer and the rate that it charges. Since NRB, has restricted that the gap between the interest offered and the interest charged should not be greater than 5%, the difference in this ratio is mainly caused by the ratio of fund mobilized and fund collected.

Table-20
Interest Income to Interest Expense Ratio (In Percentage)

	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
Banks						
SCBNL	4.17	3.92	3.42	3.37	3.47	3.67
NICB	2.02	1.70	1.72	1.84	1.67	1.79

(For detail: See Appendix 20)

The above table-23 explains the difference between the interests that financial institutions charges and offers to its customers. The ratio indicates that SCBNL has greater degree of difference than NICB, which means that SCBNL is charging high interest rates to the borrowers and on the other hand, offering low interest rates to its depositors.

4.2 Measuring the Distribution of Loans and Advances and Investments:

Till now, we have tried to analyze the relationships between loans and advances with various assets and liabilities of their respective banks, their trend lines and their correlation with respective variables, under this heading; we will try to examine the portfolio management of their loans and advances. Financial institutions process out loans to different sector of the economy and cater to different type of borrowers. Under this topic, the ratio of loans and advances granted to various sector of economy and for various purposes to total volume of loans and advances are measured.

Besides lending activities, a financial institution does investing activities in various sectors, especially in shares, debentures and in government securities too. So, in this chapter, the ratio of investments, as invested by the financial institutions in different types of shares and debentures to total investments are measured.

4.2.1 LOANS AND ADVANCES PORTFOLIO:

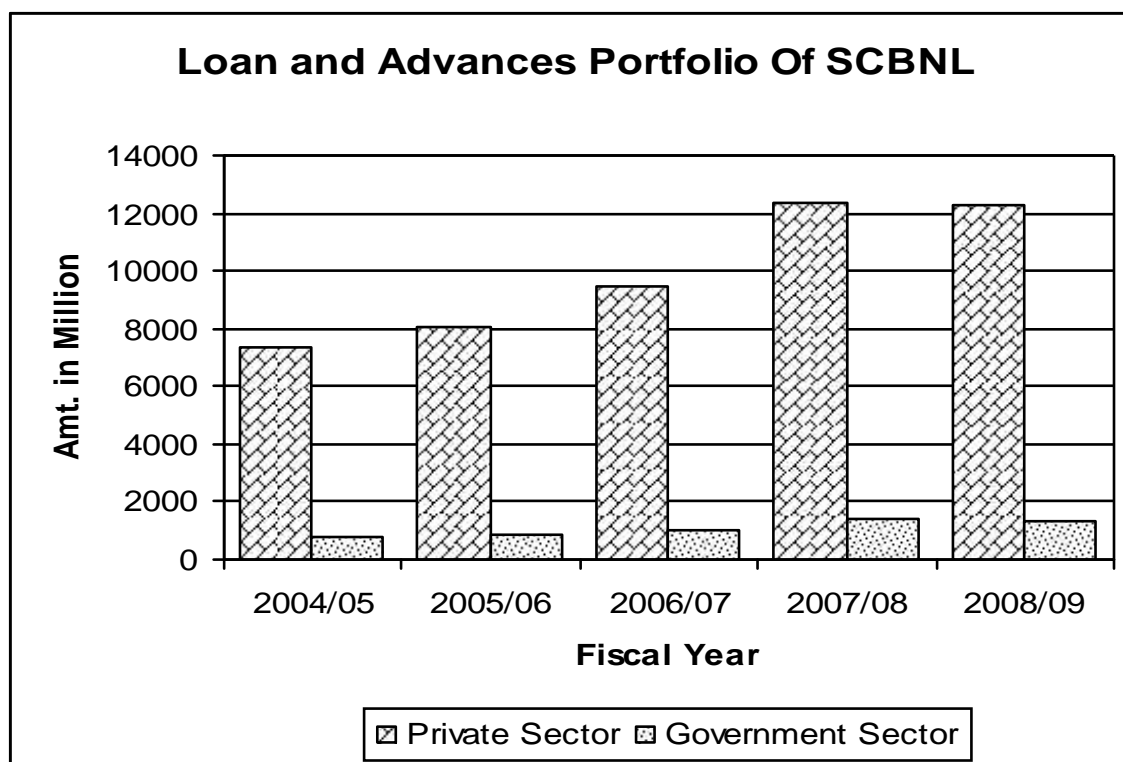
Since the survival of any banking business is dependent upon the good performance of its lending function, the high volume of well performing loans and advances in the economy is the symbol of healthy banking business

4.2.1.1 Standard Chartered Bank Nepal Ltd:

Table-21
Loans and Advances Portfolio of SCBNL (Amt in Millions)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Govt. Enterprises	814.32	893.54	1050.26	1371.86	1367.98
Pvt. Sector	7328.88	8041.88	9452.37	12346.74	12311.78
Total	8143.2	8935.42	10502.63	13718.6	13679.76

Chart-1



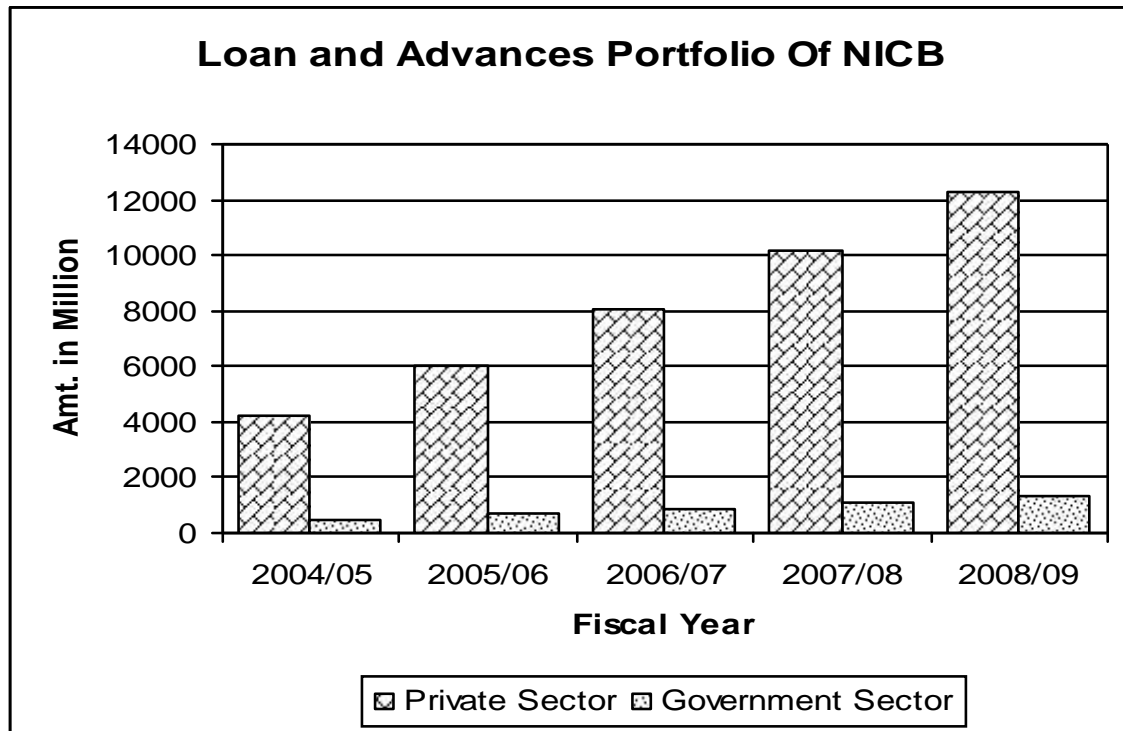
The above chart clearly signifies that private sector holds the major portion of loans and advances. The above table shows that in the portfolio of loans and advances of SCBNL, private sector holds about 90% of its share while; government sector holds just an average of 10%. The reason behind lending large amount in private sector could be that, the return that the financial institutions gets is higher in comparison to other sector. But along with the return, the risk attached with it is also high.

4.2.1.2 Nepal Industrial & Commercial Bank Ltd:

Table-22
Loans and Advances Portfolio of NICB (Amt in Million)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Govt. Enterprises	471.17	665.59	894.14	1126.47	1367.94
Pvt. Sector	4240.54	5990.36	8047.26	10138.21	12311.45
Total	4711.71	6655.95	8941.4	11264.68	13679.39

Chart-2



The above table and chart of NICB, again points out toward the contribution of lending portfolio of financial institutions in private sector. The liberalization of financial sector has aimed at the active participation of private sector in economic activities. Following the footsteps of SCBNL, NICB's major portion of loans and advances portfolio is occupied by the private sector. So, the continue effort to increase the private sector participant in the economic activity and the increasing trend towards globalization of economy may cause this part of portfolio to increase in coming future.

4.2.2 INVESTMENT PORTFOLIO:

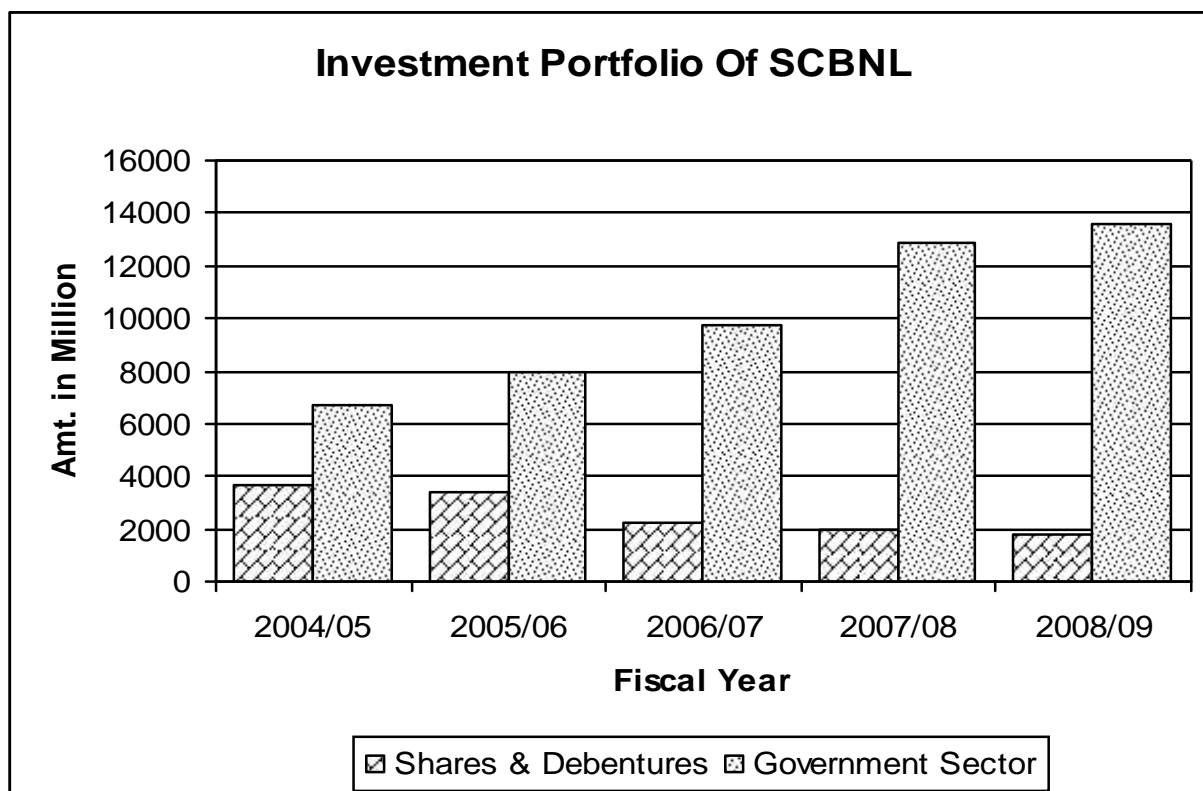
Commercial banks main function is to create credit from its borrowed fund. In doing so, commercial bank converts its liability into active assets. Under this heading we try to figure out the total amount of funds used in investments activity by the commercial banks.

4.2.2.1 Standard Chartered Bank Nepal Ltd.

Table-23
Investment Portfolio of SCBNL (Amt in Millions)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Govt. Securities	6722.80	7948.20	9702.55	12847.54	13553.23
Shares & Debentures	3634.90	3412.10	2259.69	1977.27	1761.15
Total	10357.70	11360.30	11962.24	14824.81	15314.38

Chart-3



The above table –26 shows that SCBNL Ltd. is more inclined towards investing their borrowed funds in government securities than in shares and debentures. In the F/Y 2004/05, SCBNL’s investment portfolio was in the ratio of approx. 65% to 35%, the latter being the portion of shares and debentures, whereas government securities, occupied 65% of total investment fund. However, SCBNL has been increasing investments in government securities in latter years due to insecure business environment. In the F/Y 2008/09, the portion of shares and debentures in the total investment portfolio decreased to 12.5%. This clearly shows the changing attitude of the bank. Still, SCBNL has not invested its fund in NRB bonds.

4.2.2.2 Nepal Industrial & Commercial Bank Ltd:

Table-24
Investment Portfolio of NICB

(Amt in Millions)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Govt. Securities	1075.20	1235.30	1572.90	2479.91	1599.48
Shares & Debentures	78.10	525.40	89.88	353.52	163.01
Total	1153.30	1760.70	1662.78	2833.43	1762.49

Chart-4

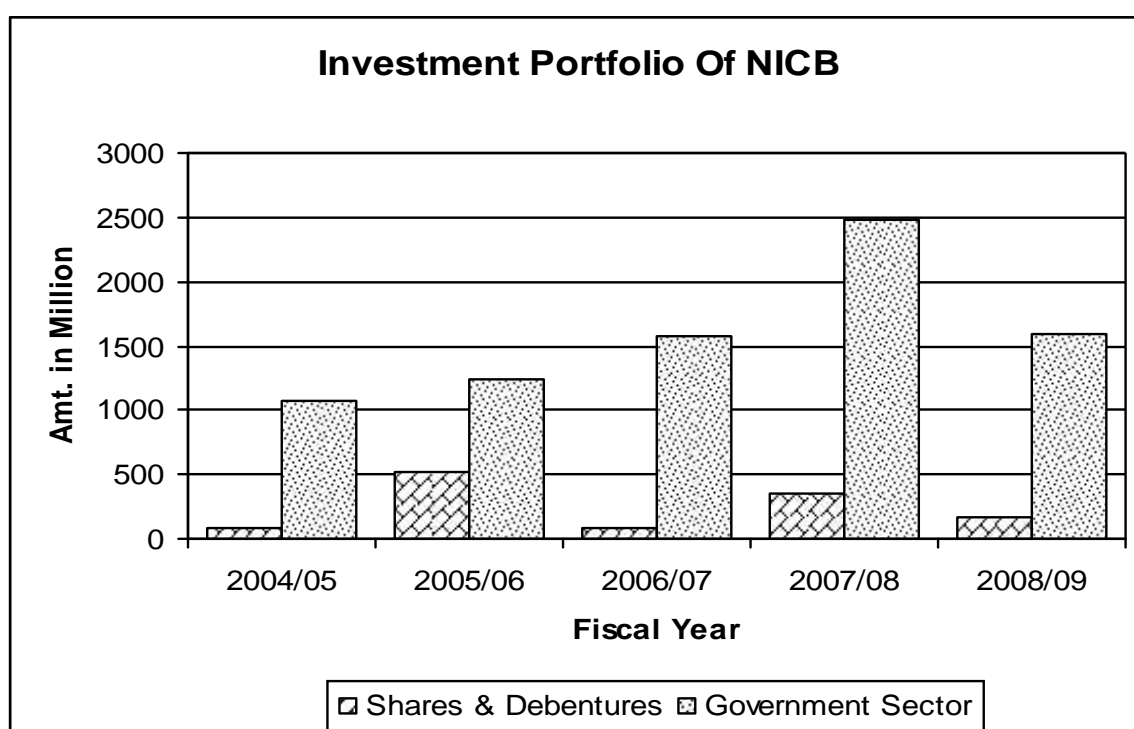


Chart-4 represents the investment portfolio of NICB. Like SCBNL, this bank too has invested its major portion of its fund in government securities. The trend of investing in shares & debentures in case of NICB is fluctuating. The reason behind investing major portion of borrowed funds in government securities may be that, government securities hold minimal amount of risk.

4.2.3 Private Sector Loans to Total Loans and Advances:

This ratio measures the contribution of financial institution's lending in private sector. The liberalization of financial sector has aimed at active participation of private

sector in the development of overall economy of the country. The ratio of private sector loans to total loans and advances measures the volume of private sector activity in total economy with comparison to government sector activity.

Table-25
Private Sector Loan to Total Loan and Advances Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.90	0.90	0.90	0.90	0.90	0.90
NICL	0.90	0.90	0.90	0.90	0.90	0.90

(For detail: See Appendix 2P)

Table-28 explains the portion of loans and advances granted to private sector are significant for both the financial institutions. Both the financial institutions have granted loans to private sector around 90% in all the fiscal years. The ratio proves that the dependency of lending activity in government sector is still negligible compare to private sector loans in commercial banks. This may be due to the fact that granting loans to private sector results in more return to the financial institutions than providing loans to government sector.

The overall conclusion drawn from the ratio explains the importance of private sector in the banking business. This shows that both the financial institution's lending is largely dependent on the private sector and on its development.

4.2.4 Government Sector Loans to Total Loans and Advances:

This ratio measures the contribution made by financial institutions in government sector. Even though, the liberalization of financial sector has aimed at active participation of private sector in the economic activities, the role of government sector cannot be denied and is essential for the economic development of any country. The below table represents the portion of loans and advances granted to government sector by two financial institutions namely SCBNL and NICB. While calculating this ratio, the bills purchased and discounted are excluded from total loans and advances and from government sector as well as private sector loans.

Table-26
Government Sector Loan to Total Loan and Advances Ratio (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.10	0.10	0.10	0.10	0.10	0.10
NICB	0.10	0.10	0.10	0.10	0.10	0.10

(For detail: See Appendix 2Q)

Table-29 explains the contribution of loans and advances to government sector by both the financial institutions. And the result shows only 10% loans have been invested in the government sector by private commercial banks in comparison to 90% portion to private sector. The ratio of government sector to total loans and advances has been increasing in positive trend but still, financial institutions heavily rely on the private sector. This shows that the dependency of lending activities of financial institutions in private sector is growing. This may be due to the fact that lending in private sector seeks more return to the financial institutions than lending to government sector, even though government sector is safer than private sector.

The ratio explains the importance of private sector in banking business for both the financial institutions. In the age of liberalization, the ratio is good in case of both the financial institutions, but the importance of government sector should not be ignored for the development of the country.

4.2.5 Ratio of Government Securities to Total Investments:

This ratio measures the financial institutions contribution in government securities. Loans and advances granted by financial institutions has risks attached with them which, financial institutions have to bear but, investments are comparatively less risky than loans and advances. Investing in government securities has minimal amount of risk attached with them. Tabulated value explains the ratio of government securities in total investments.

Table-27
Ratio of Government Securities to Total Investments (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.65	0.70	0.74	0.67	0.52	0.66
NICB	0.93	0.70	0.76	0.71	0.69	0.76

(For detail: See Appendix 2R)

Table-30 shows that financial institutions spend a significant portion of their funds in government securities. The combined mean of both the financial institutions stands at 71%. While NICB in the F/Y 2004/05, a total of 93% amount of the funds were spent on the government securities. Similarly, SCBNL, in the F/Y 2006/07, 74% of the funds were spent in government securities. But by the F/Y 2008/09 the ratio of both the banks decreased. This may be due to the fact that return generated from the government securities is less in comparison to the returns gained from other sources

4.2.6 Ratio of Shares and Debentures to Total Investments:

This ratio measures the portion of shares and debentures in the total investments. Organizations buy shares and debentures of other organizations and receive return from those invested assets. In other words, financial institutions invest their capital in other organization's shares and debentures. As said earlier, investments carry less amount of risk than granting loans and advances to different sectors with high risks.

Table-28
Ratio of Shares and Debentures to Total Investments (In Percentage)

Banks	Fiscal Year (Mid July)					MEAN
	2004/05	2005/06	2006/07	2007/08	2008/09	
SCBNL	0.0013	0.0012	0.0033	0.0082	0.0057	0.0040
NICB	0.0010	0.0007	0.0104	0.0115	0.0088	0.0064

(For detail: See Appendix 2S)

Table-31 explains the ratio of shares and debentures in total investments. Both the institutions have invested very negligible amount in the shares and debenture of other companies. The investment pattern of the financial institutions have been largely influence by the regulation of NRB. Since NRB do not permit any financial institutions to invest in other similar financial institutions, so they do not have opportunity to invest in the profitable companies. In above table it is clearly seen that all ratio are less than 1 %.

4.3 Measuring the Lending Strength of the Banks in Absolute Terms:

In this topic various variables in their absolute value are measured. Unlike ratio analysis, here values are measured individually. This variable enables us to measure the

contribution of the respective financial institutions in those aspects. The ratio analysis solely describes about the ratio between two variables but does not provide information about the absolute value of those variables. Hence, some of the important variables are measured here.

4.3.1 Net Assets

A net asset of the firm refers to Total Assets minus Total Outsiders liability. Net asset of a firm measures the portion of net fixed assets in relation to net worth of a firm. Higher the value indicates the higher involvement of owner's equity in financing fixed assets of a firm and vice versa. This figure measures shareholder's wealth in a firm.

Table-29
NET ASSETS

(In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	1582.41	1754.14	2116.35	2492.55	3052.47	2199.584
NICB	681.71	766.46	918.5	1303.43	1660.25	1066.07

Chart-5

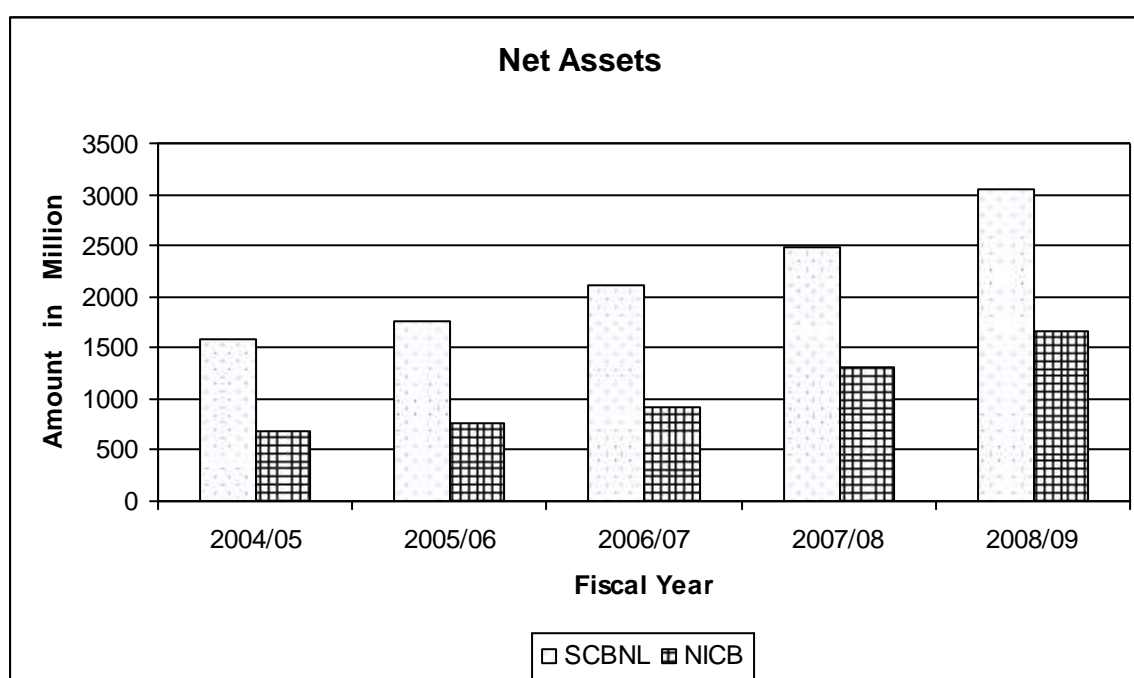


Chart-5 shows that the net assets of SCBNL are high between the two financial institutions throughout five years. The trend line of both the financial institutions shows an increasing trend. The net asset of SCBNL in the F/Y 2004/05 was Rs.1582.41 million but it increased its net assets to Rs.3052.47 by the F/Y 2008/09, which is an increment of

approximately 92.9%. NICB, on the other hand had a net assets of Rs.681.71 million at the start of the Fiscal Year 2004/05, and in the F/Y 2008/09 the net assets amount of NICB reached Rs.1660.25 million that constitutes 143.54 % increment in the five year's period.

Table-30

Mean / S.D. / C.V. of Net Assets				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	2199.584	591.5	26.89	367.853
NICB	1066.07	408.859	38.35	249.405

Table-33 shows that the mean net asset of SCBNL is 2199.584 while the mean net asset of NICB is 1066.07. Likewise the Standard Deviation of SCBNL is higher than that of NICB. However, SCBNL has the lower percentage of variation in its net assets. The volume of net assets of SCBNL permits it to expand its business in higher degree than NICB. The slope of the trend line is higher of SCBNL.

4.3.2 Deposits

Deposits are the major source of fund for any financial institutions. The amount of deposits in the bank's liability plays a very important role in administering the lending and investing function of the bank. Deposits consist of all types of demand and fixed deposits as well as margin and deposits in foreign currency too. Larger the volume of deposits, larger will be the lending and investing functions and vice versa.

Table-31
Deposits

(In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	19363.47	23061.03	24647.02	29744	35871.72	26537.45
NICB	6241.38	8765.95	10068.23	13084.69	15579.93	10748.04

Chart-6

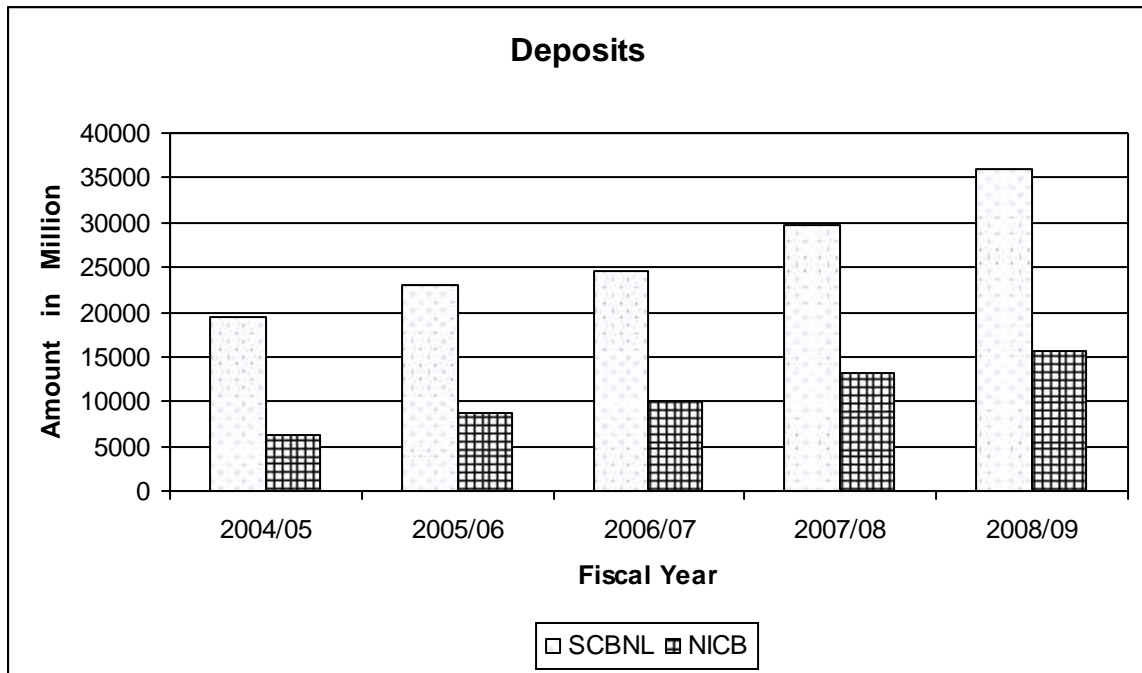


Chart-6 gives us the picture of the deposits volume of the two concerned bank. The figure explains that the deposit volume of SCBNL is way too high than NICB. Comparing the volume of the two banks, the deposits volume of SCBNL is about 25% higher than NICB in every year. The figure shows that the deposit trend of NICB and SCBNL has increasing trend.

Table-32

Mean / S.D. / C.V. of Total Deposits				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	26537.45	6413.57	24.17	3969.947
NICB	10748.04	3657.455	34.03	2299.584

Table-35 shows that the SCBNL has Mean of 26537.45, SD of 6413.57 and CV of 24.17 % and the NICB have Mean of 10748.04 ,standard deviation of 3657.455 and CV of 34.03%. The high degree in the variation of NICB is caused by the increasing trend of deposits. The slope of the trend line is higher of SCBNL.

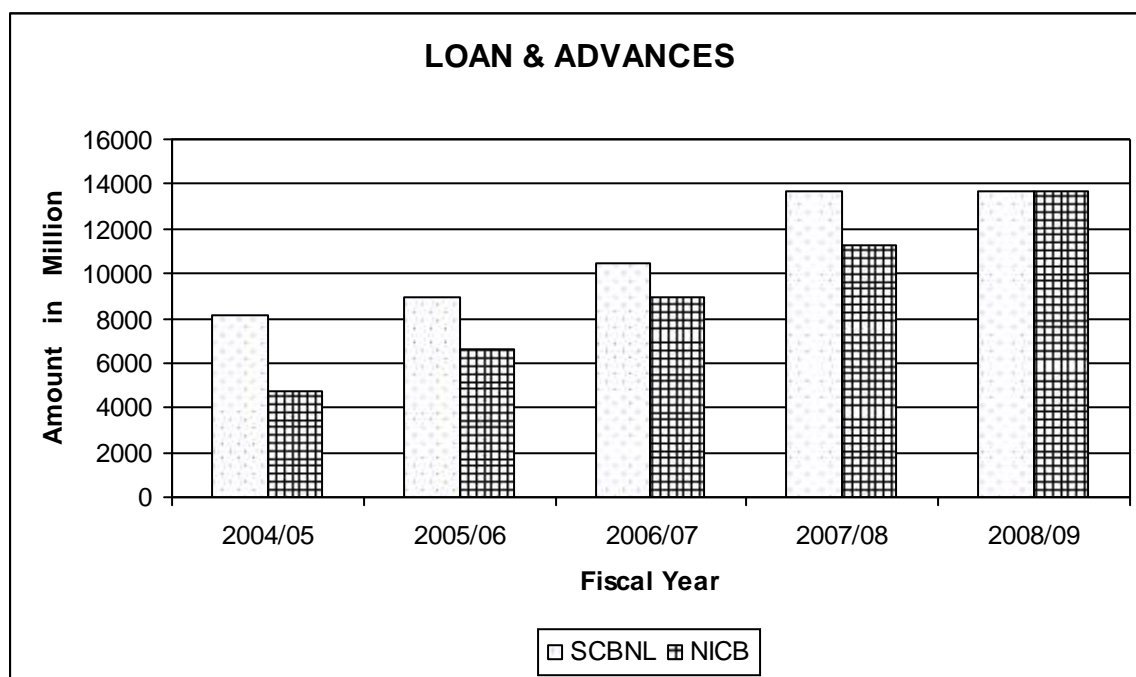
4.3.3 Loans and Advances

The main function of any financial institution like banks is to create credits from its funds collected through deposits. In doing so, it converts its liability into assets. And loans and advances are the assets generated from such activities of the banks. Since the survivals of the banks are dependent mostly on the good quality of its credit function, the high volume of good performing loans and advances in economy is a symbol of healthy banking environment.

Table-33
Loans and Advances (In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	8143.20	8935.42	10502.64	13718.6	13679.76	10995.92
NICB	4711.71	6655.96	8941.40	11264.68	13679.39	9050.63

Chart-7



The above-presented chart explains about the volume of loans and advances achieved by both SCBNL and NICB respectively. The chart shows that throughout all the years, the volume of loans and advances of SCBNL is high than that of NICB. Even though, the physical volume of NICB is lower than that of SCBNL, the ratio of NICB is increasing at much higher rate than SCBNL. In F/Y 2008/09 the volume of Loan & advances of SCBNL and NICB seems to equal. It also seems that volume of SCBNL is slightly decreased.

Table-34

Mean / S.D. / C.V. of Loans and Advances				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	10995.92	2609.74	23.73	1585.63
NICB	9050.63	3567.21	39.41	2254.41

The mean loans and advances of SCBNL are high between the two banks, and have the least variation with 23.73% in comparison to 39.41% of NICB. SCBNL has least deviation than NICB. The slope of the trend line is lower of SCBNL.

4.3.4 Investments

Loans and advances and investments are the major area of fund mobilization for any financial institutions. Loans and advances are more risky compare to investments. Investments are considered as a cushion against the liquidity risk and at the same time give return. Investments have a nature of being more liquidity than loans and advances.

Table-35
Investments

(In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	9702.55	12838.56	13553.23	13902.82	20236.12	14046.66
NICB	1572.90	2479.91	1599.48	2311.47	3026.02	2197.82

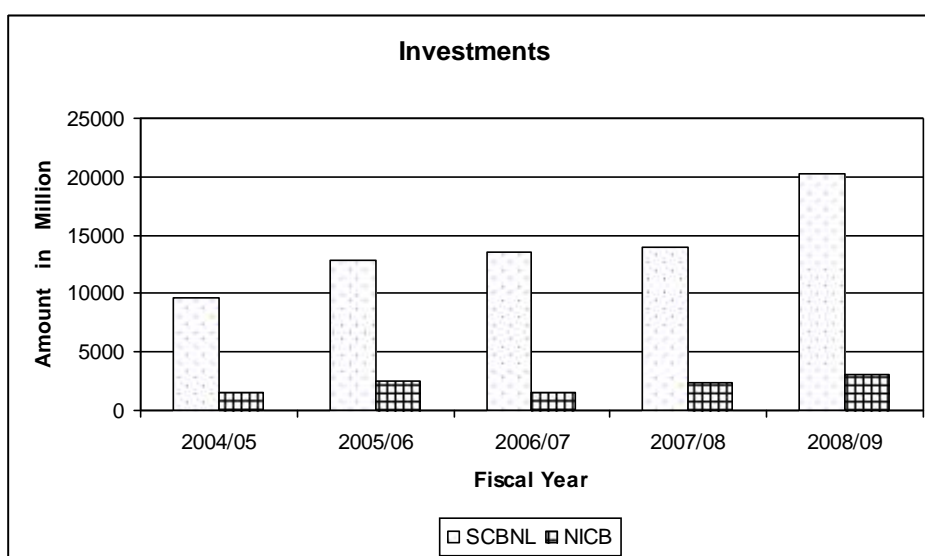
Chart-8

Chart-8 presented above shows the volume contributed by investments of both the banks. The amount of investments by SCBNL in the F/Y 2004/05 was Rs.9702.55 million but it is increased to 20236.1 million by the F/Y 2006/07; it increased its investments by 108.56 %. Looking at the chart, the trend is increasing. NICB on the other hand, has very less amount of investments in comparison to SCBNL, differing with about 6 folds.

Table-36

Mean / S.D. / C.V. of Investments				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	14046.66	3837.459	27.32	2213.14
NICB	2197.82	617.767	28.11	273.85

The above table shows that mean and standard deviation of SCBNL is high with 14046.66 and 3837.459 in comparison to 2197.82 and 617.767 of NICB. The CV of SCBNL is low between the two banks. This point out to the fact that SCBNL is more consistent in keeping the value close in the given five years than NICB. The slope of the trend line is higher of SCBNL.

4.3.5 Interest Earned

Interest earned measures the financial institution's ability to generate income from its lending and investment activities. Interest earned by a financial institution is also one of the major indicators of a good financial performance. It reflects to the operational efficiency of financial institutions. So higher ratio indicates higher efficiency and vice-versa.

Table-37

Interest Earned

(In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	1058.68	1189.60	1411.98	1591.2	1887.22	1427.736
NICB	457.61	579.98	725.82	931.4	1283.52	795.67

Chart-9

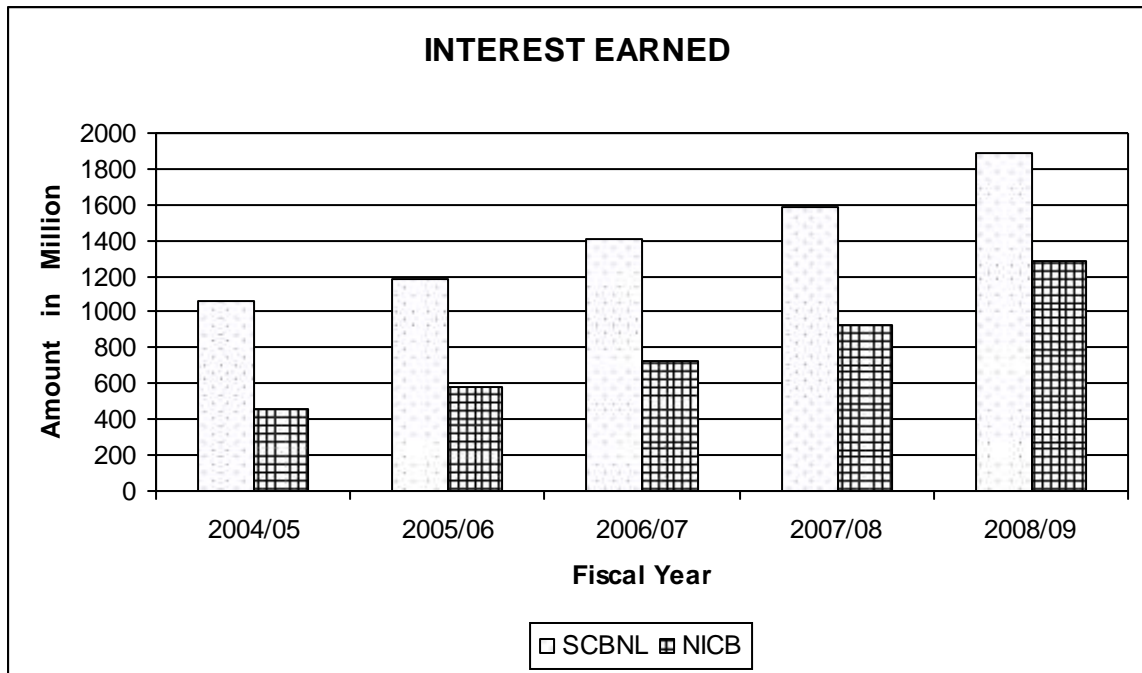


Chart-9 explains the earning trend of both the banks. The chart shows that the interest earned by both the banks is in increasing trend, however, the growth rate of NICB is much higher than that of SCBNL. SCBNL’s income at the starting of F/Y 2004/05 was Rs1058.68 million which increased to Rs1887.22 million by the end of F/Y 2008/09 which is 78.26 % increase during the five year period. NICB’s income in the F/Y 2004/05 was Rs457.61 million which increased to Rs1283.52 million by the F/Y 2008/09, with an increment of approximately 180.48% .

Table-38

Mean / S.D. / C.V. of Interest Earned				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	1427.736	328.255	22.99	205.868
NICB	795.67	324.848	40.83	200.324

The above table further explains that SCBNL has high mean with less degree of variation with 1427.736 and 22.99% against NICB’s 795.67 as mean and 40.83% as its CV. Standard Deviation of NICB is slightly low against the Standard Deviation of SCBNL i.e. 324.848 & 328.255 of NICB & SCBNL respectively. The slope of the trend line is higher of SCBNL.

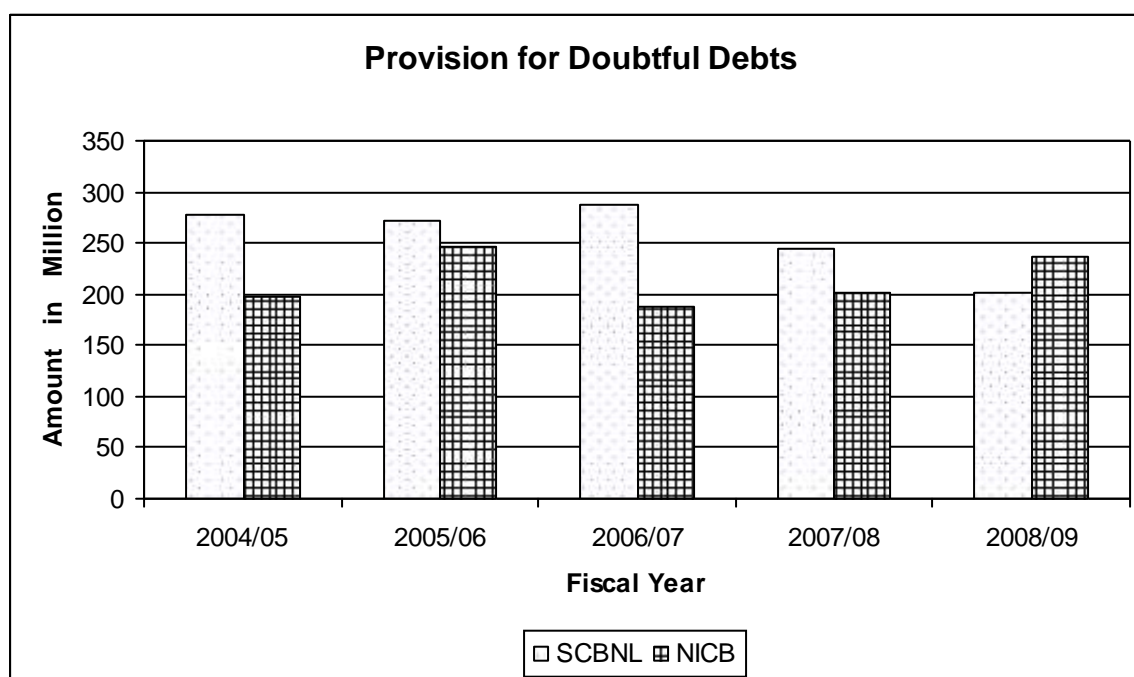
4.3.6 Provision for Doubtful Debts:

Provision for doubtful debts indicates towards the amount provisioned against the different categories of loans and advances (pass, substandard, doubtful and loss). Provision for doubtful debts allows us to measure the financial institution's efficiency and the quality of the loans and advances and investments that it has invested into.

Table-39
Provision for Doubtful Debts (In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	277.66	270.86	287.51	245.39	200.95	284.80
NICB	197.64	246.16	187.25	200.66	236.46	191.27

Chart-10



The above chart explains about the provision made against loans and advances that the financial institutions have issued. The chart shows that SCBNL's provision is high throughout the years except last year when comparing the two. The trend of SCBNL is fluctuating in trends, while NICB has increasing and stable trend. In the starting of the F/Y 2004/05, the amount provisioned by NICB against doubtful loans and advances was Rs197.64 million which increased to Rs236.46 million with an increment of almost 19.64% within the five years period, While SCBNL has 2.76% decrease in those years.

Table-40

Mean / S.D. / C.V. of Provision for Doubtful Debts				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	256.474	34.73	13.54	-17.789
NICB	213.634	25.98	12.16	3.214

The above table further explains that SCBNL has high mean value of 256.474 against NICB with 213.634. SCBNL has high variability with 13.54% and Standard Deviation of it is 34.73. The variability of NICB is 12.16% and SD is 25.98. From the above table, we can make the final judgment that SCBNL is likely to have high value of risky assets than NICB has, which could be witnessed in the following years to come. The Slope of SCBNL is higher but represented in negative sign.

4.3.7 Net Profit

The firm's income usually refers to money received by an individual whether earned through work or earned through dividend, interest "everything then, must be assessed in money, for this always enable men to exchange their service and to make the society possible" (*ARISTOTLE, 384-322 B.C.*)

Income is an important indicator for measuring the financial performance of the financial institutions. Higher the volume, higher will be the success of the banks in operational and strategically aspects.

Table-41
Net Profit

(In Rs. Million)

YEAR	2004/05	2005/06	2006/07	2007/08	2008/09	MEAN
SCBNL	536.24	658.76	691.67	818.92	1025.11	746.14
NICB	113.76	96.59	158.48	243.06	317.43	185.86

Chart-11

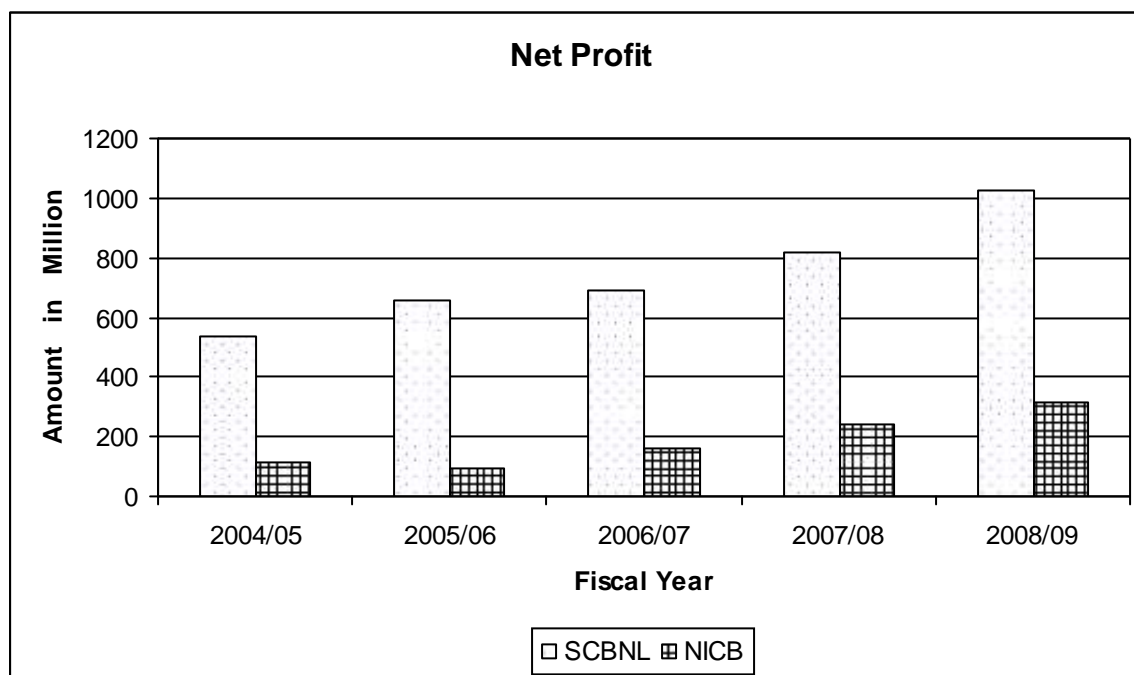


Chart-11 shows the profit that the two financial institutions have earned in the five years. The chart shows that the net profit, SCBNL has earned is very high in all the given years against NICB. Both the banks have an increasing trend of net profit except in 2005/06 of NICB. So, assessing the performance of both the financial institutions for the five years, SCBNL has an average increment in its net profit of 9.11%, while NICB has the increment of overall 179% even though its downfall in the F/Y 2005/06. But if we are to analyze the performance of last one year of these banks, then the growth percentage of NICB is way too high with 30.59% against that of SCBNL with 25.17%

Table-42

Mean / S.D. / C.V. of Net Profit				
Banks	Mean	S.D.	C.V.(%)	Slope
SCBNL	746.14	185.59	24.87	113.79
NICB	185.86	92.87	49.97	55.38

The above table points out that the mean and SD of SCBNL is high in comparison to NICB. But NICB has high variability between the two with 49.97% against 24.87% of SCBNL. The high variability of NICB has been caused by the downfall of net profit in the F/Y 2005/06.

4.4 Measuring Growth Rate based on Trend Value:

Measuring variables through trend analysis, exhibits the behavior of given variables in series of time. Under this topic, we shall examine the trend analysis of variables like, net assets, deposits, loans and advances, investments and net profit. In other words, trend analysis is yet another statistical tool used for forecasting the future results, calculating the present values. However, certain assumptions have to be kept in mind while analyzing the trend value.

- ⇒ The main assumption is that other things will remain unchanged
- ⇒ The forecast will be true when only least square method will be carried out
- ⇒ The financial institution will run in the present situation
- ⇒ The economy will remain in the present stage
- ⇒ NRB will not change its guidelines concerning commercial banks

4.4.1 Trend Analysis of Net Assets:

Net assets reflect the overall efficiency and performance of the financial institutions. The trend line of two aforesaid financial institutions is obtained from the nine years data based on the least square method of time series.

Table-43
Trend value of Net Assets of SCBNL and NICB

(In Rs. Million)

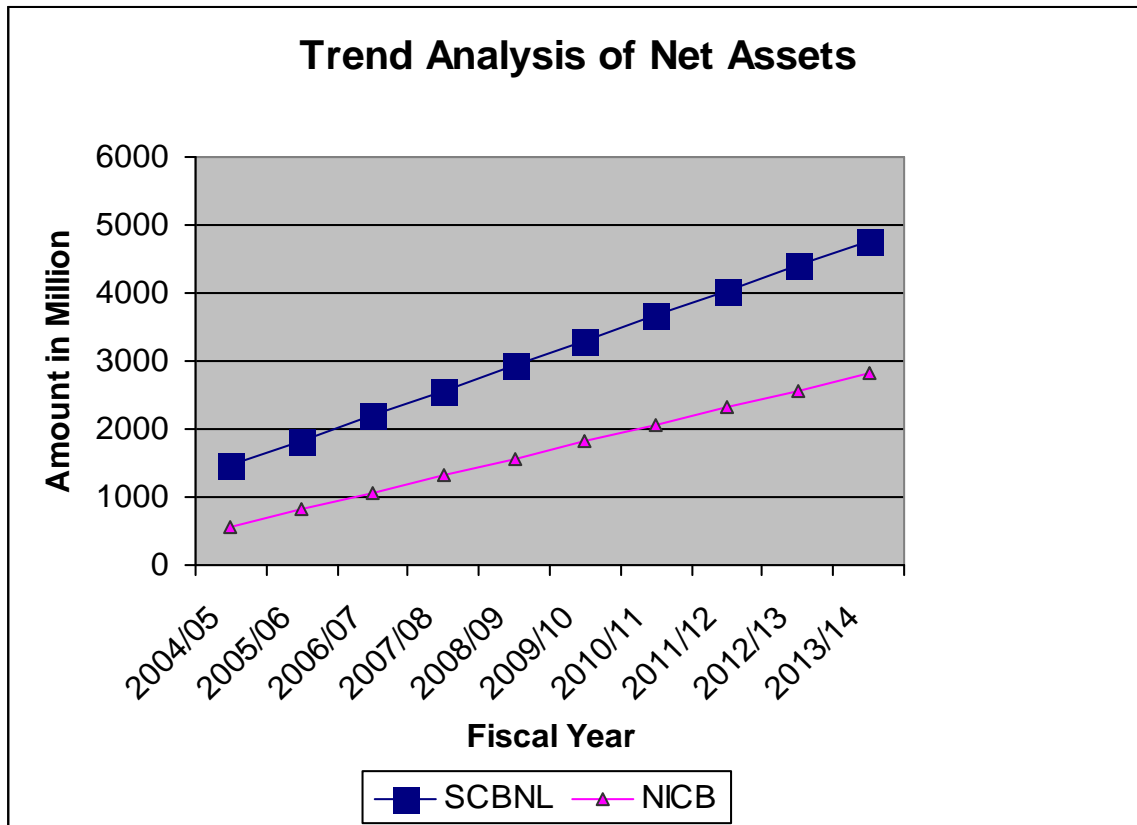
Bank/Year	SCBNL	NICB
2004/05	1463.88	567.26
2005/06	1831.73	816.67
2006/07	2199.58	1066.07
2007/08	2567.44	1315.48
2008/09	2935.29	1564.88
2009/10	3303.14	1814.29
2010/11	3671.00	2063.69
2011/12	4038.85	2313.1
2012/13	4406.70	2562.5
2013/14	4774.56	2811.91

(For detail: See Appendix -3 A)

From the above comparative table-46, it is clear that the net assets of both the financial institutions are in increasing trend. According to the calculation made on the basis of

linear equation of $Y = a + bx$, the net assets of SCBNL in the F/Y 2013/14 will reach to Rs4774.56 million approximately, while the net assets of NICB estimated to reach at Rs2811.91 million.

Chart-12



The above chart-12 shows the trend behavior of net assets in SCBNL and NICB. There is a great difference in the trend line of SCBNL and NICB in both slope as well as magnitude. The above chart shows the increasing trend line of both the financial institutions but the degree of increment differs between the two banks. SCBNL has high magnitude of increment than NICB has. NICB has low magnitude of increment in its net assets as well as its slope.

4.4.2 Trend Analysis of Deposits:

Deposits are one of the most vulnerable liabilities of commercial banks and its trend behaviors can be determined by various seasonal and cyclical factors as well as economic conditions. The trend line of deposits of these two financial institutions for the period of ten years is based on the least square method of time series.

Table-44
Trend Value of Deposits of SCBNL and NICB

(In Rs. Million)

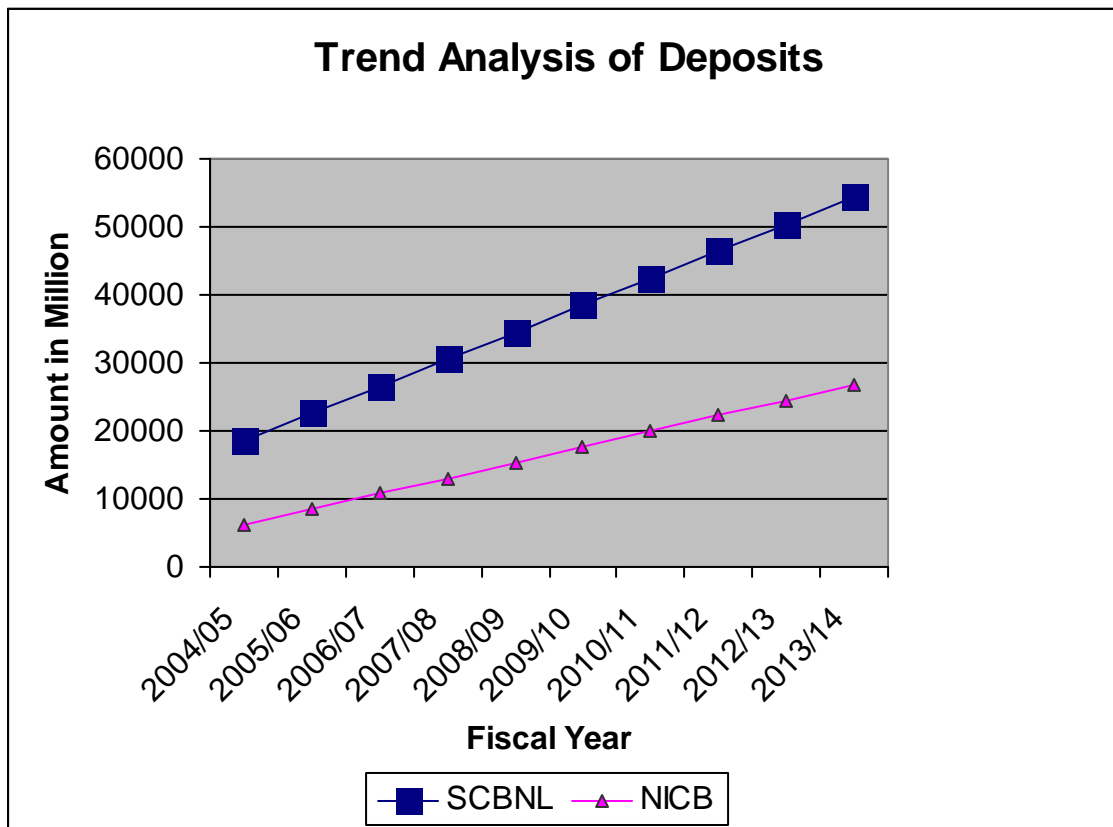
Bank/Year	SCBNL	NICB
2004/05	18597.6	6148.87
2005/06	22567.5	8448.46
2006/07	26537.5	10748
2007/08	30507.4	13047.6
2008/09	34477.3	15347.2
2009/10	38447.3	17646.8
2010/11	42417.2	19946.8
2011/12	46387.2	22246.0
2012/13	50357.1	24545.5
2013/14	54327.1	26845.1

(For detail: See Appendix -3 B)

Table-47 shows the linear equation of the trend line of both banks, trend value of those banks for the F/Y 2004/05 to F/Y 2013/14. In the linear trend equation $Y = a + bx$, the value of b represent the propensity of growth of each bank i.e. slope of growth of the value each period. It represents the absolute value of growth that the financial institution is likely to increase in its volume of deposits.

On the basis of the trend line calculations, the volume of deposits of these financial institutions will reach at Rs54327.1 million and Rs26845.1 million for SCBNL and NICB in F/Y 2013/14 respectively.

Chart-13



The above chart-13 depicts the nature of total deposits in SCBNL and NICB. We can see a huge gap between the volumes of the deposits between two financial institutions and in their slopes and magnitude also. SCBNL has high degree of increasing slope and NICB has also increasing trend, in summary both the banks are in increasing trend.

From the above chart and table, we can conclude that even though the volume of NICB is less in comparison to SCBNL, the growth rate created by this bank has made this financial institution the better one than the other bank in terms of deposit collection.

4.4.3 Trend Analysis of Loans and Advances

Loans and advances are the major source of the bank's income and they represent the major portion in the volume of total assets of the bank. Here the trend value of loans and advances of SCBNL and NICB have been calculated for the period of next five years.

Table-45

Trend Value of Loans and Advances of SCBNL and NICB (In Rs. Million)

Bank/Year	SCBNL	NICB
2004/05	7824.66	4541.81
2005/06	9410.29	6796.22
2006/07	10995.9	9050.63
2007/08	12581.6	11305
2008/09	14167.2	13559.4
2009/10	15752.8	15813.9
2010/11	17338.4	18068.3
2011/12	18924.1	20322.7
2012/13	20509.7	22577.1
2013/14	22095.3	24831.5

(For detail: See Appendix -3 C)

The above comparative chart and table makes it clear that the loan & advances of both the banks are increasing regularly. If the present conditions are to be considered like assumed before, the amount of loans and advances at the end of F/Y 2013/14 for SCBNL and NICB will estimated to be at Rs22095.3 and Rs24831.5 million respectively.

Chart-14

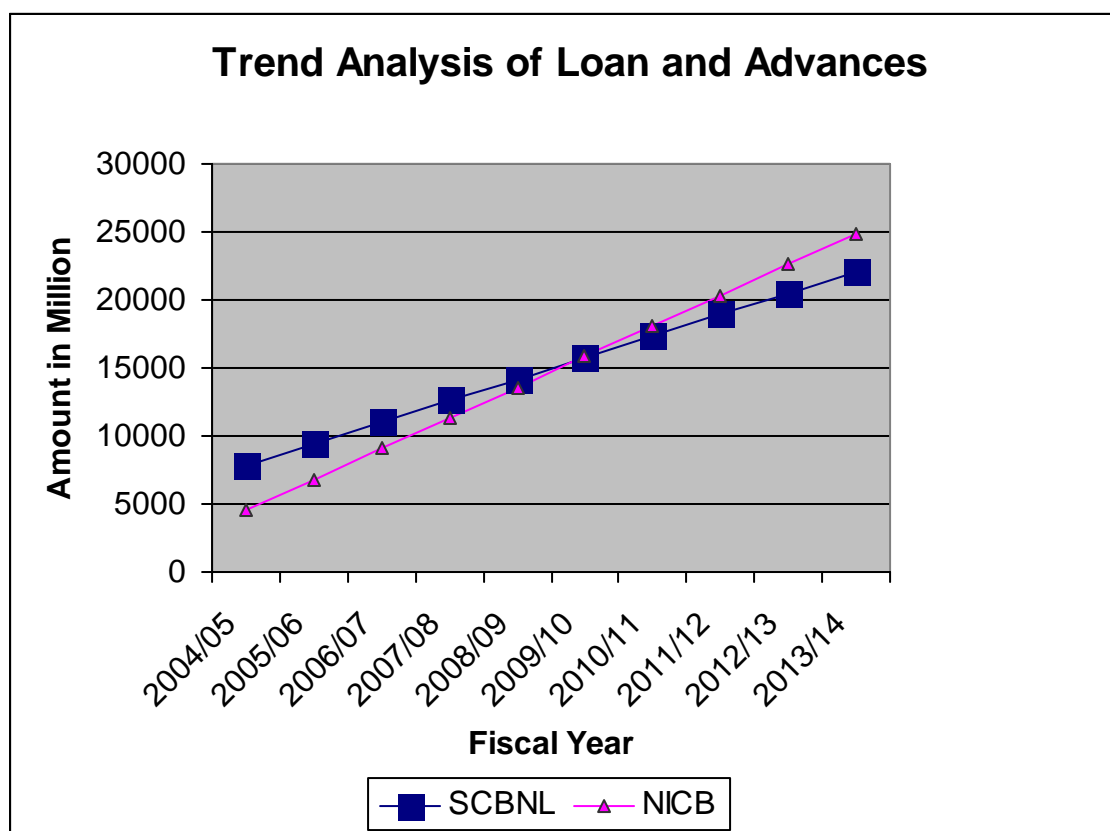


Chart-14 exhibits the trend lines representing the lending behaviors of both the financial institutions. The trend line of SCBNL has been higher than NICB in beginning of study period but after 2009/10 it seems lower than NICB. The comparative above chart makes it clear that the loan and advances of SCBNL is increasing in decreasing rate but NICB is increasing in increasing rate.

However, comparing the two financial institutions individually, NICB's deposit utilization in terms of loans and advances is comparatively better than that of SCBNL, which means that the bank is very aggressive in mobilizing its collected fund. But high utilization does not guarantee the quality return on loans as the evaluation of credit worthiness of the customer is the prime factor that has to be considered foremost.

4.4.4 Trend Analysis of Investments

Loans and advances and investments are two major area of fund mobilization of the financial institutions. Loans and advances, on one hand are considered to be risky assets whereas, investments on the other hand, is regarded as the cushion against the liquidity risk.

Table-46
Trend Value of Investments of SCBNL and NICB (In Rs. Million)

Bank/Year	SCBNL	NICB
2004/05	9620.38	1650.12
2005/06	11833.5	1923.97
2006/07	14046.7	2197.82
2007/08	16259.8	2471.82
2008/09	18472.9	2745.52
2009/10	20686.1	3019.37
2010/11	22899.2	3293.22
2011/12	25112.4	3567.07
2012/13	27325.5	3840.92
2013/14	29538.6	4114.77

(For detail: See Appendix -3 D)

The above table presented makes it clear that the investments of both the banks are increasing simultaneously. The amount invested by both the financial institutions in investments in the F/Y 2013/14 will estimated to reach at Rs.29538.6 and Rs.4114.77 million for SCBNL and NICB respectively. SCBNL has opted to invest its collected fund more in investments than NICB. This proves that SCBNL is more aggressive in mobilizing its collected funds in investments than it has in loans and advances.

Chart-15

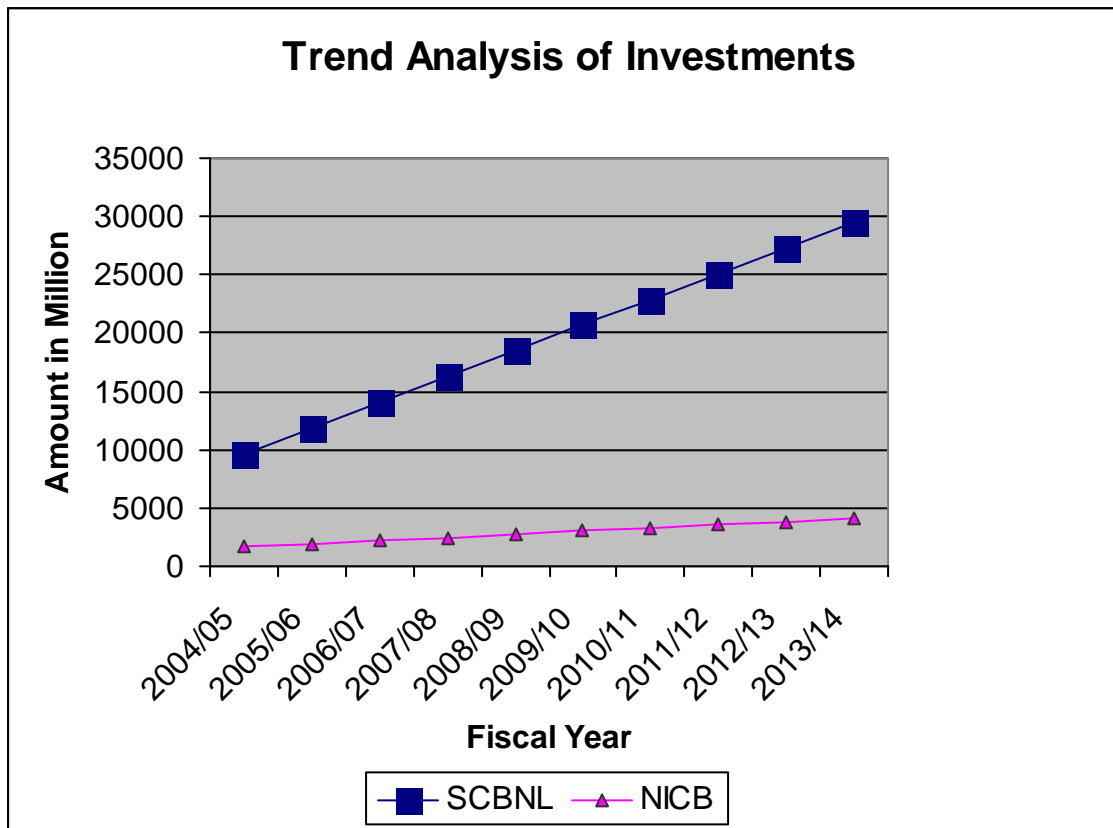


Chart-15 explains about the trend lines representing the investments of SCBNL and NICB. The chart clearly shows the difference in volume and magnitude of investments between the two banks. SCBNL always has high volume of investments in comparison to NICB and also has achieved high degree of slope and magnitude. Both the financial institutions have increasing trend, but the degree of increment is different between these two banks.

4.4.5 Trend Analysis of Net Profit

Income is the major indicator to analyze the performance of the financial institutions. Here the calculations have been carried out to analyze the net profit of the two banks for the coming years based on its past performances.

Table-47
Trend Value of Net Profit of SCBNL and NICB (In Rs. Million)

Bank/Year	SCBNL	NICB
2004/05	518.56	75.1
2005/06	632.35	130.48
2006/07	746.14	185.86
2007/08	859.93	241.25
2008/09	973.72	296.63
2009/10	1087.51	352.01
2010/11	1201.3	407.39
2011/12	1315.09	462.77
2012/13	1428.88	518.15
2013/14	1542.67	573.53

(For detail: See Appendix -3 E)

The above table clearly shows the performance of the two banks NICB and SCBNL in terms of the returns. And it can be clearly distinguished that SCBNL is more successful in achieving its goal than NICB. Assuming the present course of action, both SCBNL and NICB could post its net profit to Rs.1542.67 millions and Rs.573.53 millions in the F/Y 2011/12. The success to achieve high competitive growth rate can be attributed to balanced portfolio in advancing credits and in investments by diversifying its business.

Chart-16

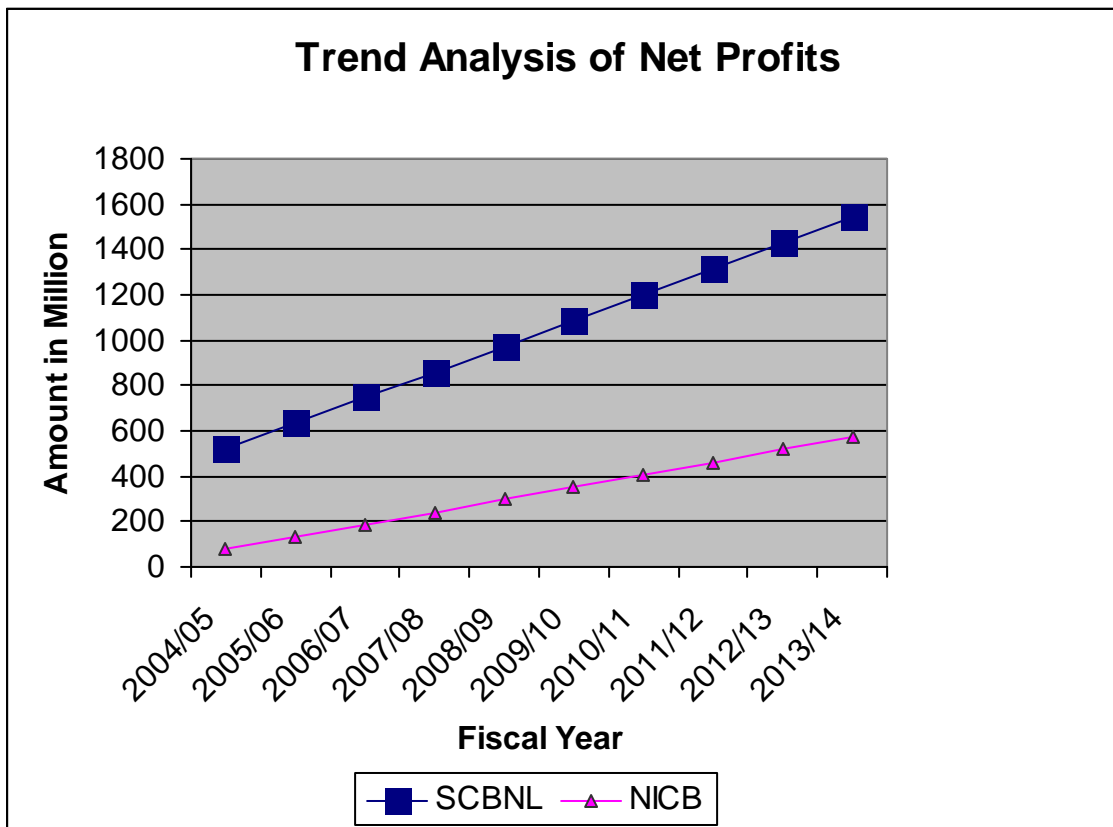


Chart-16 clearly shows that both the financial institutions are successful in recording net profit in an increasing trend; also a prediction has been made for coming years using the linear equations based on its past year's performance. But the degree of slope and magnitude between SCBNL and NICB has a vast difference.

4.4.6 Trend Analysis of Interest Earned and Provision For Doubtful Debt

Interest earned and provision of Doubtful debt is the major indicator of the performance evaluation of the banks to analyze the performance of the financial institutions. Here the calculations have been carried out to analyze the performance under doubtful debt and interest earned of the two banks for the coming years based on its past performances.

Table-48
Trend Value of Interest Earned and Provision for Doubtful Debt of SCBNL and NICB

(In Rs. Million)

Bank/Year	Interest Earned		Provision For Doubtful Debt	
	SCBNL	NICB	SCBNL	NICB
2004/05	1016	395.018	292.252	207.206
2005/06	1221.87	595.342	274.363	210.42
2006/07	1427.74	795.666	256.474	213.634
2007/08	1633.6	995.99	238.585	216.848
2008/09	1839.47	1196.31	220.696	220.062
2009/10	2045.34	1396.64	202.807	223.276
2010/11	2251.21	1596.96	184.918	226.49
2011/12	2457.08	1797.29	167.029	229.704
2012/13	2662.94	1997.61	149.14	232.918
2013/14	2868.81	2197.93	131.251	236.132

(For detail: See Appendix -3 F1 & 3 F2)

The above table clearly shows the performance of the two banks NICB and SCBNL in terms of the interest earned and provision of doubtful debt. And it can be clearly distinguished that SCBNL is more successful in achieving its goal than NICB under interest earned. It is in increasing trend of both banks. The provision for doubtful debt is in fluctuating trends SCBNL but in increasing trend of NICB.

Chart-17 A

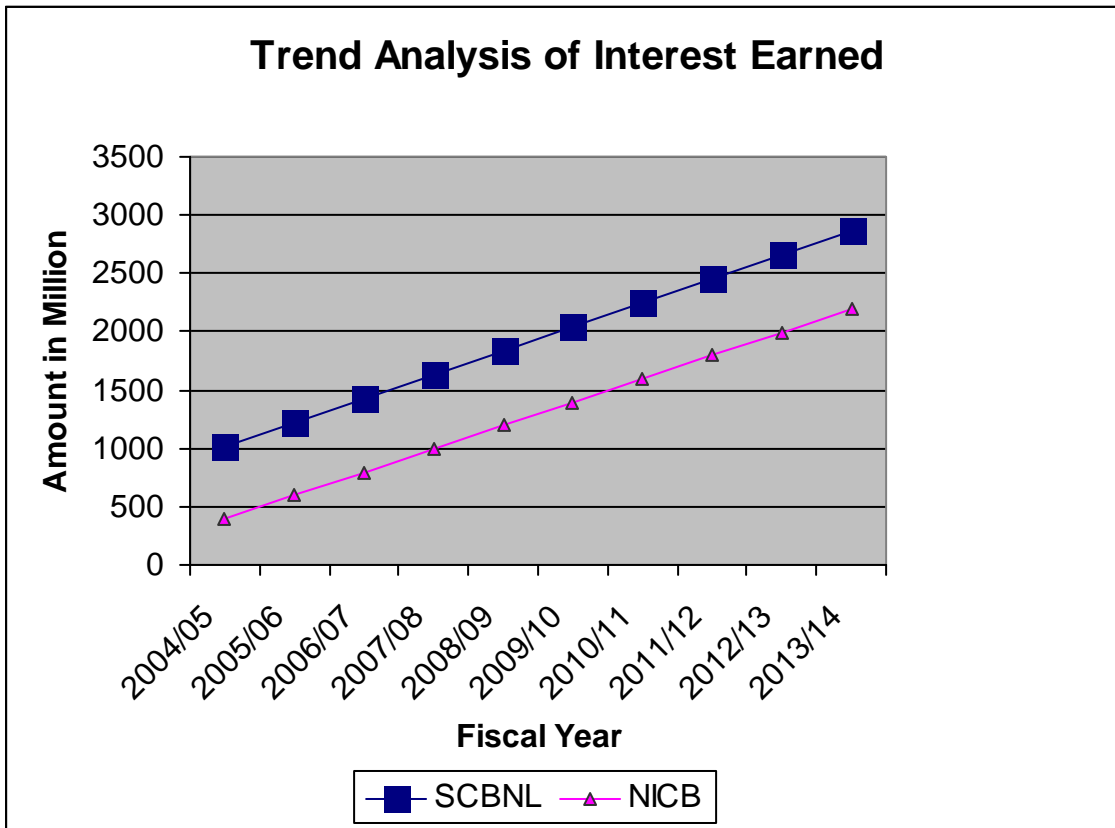


Chart - 17 B

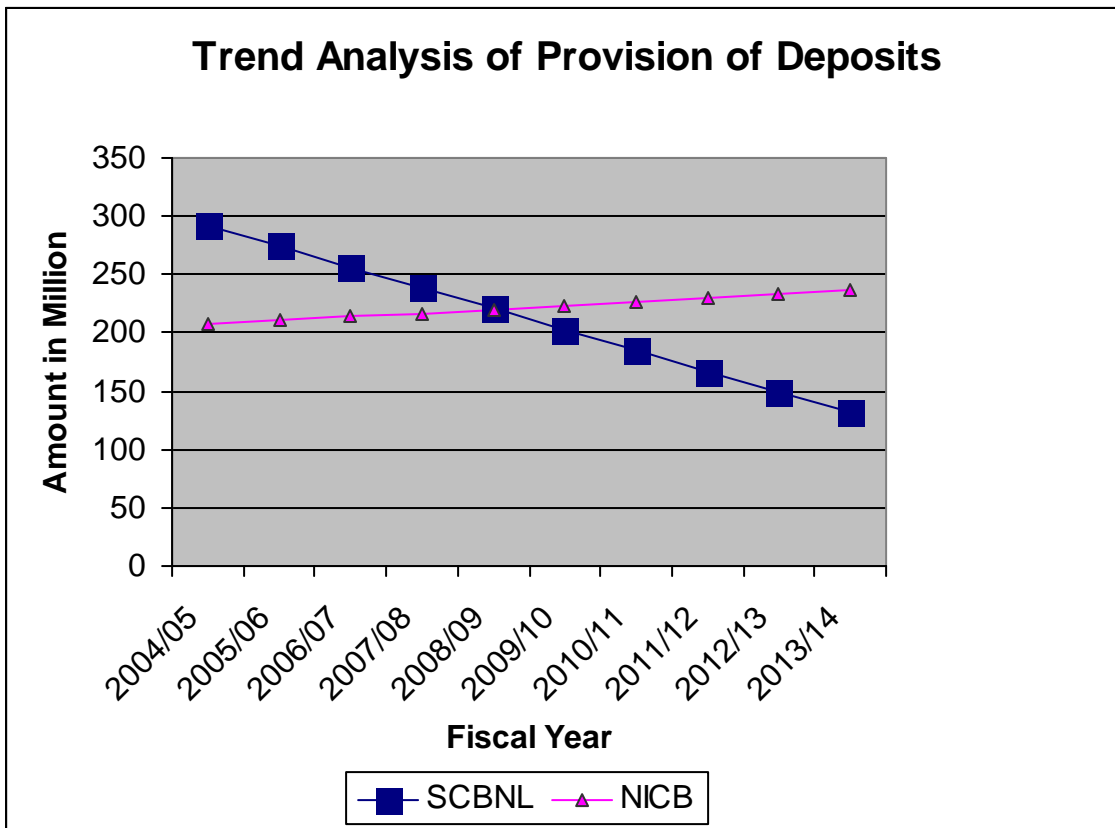


Chart-17 A clearly shows that both the financial institutions are successful in recording Interest earned in an increasing trend; also a prediction has been made for coming years using the linear equations based on its past year's performance. But the degree of slope and magnitude between SCBNL and NICB has a vast difference. And Chart-17 B clearly shows that SCBNL has decreasing trend in provision for doubtful debt but NICB is in increasing trend. In Year 2008/09 it looks like to be equal.

4.5 Measuring Correlation between Different Variables:

4.5.1 Correlation between Deposits and Loans and Advances:

The correlation between deposits and loans and advances describes the degree of relationships between these two variables. How one unit of deposits increase influences the volume of loans and advance is the focal point of this measurement. Here, Deposit is the independent variable and Loans and Advances is the dependent variable as financial institution cannot control the volume of the deposits that it receives but on the other hand, it can control the flow of loans and advances.

Table-49

Correlation between Deposits and Loans and Advances

Banks	Correlation Coefficient (r)	r²	P.Er	6 P.Er
SCBNL	0.9312	0.8671	0.04	0.2406
NICB	0.9948	0.99	0.0032	0.02

(For detail: See Appendix -4 A)

Table-51 describes the relationship between the total deposits and loans and advances. There is a high degree of positive relationship between deposits and loans and advances in both the financial institutions. The correlation coefficient between the two variables is 0.9312 for SCBNL, which means a positive relationship. The value of (r²), coefficient of determination is 0.8671, which indicates that 86.71% of variation of the dependent variable has been explained by the independent variable. Since, the value or (r) is more than six times the value of (P.Er), it can be said that the correlation between these two variables is certain and significant for SCBNL.

NICB, on the other hand, has the correlation coefficient of 0.9948 which means higher positive correlation, and the value of determination (r^2) is 0.99, indicating that 99% of dependent variable has been explained by the independent variable. And the value of (r) is greater than the value of (P.Er) with 0.9948 against 0.02. Thus, it can be said that the relationship between deposits and loans and advances is significant.

The value of (r) calculated above explains that a percentage increase in deposits is likely to generate the same percentage of change in the value of loans and advances. The above table-51 shows that both SCBNL and NICB have positive relationship. However, the value or (r) is higher for NICB among the two financial institutions, which points out that NICB has the higher probability of being so.

4.5.2 Correlation between Doubtful Debts and Loans and Advances:

Doubtful debts and loans & advances are inter-related as; doubtful debts are the result of the latter ones. And this correlation measures the degree of relationship between these two variables. Here, loans & advances act as an independent variable and doubtful debts as dependent variable, as a simple change in the volume of loans & advances directly impacts in the volume of the doubtful debts.

Table-50

Correlation between Doubtful Debts and Loans & Advances

Banks	Correlation Coefficient (r)	r^2	P.Er	6 P.Er
SCBNL	-0.785	0.62	0.1159	0.695
NICB	0.1924	0.037	0.2905	1.7428

(For detail: See Appendix -4 B)

Table-52 reveals the poor relationship between provision for doubtful debts and loans and advances for SCBNL. The above calculation show no relationship between the two variables as the value of correlation coefficient (r) for SCBNL is less than the value of 6P.Er. The value of r^2 (correlation of determination) is 0.62 which means that 62% of the variation in the dependent variable has been explained by the independent variable.

Though, relatively low, the relationship between the two variables of NICB is not significant and positive as the value of correlation coefficient (r) is less than the value of 6P.Er. This implies that the change in the volume of loans & advances don't directly

impacts on the volume of doubtful debts. The coefficient of determination (r^2) of NICB stands at 0.037.

From the above analysis, we can conclude that SCBNL has no relation between the two variables, while NICB has relationship, but the margin is relatively low. The negative relationship occurred in SCBNL is caused due to the bad quality of their loans and advances and increase in risk element in lending.

4.5.3 Correlation between Interest Earned and Net Profit:

Interest earned by financial institutions contributes to the big portion of the bank's income. And this correlation measures the degree of relationship between the net profit and the interest earned by the financial institutions. Here, the financial institutions cannot control the volume of profit that the bank earns but it can control the interest that it earns. So, interest earned acts as an independent variable and net profit as a dependent variable.

Table-51

Correlation between Interest Earned and Net Profit

Banks	Correlation Coefficient (r)	r^2	P.Er	6 P.Er
SCBNL	0.9816	0.96	0.011	0.0659
NICB	0.9736	0.95	0.0157	0.0942

(For detail: See Appendix -4 C)

Table-53 reveals the relationship between net profit and interest earned, of both the banks. The above table explains that the value of correlation coefficient (r) in SCBNL and NICB is significant and the relationship between the two variables (Interest Earned and Net Profit) is certain, since the value of (r) is greater than the value of probable error (6P.Er) with 0.9816 for SCBNL and 0.9736 for NICB. And the value of coefficient of determination (r^2) for both the banks is at 0.96 and 0.95 for SCBNL and NICB, which means that only 96% and 95% has been explained by the independent variables and that other variables have huge impact on the volume of the net profit.

From the above table, it can be concluded that certain change in the volume of interest earned has greater chance to generate same percentage change in the volume of net profit. And it can be concluded that other factors other than interest earned by the financial institutions govern low percent in the net profit of the banks.

4.5.4 Correlation Between Net Profit and Loans & Advances:

The correlation between net profit and loans & advances describes the degree of relationship between these two variables and the value of (r), correlation coefficient measures if a percentage change in the volume of one variable affects the similar change in the volume of other variables. Here, loans & advances positioned as independent variable and net profit, as dependent variable. The financial institutions cannot control the profit that it earns but it can control the volume of loans & advances.

Table-52

Correlation between Net Profit and Loans & Advances

Banks	Correlation Coefficient (r)	r²	P.Er	6 P.Er
SCBNL	0.9046	0.82	0.0548	0.3289
NICB	0.9548	0.91	0.0267	0.1599

(For detail: See Appendix -4 D)

Table-54 explains the correlation between net profit and loans& advances of SCBNL and the calculations shows a positive relationship, which means that a percentage change in the volume of loans & advances affects the similar change in the volume of the net profit of the financial institution. The value of correlation coefficient (r) is 0.9046 for SCBNL and the value of probable error (6P.Er) is 0.3289, which means that the value or “r” is more than the latter one. The correlation of determination (r²) is 0.82 which means that 82 % in the dependent variable is explained by the independent variable. In other words, there is a significant relationship between loans & advances and net profit.

Likewise, there is a significant relationship between the above two variables for NICB. Comparing the value of correlation coefficient (r) with that of probable error (6P.Er), the value of correlation coefficient is greater, which indicates towards the significant relationship between the two variables. Similarly, the correlation of determination (r²) is 0.91, which indicates towards the higher percentage of the dependent variable is controlled by the independent variable.

From the above analysis, SCBNL and NICB have a positive relationship between net profit and loans & advances. The relationship is significant and the value of determination shows good percentage of dependency for both SCBNL and NICB.

4.6 Hypothesis Test

1. Net Assets

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 2199.584$	$\bar{X}_2 = 1066.07$
$s_1 = 591.5$	$s_2 = 408.859$

Null Hypothesis (H_0) :

$\mu_1 = \mu_2$. That is, there is no significant difference in the average net assets between two banks.

Alternative Hypothesis (H_1) :

$\mu_1 \neq \mu_2$. That is, there is significant difference in the average net assets between two banks.

Test Statistics:

Under H_0 , the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{2199.584 - 1066.07}{\sqrt{323148.71 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 3.1528
 \end{aligned}$$

Where,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of Net assets of SCBNL

\bar{x}_2 = Mean of Net assets of NICB

s_1 = Standard Deviation of Net assets of SCBNL

s_2 = Standard Deviation of Net assets of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5 \times 591.5^2 + 5 \times 408.859^2}{5 + 5} = 323148.71$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision:

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. Which means that, there is significant difference in the average net assets between two banks?

2. Deposits

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 26537.45$	$\bar{X}_2 = 10748.04$
$s_1 = 6413.57$	$s_2 = 3657.455$

Null Hypothesis (H0) :

$\mu_1 = \mu_2$. That is, there is no significant difference in the average deposits between two banks.

Alternative Hypothesis (H1) :

$\mu_1 \neq \mu_2$. That is, there is significant difference in the average deposits between two banks.

Test Statistics:

Under H₀, the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{26537.45 - 10748.04}{\sqrt{34069285.76 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 4.277
 \end{aligned}$$

Where,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of deposits of SCBNL

\bar{x}_2 = Mean of deposits of NICB

s_1 = Standard Deviation of deposits of SCBNL

s_2 = Standard Deviation of deposits of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5(6413.57^2) + 5(3657.455^2)}{5 + 5} = 34069285.76$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance (α) = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision:

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. This means that, there is significant difference in the average deposits between two banks.

3. Loan and Advance

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 10995.92$	$\bar{X}_2 = 9050.63$
$s_1 = 2609.74$	$s_2 = 3567.21$

Null Hypothesis (H_0) :

$\bar{X}_1 \sim \bar{X}_2$. That is, there is no significant difference in the average loan and advances between two banks.

Alternative Hypothesis (H_1) :

$\bar{X}_1 \neq \bar{X}_2$. That is, there is significant difference in the average loan and advances between two banks.

Test Statistics:

Under H_0 , the test statistics is,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{10995.92 - 9050.63}{\sqrt{12209831.28 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 0.8802
 \end{aligned}$$

Where ,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of loan and advances of SCBNL

\bar{x}_2 = Mean of loan and advances of NICB

s_1 = Standard Deviation of loan and advances of SCBNL

s_2 = Standard Deviation of loan and advances of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5 \times 2609.74^2 + 5 \times 3567.21^2}{5 + 5} = 12209831.28$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is less than the tabulated value of 't'. It is not significant and H_0 is accepted. This means that, there is no significant difference in the average loan and advances between two banks.

4. Investments

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 14046.66$	$\bar{X}_2 = 2197.82$
$s_1 = 3837.459$	$s_2 = 617.767$

Null Hypothesis (H_0) :

$\mu_1 = \mu_2$. That is, there is no significant difference in the average Investments between two banks.

Alternative Hypothesis (H_1) :

$\mu_1 \neq \mu_2$. That is, there is significant difference in the average Investments between two banks.

Test Statistics:

Under H_0 , the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{14046.66 - 2197.82}{\sqrt{9442329.78 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 6.097
 \end{aligned}$$

Where ,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of Investments of SCBNL

\bar{x}_2 = Mean of Investments of NICB

s_1 = Standard Deviation of Investments of SCBNL

s_2 = Standard Deviation of Investments of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5 \times 3837.459^2 + 5 \times 617.767^2}{5 + 5} = 9442329.78$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. This means that, there is significant difference in the average Investments between two banks.

5. Interest Earned

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 1427.736$	$\bar{X}_2 = 795.67$
$s_1 = 328.255$	$s_2 = 324.848$

Null Hypothesis (H_0) :

$\mu_1 = \mu_2$. That is, there is no significant difference in the average Interest earned between two banks.

Alternative Hypothesis (H_1) :

$\mu_1 \neq \mu_2$. That is, there is significant difference in the average Interest earned between two banks.

Test Statistics:

Under H_0 , the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{1427.736 - 795.67}{\sqrt{133298.69 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 2.737
 \end{aligned}$$

Where ,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of Interest earned of SCBNL

\bar{x}_2 = Mean of Interest earned of NICB

s_1 = Standard Deviation of Interest earned of SCBNL

s_2 = Standard Deviation of Interest earned of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5 \times 328.255^2 + 5 \times 324.848^2}{5 + 5} = 133298.69$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. This means that, there is significant difference in the average Interest earned between two banks.

6. Provision for doubtful debts

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 256.474$	$\bar{X}_2 = 213.634$
$s_1 = 34.73$	$s_2 = 25.98$

Null Hypothesis (H_0) :

$\bar{X}_1 \sim \bar{X}_2$. That is, there is no significant difference in the average provision for doubtful debts between two banks.

Alternative Hypothesis (H_1) :

$\bar{X}_1 \neq \bar{X}_2$. That is, there is significant difference in the average provision for doubtful debts between two banks.

Test Statistics:

Under H_0 , the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{256.474 - 213.634}{\sqrt{1175.7083 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 1.9755
 \end{aligned}$$

Where ,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of provision for doubtful debts of SCBNL

\bar{x}_2 = Mean of provision for doubtful debts of NICB

s_1 = Standard Deviation of provision for doubtful debts of SCBNL

s_2 = Standard Deviation of provision for doubtful debts of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5 \times 34.73^2 + 5 \times 25.98^2}{5 + 5} = 1175.7083$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is less than the tabulated value of 't'. It is not significant and H_0 is accepted. This means that, there is no significant difference in the average provision for doubtful debts between two banks.

7. Net profit

For NCBNL	For NICB
$n_1 = 5$	$n_2 = 5$
$\bar{X}_1 = 746.14$	$\bar{X}_2 = 185.86$
$s_1 = 185.59$	$s_2 = 92.87$

Null Hypothesis (H_0) :

$\mu_1 = \mu_2$. That is, there is no significant difference in the average net profit between two banks.

Alternative Hypothesis (H_1) :

$\mu_1 \neq \mu_2$. That is, there is significant difference in the average net profit between two banks.

Test Statistics:

Under H_0 , the test statistics is ,

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \\
 &= \frac{746.14 - 185.86}{\sqrt{26917.8031 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\
 &= 5.3995
 \end{aligned}$$

Where ,

n_1 = No. of Sample Period of SCBNL

n_2 = No. of Sample Period of NICB

\bar{x}_1 = Mean of net profit of SCBNL

\bar{x}_2 = Mean of net profit of NICB

s_1 = Standard Deviation of net profit of SCBNL

s_2 = Standard Deviation of net profit of NICB

Now,

$$S^2 = \frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2} = \frac{5(185.59)^2 + 5(92.87)^2}{5 + 5} = 26917.8031$$

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Level Of Significance () = 5 %

Hence, The Tabulated Value of t at 5 % level of significance for two-tailed test is 2.306.

That is $t_{0.05(8)}$ is equal to 2.306.

Decision :

Since, calculated value of 't' is greater than the tabulated value of 't'. It is significant and H_1 is accepted. This means that, there is significant difference in the average net profit between two banks.

4.7 Major Findings of the Study:

The major findings of the study are derived on the basis of financial and statistical data analysis of SCBNL and NICB, which are presented as follows:

- The mean Current ratio of SCBNL and NICB are 1.04 and 1.08 respectively. The standard ratio 2.0 is not maintained by both the banks.
- The mean Liquid Fund to Current Liability Ratio of SCBNL and NICB are 0.14 and 0.1 respectively. This indicates that the bank can better withstand even in an adverse condition.
- The mean Liquid Fund to Total Deposits Ratio of SCBNL and NICB are 0.15 and 0.11 respectively. The ratio implies that in adverse condition, SCBNL can better survive than NICB.
- The mean Cash and Bank Balance to Interest Sensitive Deposits Ratio of SCBNL and NICB are 0.25 and 0.37 respectively.
- The mean total assets to total liabilities ratio of SCBNL and NICB are 1.08 and 1.09 respectively.
- The mean loans and advances to total assets ratio of SCBNL and NICB are 0.37 and 0.7 respectively. This ratio, in aggregate may indicate that SCBNL may be shifting its business to other fee-based activities and lessening its volume of loans and advances.
- The mean Investments to Total Loans and Advances and Investment Ratio of SCBNL and NICB are 0.56 and 0.20 respectively. SCBNL infers the lowest degree of investments in risk assets than NICB.
- The mean total Loans and Advances and Investments to total deposits Ratio of SCBNL and NICB are 0.94 and 1.04 respectively. NICB is better than SCBNL in utilizing its funds thus collected, irrespective of the area of its utilization and returns.
- The mean performing assets to total assets ratio of SCBNL and NICB are 0.868 and 0.676 respectively. The result shows that SCBNL is more successful in utilizing its assets in the profit generating projects than NICB.

- The mean non-performing assets to total assets of SCBNL and NICB are 0.132 and 0.324 respectively. And the mean return on loans and advances ratio are 0.07 and 0.02 respectively.
- Both the banks are able to decrease the loan loss ratio.
- SCBNL has low dependency in fund-based activity whereas, NICB has higher dependency.
- The portfolio of loan and advances of SCBNL on Government enterprises is higher and on private sector is lower (10%). The portfolio of loans and advances of NICB on Government enterprises is less than SCBNL.
- The trend of investing in share and debenture in case of NICB is fluctuating but this trend of SCBNL is decreasing.
- The mean private sector loans to total loans and advances of both banks are seems to be equal. The mean government sector loans to total loans and advances of both banks are seems to be equal.
- The mean ratio of government securities to total investment of SCBNL and NICB are 0.66 and 0.76 respectively.
- The Mean ratio of share and debenture to total investments of SCBNL and NICB are 0.004 and 0.0064 respectively.
- The net assets of SCBNL are high between the two financial institutions throughout five years. The deposit volume of SCBNL is way too high than NICB. The volume of loans and advances of SCBNL is high than that of NICB. NICB on the other hand, has very less amount of investments in comparison to SCBNL, differing with about 6 folds. The interest earned by both the banks is in increasing trend; however, the growth rate of NICB is much higher than that of SCBNL. The net profit, SCBNL has earned is very high in all the given years against NICB.
- SCBNL has high magnitude of increment than NICB has. NICB has low magnitude of increment in its net assets as well as its slope.
- NICB is less in comparison to SCBNL, the growth rate created by this bank has made this financial institution the better one than the other bank in terms of deposit collection.
- NICB's deposit utilization in terms of loans and advances is comparatively better than that of SCBNL, which means that the bank is very aggressive in mobilizing its collected fund.

- SCBNL always has high volume of investments in comparison to NICB and has achieved high degree of slope and magnitude. Both the financial institutions have increasing trend, but the degree of increment is different between these two banks.
- The financial institutions are successful in recording net profit in an increasing trend; also a prediction has been made for coming years using the linear equations based on its past year's performance.
- SCBNL has decreasing trend in provision for doubtful debt but NICB is in increasing trend. In Year 2008/09 it looks like to be equal.
- The correlation coefficient between deposits and loans & advances of SCBNL and NICB are 0.9312 and 0.9948 respectively.
- The correlation coefficient between Doubtful Debts and Loans & Advances of SCBNL and NICB are -0.785 and 0.1924 respectively.
- The correlation coefficient between Interest Earned and Net Profit of SCBNL and NICB are 0.9816 and 0.9736 respectively.
- The correlation coefficient between Net Profit and Loans & Advances of SCBNL and NICB are 0.9046 and 0.9548 respectively.
- Under Hypothesis test, there is significant difference in averages between two banks i.e. net assets, deposits, investments, interest earned and net profit. This test clearly shows that there is a clear-cut differences between both banks.
- Under Hypothesis test, there is no significant difference in averages between two banks i.e. Loan & advance and provision for doubtful debts. This test clears that there is no such a deviation between both banks.

CHAPTER : 5

SUMMARY, CONCLUSION AND RECOMMENDATION:

5.1 Summary:

Extend of development of any country is demonstrated by the development of the financial sector of that country. The financial sector comprises of Banks, Co-operative Societies, Insurance companies, and Finance companies. And integrated and speedy development of any country is possible only when a competitive financial service reaches every nook and corner of the country and its people. “Bank is an establishment for depositing, withdrawing and borrowing money” (Oxford English Dictionary). In general terms, banks are institutions that pool to gather the scattered savings of the people and arrange for its productive use. Banks, as a manager collects, disperses and controls the flow of the money. Banks collects fund from the public who has savings and it disperses the same fund to the persons who are in need of it. Banks can also be defined in terms of “Negotiators of Credit”. The activity of banks as a negotiator of credit is characterized by lending of other people’s, that is, of borrowed money. In fact, a bank borrows money in order to lend it.

Banking is a negotiation between granters of credit and the grantees of credit. For the activity of the bank as negotiators of credit, the golden rule holds that an organic connection must be created between the credit transactions and the debit transactions. The credit that the bank grants must correspond quantitatively and qualitatively to the credit that it takes up. More exactly expressed, “the date on which the bank’s obligations fall due must not precede the date on which its corresponding claims can be realized”. Only thus, can the damage of insolvency be avoided. It is true that the risk remains. Imprudent granting of credit is bound to prove just as ruinous to the bank as to any other merchants that follows from the legal structure of their business, there is no legal connection between their credit transactions and their debit transactions and their obligation to pay back the money they have borrowed is not affected by the fate of their investments. The obligation continues even if the investment proves dead losses.

Lending is the most fundamental function of the bank. “It is the essence of commercial banking; consequently the formulation and implementation of sound lending policies are among the most important responsibilities of the bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit.” (Bhattacharya, 1998: V)

The quality of loan, quality of borrower and quality of securities determines the health of any bank. The efficiency of banker lies in how it multiplies the deposits of depositors. Hence, lending should be accompanied by some basic principles and practices. No banker would willingly give a loan, unless he has sufficient confidence in the borrower that it will not be necessary to seek the help of court for the recovery. Safety of funds, liquidity of funds, purpose of loan, security of loan, profitability, spread of loan portfolio and compliance with the national interest are some of the principles that the banker should consider while granting loan.

The money mobilized in loans is borrowed from public via deposits, which is a liability of the company. Besides, interest from such loans is one of the main sources of income of banking institutions. If the financial institutions are not able to recover its loans, then it's a failure on the part of the company.

NRB, the central bank of Nepal, to fulfill the ever growing credit requirement has adopted the liberal policies and provided many facilities to the probable bankers of Nepal and abroad through Commercial Bank Act 1974 A.D. consequent of the policies provided by Nepal Government to open commercial banks with foreign joint ventures in 2041B.S. NRB has further introduced the new act called Bank and Financial Institutions Act 2058 to facilitate the operation of Banks and Financial Institutions smoothly in the present competitive environment. At present 28 commercial banks are helping not only in the field of deposit mobilization and lending but also to the areas like different product and service development and employment generations too.

As stated earlier, lending is one of the essential and main functions where the whole banking business is rested upon. The globalization and liberalization has opened various investment and lending opportunities in front of the business community and to the

banking business too. It has opened a new lending as well as investment area to diversify their respective portfolio. However, subsequent development of commercial banks in quality has not been satisfactory. The central bank, once has to withdraw the permission to register new banks due to its unsatisfactory increment in credit of productive and employment generating sector. Bank's growth and profitability are the result of carefully forecasting funding needs, competitively attracting funds, efficiently borrowing funds, and effectively investing funds in safe but profitable earning assets. (Halter, 1999: 76)

Today, the banking sector is severely affected by the NPA (Non-Performing Assets) problem. The importance of lending in Nepalese Commercial Banks has remained virtually unchanged. Only the number of commercial banks and other financial institutions has increased significantly. And despite this increment in the number of financial institutions, the ratio of total assets to total credit of commercial banks has been decreasing. This is an indicative of bad performance of the commercial banks in the area of lending. Without implementing its lending function efficiently, none of the commercial banks, in the long run can survive. It is possible that commercial banks, in a year or two, can generate high volume of profit coming from other subsidiary fee based activities, but in the long run, without increasing its lending functions, it cannot increase its fee based income too.

Today, commercial banks in Nepal have been facing several challenges, some of them arising due to lack of smooth functioning of economy, some due to confused policies and many of them due to default of the borrowers. The liberalization of the financial sector demands a new technology of lending to cope up with the rising pressure on the profitability of banks and financial institutions.

5.2 Conclusion:

) Nepal is a developing country. It needs to strengthen its economic structure to achieve rapid national development. And Commercial Banks plays a vital role in the economic development of any country. The poor infrastructure of Nepalese economy, slow paced industrial sector, low rate of employment, majority of non-organized financial sector, lack of organized capital market, have always been demanding an efficient, competent, and liberalized banking industries. Today's so called developed

countries also have fasted their economic development with the help of banking system.

- J) Though Nepalese banking system has paced up in its development, but still it hasn't been very successful in bringing about changes in its developing economy, society and its people. Still, a large portion of Nepalese economy is untouched by its services.
- J) At present, 28 commercial banks, 58 development banks, 79 finance companies are operating in Nepal. The market seems over crowded, and the financial institutions are finding a tough time competing among themselves. But the financial institution's performance cannot and should not be judged solely by the volume of profit that it has earned by maintaining adequate liquidity and safety, it should also be assessed on the basis of the contribution that these financial institutions have made to the community, to the government and to the national economy in the form of fund mobilization, service, employment, profit and discharging their accountability towards the government.
- J) The measurement of liquidity position of SCBNL and NICB has revealed that the current ratio of both the financial institutions stands below the normal standard of 2:1. In other words, from the working capital point of view; both the financial institutions are following an aggressive working capital policy. Though these banks are not able to put up with the standard ratio, but it cannot be said that these banks are not able to pay their short-term obligations. Keeping the standard ratio of combined mean of both of these banks, the performance of NICB can be considered the better one among the two. As per the mean ratio of liquid fund to current liability, liquid fund to total deposit ratio of SCBNL is higher than NICB. While cash and bank balance to interest sensitive deposit ratio of NICB is higher than SCBNL, which means that SCBNL can better serve the unanticipated demand of current liability and that it can better survive even in an adverse condition than NICB.
- J) Analysis of total assets to total liabilities and loans and advances to total assets ratio suggests the performance of NICB is the best. It is always recommended to have higher total assets to total liabilities ratio since it signifies the overall increase of credit and overall development of the financial institutions. Against the performance of SCBNL in loans and advances to total assets ratio, it has a poor performance as compare to NICB. These ratios in aggregate indicate that SCBNL might be shifting its business to other fee based activities and reducing its volume of loans and advances.

-) Investments are generally considered safer than loans & advances. Lack of lending opportunities and deteriorating economic growth may have led financial institutions to look for safer means of fund mobilization. Investments to loans & advances and investments indicate that SCBNL is more inclined towards investing their funds in investments than in loans & advances than NICB. But, safety does not provide with satisfactory return. Analysis of loans & advances and investment to total deposit ratio indicate that both SCBNL and NICB have been able to utilize their resources of assets satisfactorily. Comparatively, loans and advances to total deposit ratio of NICB is higher than that of SCBNL. This implies that NICB is more efficiently utilizing the funds in extending credit for profit generation.
-) Similarly, the ratio of performing assets to total assets of SCBNL is higher than that of NICB. So, clearly SCBNL is also efficiently utilizing their assets in profit generating activities. The ratio of non-performing assets to total assets shows that NICB has higher ratio than SCBNL. The ratio of return of loan and advances show that SCBNL is more successful and efficient in mobilizing their assets in productive sector than NICB.
-) The ratio analysis of loan loss of both the financial institutions indicates both of them have same ratio. Loan loss ratio provides a cushion for financial institutions in case of borrower's default in repayment of loans. Both the banks have lower value of bad loans, which suggest that these banks have been managing the risk assets very efficiently.
-) The major source of operating income of these financial institutions is from interest, and the analysis shows that ratio of interest earned to total income and interest expenses to total deposit of NICB is higher than that of SCBNL. Which proves that NICB is successful in generating more income from the funds mobilized as loans and advances, while on the other hand, it is also paying more interest to its depositors. SCBNL, being a pioneer in the modern technology and modern banking, has succeeded in collecting the fund in the cheapest possible price. Thus, the ratio of interest earned to interest expense of SCBNL confirms that it is more successful in earning more operating income than NICB.
-) Analysis of the ratio of sector-wise distribution of loans & advances and investments of SCBNL and NICB shows that flow of loans & advances in government sector are low against the flow of loans and advances in private sector. The contribution of both

these financial institutions in private sector is appreciable, but the increase credit in this sector is indispensable for the national development. However the movement of government securities against shares and debentures in investments is high.

-) The absolute measures of lending strength have revealed that mean volume of net assets, deposits, loans and advances, investments, interest earned, provision for doubtful debts and net profit of SCBNL is higher with moderate variation against the performance of NICB. The C.V of NICB is highest in almost of the cases and this has significantly differed from the C.V of SCBNL. This indicates that there is a high degree of variation in the performance of NICB. The variation has caused due to the increasing trend of very components in the performance of NICB. Compare to NICB, SCBNL has less degree of variation, except in net assets. The volume contributed by SCBNL in case of investments is highly appreciable as compare to its net assets. This concludes that SCBNL is not quite positive towards increasing its assets in loans and advances.
-) Trend analysis experimented above has revealed that the performance of SCBNL in almost all the cases is better than NICB, where the average growth rate of NICB is higher than SCBNL. The slope of trend line is the higher for NICB in all the variables measured. Especially in recent years, NICB increasing efficiency in deposit collection and loans & advances and investments has placed this bank in better position. The high degree of growth in loans & advances and investments has kept NICB in the better position in the field of lending.
-) SCBNL and NICB are likely to increase Rs.4774.56 million and Rs.2811.91 million of net assets in the period of ten years experimented above. Similarly, these two financial institutions will likely to reach Rs.54327.1 million and Rs.26845.1 million in deposits. And Rs.22095.3 million and Rs.24831.5 million in loans and advances, Rs.29538.6 million and Rs.4114.77 million in investments. And net profit for SCBNL and NICB in the period of ten years will reach at Rs.1542.67 million and Rs.573.53 million.
-) The growth ratio of deposits is higher in comparison to loans and advances, and with limited investing and lending opportunities; the liquidity position of these two financial institutions is likely to increase in the near future. Even though, increase of deposits certainly gives more possibility in increasing its credit, but if the existing condition of the country does not turn toward the betterment, then the liquidity caused

by the overflow of deposits could cause major impact in the profitability of these financial institutions.

J) The correlation calculated between variables has generally shown high degree of significant correlation between them except in the case of provision for doubtful debts & loans and advances. The highest correlation of NICB in respect of deposits and loans & advances, interest earned and net profit and provision for doubtful debts and loans & advances are the indicative of good performance of NICB in generating loans and advances.

5.3 Recommendation:

Since these financial institutions are using public's hard-earned savings and that the performance of these institutions serve as the backbone of the economic development of the country, it makes it even more crucial to highlight and carry out corrective action plans to overcome any weaknesses and unsatisfactory policies. Although, these financial institutions have many years of commercial experience in the banking sector and expert management team to look into these matter, some weaknesses have come into light through the study and possible recommendations have been forwarded.

Expansion of banking services in rural areas:

The liquidity position of both the financial institutions cannot be put in the satisfactory level, as both the banks have the capacity and resource to perform better than their current performance. They are recommended to look upon new field of lending and investment. As stated earlier, a large portion of Nepalese economy is still untouched by its services. Thus, these financial institutions are recommended to explore and expand their credit in those areas. The government should also initiate appropriate environment to attract and motivate these financial institutions to invest in rural economy.

Utilization of resources:

Since the entire economy is largely dependent on the proper execution of lending functions by financial institutions, the negative tendency towards lending affects the performance of all the banks in the long run. It is recommended that SCBNL should be more liberal in utilizing its deposits in loans and advances for profit generation. Both the

financial institutions, especially NICB are recommended to utilize their assets in performing assets at their best.

Prudent lending policy:

The increasing provision for non-performing loans is not helping the overall performance and the profitability of the financial institutions. Careful evaluation of the probable borrowers, identification of the probable risk before granting loans, helps in decreasing the volume of downgraded loans. All the financial institutions are recommended to follow the guidelines formulated by the central bank (NRB), and timely and proper actions may reduce many of the credit risk arising from the borrower's defaulter, lack of credit appraisal, black listed borrowers.

Ideal portfolio management:

Portfolio management of the financial institutions basically means the proper allocation of fund in different components of banking assets having different degrees of risk and varying rate of return in such a way that maximum profit can be achieved. And the portfolio of SCBNL cannot be regarded as the best mix of lending and investments even though the ratio of investment to total loan & advances and investments has been decreasing every year, which, however, is very nominal. The portfolio situation of all the financial institutions should analyze carefully in different time intervals and alternations should be made to maintain equilibrium in the portfolio management as far as possible.

Decrease spread rate:

According to NRB guidelines, the gap between interest charged and interest offered should not be more than 5%. And as the ratio shows, the interest gap of SCBNL between interests earned and interest expenses is highly unfavorable. Thus, SCBNL is recommended to minimize the gap by allowing higher interest rate in deposits. Minimizing this gap results in high volume of deposits and loans & advances and helps in increasing the sustainable lending practice.

Effective recovery mechanism:

The inappropriate and haphazard procedure in lending has been a major cause for the increasing trend of non-performing assets for most of the financial institutions operating in Nepal. So, it is recommended to all the financial institutions to exercise a suitable mechanism through which the overdue loans can be recovered timely. And for that purpose, all the financial institutions are advised to enact special "loan recovery act".

Innovation of new products:

To achieve desired result in today's cut-throat competition, every single financial institution need to offer new and better products and services to its customers time and again. SCBNL is widely known for its innovative, personalized and customer oriented banking systems. Since NICB is comparatively new in the field of banking system in Nepal against SCBNL, it has lately come up with very innovative and new products. Even though, it is recommended to NICB to bring about new products and services to its customers regularly. And marketing is one of the best ways to inform about products and services and its features.

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Appendices

Appendix-1

From the Capital and Liabilities Side of the Balance Sheet

(Rs. In Million)

Current Deposits					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	4356.34	4681.94	4794.53	6174.56	6202.86
NICB	233.16	391.87	510.20	654.18	834.69

(Rs. In Million)

Saving Deposits					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	13030.93	14597.67	15244.38	17856.13	19187.64
NICB	2024.26	2797.42	3335.67	3667.90	3993.72

(Rs. In Million)

Fixed Deposits					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	1416.38	2136.31	3196.49	3301.01	7101.7
NICB	2930.62	4064.50	4074.56	5875.95	7580.06

(Rs. In Million)

Non Interest Payable Deposits					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	4605.13	5191.36	5280.64	6648.6	6580.82
NICB	296.59	444.81	591.81	726.43	936.879

(Rs. In Million)

Total Deposits					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	19363.47	23061.03	24647.02	29744	35871.72
NICB	6241.38	8765.95	10068.23	13084.69	15579.93

(Rs. In Million)

Current Liabilities					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	20199.26	24013.21	26480.34	30843.24	37535
NICB	6826.20	9406.19	10560.84	13735.31	16890.38

(Rs. In Million)

Total Liabilities					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	20199.27	24013.21	26480.34	30843.24	37535
NICB	6826.39	9617.14	10760.84	13935.31	17090.38

(Rs. In Million)

Loan Loss Provision					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	277.66	270.86	287.51	245.39	200.95
NICB	197.64	246.16	187.25	200.66	236.46

From the Assets Side of the Balance Sheet

(Rs. In Million)

Cash and Bank Balance					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	3371.08	3283.51	3782.17	4247.78	5192.71
NICB	1010.38	1102.65	762.77	1352.35	1461.15

(Rs. In Million)

Liquid Fund					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	3371.08	3283.51	3782.17	4247.78	5192.71
NICB	1010.38	1102.65	762.77	1352.35	1461.15

(Rs. In Million)

Current Assets					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	21216.57	25027.49	27838.04	31869.2	39108.59
NICB	7384.88	10238.53	11303.65	14928.5	18166.57

(Rs. In Million)

Investments					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	9702.55	12838.56	13553.23	13902.82	20236.12
NICB	1572.90	2479.91	1599.48	2311.47	3026.02

(Rs. In Million)

Total Assets					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	21781.68	25767.35	28596.69	33335.79	40587.47
NICB	7508.1	10383.60	11679.34	15238.74	18750.63

(Rs. In Million)

Loans and Advances					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	8143.20	8935.42	10502.64	13718.6	13679.76
NICB	4711.71	6655.96	8941.40	11264.68	13679.39

(Rs. In Million)

Loans And Advances & Investments					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	17845.75	21773.98	24055.87	27621.42	33915.88
NICB	6284.61	9135.87	10540.88	13576.15	16705.41

From Profit and Loss Account

(Rs. In Million)

Interest Expenses					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	254.13	303.20	413.06	471.73	543.79
NICB	225.99	340.22	421.37	506.00	767.2

(Rs. In Million)

Total Operating Income					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	1285.54	1418.24	1558.01	1774.15	2092.13
NICB	292.51	314.83	410.91	546.34	719.92

(Rs. In Million)

Total Interest Earned					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	1058.68	1189.60	1411.98	1591.2	1887.22

NICB	457.61	579.98	725.82	931.4	1283.52
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(Rs. In Million)

Private Sector Loan					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	7328.88	8041.88	9452.37	12346.74	12311.78
NICB	4240.54	5990.36	8047.26	10138.21	12311.45

(Rs. In Million)

Government Sector Loan					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	814.32	893.54	1050.26	1371.86	1367.98
NICB	471.17	665.59	894.14	1126.47	1367.94

(Rs. In Million)

Government Securities					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	6722.80	7948.20	9702.55	12847.54	13553.23
NICB	1075.20	1235.30	1572.90	2479.91	1599.48

(Rs. In Million)

Investment in Shares and Debentures (S&D)					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	13.35	15.34	44.94	114.54	115.42
NICB	1.51	1.84	16.59	26.47	26.59

(Rs. In Million)

Net Assets (= Total Assets – Total Liabilities)					
Banks	2004/05	2005/06	2006/07	2007/08	2008/09
SCBNL	1582.41	1754.14	2116.35	2492.55	3052.47
NICB	681.71	766.46	918.5	1303.43	1660.25

Appendix-2

2A CALCULATION OF CURRENT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Current Assets	21216.57	25027.49	27838.04	31869.2	39108.59	
Current Liabilities	20199.26	24013.21	26480.34	30843.24	37535	
Ratio	1.05	1.04	1.05	1.03	1.04	1.04

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Current Assets	7384.88	10238.53	11303.65	14928.5	18166.57	
Current Liabilities	6826.20	9406.19	10560.84	13735.31	16890.38	
Ratio	1.08	1.09	1.07	1.09	1.08	1.08

2B CALCULATION OF LIQUID FUND TO CURRENT LIABILITIES RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Liquid Fund	3371.08	3283.51	3782.17	4247.78	5192.71	
Current Liabilities	20199.26	24013.21	26480.34	30843.24	37535	
Ratio	0.17	0.14	0.14	0.14	0.14	0.14

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Liquid Fund	1010.38	1102.65	762.77	1352.35	1461.15	
Current Liabilities	6826.20	9406.19	10560.84	13735.31	16890.38	
Ratio	0.15	0.12	0.07	0.1	0.1	0.1

2C CALCULATION OF LIQUID FUND TO TOTAL DEPOSIT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Liquid Fund	3371.08	3283.51	3782.17	4247.78	5192.71	
Total Deposits	19363.47	23061.03	24647.02	29744	35871.72	
Ratio	0.17	0.14	0.15	0.14	0.14	0.15

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Liquid Fund	1010.38	1102.65	762.77	1352.35	1461.15	
Total Deposits	6241.38	8765.95	10068.23	13084.69	15579.93	
Ratio	0.16	0.13	0.08	0.1	0.09	0.11

2D CALCULATION OF CASH & BANK BALANCE TO SAVINGS DEPOSIT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Cash & Bank balance	3371.08	3283.51	3782.17	4247.78	5192.71	
Saving Deposits	13030.93	14597.67	15244.38	17856.13	19187.64	
Ratio	0.26	0.22	0.25	0.24	0.27	0.25

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Cash & Bank balance	1010.38	1102.65	762.77	1352.35	1461.15	
Saving Deposits	2024.26	2797.42	3335.67	3667.90	3993.72	
Ratio	0.50	0.39	0.23	0.37	0.37	0.37

2E CALCULATION OF TOTAL ASSETS TO TOTAL LIABILITIES RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Total Assets	21781.68	25767.35	28596.69	33335.79	40587.47	
Total Liabilities	20199.27	24013.21	26480.34	30843.24	37535	
Ratio	1.08	1.07	1.08	1.08	1.08	1.08

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Total Assets	7508.1	10383.60	11679.34	15238.74	18750.63	
Total Liabilities	6826.39	9617.14	10760.84	13935.31	17090.38	
Ratio	1.1	1.08	1.09	1.09	1.1	1.09

2F CALCULATION OF LOAN & ADVANCES TO TOTAL ASSETS RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loan & Advances	8143.20	8935.42	10502.64	13718.6	13679.76	
Total Assets	21781.68	25767.35	28596.69	33335.79	40587.47	
Ratio	0.37	0.35	0.37	0.41	0.34	0.37

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loan & Advances	4711.71	6655.96	8941.40	11264.68	13679.39	
Total Assets	7508.1	10383.60	11679.34	15238.74	18750.63	
Ratio	0.63	0.64	0.77	0.74	0.73	0.7

2G CALCULATION OF INVESTMENT TO TOTAL LOANS AND ADVANCES AND INVESTMENT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Total Investment	9702.55	12838.56	13553.23	13902.82	20236.12	
Loans And Advances & Investments	17845.75	21773.98	24055.87	27621.42	33915.88	
Ratio	0.54	0.59	0.56	0.50	0.6	0.56

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Total Investment	1572.90	2479.91	1599.48	2311.47	3026.02	
Loans And Advances & Investments	6284.61	9135.87	10540.88	13576.15	16705.41	
Ratio	0.25	0.27	0.15	0.17	0.18	0.20

2H CALCULATION OF LOANS AND ADVANCES & INVESTMENT TO TOTAL DEPOSIT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loans And Advances & Investments	17845.75	21773.98	24055.87	27621.42	33915.88	
Total Deposits	19363.47	23061.03	24647.02	29744	35871.72	
Ratio	0.92	0.94	0.98	0.93	0.95	0.94

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loans And Advances & Investments	6284.61	9135.87	10540.88	13576.15	16705.41	
Total Deposits	6241.38	8765.95	10068.23	13084.69	15579.93	
Ratio	1.01	1.04	1.05	1.04	1.07	1.04

2I CALCULATION OF PERFORMING ASSETS TO TOTAL ASSETS RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Performing Assets	18514.43	22932.94	25165.09	29002.14	34499.35	
Total Assets	21781.68	25767.35	28596.69	33335.79	40587.47	
Ratio	0.85	0.89	0.88	0.87	0.85	0.868

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Performing Assets	4730.11	6749.34	8993.092	10209.96	12375.42	
Total Assets	7508.1	10383.60	11679.34	15238.74	18750.63	
Ratio	0.63	0.65	0.77	0.67	0.66	0.676

2J CALCULATION OF NON-PERFORMING ASSETS TO TOTAL ASSETS RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Non-performing Assets	3267.25	2834.41	3431.6	4333.65	6088.12	
Total Assets	21781.68	25767.35	28596.69	33335.79	40587.47	
Ratio	0.15	0.11	0.12	0.13	0.15	0.132

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Non-performing Assets	2777.99	3634.26	2686.25	5028.78	6375.21	
Total Assets	7508.1	10383.60	11679.34	15238.74	18750.63	
Ratio	0.37	0.35	0.23	0.33	0.34	0.324

2K CALCULATION OF RETURN ON LOAN & ADVANCES RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Net Profit	536.24	658.76	691.67	818.92	1025.11	
Loan & Advances	8143.20	8935.42	10502.64	13718.6	13679.76	
Ratio	0.07	0.07	0.07	0.06	0.07	0.07

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Net Profit	113.76	96.59	158.48	243.06	317.43	
Loan & Advances	4711.71	6655.96	8941.40	11264.68	13679.39	
Ratio	0.02	0.01	0.02	0.02	0.02	0.02

2L CALCULATION OF LOAN LOSS RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loan Provision	277.66	270.86	287.51	245.39	200.95	
Total Loan & Advance	8143.20	8935.42	10502.64	13718.6	13679.76	
Ratio	0.03	0.03	0.03	0.02	0.01	0.03

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Loan Provision	197.64	246.16	187.25	200.66	236.46	
Total Loan & Advance	4711.71	6655.96	8941.40	11264.68	13679.39	
Ratio	0.04	0.04	0.02	0.02	0.02	0.03

2M CALCULATION OF INTEREST EARNED TO TOTAL INCOME OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Earned	1058.68	1189.60	1411.98	1591.2	1887.22	
Total Income	1285.54	1418.24	1558.01	1774.15	2092.13	
Ratio	0.82	0.84	0.91	0.90	0.90	0.87

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Earned	457.61	579.98	725.82	931.4	1283.52	
Total Income	292.51	314.83	410.91	546.34	719.92	
Ratio	1.56	1.84	1.77	1.70	1.78	1.73

2N CALCULATION OF INTEREST EXPENSES TO TOTAL DEPOSIT RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Expenses	254.13	303.20	413.06	471.73	543.79	
Total Deposits	19363.47	23061.03	24647.02	29744	35871.72	
Ratio	0.01	0.01	0.02	0.02	0.02	0.02

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Expenses	225.99	340.22	421.37	506.00	767.2	
Total Deposits	6241.38	8765.95	10068.23	13084.69	15579.93	
Ratio	0.04	0.04	0.04	0.04	0.05	0.04

20 CALCULATION OF INTEREST INCOME TO INTEREST EXPENSE RATIO OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Earned	1058.68	1189.60	1411.98	1591.2	1887.22	
Interest Expenses	254.13	303.20	413.06	471.73	543.79	
Ratio	4.17	3.92	3.42	3.37	3.47	3.67

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Interest Earned	457.61	579.98	725.82	931.4	1283.52	
Interest Expenses	225.99	340.22	421.37	506.00	767.2	
Ratio	2.02	1.70	1.72	1.84	1.67	1.79

2P CALCULATION OF PRIVATE SECTOR LOANS TO TOTAL LOANS AND ADVANCES OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Private Sector Loan	7328.88	8041.88	9452.37	12346.74	12311.78	
Loan & Advances	8143.20	8935.42	10502.64	13718.6	13679.76	
Ratio	0.9	0.9	0.9	0.9	0.9	0.9

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Private Sector Loan	4240.54	5990.36	8047.26	10138.21	12311.45	
Loan & Advances	4711.71	6655.96	8941.40	11264.68	13679.39	
Ratio	0.90	0.90	0.90	0.90	0.90	0.90

2Q CALCULATION OF GOVERNMENT SECTOR LOANS TO TOTAL LOANS AND ADVANCES OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Government Sector Loan	814.32	893.54	1050.26	1371.86	1367.98	
Loan & Advances	8143.20	8935.42	10502.64	13718.6	13679.76	
Ratio	0.1	0.1	0.1	0.1	0.1	0.1

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Government Sector Loan	471.17	665.59	894.14	1126.47	1367.94	
Loan & Advances	4711.71	6655.96	8941.40	11264.68	13679.39	
Ratio	0.10	0.10	0.10	0.10	0.10	0.10

2S CALCULATION OF RATIO OF SHARES AND DEBENTURES TO TOTAL INVESTMENTS OF

SCBNL						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Investment in S&D	13.35	15.34	44.94	114.54	115.42	
Investments	9702.55	12838.56	13553.23	13902.82	20236.12	
Ratio	0.0013	0.0012	0.0033	0.0082	0.0057	0.0040

NICB						
FY	2004/05	2005/06	2006/07	2007/08	2008/09	Mean
Investment in S&D	1.51	1.84	16.59	26.47	26.59	
Investments	1572.90	2479.91	1599.48	2311.47	3026.02	
Ratio	0.0010	0.0007	0.0104	0.0115	0.0088	0.0064

Appendix-3

Trend Analysis

**3.A Calculation of the trend line of net assets of:
SCBNL**

Fiscal Year	Net Assets (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	1582.41	-2	4	-3164.82	1463.88
2005/06	1754.14	-1	1	-1754.14	1831.73
2006/07	2116.35	0	0	0	2199.58
2007/08	2492.55	1	1	2492.55	2567.44
2008/09	3052.47	2	4	6104.94	2935.29
N=5	∑Y=10997.92	∑X=0	∑X ² =10	∑XY=3678.53	

Now,

$$a X \frac{Y}{N} = \frac{10997.92}{5} = 2199.584$$

$$b X \frac{XY}{X^2} = \frac{3678.53}{10} = 367.853$$

Trend values of Net Assets for 2009/10-20013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	3303.14
2010/11	4	3671.00
2011/12	5	4038.85
2012/13	6	4406.70
2013/14	7	4774.56

NICB

Fiscal Year	Net Assets (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	681.71	-2	4	-1363.42	567.26
2005/06	766.46	-1	1	-766.46	816.67
2006/07	918.5	0	0	0	1066.07
2007/08	1303.43	1	1	1303.43	1315.48
2008/09	1660.25	2	4	3320.5	1564.88
N=5	∑Y=5330.35	∑X=0	∑X ² =10	∑XY=2494.05	

Now,

$$a X \frac{Y}{N} = \frac{5330.35}{5} = 1066.07$$

$$b X \frac{XY}{X^2} = \frac{2494.05}{10} = 249.405$$

Trend values of Net Assets for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	1814.29
2010/11	4	2063.69
2011/12	5	2313.1
2012/13	6	2562.5
2013/14	7	2811.91

3.B Calculation of the trend line of Deposits of:

SCBNL

Fiscal Year	Deposits (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	19363.47	-2	4	-38726.94	18597.6
2005/06	23061.03	-1	1	-23061.03	22567.5
2006/07	24647.02	0	0	0	26537.5
2007/08	29744	1	1	29744	30507.4
2008/09	35871.72	2	4	71743.44	34477.3
N=5	∑Y=132687.2	∑X=0	∑X ² =10	∑XY=39699.47	

Now,

$$a X \frac{Y}{N} = \frac{132687.2}{5} = 26537.45$$

$$b X \frac{XY}{X^2} = \frac{39699.47}{10} = 3969.947$$

Trend values of Deposits for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	38447.3
2010/11	4	42417.2
2011/12	5	46387.2
2012/13	6	50357.1
2013/14	7	54327.1

NICB

Fiscal Year	Deposits (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	6241.38	-2	4	-12482.76	6148.87
2005/06	8765.95	-1	1	-8765.95	8448.46
2006/07	10068.23	0	0	0	10748
2007/08	13084.69	1	1	13084.69	13047.6
2008/09	15579.93	2	4	31159.86	15347.2
N=5	∑Y=53740.18	∑X=0	∑X ² =10	∑XY=22995.84	

Now,

$$a X \frac{Y}{N} = \frac{53740.18}{5} = 10748.04$$

$$b X \frac{XY}{X^2} = \frac{22995.84}{10} = 2299.584$$

Trend values of Deposits for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	17646.8
2010/11	4	19946.8
2011/12	5	22246.0
2012/13	6	24545.5
2013/14	7	26845.1

3.C Calculation of the trend line of Loans and Advances of:

SCBNL

Fiscal Year	Loans & Advances (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	8143.20	-2	4	-16286.4	7824.66
2005/06	8935.42	-1	1	-8935.42	9410.29
2006/07	10502.64	0	0	0	10995.9
2007/08	13718.6	1	1	13718	12581.6
2008/09	13679.76	2	4	27359.52	14167.2
N=5	∑Y=54979.62	∑x=0	∑X ² =10	∑XY=15856.3	

Now,

$$a X \frac{Y}{N} = \frac{54979.62}{5} = 10995.92$$

$$b X \frac{XY}{X^2} = \frac{15856.3}{10} = 1585.63$$

Trend values of Loans & Advances for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	15752.8
2010/11	4	17338.4
2011/12	5	18924.1
2012/13	6	20509.7
2013/14	7	22095.3

NICB

Fiscal Year	Loans & Advances	X=t-2006/07	X ²	XY	Yc=a+bx
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	(Y)				
2004/05	4711.71	-2	4	-9423.42	4541.81
2005/06	6655.96	-1	1	-6655.96	6796.22
2006/07	8941.40	0	0	0	9050.63
2007/08	11264.68	1	1	11264.68	11305
2008/09	13679.39	2	4	27358.78	13559.4
N=5	$\phi Y=45253.14$	$\phi x=0$	$\phi X^2=10$	$\phi XY=22544.08$	

Now,

$$a X \frac{Y}{N} = \frac{45253.14}{5} = 9050.63$$

$$b X \frac{XY}{X^2} = \frac{22544.08}{10} = 2254.41$$

Trend values of Loans & Advances for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	15813.9
2010/11	4	18068.3
2011/12	5	20322.7
2012/13	6	22577.1
2013/14	7	24831.5

3.D Calculation of the trend line of Investments of: SCBNL

Fiscal Year	Investments (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	9702.55	-2	4	-19405.1	9620.38
2005/06	12838.56	-1	1	-12838.56	11833.5
2006/07	13553.23	0	0	0	14046.7
2007/08	13902.82	1	1	13902.82	16259.8
2008/09	20236.12	2	4	40472.24	18472.9
N=5	$\phi Y=70233.28$	$\phi x=0$	$\phi X^2=10$	$\phi XY=22131.4$	

Now,

$$a X \frac{Y}{N} = \frac{70233.28}{5} = 14046.66$$

$$b X \frac{XY}{X^2} = \frac{22131.4}{10} = 2213.14$$

Trend values of Investments for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	20686.1
2010/11	4	22899.2
2011/12	5	25112.4
2012/13	6	27325.5
2013/14	7	29538.6

NICB

Fiscal Year	Investments (Y)	X= t-2006/07	X ²	XY	Yc=a+bx
2004/05	1572.90	-2	4	-3145.8	1650.12
2005/06	2479.21	-1	1	-2479.21	1923.97
2006/07	1599.48	0	0	0	2197.82
2007/08	2311.47	1	1	2311.47	2471.82
2008/09	3026.02	2	4	6052.04	2745.52
N=5	∑Y=10989.08	∑x=0	∑X ² =10	∑XY=2738.5	

Now,

$$a X \frac{Y}{N} = \frac{10989.08}{5} = 2197.82$$

$$b X \frac{XY}{X^2} = \frac{2738.5}{10} = 273.85$$

Trend values of Investments for 2009/10-2013/14

Fiscal Year (t)	X (t-2006/07)	Trend Values
2009/10	3	3019.37
2010/11	4	3293.22
2011/12	5	3567.07
2012/13	6	3840.92
2013/14	7	4114.77

3.E Calculation of the trend line of Net Profit of:

SCBNL

Fiscal Year	Net Profit (Y)	X= t-2006/07	X ²	XY	Yc=a+bx
2004/05	536.24	-2	4	-1072.48	518.56
2005/06	658.76	-1	1	-658.76	632.35
2006/07	691.67	0	0	0	746.14
2007/08	818.92	1	1	818.92	859.93
2008/09	1025.11	2	4	2050.22	973.72
N=5	∑Y=3730.7	∑x=0	∑X ² =10	∑XY=1137.9	

Now,

$$a X \frac{Y}{N} = \frac{3730.7}{5} = 746.14$$

$$b X \frac{XY}{X^2} = \frac{1137.9}{10} = 113.79$$

Trend values of Net Profit for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
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2009/10	3	1087.51
2010/11	4	1201.3
2011/12	5	1315.09
2012/13	6	1428.88
2013/14	7	1542.67

NICB

Fiscal Year	Net Profit (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	113.76	-2	4	-227.52	75.1
2005/06	96.59	-1	1	-96.59	130.48
2006/07	158.48	0	0	0	185.86
2007/08	243.06	1	1	243.06	241.25
2008/09	317.43	2	4	634.86	296.63
N=5	∑Y=929.32	∑X=0	∑X ² =10	∑XY=553.81	

Now,

$$a X \frac{Y}{N} = \frac{929.32}{5} = 185.86$$

$$b X \frac{XY}{X^2} = \frac{553.81}{10} = 55.38$$

Trend values of Net Profit for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	352.01
2010/11	4	407.39
2011/12	5	462.77
2012/13	6	518.15
2013/14	7	573.53

3.F1 Calculation of the trend line of Interest earned

SCBNL

Fiscal Year	Interest Earned (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	1058.68	-2	4	-2117.36	1016

2005/06	1189.60	-1	1	-1189.6	1221.87
2006/07	1411.98	0	0	0	1427.74
2007/08	1591.2	1	1	1591.2	1633.6
2008/09	1887.22	2	4	3774.44	1839.47
N=5	$\phi Y=7138.68$	$\phi x=0$	$\phi X^2=10$	$\phi XY=2058.68$	

Now,

$$a X \frac{Y}{N} = \frac{7138.68}{5} = 1427.74$$

$$b X \frac{XY}{X^2} = \frac{2058.68}{10} = 205.87$$

Trend values of Interest earned for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	2045.34
2010/11	4	2251.21
2011/12	5	2457.08
2012/13	6	2662.94
2013/14	7	2868.81

NICB

Fiscal Year	Interest Earned (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	457.61	-2	4	-915.22	395.018
2005/06	579.98	-1	1	-579.98	595.342
2006/07	725.82	0	0	0	795.666
2007/08	931.4	1	1	931.4	995.99
2008/09	1283.52	2	4	2567.04	1196.31
N=5	$\phi Y=3978.33$	$\phi x=0$	$\phi X^2=10$	$\phi XY=2003.24$	

Now,

$$a X \frac{Y}{N} = \frac{3978.33}{5} = 795.67$$

$$b X \frac{XY}{X^2} = \frac{2003.24}{10} = 200.324$$

Trend values of Interest earned for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	1396.64
2010/11	4	1596.96
2011/12	5	1797.29
2012/13	6	1997.61
2013/14	7	2197.93

3.F2 Calculation of the trend line of Provision for Doubtful Debts SCBNL

Fiscal Year	Provision for Doubtful Debt (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
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2004/05	277.66	-2	4	-555.32	292.252
2005/06	270.86	-1	1	-270.86	274.363
2006/07	287.51	0	0	0	256.474
2007/08	245.39	1	1	245.39	238.585
2008/09	200.95	2	4	401.9	220.696
N=5	$\phi Y=1282.37$	$\phi x=0$	$\phi X^2=10$	$\phi XY=-178.89$	

Now,

$$a X \frac{Y}{N} = \frac{1282.37}{5} = 256.474$$

$$b X \frac{XY}{X^2} = \frac{-178.89}{10} = -17.789$$

Trend values of Provision for Doubtful Debt for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	202.807
2010/11	4	184.918
2011/12	5	167.029
2012/13	6	149.14
2013/14	7	131.251

NICB

Fiscal Year	Provision for Doubtful Debt (Y)	X=t-2006/07	X ²	XY	Yc=a+bx
2004/05	197.64	-2	4	-395.28	207.206
2005/06	246.16	-1	1	-246.16	210.42
2006/07	187.25	0	0	0	213.634
2007/08	200.66	1	1	200.66	216.848
2008/09	236.46	2	4	472.92	220.062
N=5	$\phi Y=1068.17$	$\phi x=0$	$\phi X^2=10$	$\phi XY=32.14$	

Now,

$$a X \frac{Y}{N} = \frac{1068.17}{5} = 213.634$$

$$b X \frac{XY}{X^2} = \frac{32.14}{10} = 3.214$$

Trend values of Provision For Doubtful Debt for 2009/10-2013/14

Fiscal Year (t)	X=t-2006/07	Trend Values
2009/10	3	223.276
2010/11	4	226.49
2011/12	5	229.704
2012/13	6	232.918
2013/14	7	236.132

Calculation of Mean, Standard Deviation and Coefficient of Variation

A) Net Assets

SCBNL			
Fiscal Year	Net Assets(X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	1582.41	-617.174	380903.7463
2005/06	1754.14	-445.444	198420.3571
2006/07	2116.35	-83.234	6927.898756
2007/08	2492.55	292.966	85829.07716
2008/09	3052.47	852.886	727414.529
N=5	$\sum X=10997.92$		$(x - \bar{x})^2 \sum X$ 1399495.61

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{10997.92}{5} = 2199.584$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(x - \bar{x})^2 \sum X}{N - 1}} = \sqrt{\frac{1399495.61}{4}} = 591.5$$

NICB			
Fiscal Year	Net Assets (X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	681.71	-384.36	147732.6096
2005/06	766.46	-299.61	89766.1521
2006/07	918.5	-147.57	21776.9049
2007/08	1303.43	237.36	56339.7696
2008/09	1660.25	594.18	353049.8724
N=5	$\sum X=5330.35$		$(x - \bar{x})^2 \sum X$ 668665.3086

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{5330.35}{5} = 1066.07$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(x - \bar{x})^2 \sum X}{N - 1}} = \sqrt{\frac{668665.3086}{4}} = 408.859$$

A) Deposits

SCBNL			
Fiscal Year	Deposits (X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	19363.47	-7173.978	51465960.34
2005/06	23061.03	-3476.418	12085482.11
2006/07	24647.02	-1890.428	3573718.023
2007/08	29744	3206.552	10281975.73
2008/09	35871.72	9334.272	87128633.77

N=5	$\phi X=132687.2$	$(x Z \bar{x})^2 X 164535770$
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Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{132687.2}{5} = 26537.45$$

$$\text{Standard Deviation } \left(\sqrt{\frac{\sum (x Z \bar{x})^2}{N Z 1}} \right) = \sqrt{\frac{164535770}{4}} = 6413.57$$

NICB			
Fiscal Year	Deposits (X)	$x Z \bar{x}$	$(x Z \bar{x})^2$
2004/05	6241.38	-4506.656	20309948.3
2005/06	8765.95	-1982.086	3928664.911
2006/07	10068.23	-679.806	462136.1976
2007/08	13084.69	2336.654	5459951.916
2008/09	15579.93	4831.894	23347199.63
N=5	$\phi X=53740.18$		$(x Z \bar{x})^2 X 53507900.95$

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{53740.18}{5} = 10748.04$$

$$\text{Standard Deviation } \left(\sqrt{\frac{\sum (x Z \bar{x})^2}{N Z 1}} \right) = \sqrt{\frac{53507900.95}{4}} = 3657.455$$

B) Loan and Advances

SCBNL			
Fiscal Year	Loan and Advances (X)	$x Z \bar{x}$	$(x Z \bar{x})^2$
2004/05	8143.20	-2852.724	8138034.22
2005/06	8935.42	-2060.504	4245676.734
2006/07	10502.64	-493.284	243329.1047
2007/08	13718.6	2722.676	7412964.601
2008/09	13679.76	2683.836	7202975.675
N=5	$\phi X=54979.62$		$(x Z \bar{x})^2 X 27242980.33$

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{54979.62}{5} = 10995.92$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{\sum (x - \bar{x})^2}{N - 1}} = \sqrt{\frac{27242980.33}{4}} = 2609.74$$

NICB			
Fiscal Year	Loan and Advances (X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	4711.71	-4338.918	18826209.41
2005/06	6655.96	-2394.668	5734434.83
2006/07	8941.40	-109.228	11930.75598
2007/08	11264.68	2214.052	4902026.259
2008/09	13679.39	4628.762	21425437.65
N=5	$\sum X = 45253.14$		$\sum (x - \bar{x})^2 = 50900038.91$

Now,

$$\text{Mean } (\bar{x}) = \frac{\sum X}{N} = \frac{45253.14}{5} = 9050.63$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{\sum (x - \bar{x})^2}{N - 1}} = \sqrt{\frac{50900038.91}{4}} = 3567.21$$

B) Investment

SCBNL			
Fiscal Year	Investment(X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	9702.55	-4344.106	18871256.94
2005/06	12838.56	-1208.096	1459495.945
2006/07	13553.23	-493.426	243469.2175
2007/08	13902.82	-143.836	20688.7949
2008/09	20236.12	6189.464	38309464.61
N=5	$\sum X = 70233.28$		$\sum (x - \bar{x})^2 = 58904375.5$

Now,

$$\text{Mean } (\bar{x}) = \frac{\sum X}{N} = \frac{70233.28}{5} = 14046.66$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{\sum (x - \bar{x})^2}{N - 1}} = \sqrt{\frac{58904375.5}{4}} = 3837.459$$

NICB			
Fiscal Year	investments (X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	1572.90	-624.916	390520.0071
2005/06	2479.21	281.394	79182.58324
2006/07	1599.48	-598.336	358005.9689
2007/08	2311.47	113.654	12917.23172
2008/09	3026.02	828.204	685921.8656

N=5	$\phi X=10989.08$	$(x \bar{Z} \bar{x})^2 \times 1526547.657$
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Now,

$$\text{Mean } \left(\frac{\Sigma X}{N} \right) = \frac{10989.08}{5} = 2197.82$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(x \bar{Z} \bar{x})^2}{N \bar{Z} 1}} \times \sqrt{\frac{1526547.657}{4}} = 617.767$$

C) Net Profits

SCBNL			
Fiscal Year	Net Profits (X)	$x \bar{Z} \bar{x}$	$(x \bar{Z} \bar{x})^2$
2004/05	536.24	-209.9	44058.01
2005/06	658.76	-87.38	7635.2644
2006/07	691.67	-54.47	2966.9809
2007/08	818.92	72.78	5296.9284
2008/09	1025.11	278.97	77824.2609
N=5	$\phi X=3730.7$		$(x \bar{Z} \bar{x})^2 \times 137781.445$

Now,

$$\text{Mean } \left(\frac{\Sigma X}{N} \right) = \frac{3730.7}{5} = 746.14$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(x \bar{Z} \bar{x})^2}{N \bar{Z} 1}} \times \sqrt{\frac{137781.445}{4}} = 185.59$$

NICB			
Fiscal Year	Net Profits (X)	$x \bar{Z} \bar{x}$	$(x \bar{Z} \bar{x})^2$
2004/05	113.76	-72.104	5198.986816
2005/06	96.59	-89.274	7969.847076
2006/07	158.48	-27.384	749.883456
2007/08	243.06	57.196	3271.382416
2008/09	317.43	131.566	17309.61236
N=5	$\phi X=929.32$		$(x \bar{Z} \bar{x})^2 \times 34499.71$

Now,

$$\text{Mean } \left(\frac{\Sigma X}{N} \right) = \frac{929.32}{5} = 185.86$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(x \bar{Z} \bar{x})^2}{N \bar{Z} 1}} \times \sqrt{\frac{34499.71}{4}} = 92.87$$

C) Interest Earned

SCBNL			
Fiscal Year	Interest Earned(X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	1058.68	-369.056	136202.3311
2005/06	1189.60	-238.136	56708.7545
2006/07	1411.98	-15.756	248.251536
2007/08	1591.2	163.464	26720.4793
2008/09	1887.22	459.484	211125.5463
N=5	$\sum X=7138.68$		$(\sum (x - \bar{x})^2) \times 4 = 431005.363$

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{7138.68}{5} = 1427.74$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(\sum (x - \bar{x})^2)}{N - 1}} = \sqrt{\frac{431005.363}{4}} = 328.255$$

NICB			
Fiscal Year	Interest Earned(X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	457.61	-338.056	114281.8591
2005/06	579.98	-215.686	46520.4506
2006/07	725.82	-69.846	4878.463716
2007/08	931.4	135.734	18423.71876
2008/09	1283.52	487.854	238001.5253
N=5	$\sum X=3978.33$		$(\sum (x - \bar{x})^2) \times 4 = 422106.02$

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{3978.33}{5} = 795.67$$

$$\text{Standard Deviation } (s) = \sqrt{\frac{(\sum (x - \bar{x})^2)}{N - 1}} = \sqrt{\frac{422106.02}{4}} = 324.848$$

D) Provision For Doubtful Debt

SCBNL			
Fiscal Year	Provision for doubtful Debt(X)	$x - \bar{x}$	$(x - \bar{x})^2$
2004/05	277.66	21.186	448.846596
2005/06	270.86	14.386	206.956996
2006/07	287.51	31.036	963.233296
2007/08	245.39	-11.084	122.855056
2008/09	200.95	-55.524	3082.914576

N=5	$\phi X=1282.37$	$(x \bar{Z} \bar{x})^2 \times 4824.81$
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Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{1282.37}{5} = 256.474$$

$$\text{Standard Deviation } \left(\frac{\sum (x \bar{Z} \bar{x})^2}{N \bar{Z} 1} \right) = \sqrt{\frac{4824.81}{4}} = 34.73$$

NICB			
Fiscal Year	Provision for doubtful Debt(X)	$x \bar{Z} \bar{x}$	$(x \bar{Z} \bar{x})^2$
2004/05	197.64	-15.994	255.808036
2005/06	246.16	32.526	1057.940676
2006/07	187.25	-26.384	696.115456
2007/08	200.66	-12.974	168.324676
2008/09	236.46	22.826	521.026276
N=5	$\phi X=1068.17$		$(x \bar{Z} \bar{x})^2 \times 2699.22$

Now,

$$\text{Mean } \left(\frac{\sum X}{N} \right) = \frac{1068.17}{5} = 213.634$$

$$\text{Standard Deviation } \left(\frac{\sum (x \bar{Z} \bar{x})^2}{N \bar{Z} 1} \right) = \sqrt{\frac{2699.22}{4}} = 25.98$$

Appendix-4

Correlation Coefficient:

4A. Correlation between Deposit and Loans & Advances of:

SCBNL

F/Y	Deposit (X)	Loans & Advances (Y)	x=(X-X̄)	y=(Y-Ȳ)	x ²	y ²	xy
2004/05	19363.47	8143.20	-7173.98	-2852.72	51465989	8138011	20465356
2005/06	23061.03	8935.42	-3476.42	-2060.5	12085496	4245660	7163163
2006/07	24647.02	10502.64	-1890.43	-493.28	3573726	243325.2	932511.3
2007/08	29744	13718.6	3206.55	2722.68	10281963	7412986	8730410
2008/09	35871.72	13679.76	9334.27	2683.84	87128596	7202997	25051687
N=5	X X 132687.2	Y X 54979.62			x ² X 164535770	y ² X 27242980	xy X 62343128

$$X X \ 132687.2$$

$$\bar{X} = \frac{X}{N} = \frac{132687.2}{5} = 26537.45$$

$$x^2 \ X \ 164535770$$

$$Y \ X \ 54979.62$$

$$\bar{Y} = \frac{Y}{N} = \frac{54979.62}{5} = 10995.92$$

$$y^2 \ X \ 27242980$$

$$xy \ X \ 62343128$$

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = \frac{62343128}{\sqrt{164535770} \sqrt{27242980}}$$

$$r = 0.9312$$

$$r^2 = 0.8671$$

Calculation of Probable Error:

$$\begin{aligned}
 P.Er &= 0.6745 \frac{1 Z r^2}{\sqrt{N}} \\
 &= 0.6745 \frac{1 Z 0.8671}{\sqrt{5}} \\
 P.Er &= 0.04 \qquad 6P.Er = 0.2406
 \end{aligned}$$

NICB

F/Y	Deposit (X)	Loans & Advances (Y)	x= (X-X̄)	y= (Y-Ȳ)	x ²	y ²	xy
2004/05	6241.38	4711.71	-4506.656	-4338.918	20309948.3	18826209.41	19554010.84
2005/06	8765.95	6655.96	-1982.086	-2394.668	3928664.911	5734434.83	4746437.92
2006/07	10068.23	8941.40	-679.806	-109.228	462136.198	11930.76	74253.85
2007/08	13084.69	11264.68	2336.654	2214.052	5459951.92	4902026.26	5173473.46
2008/09	15579.93	13679.39	4831.894	4628.762	23347199.6	21425437.65	22365687.34
N=5	X X 15579.9	Y X 45253.14			x ² X 53507901	y ² X 50900038.91	xy X 51913863.4

X X 15579.9

$$\bar{X} = \frac{X}{N} = \frac{15579.9}{5} = 10748$$

x² X 53507901

Y X 45253.14

$$\bar{Y} = \frac{Y}{N} = \frac{45253.14}{5} = 9050.628$$

y² X 50900038.91

xy X 51913863.4

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = \frac{51913863.4}{\sqrt{53507901} \sqrt{50900038.91}}$$

$$r = 0.9948 \quad r^2 = 0.99$$

Calculation of Probable Error:

$$\begin{aligned} P.Er &= 0.6745 \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \frac{1 Z 0.99}{\sqrt{5}} \end{aligned}$$

$$P.Er = 0.0032 \quad 6P.Er = 0.02$$

4B. Correlation between Provision for Doubtful Debts and Loans & Advances of:

SCBNL

F/Y	Loans & Advances (X)	Provision for Doubtful Debts (Y)	x= (X-X̄)	y= (Y-Ȳ)	x ²	y ²	xy
2004/05	8143.20	277.6	-2852.7	21.138	8138034.22	446.815	-60300.879
2005/06	8935.42	270.86	-2060.5	14.398	4245676.73	207.302	-29667.137
2006/07	10502.64	287.51	-493.28	31.048	243329.11	963.978	-15315.482
2007/08	13718.6	245.39	2722.7	-11.07	7412964.6	122.589	-30145.469
2008/09	13679.76	200.95	2683.8	-55.51	7202975.67	3081.582	-148985.104
N=5	X X54979.62	Y X1282.31			x ² X 27242980	y ² X 4822.267	xy X -284414.07

$$X X54979.62$$

$$\bar{X} = \frac{X}{N} = \frac{54979.62}{5} = 7937.46$$

$$x^2 X 27242980$$

$$Y X1282.31$$

$$\bar{Y} = \frac{Y}{N} = \frac{1282.31}{5} = 256.462$$

$$y^2 X 4822.267$$

$$xy X -284414.07$$

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$r = \frac{2284414.07}{\sqrt{27242980} \sqrt{4822.267}}$$

$$r = -0.785$$

$$r^2 = 0.62$$

Calculation of Probable Error:

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$= 0.6745 \frac{1 Z 0.62}{\sqrt{5}}$$

P.Er = 0.1159 6P.Er= 0.695

NICB

F/Y	Loans & Advances (X)	Provision for Doubtful Debts (Y)	x= (X-X̄)	y= (Y-Ȳ)	x ²	y ²	xy
2004/05	4711.71	197.64	-4338.918	-15.994	18826209.41	255.81	69396.65
2005/06	6655.96	246.16	-2394.668	32.526	5734434.83	1057.94	-77888.97
2006/07	8941.40	187.25	-109.228	-26.384	11930.76	696.12	2881.87
2007/08	11264.68	200.66	2214.052	-12.974	4902026.26	168.32	-28725.11
2008/09	13679.39	236.46	4628.762	22.826	21425437.65	521.03	105656.12
N=5	X X 45253.14	Y X 1068.17			x ² X 50900038.91	y ² X 2699.22	xy X 71320.57

X X45253.14

$$\bar{X} = \frac{X}{N} = \frac{45253.14}{5} = 9050.63$$

$$x^2 \text{ X } 50900038.91$$

$$Y \text{ X } 1068.17$$

$$\bar{Y} = \frac{Y}{N} = \frac{1068.17}{5} = 213.634$$

$$y^2 \text{ X } 2699.22$$

$$xy \text{ X } 71320.57$$

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = \frac{71320.57}{\sqrt{50900038.91} \sqrt{2699.22}}$$

$$r = 0.1924 \quad r^2 = 0.037$$

Calculation of Probable Error:

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$= 0.6745 \frac{1 Z 0.037}{\sqrt{5}}$$

$$P.Er = 0.2905 \quad 6P.Er = 1.7428$$

4C. Correlation between Interest Earned and Net Profit of:

SCBNL

F/Y	Interest Earned (X)	Net Profit (Y)	x= (X- X̄)	y= (Y- Ȳ)	x ²	y ²	xy
2004/05	1058.68	536.24	-369.06	-209.9	136202.33	44058.01	77464.854
2005/06	1189.60	658.76	-238.14	-87.38	56708.755	7635.264	20808.324
2006/07	1411.98	691.67	-15.756	-54.47	248.252	2966.98	858.229
2007/08	1591.2	818.92	163.46	72.78	26720.479	5296.93	11896.909
2008/09	1887.22	1025.11	459.48	278.97	211125.55	77824.26	128182.25

N=5	X X7138.68	Y X 3730.7			x^2 X 431005.36	y^2 X 137781.44	xy X 239210.569
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X X7138.68

$$\bar{X} = \frac{X}{N} = \frac{7138.68}{5} = 1427.74$$

x^2 X 431005.36

Y X3730.7

$$\bar{Y} = \frac{Y}{N} = \frac{3730.7}{5} = 746.14$$

y^2 X 137781.44

xy X 239210.569

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = \frac{239210.569}{\sqrt{431005.36} \sqrt{137781.44}}$$

$$r = 0.9816 \quad r^2 = 0.96$$

Calculation of Probable Error:

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$= 0.6745 \frac{1 Z 0.96}{\sqrt{5}}$$

$$P.Er = 0.011 \quad 6P.Er = 0.0659$$

NICB

F/Y	Interest Earned (X)	Net Profit (Y)	x= (X-X̄)	y= (Y-Ȳ)	x^2	y^2	xy
2004/05	457.61	113.76	-338.06	-72.104	114281.859	5198.987	24375.189
2005/06	579.98	96.59	-215.69	-89.274	46520.451	7969.847	19255.152
2006/07	725.82	158.48	-69.846	-27.384	4878.464	749.883	1912.663
2007/08	931.4	243.06	135.73	57.196	18423.719	3271.382	7763.442
2008/09	1283.52	317.43	487.85	131.566	238001.525	17309.612	64184.999
N=5	X X 3978.33	Y X 929.32			x^2 X 422106.02	y^2 X 34499.71	xy X 117491.45

$\Sigma X = 3978.33$

$$\bar{X} = \frac{\Sigma X}{N} = \frac{3978.33}{5} = 795.67$$

$\Sigma x^2 = 422106.01$

$\Sigma Y = 929.32$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{929.32}{5} = 185.86$$

$\Sigma y^2 = 34499.71$

$\Sigma xy = 117491.45$

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}}$$

$$r = \frac{117491.45}{\sqrt{422106.02} \sqrt{34499.71}}$$

$$r = 0.9736 \quad r^2 = 0.95$$

Calculation of Probable Error:

$$P.Er = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$= 0.6745 \frac{1 Z 0.95}{\sqrt{5}}$$

$$P.Er = 0.0157 \quad 6P.Er = 0.0942$$

4D. Correlation between Net Profit and Loans & Advances of:

SCBNL

F/Y	Loans & Advances (X)	Net Profit (Y)	x= (X-X̄)	y= (Y-Ȳ)	x ²	y ²	xy
2004/05	8143.20	536.24	-2852.7	-209.9	8138034.22	44058.01	598786.77
2005/06	8935.42	658.76	-2060.5	-87.38	4245676.73	7635.26	180046.84
2006/07	10502.64	691.67	-493.28	-54.47	243329.11	2966.98	26869.18
2007/08	13718.6	818.92	2722.7	72.78	7412964.60	5296.93	198156.36
2008/09	13679.76	1025.11	2683.8	278.97	7202975.68	77824.26	748709.73

N=5	X X 54979.62	Y X 3730.7			x^2 X 27242980.33	y^2 X 137781.44	xy X 1752568.87
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X X 54979.62

$$\bar{X} = \frac{X}{N} = \frac{54979.62}{5} = 10995.92$$

x^2 X 27242980.33

Y X 3730.7

$$\bar{Y} = \frac{Y}{N} = \frac{3730.7}{5} = 746.14$$

y^2 X 137781.44

xy X 1752568.87

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = \frac{1752568.87}{\sqrt{27242980.33} \sqrt{137781.44}}$$

$$r = 0.9046 \quad r^2 = 0.82$$

Calculation of Probable Error:

$$\begin{aligned} P.Er &= 0.6745 \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \frac{1 Z 0.82}{\sqrt{5}} \end{aligned}$$

$$P.Er = 0.0548 \quad 6P.Er = 0.3289$$

NICB

F/Y	Loans & Advances (X)	Net Profit (Y)	x= (X-X̄)	y= (Y-Ȳ)	x^2	y^2	xy
2004/05	4711.71	113.76	-4338.9	-72.104	18826209.41	5198.987	312853.34
2005/06	6655.96	96.59	-2394.7	-89.274	5734434.83	7969.847	213781.59
2006/07	8941.40	158.48	-109.23	-27.384	11930.76	749.883	2991.10
2007/08	11264.68	243.06	2214.1	57.196	4902026.26	3271.382	126634.92
2008/09	13679.39	317.43	4628.8	131.566	21425437.65	17309.612	608987.70
N=5	X X 45253.14	Y X 929.32			x^2 X 50900038.91	y^2 X 34499.71	xy X 1265248.65

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$\Sigma X = 45253.14$

$$\bar{X} = \frac{\Sigma X}{N} = \frac{45253.14}{5} = 9050.628$$

$\Sigma x^2 = 50900038.91$

$\Sigma Y = 929.32$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{929.32}{5} = 185.86$$

$\Sigma y^2 = 34499.71$

$\Sigma xy = 1265248.65$

Correlation of Coefficient can be calculated by using the following formula:

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2} \sqrt{\Sigma y^2}}$$

$$r = \frac{1265248.65}{\sqrt{50900038.91} \sqrt{34499.71}}$$

$$r = 0.9548 \quad r^2 = 0.91$$

Calculation of Probable Error:

$$\begin{aligned} \text{P.Er} &= 0.6745 \frac{1 - r^2}{\sqrt{N}} \\ &= 0.6745 \frac{1 - 0.91}{\sqrt{5}} \end{aligned}$$

$$\text{P.Er} = 0.0267 \quad 6\text{P.Er} = 0.1599$$