

# CHAPTER I

## INTRODUCTION

### 1.1 General background of the study

Bank is an institution that works for making the monetary transactions sound and effective. Bank collects deposits from the depositors and lends it to the people who are seeking credit for their own purposes. Bank accumulates the idle money from the scattered sources and lends it to the various productive sectors in an economy that certainly yields positive results in an economy, employment opportunities, economic activities and finally developing the whole economy.

Main objective of the bank is to mobilize idle resources into productive sectors by collecting the funds from scattered sources. Bank accepts the deposit in numerous forms depending upon the nature of savers and the strategy of the bank itself. Some of the common type of deposits are current deposit, fixed deposit and call deposit. The interest rate of the deposit varies to the different banks as the central bank has freed up the commercial banks to determine the interest rate of their own.

Bank accepts deposits in numerous forms depending upon the nature of savers and banks own product offering strategy .Some of the common deposits are saving, fixed and call deposits etc. Banks collect the saving of people in the form of deposits collection and investment in the productive area. They give the loan to the people; banks mobilize deposit collected from people. People who have a lot of money also consume precious goods; people have no idea the investment in productive line.

The development of a country is always measured by its economic development through indices. Therefore every country has given emphasis on uplifting of a country can hardly be carried forward without the assistances of financial institution. The role of commercial banks in supplying the credit in the economy is vital. Banks are the main sources which motivate people to save their earnings. The proposed study is believed to be beneficial for a number of individuals, groups, and organizations directly or indirectly.

In modern age, economic condition is one of the most remarkable distinctions. In this universe, there are a number of countries whose economic condition is very high with per capita income of more than US \$ 30,000.00 while there are such countries whose economic condition is very poor with per capita income of less than \$500 per annum. Of course, these countries are trying to lift up their economic condition. These countries are suffering from numerous problems. However, recently, significant improvement has been seen in the global economic and financial scenario.

Capital formation, considered to be one of the important factors in economic development leads to increase the size of national output, income and employment solving the problem of inflation, balance of payments and making the economy free from any burden of foreign debts. Domestic capital formation helps in making a country self-sustainable.

“Capital formation was the accumulation of capital. Profit made by the business community constituted the major part of saving of the community and that savings was assumed to be invested. They thought capital formation indeed plays a decisive role in determining the level and growth of national income and economic development”. It seems unquestionable that the insufficient capital accumulation is the more serious limiting factors in developing countries. In the view of many economists, capital occupies the central and strategic position in the process of economic development. .It seems unquestionable that the insufficient capital accumulation is the more serious limiting factor in undeveloped countries.

In the view of many economists, capital occupied central and strategic position in the process of economic economy lie in the rapid expansion of the rate of its capital investment. So that it development in an under developed attains a rate of growth of output which exceeds the rate of growth of population by the significant margin only with such a rate of capital investment will the living standard begin to improve in a developing country. In developing countries the rate of saving is quite low and exiting institution are half successive in mobilizing such saving as most people have incomes so low that vertically all current income be spent in marinating a substantial level of consumption.

"For the development of the nation it is required to have enough capital, without adequate capital investment may not be possible, formation of the adequate capital through the financial institution like finance company banks etc is important.

Generally Bank is an institution, the essential operation of which is to make the monetary transaction possible in a sound and effective way. Bank accepts deposits of money from those who save and lend to those who need credit for some purpose. Bank accumulates idle money from general public by offering attractive or sound interest and lends it to the fund seekers in the economy Investment in fixed assets would be possible where by productivity could grow, employment could be generated and finally national economy could be enhanced. Banks are also found to be involved in a number of agency services of remitting and collecting cash on behalf of its clients by opening bank drafts and letter of credit facility etc.

Besides, the main task of bank is to mobilize idle resources into productive sector by collecting it from scattered sources and generating profit. Banks also facilitates people to carry out their financial transaction in every sector such as organization, industries, agriculture trade and needy people as well. Bank accepts deposits in numerous forms depending upon the nature of savers and banks own product offering strategy .Some of the common deposits are saving, fixed and call deposits etc. the cost of deposits to the banks varied as central bank has freed up the commercial bank to offer the interest rate on their own.

However, it's said that the average cost of deposits for the bank is 4%.Development of nation banking sector of that country is responsible and must be strong. The financial sector like bank is a vast field, which helps in reducing poverty, increase in life style of people, increase employment opportunities and there by developing the society of a country as a whole development of a country depends upon adequate saving and invested in productive sector which is inspired by banking activities. Due to the low income there is fewer saving .people spend all the money in consumption of necessary items. People who have a lot of money also consume precious goods; people have no idea the investment in productive line. Banks are the main sources which motivate people to save their earnings. Banks collect the saving of people in

the form of deposits collection and investment in the productive area. They give the loan to the people; banks mobilize deposit collected from people.

The importance of the banking as the nerve centre of economic development cannot be over emphasized and it is said that which are the need of and great wealth of country has got to be kept very scared just as water of irrigation good banks are for the country's and trade. The development of a country is always measured by its economic development through indices. Therefore every country has given emphasis on uplifting of a country can hardly be carried forward with out the assistances of financial institution. They are the indispensable part of the development process It is the fact that the unorganized financial system leads the country. Therefore, central bank plays a major role and keeping the financial system of a country organized by providing those guidelines and directions.

The recent trend in the banking industries has been observed that the portion of idle cash they are holding is mounting. For instance: commercial banks are currently holding about 326.364 billion rupees. In the mean time, the total loan outstanding and investments of commercial banks is about 320.316 billion rupees only. This clearly shows the level of deposit management by commercial banks and it requires something to be done immediately.

Recognizing the true fact of developing country," Nepal cannot ignore the importance of commercial banks. Realizing it, HMG of Nepal has been adopted the economy liberalization policy. Due to liberalization policy made by government, the number of bank has been increased and there has emerged the tough competition among them”.

## **1.2 Focus of the study**

This study focuses on the history of the deposit mobilization of total commercial banking system and two sampled banks NBL and SCBNL. This study is made the especial aim of observing the deposit mobilization position of total commercial banking system in Nepal and comparing the deposit mobilization position of NBL representing the government owned commercial bank and SCBNL representing the

private sector commercial bank. Therefore the study certainly focuses on the elements related to deposit mobilization. The study focuses on the analysis of efficiency of deposit mobilization of total commercial banking system and two sampled banks.

### **1.3 Statement of the Problem**

Within the sphere of the proposed study, there exist a considerable number of problems regarding the commercial banks, services they offer such as different deposit types, their features etc., and their relationship with customers. For example: It's said that banks are not being able to fully utilize their deposits fund in to productive sectors. In other words, they are said to be more focused on retail banking rather than in corporate banking. Similarly, banks are holding major portion of their deposits liabilities as the cost bearing deposits. Likewise, it can be generalized that banks are not being able to manage their liquid assets efficiently.

Precisely, these problems could be numerically categorized into the following four broad groups, and they are being explained as well. The recent trend observed in banking industry is that they have not been able to fully utilize their deposit fund by mobilizing it into productive sectors. Due to the deteriorating economic scenario, management of the banks, and the attitude of the board of directors, they have been able to lend about 70 percent of total deposits only. Referring to the Banks' composition of deposit liabilities, it can be said that they are holding too much of cost bearing deposits.

Banks are merely the financial intermediaries that accept the deposits from the savers and invest or lend the funds to the funds seekers in the economy. Therefore, issues related to the banks' investments, and lending certainly affect the Protection of funds deposited by the savers. Definitely, there are some rules and regulations prescribed by the central bank such as the recent one which compels the banks to issue their capital equal to a billion rupees. However, banks' loan investments, capital structures, existing management slacks etc. do not represent that the public funds deposited at the banks are safe. Commercial banks deserve the power to create money and credit because the public readily accept claims on bank deposits, particularly checks, credit and debit cards, and computer entries, in payment for goods and services. In addition,

the law requires individual banks to hold only a fraction of the amount of deposits received from the public as cash reserves, thus freeing up a majority of incoming funds for making loans and other investments.

This capacity of banks to create money and deposits has a number of important influences on the financial system and the economy as a whole. Banks can invest up to their money or deposit multiplier and money created by banks is also instantly available for spending. Therefore, unless carefully controlled by the central bank, it can fuel inflation.

#### **1.4 Objectives of the Study**

Banks provide both the deposit and credit services to the public. They accept the funds from the savers as deposits and lend the funds to the fund seekers in the economy. Therefore, banks can run effectively and efficiently only if they can mobilize their deposits fund at their prescribed area and realize those disbursed amounts timely. In totality, the proposed study aims to analyze how far the banks have been able to achieve these objectives.

The basic purposes of this study are:

1. To analyze the financial factors like liquidity management, efficiency and profitability position in relation to deposit mobilization of commercial banks.
2. To observe the deposit mobilization position of government owned commercial banks and private sector commercial banks.
3. To observe the trend of deposit and loan investment.
4. To identify the formation of deposit liabilities

#### **1.5 Significance of the study**

The quality and coverage of a bank's fund mobilizing policy reflects the degree of healthiness of the bank and eventually the national economy. In order to accomplish the optimum utilization of the scarce economic resource, the capital, banks must successfully formulate their fund mobilizing policy and effectively implement it as well. So, the role of commercial banks in supplying the credit in the economy is vital.

The proposed study is believed to be beneficial for a number of individuals, groups, and organizations directly or indirectly. Some of the direct beneficiaries of the study could be named as lenders, creditors, investors, and depositors of the banks. However, borrowers can also achieve some sort of advantages from the study. These beneficiaries and the kind of benefits they receive from the proposed study are being explained as follows:

- ) Investors
- ) Depositors
- ) Borrowers
- ) Policy Makers
- ) Future Researchers

#### **1.6 Limitations of the Study:**

The study has focused on its objective to observe the deposit mobilization position of commercial banks. As the study is more objective and is made for the fulfillment of academic requirement, it possesses numbers of limitations. Some specific limitations are as follows:

- ) The research work will be made on the basis of latest four years' data from fiscal year 2005 to 2009.
- ) 6 months time is a limit for the study.
- ) Simple statistical and financial tools are used for the analysis.
- ) Study is made mainly on the basis of secondary data only.

## **1.7 Organization of the study**

This unit considers the total considerations of the research report. This report is organized on five chapters. These five chapters consider:

### **1. Introduction**

The first chapter includes the introduction of the study that considers the background of the study, historical development of commercial bank in Nepal, statement of problem, significance of the study, objective of the study, focus of the study, limitation of the study, and the organization of the study.

### **2. Review of Literature**

This is the second chapter of the report. It includes the conceptual review and review of related studies. Conceptual review considers the study of books and other publications related to the concept of commercial bank, concept of deposit and concept of deposit mobilization. And the review of related studies includes the study of past studies made on the deposit related topics especially the studies related to the deposit mobilization of commercial banks.

### **3. Research Methodology**

This chapter contains the tools and techniques these are applied on the study. The financial and statistical tools which are used for the analysis and presentation of data are described in this chapter.

### **4. Presentation and analysis of data**

This is the major chapter of the study. It contains the presentation of data and analysis of the data that specify the findings of the study. Data are presented on the basis of objective of the study. This chapter contains the major findings of the study too. It helps the searcher to find out what is going on about the deposit mobilization in Nepal and selected commercial banks.

### **5. Summaries, Conclusion and Recommendation**

This is the last chapter of the study that contains summary of the study, conclusion of the study and some recommendations to the related banks and policy makers for making the deposit mobilization position of related banks and total commercial banking system better than that is.



## **CHAPTER II**

### **REVIEW OF LITERATURE**

To develop the concept and ideas about the selected topic, the review of relevant material is very important and crucial. In fact, review of literature begins with a search for a suitable topic and continuous throughout the duration of the research, either a dissertation or a thesis. Review of literature means reviewing research studies or other relevant propositions in the related areas of the study so that all the past studies, their conclusions and deficiencies may be known and further search can be conducted.

It is an integral and mandatory process in research works. It deals with a literature survey of existing volumes of similar or related subjects and a careful check should be made that the proposed study has not been carried out previously. Completely new and original problems are very rare, however a previous study should not be exactly replicable unless the techniques used facilitate to trace out the doubtful conclusions or some new sources of information identified.

So, in this chapter, the emphasis is given to review of major relevant literature on the deposit liabilities and their analyses. Different definitions or opinions expressed by experts in respect of deposit mobilization are considered to be relevant for the proposed study.

Similarly, this chapter also sheds light on some of the rules and regulations prescribed by the central bank regarding the commercial banks' deposit liabilities and their mobilization aspects.

This chapter is basically concerned with review of literature relevant to the topic "Deposit Mobilization of SCBNL and NBL". Every study is very much based on past knowledge. The previous studies can not be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past studies.

## **Conceptual Review**

An attempt has been made to look in to a number of related books and the bank publications, especially of those related to the deposits collection and mobilization aspects, and central bank's rules and regulations that abide the commercial banks on this regard. In addition, some sort of personal intuition has also been made.

### **2.1 History of Commercial Banks in Nepal**

Commercial Bank Act, 2031 BS of Nepal has defined commercial bank as an organization which exchanges money, accepts, grants loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose.

As per Banking and Financial Institution Act (BAFIA) commercial bank is defined as any financial institution that is operate under section 47(1) of BAFIA-2063.

It is fact that financial sector plays a vital role for the economic development of a country. Even before the establishment of a banking system in Nepal financial transaction was in practice as undertaken by some moneylenders like sahu-mahajans, zamindars, relatives, friends, and few informal organization limited to ethnic group such as Guthi. The borrowing from the other people and the informal organization was limited and based on personal understanding. At that time people deposit their gold, silver, and valuable goods for the sake of security. Thus, the private moneylender can be taken as forerunner of the concept of financial institution.

Nepal has been ruled over by many rulers like Kirati, Lichchhavi, Mall, Ranas and Shahs. Mostly Kirati, Lichhavi, and Mall regimes were concerned with the construction of temples, pati, pouwa, chautari etc. At that period neither the people nor the government were interested to think about the economic development of the country. According to ancient "Vanshawali" in fourteenth century, the ruler of the then Kathmandu Jaysthiti Malla segregated the local domiciles into 64 different classes according to profession they had undertaken. Tankadhari was one of those classes who used to deal in coins and precious metals such as gold. These Tankadharis were said to have carried out the borrowings and lending on money (coins). Hence,

Tankadharis can be regarded as the traditional bankers of Nepal. After long time, during the Ran regime only handfuls prime minister thought about the economic development of the country. They established some offices in 1993 B.S. (1887 AD). "Tejarath Adda" was established during the tenure of Prime Minister Ranodip Singh Rana as a first institutionalized credit house. Tejarath adda provided loan under the security of gold and silver to the government employees and public. The government established its various branches and sub-branches at different places of the country for the sake of benefits of people. In the overall development of the banking system in Nepal, the Tejarath Adda many be regarded as the Father of modern banking institutions and for a quit long time it tendered a good service to government employee as well as to the general public. The government also implemented the rules against the vast interest rate taken by moneylenders. Thus, the government financial institution occupies an important role in the banking history of Nepal.

No financial institutions were established over a long period due to political reasons. To fulfill the growing need of economy on Nepal, banking activities were performed only after the establishment of Nepal Bank Ltd in 1994 B.S. as the first commercial bank of Nepal. This bank was establishment under Nepal Bank Act 1994 B.S. (1983 A.D.)

Nepal Rastra Bank established in Baisakh 14, 2013 B.S. (1956 A.D.) under Nepal Rastra Bank Act 2012 B.S. (1955 A.D.) as the central bank of Nepal. It is totally owned by government, NRB is heavily assisting for the development of whole economy. It is giving timely directives to all financial institutions operated and conducted in all over the country.

The government introduced Commercial Bank Act in Nepal in 2033 B.S. to cover the vast field of financial sector. This act has helped to emerge number of commercial bank with a view to maintain the economic interest in comfort of the public in general facilitated to provide loan for agriculture, industry, and trade and make a available banking services to the country and people.

Along vacuum in the banking sector got some rays of hope only when the government forwarded the economic liberalization policy in 2039 B.S. and decided to allow foreign banks to operate their activities in Nepal in "joint-venture model". "Joint

venture banks can be defined as an association of two or more parties having common objectives and goals so as to get maximum satisfaction. Basically at that time, it was envisioned that joint-venture banks (JVBS) would support the country in various ways”. The Nabil Bank Ltd is the first joint-venture bank established in 2041 B.S. and started its operation with modern banking services. In the same way, Nepal Indosuez Bank (at present Nepal Investment Bank), the second joint-venture bank established in 2042 B.S. with an objective to encourage efficient banking services and facilities. Likewise Standard Chartered Bank is operated under the direction of Indian management.

With the satisfactory result of joint-venture banks, Nepalese promoters are highly encouraged and as a result, commercial banks are introduced with cent percent domestic investment. At present Nepal Industrial & commercial bank (NIC), Lumbini Bank Ltd, Machhapurchhre Bank Ltd, Kumari Bank Ltd, Laxmi Bank Ltd, and Siddhartha Bank Ltd came into operation with cent percent domestic investment by Nepalese promoters which is the plus point of development of banking history of Nepal. Now, there is a strong competition between commercial banks for their existence so that the growing needs of the customers can easily be achieved.

### **Standard Chartered Bank Nepal Ltd.**

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

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the

world increasingly becomes one market. With 17 points of representation, 18 ATMs across the country and with more than 350 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporates, multinationals, large public sector companies, government corporations, airlines, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs.

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

Corporate Social Responsibility is an integral part of Standard Chartered's ambition to become the world's best international bank and is the mainstay of the Bank's values. The Bank believes in delivering shareholder value in a socially, ethically and environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organisations involving charitable community activities. The Group launched two major initiatives in 2003 under its 'Believing in Life' campaign- 'Living with HIV/AIDS' and 'Seeing is Believing'.

### **Nepal Bank Ltd.**

Nepal Bank Limited, The first bank of Nepal was established in November 15, 1937 A.D (Kartik, 30, 1994). It was formed under the principle of Joint venture (Joint venture between govt. & general public). NBL's authorized capital was Rs. 10 million & issued capital Rs. 2.5 million of which paid-up capital was Rs. 842 thousand with 10 shareholders. The bank has been providing banking through its branch offices in the different geographical locations of the country.

### **Vision Statement:**

"To remain the leading financial institution of the country."

**Mission Statement:**

Nepal Bank Limited seeks to provide an environment within which the bank can bring unique financial value and services to all customers. It will be a sound institution where depositors continue to have faith in the security of their funds and receive reasonable returns; borrowers are assured of appropriate credit facilities at reasonable prices; other service- seekers receive prompt and attentive service at reasonable cost; employees are paid adequate compensation with professional career growth opportunities and stockholders receive satisfactory return for their investment.

**Values Statement:**

At Nepal Bank Limited, we believe that our banking should be based on:

- ) Respect, service and safety for the customers we serve
- ) Respect, reward and opportunity for the people with whom we work
- ) Respect, cooperation and support for the economic community of Nepal

**Objectives:**

Nepal Bank Limited has the following objectives

- ) Continue to maintain leading share of banking sector with a significant presence in all major geographical areas in the country.
- ) Provide competitive and customer oriented banking services to all customers through competent and professional staff.
- ) Reclaim leadership within the national financial community.

**2.1.1 Concept of Commercial Bank**

"A Bank is a business organization that receives and holds deposits of funds from others make loans or extends credits and transfer funds by written order of depositors"

"A Commercial banker is a dealer in money and substitutes for money, such as cheque or bill of exchange. He also provides a variety of financial services".

"Commercial bank" a bank dealing with the general public, accepting deposit from and making loans to large numbers of household and small firms. Such banks are known in the UK as retail or high street banks. They also provide various services for depositors, including provision of cash and credit cards, storage facilities for valuables and documents, foreign exchange, stockbrocking, mortgage finance and executor services. Commercial banks are contrasted with central banks, and with investment, merchant and other specialist banks which deal little with the general public".

"The American institute of banking has laid down for functions of the commercial banks i.e. Receiving and handling deposits handling payment for its clients, granting loans and investment and creating money by extension of credit". Principally, commercial bank accepts deposits and provides loans, primarily to business firms thereby facilitating the transfer of funds on the economy. In the Nepalese context, *commercial bank act, 1974* defines "a commercial bank as one which exchanges money, deposits money accepts deposits, grants loans, and performs commercial banking functions".

The term commercial bank is also misleading because the fact that commercial bank performs not only one but many type of functions. Today the commercial banks not only issue the transfer deposits through cheques but they also operate underwriters to new equity issue deal facilities handle tax matters on behalf of their clients etc".

Commercial Banks are those banks who pool together the savings of the community and arrange for their productive use. They supply the financial needs of moderns business by various means. They accept deposits from the public on the condition that they are repayable on demand or on short notice. Commercial Banks are restricted to invest their funds in corporate securities. Their business is confined to financing the short terms needs of trade and industry such as working capital financing. They can not finance in fixed assets. They grant loans in the forms of cash credits and overdrafts. Apart from financing they also render services like collection of bills and checks, safe keeping of valuables financing advising etc. to their customers.

A commercial bank can be defined as an institution which deals in money in words of Crowther "Banks collect money from those who have it to spare or who are saving it

out of their income and lend this money out against goods security to those who requires it”.

"Commercial banks are those who pool together the savings of the community and arrange for their productive use. They supply the financial need of modern business by various means. They accept deposits from the public on the condition that they are repayable on demand or on short notice.

e. Commercial banks are restricted to invest their funds in corporate securities. Their business is confined to financing the short term needs of trade and industry such as working capital financing. They cannot finance in fixed assets. They grant loans in the form of cash credits and overdrafts. "Accepting the financing, the Bank also renders services like collection of bills and cheques, safe keeping of valuables, financial advising etc. to their customers”.

### **Theoretical Framework of the Study**

The theoretical framework of this study consists of the Introduction of commercial banks along with their role, needs and functions. The research as has been done with an aim to analyze the deposit mobilization of commercial banks deals mainly with the sources and uses of funds by the sample commercial banks. This research has been done with a focus of certain weaknesses of the commercial banks regarding their sources and uses of funds. Precisely, these problems could be numerically categorized into the following four broad groups, and they are being explained as well.

#### **I. Banks Have Not Been Able to Utilize Their Deposits Efficiently:**

The recent trend observed in banking industry is that they have not been able to fully utilize their deposit fund by mobilizing it into productive sectors. Due to the deteriorating economic scenario, management of the banks, and the attitude of the board of directors, they have been able to lend about 60 percent of total deposits only.

#### **II. Portion of Cost Bearing Deposits to Total Deposits is high:**

Referring to the Banks' composition of deposit liabilities, it can be said that they are holding too much of cost bearing deposits.



### **III. Safety of the Public Funds:**

Banks are merely the financial intermediaries that accept the deposits from the savers and invest or lend the funds to the funds seekers in the economy. Therefore, issues related to the banks' investments, and lending certainly affect the Protection of funds deposited by the savers. Definitely, there are some rules and regulations prescribed by the central bank such as the recent one which compels the banks to issue their capital equal to a billion rupees. However, banks' loan investments, capital structures, existing management slacks etc. do not represent that the public funds deposited at the banks are safe.

#### **2.1.1 Role of Commercial Banks in Nepal**

For all countries of the world and more so far the developing countries like Nepal, fast Economic Development is one of the most important aspects of developmental activities. However, it is obvious that unless the development of the important sector like agriculture, industry, trade, and commerce are achieved, envenomed development is impossible. For all the development, the regular supply of financial resources is a prerequisite.

Finance is thus like fuel for providing energy to move tempo of economic development and institutions naturally , serve as reservoir for supplying and controlling the stream of that fuel i.e. finance the commercial banks which are the financial institutions dealing with activities of agriculture industry, trade and commerce play the most important role for the business activities of the world. The objectives of the commercial banks are to mobilize the idle resources in productive uses collecting them from scattered and various sources. Its role in economic development is thus immense in order to bring out mobility of resources to meet the ever increasing needs of financing or the various economic activities.

These institutions are now trying best to contribute more and more services and facilities for the uplifting of national economy. They have become the core of financial system by holding the deposits; they make fund available through their lending and investing activities to different borrowers like individuals, business firms and even to the government. They ultimately facilitate the flow of goods and services

from producer to consumers and to the financial activities of the government. It is quite clear that commercial banks are the most important institutions of capital formation that imply mainly saving, investment and productions which ultimately lead to the economic development of a country.

The role of commercial banking in the economy is obviously a prime prerequisite for the formulations of the bank policy as the role shapes, the nature and character of the bank. The deposit minded bankers may overstress conservation liquidity while the loan minded banker may under emphasize safety. Often Commercial Bank performs a number of interrelated functions. There are not only the custodians of the community's money but the suppliers of its liquidity. For these banks customers who seldom borrow money from the bank an important function may be the acceptance and safe keeping of deposits.

But those customers who often take loans from the bank, the credits creation function may be the most important. "The commercial bank is different from the other banks especially from central bank. In appearance the main distinction between Central Bank and a Commercial Bank is that now-a-days the Central bank does not much banking, but the more fundamental difference is one of aim.

The main objective of the Commercial Bank is to make profit whereas the Central Bank thinks of the effects of its operations on the working of the economic system. The Commercial has the shareholders and is expected to the best it can for them but the Central Bank by contrast is usually owned by the government. The Commercial Bank may be few or many and they are to be found business with the general public all over the country. But, there is only one central bank in each country. Its market operations are mainly impersonal and are confided to what is necessary for influencing the country's financial business in the directions citrated by economic policy".

Commercial Banks are those banks that are engaged in commercial banking transactions and exclude from this description such banks are established for achieving certain specific goals such as co-operatives, agricultural and industrial banks, much wider activities in relation to the Economic Development of the country have been empowered to the banks. Apart from strictly performing commercial

functions, Commercial Banks so described in the act are empowered to perform such functions as undertaking of agency business. In the issue of Shares & Debentures for public corporations guaranteeing & underwriting foreign exchange business under the restriction imposed by Foreign Exchange Act, Rules, Orders & Notifications; advancing loans for period not exceeding one year against the security of the jewelers, gold & silver ornaments the mortgage of land & buildings, for acquiring plant & machinery ; and receiving deposits of government money according to the order of HMG in those places where there are no branches of the NRB or RBB or where the NRB gives its consent to remit through bills of exchange and checks in Nepal and foreign countries and so on.

Nepal being an underdeveloped country, its industries, agriculture, sectors has been expanding. It provides the credit facilities for the development of agriculture in cases where Agricultural Development Banks & Cooperative Societies do not enter into the field. The agriculture sector needs more & more capital for the improved methods of farming viz. the fertilizers, equipment, irrigation facilities etc. require obviously more investment. Thus role commercial bank in promoting agriculture sector is increasing in many of other countries, especially in developing countries like Nepal.

The economy of our country is dominated by agricultural sector. This could be exemplified about 76 % of the total population is engaged in agriculture & about 40 % of the national income comes from the agriculture. Similarly, about 51% of the export trade is in agricultural product. Also if we take into account of the major industries of Nepal, they are mainly based on agriculture. This is very clear that in such a country the financial help to the agriculture sector is most urgent & indispensable for strengthening the base of national economic structure.

Nepal being an under developed country, majority of the farmers in the villages are very poor. They do not have the sufficient capital to invest in this sector. The commercial bank has an important role to play here by helping the agriculture sector through two channels:

1. By providing fixed capital to Agricultural Development Bank by purchasing its shares of debentures
2. By giving direct credit facility to the farmers on the mortgage of their land, house, food grains & other cash crops like jute, tobacco etc.

As the agricultural development needs capital, the commercial banks are helping by providing financial help to the farmers & they are able to invest or utilize the fund in different ways that make them increase agricultural product. Thus in order to accelerate the tempo of economic development of Nepal, the government & the commercial banks should play crucial role in the agriculture sector of the economy. Thus the sound development and wide geographical average of commercial banks particularly in agriculture is a prerequisite in accelerated & sustained economic growth. In recent years even through the commercial banks have made rapid progress in mobilizing financial resources they are still insufficient in their lending policies.

The lending policies of Nepalese banks resemble more closely to those of the 19<sup>th</sup> century London Banks than 21<sup>st</sup> century developing institutions. In a way, it would seem apparent that accelerated private sector investment is dependent on the commercial banks giving more emphasis in medium & long term credit for equipment & construction & more liberal policy on the requests of collateral. In these respects, in recent years the NRB has been doing some useful services with its development oriented approach but it goes without saying that there is a long way to go to this particular field.

Thus Role of Commercial Banks in Nepal has been helping farmers by providing different facilities in Nepal. These helps are in the fields of cultivation, exporting rice, jute, paddy etc. & providing facilities regarding better market for their product, helping to start livestock, poultry firm, rice mills, animal husbandry, bee firm etc. & also provide the guidance for them.

The role of Commercial Banks is indispensable for industrial development of Nepal. Due to insufficiency of capital, industries are depending more & more upon the supply of capital by the banks. It would not be exaggeration to state that commercial banks are mainly responsible for whatever the financial institutions like ABD/N, NIDC have already been established for the development of agricultural & industrial sector of the country. The commercial banks are also continuously participating in these activities. Being a mountainous country many places are very remote & sometimes it requires many weeks to approach some of the places. Due to lack of transport & communication facilities & other geographical causes, the country has been still facing the problem of imbalances economic growth. The scattered

capital of the country is unable to solve the problem of imbalance of the economy growth. Commercial Banks have their appropriate role to play here by expanding their branches in the differently Hilly & Terai regions availing loan to the local people. In industrial sector, Commercial Banks are providing the necessary financial help for the industrial establishment in the country. They provide short & medium term loan to purchase machineries, tools, raw materials etc. & introduce new & developed techniques of production.

Commercial Banks are also helping for the development of transport by providing funds for transport Industry. Similarly, Banks are playing important role in tourism industries by helping to expand Hotel facilities, dealing with foreign exchange & accepting traveler cheques from the tourists.

So, the role of Commercial Banks is extremely important for the development of industries, trade, commerce, agriculture etc. of the country. In fact, no nation can develop itself without the development of these banks. It is not only true in the capitalist countries but also true in the socialist countries & the mixed economic countries like Nepal as well.

### **2.1.2 Functions of Commercial Banks**

Commercial Banks are directly related with the people. Commercial Bank is an important bank. Its functions are very attractive for people. Although these banks are truly inspired with the objectives of gaining profit, here Commercial Banks are also established to accelerate common people's economic welfare & facility, to make available loan to Agriculture, Industry & Commerce & to provide the banking services to the public & the state. Along with other functions, the main functions of commercial banks are to accept deposits from the people & to lend to those who demand it. Numerically, these functions could be categorized into the following functions:

- Liquidity Function
- Savings Function
- Wealth Function
- Payment Function
- Credit Function
- Policy Function

### **2.1.3 Credit Creation by Commercial Banks**

The creation of credit or deposit is one of the most important functions of commercial banks. Bankers are dealer of money who deal others people's money. Banks generate profits by accepting cash through demand deposits and advance loan on credit to customers. When a bank advances a loan, it does not pay the amount in cash. But it opens a current account in his name and allows him to withdraw the required sum by checks. But very often, the customer retains certain amount with the bank in a deposit. In this way, the bank creates credit on deposits the process is explained how the credit is created by the help of deposits.

In the modern banking industry, actual cash withdraws from the deposit are very negligible. The bank usually synchronizes the withdrawals and deposits from their past experiences. Thus a bank lends a large part of the money he receives in deposits. If the bank has more primary deposit, he can lend more keeping small cash in reserve day to day transactions. The bank knows the customers will withdraw money by cheques which will be deposited by his creditors in the same bank or some other bank where they have their accounts. Such cheques which are deposited in others bank are settled through clearing houses. The same procedure is follows in other banks. In this way, the bank is able to create credit or deposit by keeping small cash in reserves & lending the remaining amount. Therefore, the loans make an increase in the total amount of deposits. These deposits are called derived deposits.

On the other hand, when a bank advances money by discounting a bill of exchange, the proceeds of the bill are credited to the customer's account. The deposits of the customers will then increase. More deposit can make more lending by banks. This is also one of the ways of creating credit.

We know that the bank provides overdraft facility to a customer on the basis of some security. The bank enters the amount of the overdraft in the existing account of the customers & the customer is allowed to overdraw his account up to the fixed limit subject to the condition that the amount overdrawn from time to time is more than fully covered by the market value of the securities lodged with the bank. The amount may be used to buy goods & services. He can make payment by issuing cheques in settlement of his transactions. This process gives the bank an additional supply of money which did not exist before.

"A bank also creates a deposit by making investments by buying government bonds & securities. The bank pays for the bond through a cheque on itself to the central bank. If it buys security from others, it creates the amount in the account of the seller, provided he is the bank's customer. Otherwise it pays by cheque which is deposited in some other bank. In all such cases, liabilities & assets in the banking system on the whole are increased. Thus loans by create deposits or credit is created by banks". When funds are plentiful, market rate generally tend to decline, banks seek loan aggressively & therefore lower their rates induce marginal borrower to come into the market. When funds are scarce banks arise their rates & come potential borrower may differ the use of credit or seek it elsewhere. Some writers stress on the fulfillment of credit needs of various sectors which insure investment. The investment lending policy of commercial bank is based on the profit maximization as well as the enhancement of the country.

#### **2.1.4 Resources of Nepalese Commercial Banks**

Commercial banks may have various resources but the most important three sources for their daily operation and further advancing are as follows:

##### **I. Capital**

So far as the capital funds are concerned, it is only a nominal source. Therefore it can not be used for investment purpose. This capital fund consists of two elements; paid of capital and general reserve.

##### **II. Deposits**

Deposits are the main resources of commercial banks for issuing loans. Deposits are received from various forms and on the name of different accounts. There are mainly three types of deposits: current, saving and fixed. In a developing country like Nepal, where the majority of the people are still poor, saving deposits have played a significant role for the development of the country. Therefore the main source of raising capital is that of deposits. "The deposit function of the banker is important because it has to aggregate small sum of money lying scattered here and there twenties, fifties and hundred. Singly these sums have no economic efficiency what so ever but they can accomplish Herculean tasks when they are aggregate and employed by the banker".

### **III. Internal and External Borrowing**

Internal and external borrowings are very important for a developing country like Nepal being an underdeveloped country; commercial banks cannot fulfill the necessities of the society. Therefore commercial banks are allowed to borrow from both two sources external and internal. Generally external borrowing means the borrowing from foreign banks, foreign government, international banks for reconstruction and development (IBRD), International Monetary Fund (IMF) etc. Internally commercial banks can borrow from only one source that is from NRB.

#### **Concept of Deposits**

Deposit is one of the most important sources of the commercial bank." Deposit "an account with a bank or other financial institution such as a building society in the UK. Deposit may be on current account UK or checking account or sight deposit US, which bear no interest and can be withdrawn on demand, or deposit accounts UK or saving account or time deposits US which bear interest but require notice of withdrawal. In recent years new types of account have blurred.

It is important that the commercial banks deposit policy is the most essential policy for its existence. The growth of banks depends primarily upon the growth of its deposit. The volume of funds that management will use for creating income, through loans and investment is determined largely by the bank policy governing deposits. When the policy is restrictive, the growth of bank is restarted or accelerated with the liberalization in the deposit policy. In banking business the volume of credit extension much depends upon the deposit base of a bank." The deposit creating power of commercial banks forces to raise the assets along with the liabilities side of the balance sheet. In other words, assets give rise to liabilities. Traditionally, the deposit structure of a commercial bank was thought to be determined by the depositors and not by bank management. There are regular changes in this view in the modern banking industry ".

Thus, banks have evolved from relatively passive acceptors of deposits to active bidder for funds. Deposits are one of the aspects of the bank liabilities that management has been influencing through deliberate action.



"Bank deposits arise in two ways the first when the banker receives cash & credits a customer's a/c, it is known as a primary or a simple deposit. Such primary deposits are made from the initiative of depositors. The second, when banks advance loans, discount bills, provide overdraft facilities; make investments through bonds & securities. This is called derived deposits or derivative deposits. They add to the supply of money. Banks actively create such deposits".

### **2.1.5 Types of Deposits**

At the outset it is necessary to know what a deposit is. Commercial bank Act 2031, defines deposits as the amounts deposited in a current, saving or fixed a/c of a bank or financial institution. People in general, the businessmen; the industrialist & other individuals deposit money in a bank. Bank, flows such amount as loan & invest in different sectors to earn profit. Usually, a bank accepts three types of deposits. They are current, saving & fixed deposits. But in other countries we find more than three deposits. In Nepal, banks grant permission to their customers to open three types of a/c under various terms & conditions. This classification is made on different theoretical & financial basis. Therefore, deposits of bank are classified on the following basis:

- i. Demand Deposits
- ii. Saving Deposits
- iii. Fixed deposits

#### **I. Demand Deposits**

The deposit in which an amount is immediately paid at the time of any a/c holder's demand is called demand deposits. In another words, we can say this type of demand deposit as current a/c. current a/c means an a/c of amounts deposited in a bank, which may be drawn at any time on demand. Its transaction is continual & such deposit can't be invested in the productive sector, so such type of amount remains as stock in the bank. Though the bank can't gain profit by investing it in new sector after taking from the customers, this facility is given to the customer. Therefore, the bank doesn't give interest on this account. From such deposit, the merchant & traders are benefited more than the individual. The bank should pay as many times as the checks is sent until

there is deposit in his a/c. the bank can't impose any condition & restrictions in demand deposit. An institution or an individual, who usually needs money daily, precedes their acts & transaction through such deposit. The current a/c is very important for the customers of bank.

In any institution, which carries out cash transaction, there is possibility of corruption; misuses & fraud. There should be a provision of separate employees for the recovery of the cash & for the payment of the cash. The current a/c is necessary to collect and buy the bills, to use the facility of over-draft, letter of credit, remittance etc. Current deposit on the one hand, saves time & labor & on other hand, the bank keeps the accurate of the a/c holders, so it is a great facility for the customers. Therefore, it has a great importance.

## **II. Saving Deposits**

The bank can collect capital through the saving deposit as well. This deposit is also important & its necessity & scope is not negligible. According to the Commercial bank Act 2031, saving accounts means an a/c of amounts deposited in a bank for savings purposes. This account is suitable & appropriate for the people of middle class, farmers and the labors who have low income, official & small businessmen. This saving deposit bears the features of both of the current & fixed period deposits. Generally, most accounts are opened saving deposit in a bank.

Therefore, the deposit is popular in people in general. According to internal rules or banks some banks demand a small amount & some banks demand a great deal of money to open saving account. Different banks have made different rules. Some banks have made one hundred thousand, some banks have made two hundred thousand, some have three hundred thousand, some have five hundred thousand & some have not fixed the limitation. So, there is divergence as to how much amount of money can be withdrawn. Banks give some interest on it.

## **III. Fixed Deposits**

Under the commercial Bank Act 2031: Fixed Account means an account of amounts deposited in a bank for certain period of time. The customers opening such account deposit their money in this account, for a fixed period. In the other words, it is called time deposit because this account is deposited for a certain period.

Usually, only the person or institution who wants to gain more interest opens such type of account. The period of time can be 3 months, 6 months, 9 months, 1 year, 2 years, 3 years, 4 years, 5 years etc. More interest rate is payable in this deposit than other deposit. Both parties the bank & the customers can take benefit from this deposit. The banks invest this money on the productive sector & gains profit & the customers too can be made his financial transaction stronger by getting more interest from this deposit. The amount in the saving deposit must be returned to the customers after date is expires. The amount can't be withdrawn before the fixed time.

### **2.1.6 Deposits Mobilization**

“Collecting scattered small amount of capital through different Medias & investing the deposited fund in productive sector with a view to increase the income of the depositor is meant deposit mobilization. In the other words, investing the collecting fund in the productive sectors & increasing the income of the depositor, it also supports to increase the saving through the investment of increased extra amount”.

When we discuss about Deposit Mobilization, “we are concerned with increasing the income of the low income group of people & to make them able to save more & to invest again the collected amount in the development activities.

The main objective of Deposit Mobilization is to convert idle saving into active saving”.

Saving refers to that part of the total income which is more than the expenditure of the individual. In other words,  $\text{saving} = \text{Total income} - \text{total expenditure}$ . Basically saving can be divided into two parts: Voluntary saving & Compulsory Savings. Amount deposited in different accounts of Commercial Bank, investment in government securities are some examples of voluntary saving. A commercial bank collects deposit through different accounts like fixed, saving & current.

In developing countries there is always shortage of the capital for the development activities. There is need of development in all sectors. It is not possible to handle & develop all the sectors by the government alone at a time, Private people also can not undertake large business because the per capita income of the people is very low while their propensity consumes is very high. Due to the low income their saving is very low and capital formation is also very low. So their saving is not sufficient for carrying on development work.

To achieve the higher rate of growth and per capita income, economic development should be accelerated. "Economic development may be defined in a very broad sense as a process of raising income per head through the accumulation of capital but how capital can be accumulated in the development countries there are two ways one from the external and other from the internal sources. In the first gap foreign Aid, Loans and grants are the main. While in the later, financial institution operating with in the country, play in a dominant role. In the context of Nepal, commercial bank is the main financial institution which can play very important role in the resource mobilization for the economic development in the country. Trade, industry, agriculture and commerce should be developed for the economic development.

Economic development so defined is necessary and sufficient to generate rate of saving and investment. The generation of high rates of saving and there by investment is possible only through the commercial banks. Commercial banks occupies greater role in economic development by generating the saving towards the desired sectors from one place to another, communicating with its branches and agencies in different part of the country and the world and advising to the commercial people." Increasing the income of the low income group of people and making them able to save more, deposit mobilization helps to invest the collected deposit in desired sector".

The saving growth rate depends among others, on the level of country's per capita income and its growth rate, population growth rate, interest rate in saving or, on bank account, banking and financial facilities and net factor income etc. The national income is the measure of the nation from the economic activities. Saving is the excess if income over consumption. Investment is the expenditure made for the formation of fixed capital. Mobilization of saving implies transfer of resources from surplus spending unit to deficit units. In this connection, financial intermediaries play an important role in mobilizing of voluntary saving.

The amount of saving of a typical household in Nepal is a small because the people have limited opportunities for investment. They prefer "to spend saving on commodities rather than on financial assets. These restricts the process of financial intermediation, which might otherwise bring such as reduction of investment risk and

increase in liquidity when capital is highly mobile internally, saving from abroad can also finance the investment needed at home. When capital is not mobile internally, saving from abroad will limit investment at home.

Insurance of bank deposits, creation of proper atmosphere can increase deposits and the development of severity of capital markets with the helps of banks will prove effective in mobilizing the available floating resources in the country. Capital formation is possible through collecting scattered unproductive and small saving from the people. This collected fund can be utilized in productive sector to increase employment and national productivity. Deposit mobilization is the most dependable and important sources of capital formation. Banking transaction refers to the acceptance of deposits from the people for granting loan and advances, and returning the accepted deposit at demand or after the expiry of a certain period. According to banking rules and regulations, this definition clearly states that Deposit mobilization is the starting point of banking transactions.

Banking activities can be increase as much as we can mobilize the accumulated deposit effectively. Deposit, such as current, saving and fixed are the main part of the working Capital. it is due to this reason that banks keep their deposit mobilization campaign always in full swing taking resort every possible means laying at their disposal. “A Commercial bank changes the scattered unproductive small saving into Loan able & active savings. The bank not only collect saving, but also it provides incentives to the saver & help them to be able to save more”. Commercial banks are set up with a view to mobilize national resources. The first condition of National Economic Development is to be able to collect more & more deposit. In this context, the yearly increasing rate of commercial banks deposit clearly shows the satisfactory progress of deposit mobilization.

### **2.1.7 Need for Deposits Mobilization**

The following are some reasons for why Deposit Mobilization is needed in a developing country like Nepal. Workshop report “Deposit Mobilization why & how” Group “A” states the following points as the need for deposit mobilization. Capital is needed for the development of any sector of the country. The objective of Deposit Mobilization is to collect the scattered capital in different forms within the country.

It is much more important to canalize the collected deposit in the priority sector of a country. In our developing country's we have to promote our business & other sectors by investing the accumulated capital towards productive sectors.

The need of deposit mobilization is felt to control unnecessary expenditure. If there is no saving, the extra money that the people have, can flow forwards buying unnecessary & luxury goods. So, the government also should help to collect more deposit, steeping legal procedures to control unnecessary expenditures.

Commercial banks are playing a vital role for National Development. Deposit mobilization is necessary to increase their activities. Commercial banks are granting loan not only in productive sectors, but also in other sectors like food grains, gold & silver etc. though these loans are traditional in nature & are not helpful to increase productivity, but it helps, to some extent, to mobilize bank deposit.

To increase saving is to mobilize deposit. It is because if the production of agricultural & industrial products increases, it gives additional income, which helps to save more, & ultimately it plays a good role in deposit mobilization. Deposit mobilization plays a vital role for the economic development of an under developed & developing country, rather than developed one. It is because, a developed country does not feel the need of deposit mobilization for Under Developed Country (UDC) & developing country.

Deposit mobilization plays a great role in such countries. Low National Income, Low per Capita Income, lack of technical know, vicious cycle of poverty, lack of irrigation & fertilizer, pressure of population increase, geographical condition etc. are the main problem of Economic Development of an UDC like Nepal.

So far the developments of these sectors concerned, there is needs of more capital. Again, instead of the development of a particular sector, the development of every sector should go side by side. So, the development process of these sectors on one side & to accumulate the scattered & unproductive sectors deposit on the other is the felt need of an UDC. We can take this in our country's present context.

## **2.2. Review of the Related Studies**

This part consists of a review of past studies conducted by other researchers which are relevant to the topic.

### **2.2.1 Review of Articles**

**Bajracharya (2047)**, through his article “Monetary Policy & Deposit Mobilization in Nepal” has concluded that the mobilization of domestic savings is one of the monetary policies in Nepal. For this purposes commercial banks stood as the vital & active financial intermediary for generating resources in the form of deposit of the private sector so for proving credit to the investor’s in different aspects of economy.

Fry, in the article, “Resources Mobilization & Financial Development in Nepal” says that the interest rate fixing authorities causes adverse effect on income distribution. Interest rate affects the savings & its mobilization. A high interest rate diverts the resources from unproductive tangible assets into financial claim. For Nepalese people & Nepalese undeveloped money & capital market, interest can be taken as an important weapon in mobilizing the internal resources. Higher interest rate pushed people to some money & it allows people to invest into best opportunities.

Joshi the chief officer of NRB in the topic “Rural Saving Mobilization in Nepal” states that: The ability to save & the incentive to save are the two major determinants of saving. The incentive to save as reflected in NRB real interest rate policy can be stretched for with profit. It is highly probable that the further increase in the growth rate of financial saving can materialize if a flexible policy is pursued to keep real interest rate at a positive level.

Eventually the deposit expansion is to be bounded constrained by the low saving ability of the people as indicated by stagnant per capita GDP over the past decade. For a sustained growth of deposits or of overall saving rate what is needed more is to increase the income level of the people in order therefore to make saving mobilization strategy effective & successful policy measures should be taken considering two aspects of the strategy. In short run, policy should focus on the appropriate steps to tap saving within the existing banking framework while the long run measures should be adopted with a review to raising the investment rate & making it more productive.

The researchers suggest the following points to increase and to extend volume of credit:

- Effective publicity and attractive prizes.
- Branch expansion policy.
- Extend the house saving account.
- Revision in interest rate policy.
- Credit planning.
- Win the confidence of local people.
- Investment in priority sector.

**Pradhan (2053)**, in his article “Deposit Mobilization, its Problem and Prospects” has presented that deposit is the life-blood of every financial institutions, like commercial bank, finance company, and co-operative or non-government organization. He further adds in consideration of most of banks and finance companies, the latest figure dopes produce a strong feeling that serious review must be made of problems and prospects of deposit sector. Leaving few joint venture banks, other organizations rely heavily, on the business deposit and credit disbursement.

The writer has highlighted following problems of deposit mobilization in Nepalese context.

- Most of the Nepalese do not go for saving in institutional manner, due to the lack of good knowledge. However, they are very much used of saving be it in the form of cash or ornaments. Their reluctance to deal with institutional system is governed by the lower level of understanding about financial organization process, withdrawn system, and availability of depositing facilities and so on.
- Unavailability of the institutional services in rural areas.
- Due to lesser office hours of banking systems people prefers holding and cash in the personal possession.
- No more mobilization and improvement of the employment of deposits and loan sectors.



The writer has also recommended for the prosperity of deposit mobilization which are as follows;

- By providing sufficient institutional services in the rural areas.
- By cultivating the habit of using rural banking unit.
- By adding services hour system to bank.
- NRB could also organize training programs to develop skilled man power.
- By spreading co- operative to the rural areas for development of mini-branch services to these backward areas.

**Kafle (2053)** in his article entitled “NRB and its Policies for Monetary Control” opines that liberalization, the effect on deposit seems to be positive in the later period as it increased from 17.74 to 21062% of nominal GDP. And, this, there was a positive effect on saving mobilization, however in the case of loan and advances, commercial banks were found to be underlet because the percentage of loans and advances to nominal GDP was only 100.6 & 11.9 in the two period respectively .

**Bhatta (2054)**, on his article “financial policies to prevent financial crisis” has given more emphasis on Nepalese financial market sector. He has mention the financial crisis occurred in China, Mexico, South Asia, Russian Federation Ecuador, Brazil & Argentina. This crisis affected all this economic by posing negative effect in their real output. He has also focused on Nepalese financial market, which is directly effected by the national and international events.

The most effected event was September 11 incident in the U.S.A., have added more to the fragility in the global financial market. In present context in many part of the world, the move towards liberalization is getting its momentum on one hand and process of economic development is being threatened due to various anticipated incidents on the other.

He has define a financial crisis is a description to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities.

He has given light on the dynamics of financial crisis dividing it into three stages. Also he has suggested the policies to prevent financial crisis.

Following policies are supposed to be applicable for preventing financial crisis.

- Prudential supervision.
- Accounting standards & disclosure requirements.
- Legal and judicial system.
- Monetary policy and price stability.
- Exchange rate regimes and foreign exchange reserves.
- Capital controls.
- Restrictions on foreign denominated debt.
- Reduction of the role of the state owned financial institution.
- Encouraging market based discipline.
- Entry of foreign banks.
- Limitation of too-big –to fail in the corporate sector.
- Sequencing financial liberalization etc.

Lastly he has conducted that there is no doubt that the key to preventing future financial crisis is to implement sound domestic economic policies and build robust financial institutions. The experiences of the crisis hit countries, especially during the decade of nineties, has proved that a country opening to liberalized economic policy should adopt sequencing policies constraining the pace of participation on the global market place until a sound domestic infrastructure can be put into place.

Shrestha, in her Ph.D. thesis entitled. “*Investment planning of Commercial Banks in Nepal.*” has concluded that bank portfolio (loan and investment) of commercial banks has been influenced by the variable securities rates. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability, safety, liquidity, productivity, and social responsibility.

To overcome this problem she has suggested “commercial; bank should take their investment function with proper business attitude and should perform lending and investment operation efficiently with proper analysis of the project.

Mr. Shrestha, Deputy Chief officer of NRB Banking operation department, has given a short glimpse on the “*Portfolio Management in Commercial Banks, Theory and Practice*” Shrestha has highlighted issue in the article. The portfolio management becomes very important both the individual and the institutional investors. Invest would like to select a best mix of invests assets subject to the following aspects.

- Higher return which is comparable with alternative opportunities available according to the risk class of investors.
- Good liquidity with adequate safety of investment.
- Certain capital gain.
- Maximum tax concession.
- Flexible investment.
- Economic efficient and effective investment mix.

In view of above aspects ‘following strategies are adopted’

- Do not hold any single security; try to have a portfolio of different securities.
- Do not put all the eggs in the one basket; to have diversified investment.
- Choose such a portfolio of securities, which insures maximum return with minimum risk or lower of return with added objectives of wealth maximization.

However, Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its investment.

- To find out the invisible assets (generally securities) having scope for the better returns depending upon individual characteristics like age, health, need, disposition, liquidity, tax liability etc.
- To find out the risk of securities depending upon the attitude of investor towards risk.
- To develop alternative investment strategies for selecting a better Portfolio, which will insure a trade-off between risk and return. So, as to attach the primary objectives of wealth maximization at lower risk.
- To identify of securities for investment to refuse volatility of return and risk.

Shrestha has presented two types of investment analysis technique; i.e. fundamental analysis and technical analysis to consider any securities such as equity, debenture or bond and other money and capital market instrument. He has suggested that the bank

having international network can also offer access to global financial markets. He has pointed out the requirements of skilled manpower, research and analysis team and proper management information system (MIS) in any commercial banks to get success in portfolio management and customer confidence. According to Shrestha, the portfolio management activities of Nepalese commercial banks at present are in nascent stage however, on the other hand, most of the banks are not doing such activities so far because of following reasons.

- Unawareness of the clients about the services available.
- Hesitation of taking risk by the clients to use such facilities.
- Lack of proper techniques to run such activities in the best and successful manner.
- Less developed capital market and availability of new financial instruments in the financial markets

Regarding the joint venture commercial banks, they are very eager to provide such services but because of above mentioned problems very limited opportunities are available to the banks for exercising the portfolio management.

Shrestha has drawn following conclusion-

- The survival of the banks depends upon its own financial health and various activities.
- In order to develop and expand the portfolio management activities successfully, the investment management mythology of a portfolio manager should reflect high standard and give their clients the benefits of global strength, local insights and prudent philosophy.
- With the disciplined and systematic approval to the selection of appropriate countries, financial assets and the management of various risks; the portfolio manager could enhance the opportunities for each investor to earn superior return over time.
- The Nepalese banks having greater network and access to national and international capital markets have to go for portfolio management activities for the increment of their fee based income as well as to enrich the clients based and to contribute in national economy.

### 2.3 Review of Dissertations

In time of research of secondary sources it found that some student from T.U. and other management campus have conducted several thesis works. Some of them are supposed to be relevant for this study is presented below.

**Karmacharya (1998)**, in this thesis paper, “A study on the deposit mobilization by the Nepal bank ltd.” during eight years study period has concluded that the utilization side of Nepal Bank Ltd. has been weak as compare to the collection of resources. He has mentioned that the bank has successfully mentioned its liquid assets position but couldn't mobilize its resources efficiently. He has suggested to set-up more banking branches to increase the deposit collection and long-term as well as short-term credit. He has recommended not to consider security factor only but to provide loan to genuine project without security.

**Thapa (2000)**, in her thesis paper, “A comparative study on investment policy of Nepal Bangladesh bank ltd. and other joint venture banks of Nepal” has compared the investment activities NBBL with only two of the joint venture banks. By taking five years data, she has recommended in two ways, first statement recommendation and second theoretical recommendation. In statement recommendation, she has suggested about investment in government securities, OBS operation loan recover act, sound credit collection policy, project oriented approach, effective portfolio management, innovative approach to bank marketing and banking facilities. In theoretical recommendation she has suggested about liberal lending policy and cost management strategy

This study conducted by Pant entitled, “A study of deposit collection and utilization of commercial banks in Nepal” with the main objectives:

- To find out whether commercial banks have been able to collect deposit from different sector.
- To find out whether banks are to satisfy financial need of economy.
- To find out relationship between deposits and loans.

For the purpose of study, activities of NBL and RBB are taken together the period of 14 years. Only secondary data are used in this study to gather the required information regarding existing position of commercial banks.

The writer found that deposits are collected much from individuals and deposits from organization is very low, similarly more loans are granted to the commercial sector and a little amount to the agriculture and industrial by commercial banks. They cannot utilize the deposit properly. The writer further found, there is positive relation between deposits and loan.

The writer recommended that commercial banks should not limit their lending activities in only business sectors. Commercial banks also offer long term loans not only short term period. At last, he suggest that the fully interest rates should be changed by making it's more suitable to expand the services of commercial banks in all sectors.

**Pradhan (2000)** in his study “*A study on investment policy of NBL*” has tried to find out to what extent NBL has been able to utilized mobilized deposits. This is concerned only from 2029 to 2034 B.S. and mainly based on secondary data various statistical tools; Coefficient of correlation for testing the relationship between the deposit and loan and advances, ratio analysis to compare different factors like loan and advances and deposit, bank's liquidity position, profitability condition etc.

The writer found that there is a greater relationship between deposits and loan and advances. Increase in deposits leads to increase in the loan and advances but when immense increase in the deposits leads to little bit increase in loan and advances.

The writer also found that it could invest only 2.98% on the priority sector in 2034B.S. bank could not mobilize its resources. In this thesis, the writer recommended that the bank ‘should invest more on agriculture sector and further says the bank should make clear policy to provide the loan. The bank should invest on risky sector to earn more profit and increase the rate of interest in deposit side and decrease in loan and advances.

**Agrawal (2003)**, in the thesis entitled, “*A study on deposit and investment position of Yeti Finance Company Ltd.*” has tried to examine the trend of deposit position and investment position of the Yeti finance company. That study was conducted on the basis of secondary data and used various financial tools to analyze the data. Study just covered only period of five years i.e. 1997 to 2001.

The researchers have found that the deposit policy is not stale but has highly fluctuating trend and investment is gradually in increasing trend. The researcher found there is highly positively correlation between total deposit and total investment the researcher concluded that Finance Company has been found profit oriented, ignoring the social responsibility which is not a fair strategy to sustain in long run.

Therefore, it is suggested the company should involve in social program which helps the deprived people who are depended helps in agriculture. Agriculture is the paramount of Nepalese economy so that any finance company should not forget to invest in this sector. In order to do so, they must open their branches in remote area with an objective of providing cheaper financing services.

**Tandukar (2005)**, in the thesis entitled “Role of NRB in deposit mobilization of commercial banks” has tried to examine role of NRB in deposit collection by the commercial banks and to analyze the trend, of deposits mobilization towards total investment and loan and advances. Projection is for five years i.e. (1998 to 2002). The data used in those studies is both secondary and primary nature. The researcher used different financial tools such as liquidity ratio, profitability ratio, risk ratio and coefficient of correlation, trend analysis as statistical tools.

The researcher took 17 commercial banks as population and two banks i.e. NBBL and EBL as sample banks. The researcher has found that it can be said that all new directives of NRB of commercial banks are effective and it is good for both nation and the future of the banks but the loan classification and provisioning seems to be little bit uncomfortable to the commercial banks. Deposit and loan and advances of NBBL are higher than EBL but in case of the investment EBL is able to mobilize more funds than NBBL in this sector.

The researcher has recommended to NBBL that diversification of loan and investment is highly suggested to the bank. As NBBL has given priority in investment in treasury bills which is risk free but it yields very low return to the bank and recommended to EBL to collect the deposit by initiating various new program to attract the customer for this it can play a higher interest rate than other banks recently providing.

**Khadka (2007)**, in his thesis paper, “A study on the investment policy of Nepal Arab Bank Ltd.” In comparison other joint venture banks in Nepal” He has compared investment policy of NAB Ltd. with Nepal Grind lays Bank Limited (NGB) and Nepal Indosuez Bank Ltd. his study is based on five years period from 1992 to 1996. He has taken only two banks to compare the investment policy NAIL among thirteen commercial banks in Nepal. Mr. Khadka has suggested to the joint venture banks to be careful in increasing profit in real sense to maintain the confidence of shareholders, depositors and customers. He has strongly recommended NABIL to utilizing risk assets and shareholders funds to gain highest profit margin, reduce its expenses, and cheaper fund for more profitability. He has recommended investing its fund in different sector of investment and administering various deposit schemes, house building deposit scheme etc.

The forgoing review of literature suggests that the deposits mobilization plays vital role in economic development of country. Deposit mobilization can be best examined using the factors, such as interest rate, loan and advances, investment, branch expansion etc.

#### **2.4 Research Gap**

Efficient banking is not only the output of interaction of institutions involved and mechanism and process of investment of the shareholders. However it is also the thing that is influenced by the rationality in mobilizing the deposits along with proper decision making by the management. In this connection, this study contributes something new toward the deposit mobilization procedure of the Nepalese commercial banks that is not sought yet by surveying the psychology and awareness of the management. This sort of study which aims to analyze the deposit mobilization aspect of the private sector and government sector commercial banks is a new and challenging in itself but is also an opportunity to learn and identify the deposit mobilization mechanism of both public owned and government owned commercial banks. More specific studies as to the deposit mobilization have been done in the past too but this study is quite different from the other studies as this study is done with samples as a government owned bank (Nepal Bank Ltd.) and another one as a public owned commercial bank (Standard Chartered Bank) which is also a joint venture commercial bank. So this research is new in the recent scenario also.



## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology describes the method and process applied in the study. This chapter describes the methodology employed in the study. Research methodology refers to various sequential steps these are adopted by a researcher in studying a problem with certain objectives. In other words, research methodology describes the method and process applied in the entire aspect of the study. It is the process of arriving at a solution of the problem through planned and systematic dealing with the collection, analysis, and interpretation of facts and figures.

Research is a systematic method of finding right solutions for the problem where as research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. In other words, research methodology refers to the various methods of practices applied by the researcher in the entire aspect of the study.

The basic objectives of this study is to evaluate the fund mobilizing policy of standard chartered bank has got in the whole commercial JVBS of Nepal & recommend the useful & meaningful, points. So that all concerned can achieve something from this study. To accomplish this goal, the study follows the research methodology described in this chapter.

#### **3.2 Research Design**

A research design is the arrangement of conditions for collection & analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure & strategy of investigation conceived. So as to obtain answers to research questions & to control variances.

To achieve the objective of the study, description & analytical research design have been used.

Basically, the proposed study is mainly based on two types of research design namely descriptive and analytical. Descriptive research design describes the general attitude of the Nepalese depositors, business environment, problems regarding the deposits mobilization aspects etc. Similarly, the analytical research design makes a through analysis of gathered facts and information and critically evaluates it as well.

Some statistical & accounting tools have also been applied to examine facts and descriptive techniques have been adopted to evaluate funds mobilizing performance of standard chartered bank & Nepal Bank Limited & these are compared with the deposit mobilization position of commercial banks in aggregate.

### **3.3 Sources of Data**

This study is conducted on the basis of secondary data. The data relating to the investment, deposit, loan & advances, assets, & profit are directly obtained from the balance sheet & profit & loss a/c of concerned bank's annual reports.

Supplementary data & information are collected from number of institution & regulating authorities like NRB, security exchange board, Nepal stock exchange Ltd, ministry of finance budget speech of different fiscal years, economic survey & national planning commission etc.

According to the need & objectives, all the secondary data are compiled. Processed & tabulated in time series. In order to judge the reliability of data provided by the banks & other sources, they were compiled with the annual reports of auditors. Formal & informal talks to the concerned head of the department of the bank were also helpful to obtain the additional information of the related problem.

Similarly, various data & information are collected from the periodic economic journals, managerial magazines & other published & unpublished reports & documents from various sources. This research study would be based on the secondary data that are available in the published form.

Specifically, the required data for the study has been collected from the concerned organizations and a number of publishers. In other words, it has been gathered from a number of books, journals, articles, reports, etc. Some of the major types and sources of data are as follows:

- Banking and financial statistics of Nepal Rastra Bank.
- Annual report of Nepal bank ltd.
- Annual Reports of Standard Chartered Bank Nepal Ltd.
- Central Bank's directives to Commercial Banks:
- Statistics Nirdesika 2059
- Directive I to II
- Consortium Financial Directive
- Main Economic Indicators
- Recent macro economic situation of Nepal, 2006/2007

### **3.4 Population & Samples of the study**

There are twenty three commercial banks operating in Nepal which accept about 81 percent of the total deposits and sanction 71 percent of total loans and advances out of the total depository institutions. Out of these seventeen banks operating in the nation, two commercial banks representing the government sector and private sector Nepal bank limited and standard chartered bank limited respectively are selected as the base for the study. The deposit mobilization positions of these two banks are studied comparatively with the deposit mobilization of aggregate commercial banks within the country.

### **3.5 Method of Analysis**

To achieve the objectives of the study, various financial, statistical & accounting tools have been used in this study. The analysis of data will be done according to pattern of data available. Because of limited time & resources, simple analytical statistical tools such as graph, percentage, Karl Pearson's coefficient of correlation, & the method of least square, are adopted in this study. Especially descriptive analysis method is used for the study. The various calculated results obtained through financial, accounting & statistical tools tabulated under different heading and these are compared with each other.

### **3.6 Necessary tools and techniques for the study**

This thesis work is based on financial as well as statistical analysis. Some major tools and techniques applied for making the thesis work more presentable are briefly considered below

#### **3.6.1 Financial analysis (Ratio Analysis)**

In this unit the financial position of the banks are observed. Especially the ratio analysis technique is applied for financial analysis of total commercial banking system and sampled banks in this unit. An arithmetical relationship between two figures is known as ratio. It is computed by dividing one item of relationship with the other. Ratio simply means one number expressed in terms of another.

Ratio analysis is a technique of analysis & interpretation of financial statement. To evaluate the performances of an organization by creating the ratios from the figure of different accounts consisting in balance sheet & income statement is known as ratio Analysis. Ratio analysis is also very helpful for decision making. From the information provided by ratio analysis with the help of financial statement are very useful for making decision on any financial activity. Due to inter-firm comparison ratio analysis also serves as a stepping stone to remedial measures. It helps management in evolving future market strategies’.

#### **I. Liquidity Ratios**

Liquid Assets to Total Assets ratio =  $\frac{\text{liquid assets}}{\text{Total assets}}$

Liquid fund to total deposit ratio =  $\frac{\text{liquid fund}}{\text{Total deposits}}$

Cash and bank balance to current assets ratio =  $\frac{\text{Cash and bank balance}}{\text{Current assets}}$

## ii. Assets Management Ratios

$$\text{Total deposit to total liabilities ratio} = \frac{\text{Total deposit}}{\text{Total liabilities}}$$

$$\text{Loan and advances to total deposit ratio} = \frac{\text{Loan and advances}}{\text{Total deposits}}$$

$$\text{Total investment to total deposit ratio} = \frac{\text{Total investment}}{\text{Total deposits}}$$

$$\text{Loan and advances to total assets ratio} = \frac{\text{Loan and advances}}{\text{Total assets}}$$

Investment on government bond to

$$\text{Total deposit ratio} = \frac{\text{Investment on government bond}}{\text{Total deposit}}$$

## iv. Profitability Ratios

$$\text{Interest income to total income ratio} = \frac{\text{Interest income}}{\text{Total income}}$$

$$\text{Return on loan and advances ratio} = \frac{\text{Net profit}}{\text{Loan \& adv}}$$

$$\text{Return on total assets ratio} = \frac{\text{Net profit}}{\text{Total assets}}$$

$$\text{Interest expenses to total expenses} = \frac{\text{Interest expenses}}{\text{Total expenses}}$$

## iv. Growth Ratios

- Growth ratio of deposit
- Growth of loan and advances
- Growth of investment
- Growth of return

### **Standard Deviation**

The measurement of the scatterness of the mass of figure in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion. The greater the amount of dispersion, larger will be the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series; a large standard deviation means just the opposite. In this study, standard deviation of different ratio is calculated.

$$\text{S.D.} = \sqrt{\frac{\sum x^2 - (\sum x)^2}{N}}$$

### **Co-efficient of variance (C.V)**

The co-efficient of variance is the relative measurement of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in percentage. It is calculated as.

$$\text{C.V} = \frac{\text{S.D.}}{\text{Mean}} \times 100\%$$

Where,

$$\text{Standard deviation (S.D.)} = \sqrt{\frac{\sum x^2 - (\sum x)^2}{N}}$$

## **3.6.2 Statistical tools**

Statistical tools used in the chapter are as follows

### **3.6.2.1 Coefficient of Correlation Analysis (r)**

“Correlation is the statistical tools that we can use to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the degree of relationship between two sets of data. Among the various methods of finding out coefficient of correlation, Karl Pearson’s method is applied in the study. The result of coefficient of correlation is always between +1 & -1. When  $r = +1$ , it means there is perfect relationship between two variables & vice versa. When  $r = 0$ , it means there is no relationship between two variables.

The Pearson's formula is:

$$= \frac{(\bar{x} - \bar{x})(\bar{y} - \bar{y})}{(\bar{x} - \bar{x})^2 (\bar{y} - \bar{y})^2}$$

Probable error of correlation is calculated by following formula.

$$\text{P.E.r} = 0.6745 \times \frac{1-r^2}{n}$$

### 3.6.2.2 Simple Regression

Regression and correlation analysis are the techniques of studying how the variations in one series are related to the variations in another series. Measurement of the degree of relationship between two or more variables is called correlation analysis and using the relationship between a known variable and an unknown variable to estimate the known one is termed as regression analysis. Thus, correlation measures the degree of relationship between the variables while regression analysis shows how the variables are related. Thus, regression and correlation analysis determines the nature and the strength of relationship between variables. The equation of regression line where the dependant variables Y is determined by the independent variable X is given by:

$$Y = a + b x$$

a = y – intercept, Where b = slope of the regression line (i.e. it measures the change in Y per unit X) or regression coefficient of Y on X.

### 3.6.2.2 1Multiple Regression

Assuming that all variables are closely related, we can estimate the unknown value of one variable from the given or known values of the other variables. Multiple regression analysis is a logical extension of the simple linear regression analysis. In multiple regression analysis, instead of single independent variable, two or more independent variables are used to estimate the unknown values of dependant variables.

The multiple regression equation describes the average relationship between dependant variable and two or more independent variables and this relationship is

very much useful for estimating (or predicting) the dependant variable. Thus, the multiple regression equation of X1 on X2, X3 and X4 is an equation for estimating a dependant variable X, from three independent variables X2, X3 and X4.

The multiple regression equation of dependant variables X1 on three independent variables X2, X3 & X4 is given by:

$$X1 = a + b_1x_2 + b_2x_3 + b_3x_4$$

Where,

$a = x_1$  – intercept = the value of  $x_1$  when three independent variables  $x_2$ ,  $x_3$  and  $x_4$  are zero.

$b_1$  = the partial regression coefficient of  $x_1$  on  $x_2$  when  $x_3$  &  $x_4$  are held constant

$b_2$  = the partial regression coefficient of  $x_1$  on  $x_3$ , when  $x_2$  &  $x_4$  are held constant

$b_3$  = the partial regression coefficient of  $x_1$  on  $x_4$ , when  $x_2$  &  $x_3$  are held constant

### 3.6.2.3 Coefficient of Determination

The coefficient of determination gives the percentage variation in the dependant variable that is accounted for by the dependant variable/s. In other words, the coefficient of determination gives the ratio of expected variance to the total variance.

The coefficient of determination is given by the square of the correlation coefficient, i.e.  $r^2$ . So the coefficient of determination

$$r^2 = \frac{\text{Expected variance}}{\text{Total variance}}$$



## Test of Hypothesis

A quantitative statement about population parameter is called a hypothesis. In other words, it is an assumption that is made about the population parameter and then its validity is tested. It may or may not be found valid in verification. The act of verification involves testing the validity of such assumptions which, when undertaken on the basis of sample evidence, is called statistical hypothesis or testing of hypothesis.

The main goal of testing hypothesis is to test the characteristics of hypothesized population parameter based on sample information whether the difference between the population parameter and sample statistics is significant or not. The act of verification involves testing the validity of such assumption which, when undertaken on the basis of sample evidence, is called statistical hypothesis or the testing of hypothesis.

For the test of hypothesis t-test is made in this study.

### 3.6.2.4 t – statistics

t –statistics is applied for the test of small sample. If the sample size is less than 30 i.e. called small sample and t-test is used.

The following formula is used to test an observed sample correlation coefficient:

$$t = \frac{r \sqrt{n-2}}{\sqrt{1-r^2}}$$

Where,

r= simple correlation coefficient

n= number of observations

## **CHAPTER IV**

### **PRESENTATION AND ANALYSIS OF DATA**

This chapter is the major body of the research work. This chapter presents and analyses the collected data for the achievement of the objective of this study and helps the researcher to reach to the conclusion. This chapter is divided into major two parts the first is financial analysis and the second is statistical analysis.

#### **4.1 Financial analysis**

Financial analysis is the profound study of the financial position of an institution. Financial analysis in this study is the calculation and evaluation of various financial ratios, specially the ratios related to the deposit mobilization of selected banks.

This section deals with the analysis of different components regarding deposit mobilization. Following three categories of ratios are presented in this section:

) Loan and Advances

) Investment

) Return

##### **4.1.1.1 Analysis of Growth of Loan and Advances**

Loan and advances are the main transaction of the commercial bank. The major element where the banks mobilize their funds is loan and advance. Commercial banks mobilize their deposit in productive sector for earning profit and making the financial position of the bank better. So, increasing growth rate is necessary for increasing the return of the bank.

**Table No. 4.1**  
**Growth of Total Loans**

(Source: banking and financial statistics, NRB)

| <b>Banks/Year</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> | <b>2009</b> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total</b>      | 8.56        | 7.39        | 12.41       | 16.96       | 9.12        |
| <b>NBL</b>        | -2.57       | -2.98       | -0.64       | -8.8        | -30.22      |
| <b>SCBNL</b>      | 8.57        | 9.59        | 10.67       | 22.06       | 3.54        |

**Diagram No. 4.1**  
**Growth of Loan and Advance**

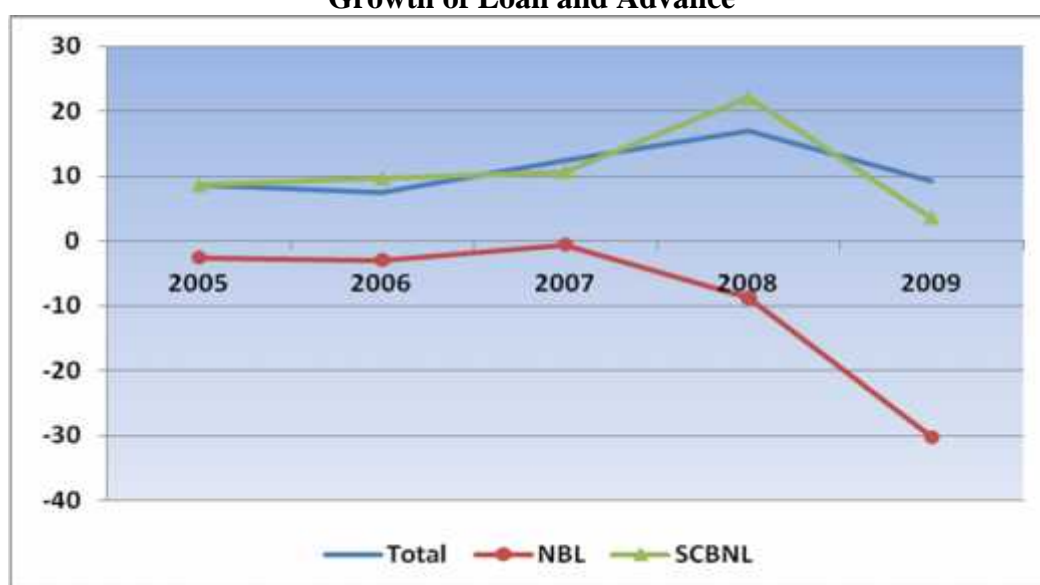


Table No. 1 and Diagram No. 1 are the presentations of the growth of loan and advance of total commercial banking system and the sampled banks. The growth ratio of total commercial banking and SCBNL are fluctuating but the ratios of NBL are seemed to be in decreasing trend.

Growth rate of total commercial banking system for 2007, 2008, and 2009 are 12.41%, 16.96% and 9.12% respectively, the ratios of NBL for same years are -0.64%, -8.8%, and -30.22%, and these ratios of SCBNL for these period are 10.67%, 22.06% and 3.54% respectively. After observing these factors it is found that SCBNL is in better position in comparison to NBL. And it is seemed that NBL should immediately take some action to make the growth of loan and advance positive.

#### 4.1.1.2 Analysis of Growth of Investment

Banks collect deposits from people and invest it to the various productive sectors. Banks have to collect adequate deposit; and invest it to the productive sector for regular return. The investment of the bank increases only when the bank is able to increase the collection of the deposit and mobilize the collected deposit well. If the investment of the bank is increasing, the return will be high.

**Table No. 4.2**

#### **Growth of Investment**

(Source: banking and financial statistics, NRB)

| Bank/Year    | 2005  | 2006  | 2007  | 2008  | 2009  |
|--------------|-------|-------|-------|-------|-------|
| <b>Total</b> | 7.21  | 8.33  | 9.38  | 21.23 | -4.22 |
| <b>NBL</b>   | -6.58 | -8.26 | -9.63 | 30.63 | -14.9 |
| <b>SCBNL</b> | 12.56 | 20.12 | 18.23 | -9.36 | 19.99 |

**Diagram No. 4.2**

#### **Growth of Investment**

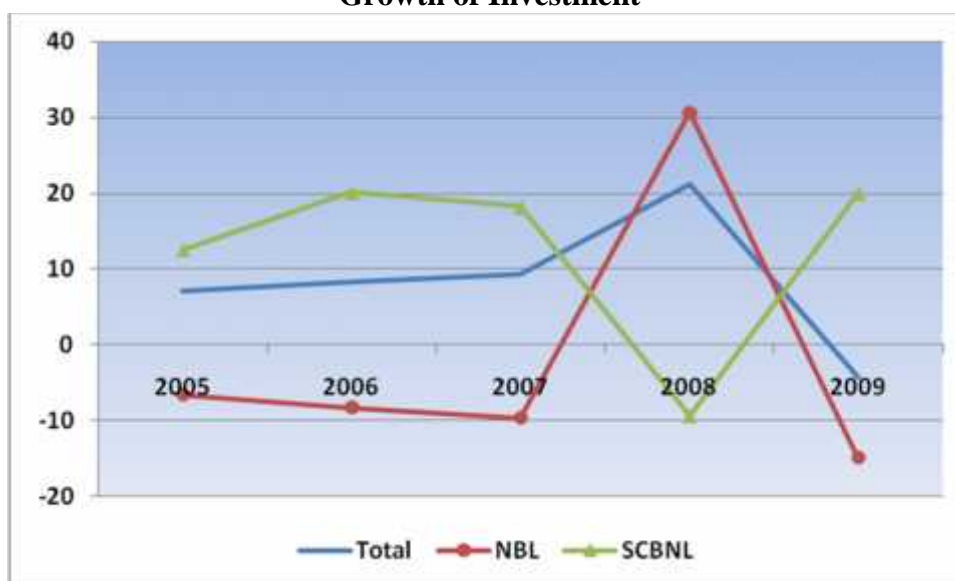


Table No. 4.2 and the Diagram No. 4.2 are the presentations of the growth of total investment of total commercial banking system and sampled banks for the study period of four years from 2006 to 2009.

The growth rate of total commercial banking system and both sampled banks NBL and SCBNL are fluctuating during the study period. Growth rate of total commercial banking system for the years 2007, 2008 and 2009 are 9.38%, 21.23% and -4.22%

respectively, growth rate of NBL for same years are -9.63%, 30.63% and -14.9% respectively and the growth rates of SCBNL for same years are 18.23%, -9.36% and 19.99% respectively.

After analyzing the facts and figures it is found that the growth rate of SCBNL is best for 2007 and 2009 and the ratio of NBL is best for 2008. But the ratio of NBL has fallen by the large percentage on 2009.

#### 4.1.1.3 Analysis of Growth of Return

One of the most important objectives of the bank is to maximize the return. It is possible through the proper mobilization of deposit. If the bank is able to mobilize the deposit well, higher will be the return and the performance of the bank. The net income is considered as the return in this unit.

**Table No. 4.3**  
**Growth of Return**

| Bank /Year   | 2005   | 2006   | 2007   | 2008    | 2009  |
|--------------|--------|--------|--------|---------|-------|
| <b>Total</b> | 12.56  | 17.89  | -12.98 | 49.04   | 69.18 |
| <b>NBL</b>   | -56.32 | -21.45 | -23.17 | -477.22 | 66.47 |
| <b>SCBNL</b> | 12.69  | 13.45  | 18.47  | -3.38   | 23.11 |

(Source: banking and financial statistics, NRB)

**Diagram No. 4.3**  
**Growth of Return**

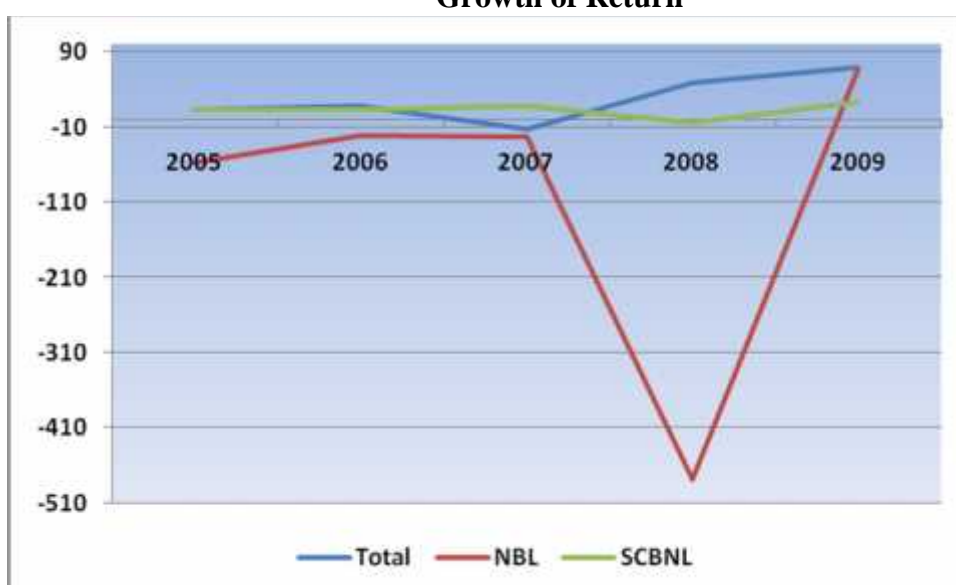


Table no. 4.3 and Diagram No. 3 show the growth ratio of the return of total commercial banking system and sampled banks. The ratios are fluctuating during the study period.

The growth rate of return of total commercial banking system for the years 2007, 2008 and 2009 are -12.98% 49.04% and 69.18% respectively, the growth rate of NBL for the same years are -23.17%, -477.22% and 66.47% respectively and the same rates of SCBNL for same years are 18.47%, -3.38% and 23.11% respectively.

After analyzing these figures it is found that the growth rate of total commercial banking system is significantly higher on the year 2009. The growth of NBL is seemed highly fluctuating and that is higher than the ratio of SCBNL on 2009.

## **4.2 Statistical Analysis**

This unit aims to analyze the factors related to the topic of the study by using statistical tools such as co-efficient of correlation, trend analysis and test of hypothesis between different variables. Such types of statistical analysis assist the researcher to get to the decision.

### **4.2.1 Analysis of Coefficient of Correlation**

The coefficient of correlation defines the degree of relationship between or among two or more variables. Here we study the degree of relationship between two variables one of them is independent variable and another is dependent variable. The Karl Pearson's method popularly known as Pearson's co-efficient of co-relation is mostly used for calculating the coefficient of correlation in practice. The Pearson's co-efficient of co- relation is denoted by "r" which shows the relationship between two variables. It helps to determine whether

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

Correlation analysis among various statistical tools is preferred in this study to identify the relationship between variables, and measure the significance of the relationship.

For the purpose of decision making interpretations are based on the following terms:

- ) When,  $r = 1$ , there is perfect positive correlation.
- ) When,  $r = -1$ , there is perfect negative correlation
- ) When,  $r = 0$ , there is no correlation
- ) When,  $r$  lies between 0.7 and 0.99 (-0.7 and -0.99), there is a high degree of positive or (negative) correlation.
- ) When " $r$ " lies between 0.5 and 0.69 (-0.5 and -0.69) there is moderate degree of correlation.
- ) When " $r$ " is less than 0.5(-0.5) there is low degree of correlation.

#### **Probable error (P.E.) of correlation**

The probable error of the correlation of coefficient is applicable for the measurement of reliability of the computed value of the correlation coefficient ' $r$ '. The probable error is calculated by:

$$P.E. = 0.6745 \times \frac{1-r^2}{n}$$

For decision making purpose following points will be considered:

- i. If  $r < P.E.$  the value of ' $r$ ' is not significant no matter how high  $r$  value is. It means there is no evidence of correlation between the variables.
- ii. If  $r > 6 P.E.$  the value of ' $r$ ' is significant i.e. correlation is significant.

#### **4.2.1.1 Analysis of Correlation Coefficient between Deposit and Total Investment**

The coefficient of correlation between deposit and investment is the degree of relationship between two variables. In this analysis, deposit is independent variable(x) and total investment is dependent variable(y). The purpose of this analysis is to justify whether the deposits are significantly used in proper way or not and whether there is any relationship between these variables.

**Table No. 4.4**

| <b>Banks</b> | <b>Base of evaluation</b> |                      |            |             |
|--------------|---------------------------|----------------------|------------|-------------|
|              | <b>r</b>                  | <b>r<sup>2</sup></b> | <b>PEr</b> | <b>6PEr</b> |
| <b>Total</b> | 0.82                      | 0.67                 | 0.11       | 0.66        |
| <b>NBL</b>   | -0.77                     | 0.59                 | 0.14       | 0.84        |
| <b>SCBNL</b> | 0.99                      | 0.98                 | 0.006      | 0.04        |

(Source: Annex)

Table no. 4.4 shows the correlation coefficient between deposit (independent variable) and total investment (dependent variable) of total commercial banking system, NBL, and SCBNL are 0.82,-0.77 and 0.99 respectively. This figure show the positive relationship between the variables of total commercial banking system and SCBNL and negative relationship between these variables to the NBL.

The coefficient of determination of the variables of total commercial banking system NBL and SCBNL are 0.67, 0.59 and 0.98 respectively. It means 67% of the variation in investment of total commercial banking system is explained by the deposit, 59% of the variation in total investment of NBL is explained by the deposit and 98% of the variation in total investment of SCBNL is explained by deposit.

Considering the probable error , the value of PEr of total commercial banking system and SCBNL are smaller than the value of correlation coefficient (i.e.r) and the value of PEr of NBL is greater than the value of correlation coefficient. Comparing the value of 6PEr with the value of coefficient of correlation (r) the value of 'r' of NBL is smaller than the value of 6PEr (i.e.  $0.59 < 0.84$ ). It means the value of r is not significant it means the relationship between the variables is insignificant. Whereas about total commercial banking system and SCBNL the relationship between the variables are significant.



#### 4.2.1.2. Analysis of Correlation Coefficient between Deposit and Loan and Advances:

Correlation coefficient between deposit and loan and advance measures the degree of relationship between total deposit and loan and advances. Generally this relation should be positive and high. If the value of (r) i.e. Correlation coefficient is high, it can be generalized that the bank is mobilizing its fund well and vice versa. Deposit is independent variable(x) and loan and advance is dependent variable (y). The main objective of this analysis is to compare the value of (r) of the sampled banks with total commercial banking system and between themselves too. This analysis further aims to observe whether the sampled banks are mobilizing their deposit and loan & advances in proper way or not.

**Table No. 4.5**  
**Correlation Coefficient between Deposit and Loan and Advances**

| Banks        | Base of evaluation |                |      |      |
|--------------|--------------------|----------------|------|------|
|              | r                  | r <sup>2</sup> | PEr  | 6PEr |
| <b>Total</b> | 0.97               | 0.94           | 0.02 | 0.12 |
| <b>NBL</b>   | 0.15               | 0.02           | 0.33 | 1.98 |
| <b>SCBNL</b> | 0.55               | 0.3            | 0.24 | 1.44 |

(Source: Annex)

Table no. 4.5 shows the degree of correlation between deposit and loan and advance of total commercial banking system, NBL and SCBNL for the study period of four years from 2006 to 2009. The degree of correlation as the value of (r) of total commercial banking system, NBL and SCBNL are 0.97, 0.15 and 0.55 respectively. It means the degree of correlation between the variables of total commercial banking system is highly positive, the degree of correlation between these variables of NBL is low but positive and the degree of the correlation of the variables of SCBNL is moderately positive.

The value of (r<sup>2</sup>) the coefficient of determination of total commercial banking system, NBL and SCBNL are 0.94, 0.02 and 0.3 respectively. It means 94% of the variation in

loan and advance of total commercial banking system is explained by the deposit, 2% of the variation in loan and advance of NBL is explained by the deposit and 30% of the variation in loan and advance of SCBNL is explained by the deposit.

Considering the probable error, the value of PEr of total commercial banking system and SCBNL are smaller than the value of correlation coefficient (i.e.  $r$ ), but the value of PEr of NBL is greater than the value of  $r$ . Comparing the value of 6PEr with the value of correlation coefficient the value of  $r$  of total commercial banking system and SCBNL is greater than the value of 6PEr so the relationship between the loan and advance and total deposit of these banks are significant, on the other hand the value of ( $r$ ) of NBL is smaller than the value of 6PEr so the relationship between the variables are insignificant.

#### 4.2.1.3 Analysis of Correlation Coefficient between Total Assets and Profit

Correlation coefficient between total assets and profit measures the degree of relationship between total assets and profit. Here, total assets are independent variable( $x$ ) and net profit is dependent variable( $y$ ). Generally it is assumed that total assets and the profit are positively correlated, if total assets increases the profit will increase and vice versa. The main purpose of analyzing this is to justify whether the profit is significantly correlated with total assets or not.

**Table No. 4.6**  
**Correlation Coefficient between Total Assets and Profit**

| Banks | Base of evaluation |       |      |      |
|-------|--------------------|-------|------|------|
|       | $r$                | $r^2$ | PEr  | 6PEr |
| Total | 0.8                | 0.64  | 0.12 | 0.72 |
| NBL   | -0.75              | 0.56  | 0.15 | 0.9  |
| SCBNL | 0.98               | 0.96  | 0.01 | 0.06 |

(Source: Annex)

Table 4.6 presents the degree of correlation between total assets and profit of total commercial banking system, NBL and SCBNL. Correlation coefficient (r) for above mentioned banks is 0.8, -0.75 and 0.98 respectively. It means the total assets and profit of total commercial banking system and SCBNL are positively correlated, but these variables of NBL are highly negatively correlated.

Coefficient of determination of these variables for total commercial banking system, NBL and SCBNL are 0.64, 0.56 and 0.96 respectively. It means 64% of variation in profit of total commercial banking system is explained by total assets, 56% of the variation in profit of NBL is explained by total assets and 96% of the variation in profit is explained by total assets.

Analyzing the value of probable error of the correlation coefficient the value of (r) of total commercial banking system and SCBNL is greater than the value of PEr so the relationship between the variables are significant. Comparing the value of 6PEr with the value of (r), the value of 6PEr of total commercial banking system and SCBNL are smaller than the value of (r) this figure further specifies the relationship between the variables. The figure relating to the NBL shows that the relationship between the variables is insignificant.

#### **4.2.1.4 Multiple Regression Analysis**

Assuming that all variables are closely related, we can estimate the unknown value of one variable from the given or known values of the other variables. Multiple regression analysis is a logical extension of the simple linear regression analysis. In multiple regression analysis, instead of single independent variable, two or more independent variables are used to estimate the unknown values of dependant variables. multiple regression equation describes the average relationship between dependant variable and two or more independent variables and this relationship is very much useful for estimating (or predicting) the dependant variable.

Thus, the multiple regression equation of X1 on X2, X3 and X4 is an equation for estimating a dependant variable X, from three independent variables X2, X3 and

X4. The multiple regression equation of dependant variables X1 on three independent variables X2, X3 & X4 is given by:

$$X1 = a + b_1x_2 + b_2x_3 + b_3x_4$$

Where,

a = x1 – intercept = the value of x1 when three independent variables x2, x3 and x4 are zero.

b1 = the partial regression coefficient of x1 on x2 when x3 & x4 are held constant

b2 = the partial regression coefficient of x1 on x3, when x2 & x4 are held constant

b3 = the partial regression coefficient of x1 on x4, when x2 & x3 are held constant

**Table No. 4.7**  
**Deposit on Profit and Loan and Advance of NBL**

| <b>Year</b> | <b>Deposit</b> | <b>Profit</b> | <b>Loan and Advance</b> |
|-------------|----------------|---------------|-------------------------|
| <b>2005</b> | 32583.4        | -658.92       | 18645.2                 |
| <b>2006</b> | 34737.4        | -482.9        | 19266.1                 |
| <b>2007</b> | 36288.5        | -371          | 19141.7                 |
| <b>2008</b> | 34744.2        | 1399.5        | 17456                   |
| <b>2009</b> | 35444.3        | 2329.7        | 12180                   |
| <b>Mean</b> | 718.825        | 35303.6       | 17010.95                |
| <b>SD</b>   | 1377.20        | 735.60        | 3324.75                 |

**Table No. 4.8**

**Deposit on Profit and Loan and Advance of SCBNL**

| <b>Year</b> | <b>Deposit</b> | <b>Profit</b> | <b>Loan and Advance</b> |
|-------------|----------------|---------------|-------------------------|
| <b>2005</b> | 16256.56       | 389.56        | 6258.9                  |
| <b>2006</b> | 18755.5        | 469.9         | 6080.7                  |
| <b>2007</b> | 21161.4        | 556.7         | 6729.6                  |
| <b>2008</b> | 19344          | 537.9         | 8214                    |
| <b>2009</b> | 23050.5        | 662.2         | 8505                    |
| <b>Mean</b> | 20577.85       | 556.67        | 7382.35                 |
| <b>SD</b>   | 1940.60        | 79.61         | 1165.09                 |

**Deposit on Profit and Loan and Advance of NBL:**

$$\text{Deposit} = 2125.246 + -10.661 \text{ Profit} -19.510 \text{ Loan and Advance}$$

Where,

2125.246 = Dependant variable – intercept (Deposit – intercept), Multiple regression constant

-10.661 = Partial regression coefficient of dependant variable (Deposit) on Profit when Loan and Advance is held constant

-19.510 = Partial regression coefficient of dependant variable (Deposit) on Loan and Advance when profit is held constant

The equation implies that the multiple regression constant (a) is 2125.246 which suggest that when Profit and Loan and Advance are zero, Deposit would be 2125.246. The constant for profit is -10.661 implies that when profit increases by RS. 1, Deposit decreases by RS. 10.661, the constant for Loan and Advance is -19.510, implies that when Loan and Advance increases by

RS. 1, Deposit will decrease by RS. 19.510. The analysis shows that the multiple correlation coefficient is 0.544 and the coefficient of multiple determinations is 0.2519 with 209.8897 standard error of estimate. The multiple correlation coefficients are not significant at 95% level of significance.

#### **Deposit on Profit and Loan and Advance of SCBNL:**

$$\text{Deposit} = 460.76 + 40.038 \text{ Profit} - 1.532 \text{ Loan and Advance}$$

Where,

460.76 = Dependent variable – intercept (Deposit – intercept), Multiple regression constant

40.038 = Partial regression coefficient of dependent variable (Deposit) on profit when loan and advance is held constant

-1.532 = Partial regression coefficient of dependent variable (Deposit) on loan and advance when profit is held constant

The equation implies that the multiple regression constant (a) is 460.76 which suggests that when profit and loan and advance are zero, deposit would be 460.76. The constant for profit is 40.038 implies that when profit increases by RS. 1, deposit increases by RS. 40.038, the constant for loan and advance is -1.532, implies that when loan and advance increases by RS. 1, deposit will decrease by RS1.532. The analysis shows that the multiple correlation coefficient is 0.737 and the coefficient of multiple determinations is 0.543 with 373.55 standard error of estimate. The multiple correlation coefficients are not significant at 95% level of significance.

#### **4.2.2 Trend Analysis**

The statistical test used in this study which describes the trend of any variables whether it increase or decrease is known as trend analysis. This heading finds out the trend of deposit utilization of total commercial banking system, NBL and SCBNL under four years study period. Commercial banks mobilize deposits in various sectors like loan and advances, government securities, share and debentures and some other productive and development sectors.

#### 4.2.2.1 Trend Analysis of Total Investment to Total Deposit Ratio

This analysis aims to analyze the trend of total investment to total deposit ratio total commercial banking system, NBL and SCBNL under four years of study period. If the trend line show the increasing trend the bank is improving its deposit mobilization capacity and vice versa. The following table and the graph line describe the trend values of total investment to total deposit of above mentioned banks:

**Table No. 4.9**

#### **Trend values of Total Investment to Total Deposit Ratio**

(Source: banking and financial statistics, NRB)

| Bank/Year    | 2005  | 2006  | 2007  | 2008  | 2009  |
|--------------|-------|-------|-------|-------|-------|
| <b>Total</b> | 20.58 | 22.61 | 22.06 | 21.51 | 20.96 |
| <b>NBL</b>   | 39.87 | 32.65 | 33.55 | 34.45 | 35.35 |
| <b>SCBNL</b> | 38.69 | 36.33 | 36.8  | 32.37 | 37.74 |

**Diagram No. 4.4**

#### **Trend Line of Total Investment to Total Deposit Ratio**

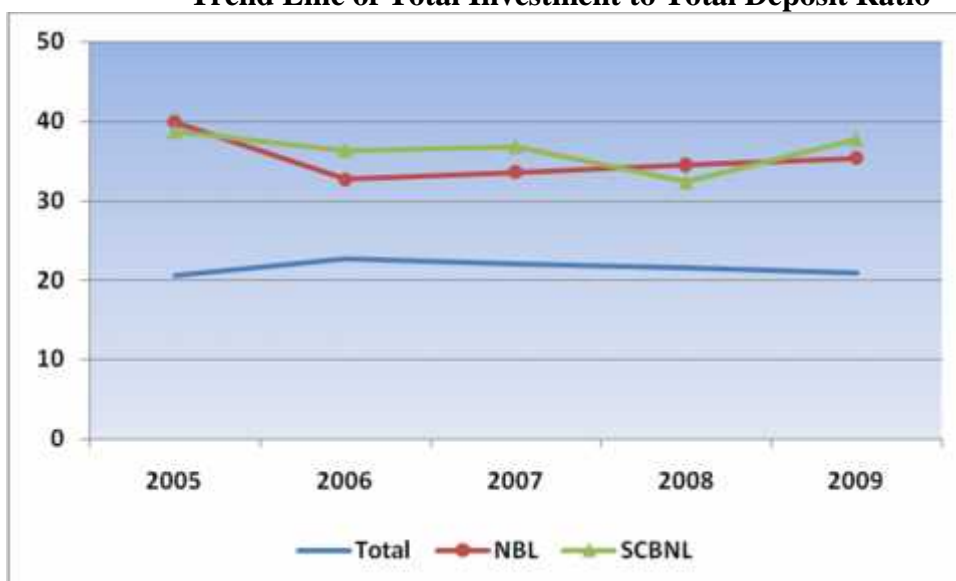


Table no. 4.9 and Diagram No. 4.5 are the presentations of the trend values of total investment to total deposit ratio during the study period. The trend lines show that total commercial banking system has decreasing trend in the ratio and NBL and SCBNL have increasing trend in the ratio. Trend value of total commercial banking system (20.96) is lowest in 2009 and SCBNL has highest trend value (i.e. 37.74) in 2009. Finally it can be determined that SCBNL is successful in managing total deposit and NBL also has the good trend on it.

#### 4.2.2.2 Trend Analysis of Loan and Advances to Total Deposit Ratio

This study aims to analyze the trend of loan and advances to total deposit ratio of total commercial banking system, NBL and SCBNL for the study period of four years from 2006 to 2009. In this analysis the increasing trend and the high trend value is considered as the best. Following table and graph line describe the trend values of loan and advances to total deposit ratio of above mentioned banks.

**Table No. 4.10**

#### **Trend values of Loan and Advances to Total Deposit Ratio**

| Year/Bank    | 2005  | 2006  | 2007  | 2008  | 2009  |
|--------------|-------|-------|-------|-------|-------|
| <b>Total</b> | 58.25 | 60.1  | 60.88 | 61.66 | 62.44 |
| <b>NBL</b>   | 54.58 | 58.07 | 51.49 | 44.91 | 38.33 |
| <b>SCBNL</b> | 38.69 | 32.28 | 34.69 | 37.1  | 39.51 |

(Source: banking and financial statistics, NRB)

**Diagram No. 4.5**

#### **Trend Line of Loan and Advance to Total Deposit Ratio**

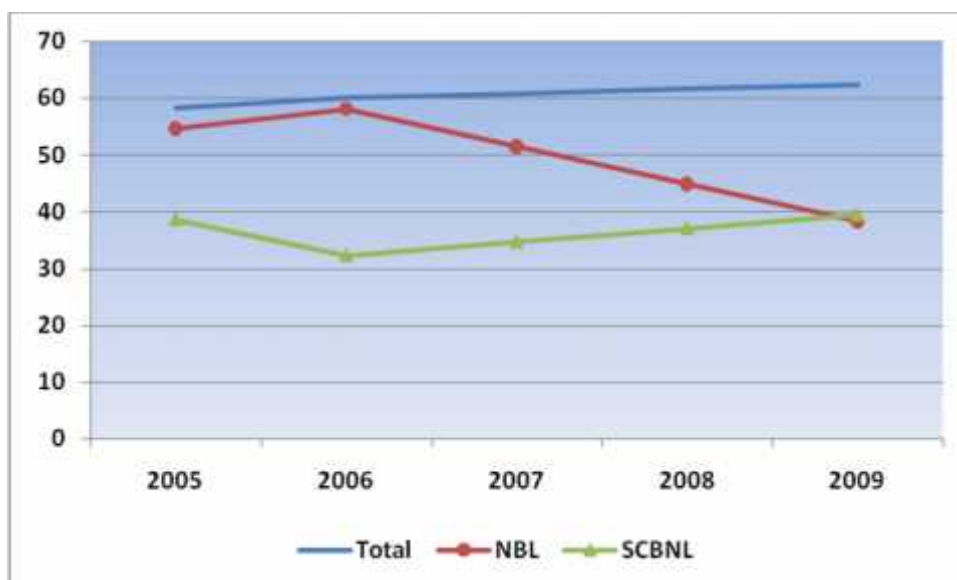


Table no. 4.10 and Diagram No. 4.5 are the presentations of the trend values of loan and advance to total deposit ratio of total commercial banking system, NBL and SCBNL. The trend values of total commercial banking system and SCBNL are in



increasing trend and the trend values of NBL during the study period are in falling trend. The trend value of total commercial banking system in 2009 is 62.44 which is highest in comparison to the trend values of sampled banks, and the trend value of SCBNL in 2006 is 32.28 that is lowest among the values, Finally loan and advance of total commercial banking system is better than both the sampled banks, and SCBNL is better between the sampled banks with increasing trend.

#### **4.2.3 Test of Hypothesis**

Test of hypothesis is the process of testing of significance regarding the parameter of the population on the basis of sample drawn from the population. In testing hypothesis, we examine on the basis of statistics computed from the sample drawn, whether the sample drawn belongs to the, parent population with certain specific characteristics or not.

In this topic, an effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population. Generally following steps are followed for the test of hypothesis.

- Formulation of hypothesis
  - © Null hypothesis.
  - © Alternative hypothesis
- Computing the test statistics.
- Fixing the level of significance.
- Finding critical region. Deciding two- tailed or one-tailed test.
- Making decision.

Since, we have population less than 30 we apply (t-test) for testing the hypothesis. Some of the main hypothesis tests which are helpful for making reliable decision regarding the deposit mobilization of sampled banks are done as follows.

**4.2.3.1.1 Test of hypothesis on investment to total deposit ratio of total commercial banking system and NBL**

**Table No. 4.11**

**Test of hypothesis on investment to total deposit ratio of total and NBL**

| year         | Total   |                       |                                | NBL      |                       |                                |
|--------------|---------|-----------------------|--------------------------------|----------|-----------------------|--------------------------------|
|              | x       | d <sub>1</sub> =(x-x) | (d <sub>1</sub> ) <sup>2</sup> | y        | d <sub>2</sub> =(y-y) | (d <sub>2</sub> ) <sup>2</sup> |
| 2005         | 20.69   | 1.2                   | 1.44                           | 32.59    | 1.69                  | 2.85                           |
| 2006         | 22.27   | 0.49                  | 0.24                           | 33.75    | -0.25                 | 0.06                           |
| 2007         | 21.22   | -0.57                 | 0.32                           | 29.19    | -4.81                 | 23.14                          |
| 2008         | 23.85   | 2.07                  | 4.28                           | 39.83    | 5.83                  | 33.99                          |
| 2009         | 19.79   | -1.99                 | 3.98                           | 33.22    | -0.78                 | 0.61                           |
| <b>Total</b> | = 87.13 | = 0                   | = 8.8                          | = 135.99 | =-0.01                | = 57.8                         |

$$\bar{x} = \frac{\sum x}{N} = \frac{87.13}{4} = 21.78$$

$$\bar{y} = \frac{\sum y}{N} = \frac{135.99}{4} = 34$$

$$S^1 = \frac{1}{n_1 + n_2 - 2} \left[ \left\{ \sum d_1^2 - \frac{(\sum d_1)^2}{n_1} \right\} + \left\{ \sum d_2^2 - \frac{(\sum d_2)^2}{n_2} \right\} \right]$$

$$= \frac{1}{4+4-2} \left[ \left\{ 8.8 - \frac{0^2}{4} \right\} + \left\{ 57.8 - \frac{(-0.01)^2}{4} \right\} \right]$$

$$= 11.1$$

Hence,

Null Hypothesis (H<sub>0</sub>):  $\mu_x = \mu_y$ , i.e. there is no significant difference between mean ratio of total investment to total deposit of total commercial banking system and NBL.

Alternative Hypothesis (H<sub>1</sub>):  $\mu_x \neq \mu_y$  (two tailed), i.e. there is significant difference between mean ratio of total investment to total deposit ratio of total commercial banking system and NBL.

Now,

Calculating the value to 't' :

$$t = \frac{\bar{X} - \bar{Y}}{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$$

$$= \frac{21.78 - 34}{11.1 \left( \frac{1}{4} + \frac{1}{4} \right)}$$

$$= 5.2$$

Therefore; t = 5.2,

Tabulated value of 't' ( two- tailed test) for (n<sub>1</sub>+n<sub>2</sub>-2) (i.e. 6) degree of freedom, At 5% level of significance is 2.447.

#### Decision:

Since calculated value of 't' is greater than its tabulated value, we accept alternative hypothesis( H<sub>1</sub>). In other words, there is significant difference between mean ratio of investment to total deposit of total commercial banking system and NBL.

#### 4.2.3.1.2 Test of hypothesis on investment to total deposit ratio of total commercial banking system and SCBNL

**Table No. 4.12**

**Test of hypothesis on investment to total deposit ratios of total and SCBNL**

| year  | Total  |                       |                                | SCBNL   |                       |                                |
|-------|--------|-----------------------|--------------------------------|---------|-----------------------|--------------------------------|
|       | x      | d <sub>1</sub> =(x-x) | (d <sub>1</sub> ) <sup>2</sup> | y       | d <sub>2</sub> =(y-y) | (d <sub>2</sub> ) <sup>2</sup> |
| 2005  | 21.78  | 0                     | 0                              | 37.03   | 0                     | 0                              |
| 2006  | 22.27  | 0.49                  | 0.24                           | 35.84   | -1.19                 | 1.42                           |
| 2007  | 21.22  | -0.57                 | 0.32                           | 37.56   | 0.53                  | 0.28                           |
| 2008  | 23.85  | 2.07                  | 4.28                           | 37.24   | 0.21                  | 0.04                           |
| 2009  | 19.79  | -1.99                 | 3.98                           | 37.5    | 0.47                  | 0.22                           |
| total | =87.13 | =0                    | =8.8                           | =148.14 | =0.02                 | =1.96                          |

$$X^{-} = \frac{\sum x}{N} = \frac{87.13}{4} = 21.78 \qquad Y^{-} = \frac{\sum y}{N} = \frac{148.14}{4} = 37.03$$

$$S^2 = \frac{1}{n_1 + n_2 - 2} \left[ \left\{ \sum d_1^2 - \frac{(\sum d_1)^2}{n_1} \right\} + \left\{ \sum d_2^2 - \frac{(\sum d_2)^2}{n_2} \right\} \right]$$

$$= \frac{1}{4+4-2} \left[ \left\{ 8.8 - \frac{0}{4} \right\} + \left\{ 1.96 - \frac{(0.02)^2}{4} \right\} \right]$$

$$= 1.79$$

Hence,

Null Hypothesis ( $H_0$ ):  $\mu_x = \mu_y$ , i.e.. there is no significant difference between mean ratio of total investment to total deposit of total commercial banking system and SCBNL.

Alternative Hypothesis ( $H_1$ ):  $\mu_x \neq \mu_y$  (two tailed), i.e. there is significant difference between mean ratio of total investment to total deposit ratio of total commercial banking system and SCBNL.

Now,

Calculating the value to 't' :

$$t = \frac{X^{-} - Y^{-}}{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$$

$$= \frac{21.78 - 37.03}{1.79 \left( \frac{1}{4} + \frac{1}{4} \right)}$$

$$= -16.22$$

Therefore;  $t = 16.22$

Tabulated value of 't' (two- tailed test) for (n1+n2-2) (i.e. 6) degree of freedom, At 5% level of significance is 2.447.

**Decision:**

Since calculated value of 't' is greater than its tabulated value, we accept alternative hypothesis( H1). In other words, there is significant difference between mean ratio of investment to total deposit of total commercial banking system and SCBNL.

**4.2.3.1.3 Test of hypothesis on Investment and Total Deposit Ratio of NBL and SCBNL**

**Table No. 4.13**

**Test of hypothesis on Investment to Total Deposit Ratio of NBL and SCBNL**

| Year         | NBL     |                        |                                | SCBNL   |                       |                                |
|--------------|---------|------------------------|--------------------------------|---------|-----------------------|--------------------------------|
|              | x       | d <sub>1</sub> =(x-x̄) | (d <sub>1</sub> ) <sup>2</sup> | y       | d <sub>2</sub> =(y-ȳ) | (d <sub>2</sub> ) <sup>2</sup> |
| 2005         | 21.78   | 0                      | 0                              | 37.03   | 0                     | 0                              |
| 2006         | 33.75   | -0.25                  | 0.06                           | 35.84   | -1.19                 | 1.42                           |
| 2007         | 29.19   | -4.81                  | 23.14                          | 37.56   | 0.53                  | 0.28                           |
| 2008         | 39.83   | 5.83                   | 33.99                          | 37.24   | 0.21                  | 0.04                           |
| 2009         | 33.22   | -0.78                  | 0.61                           | 37.5    | 0.47                  | 0.22                           |
| <b>Total</b> | =135.99 | = -0.01                | =57.8                          | =148.14 | =0.02                 | =1.96                          |

$$X = \frac{\sum x}{N} = \frac{87.13}{4} = 21.78 \qquad Y = \frac{\sum y}{N} = \frac{148.14}{4} = 37.03$$

$$S^2 = \frac{1}{n_1 + n_2 - 2} \left[ \left\{ \sum d_1^2 - \frac{(\sum d_1)^2}{n_1} \right\} + \left\{ \sum d_2^2 - \frac{(\sum d_2)^2}{n_2} \right\} \right]$$

$$= \frac{1}{4+4-2} \left[ \left\{ 57.8 - \frac{(-0.01)^2}{4} \right\} + \left\{ 1.96 - \frac{(0.02)^2}{4} \right\} \right]$$

$$= 9.96$$

Hence,

Null Hypothesis (H<sub>0</sub>):  $\mu_x = \mu_y$ , i.e. there is no significant difference between mean ratio of total investment to total deposit of NBL and SCBNL.

Alternative Hypothesis (H<sub>1</sub>):  $\mu_x \neq \mu_y$  (two tailed), i.e. there is significant difference between mean ratio of total investment to total deposit ratio of NBL and SCBNL.

Now,

Calculating the value to 't' :

$$t = \frac{\bar{X} - \bar{Y}}{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$$

$$= \frac{34 - 37.03}{9.96 \left( \frac{1}{4} + \frac{1}{4} \right)}$$

$$= -1.3587$$

Therefore; t = 1.3587

Tabulated value of 't' (two- tailed test) for (n1+n2-2) (i.e. 6) degree of freedom, At 5% level of significance is 2.447.

#### Decision:

Since calculated value of 't' is smaller than its tabulated value, we accept null hypothesis (H0). In other words, there is no significant difference between mean ratio of investment to total deposit of NBL and SCBNL.

#### 4.2.3.2.1 Test of Hypothesis on Loan and Advance to Total Deposit Ratio of Total Commercial Banking System and NBL

**Table No. 4.14**

**Test of Hypothesis on L&A to Total Deposit Ratio of Total and NBL**

| year  | Total  |                       |                                | NBL     |                       |                                |
|-------|--------|-----------------------|--------------------------------|---------|-----------------------|--------------------------------|
|       | x      | d <sub>1</sub> =(x-x) | (d <sub>1</sub> ) <sup>2</sup> | y       | d <sub>2</sub> =(y-y) | (d <sub>2</sub> ) <sup>2</sup> |
| 2005  | 61.27  | 0                     | 0                              | 48.2    | 0                     | 0                              |
| 2006  | 61.09  | -0.18                 | 0.03                           | 55.46   | 7.26                  | 52.71                          |
| 2007  | 57.8   | -3.47                 | 12.04                          | 52.75   | 4.55                  | 20.7                           |
| 2008  | 64.88  | 3.61                  | 13.03                          | 50.24   | 2.04                  | 4.16                           |
| 2009  | 61.33  | 0.06                  | 0.004                          | 34.36   | -13.84                | 191.6                          |
| total | =245.1 | =0.02                 | =25.104                        | =192.81 | =0.01                 | =269.1                         |

$$X = \frac{\sum x}{N} = \frac{245}{4} = 61.27$$

$$Y = \frac{\sum y}{N} = \frac{192.81}{4} = 48.2$$

$$\begin{aligned} S^2 &= \frac{1}{n_1 + n_2 - 2} \left[ \left\{ \frac{\sum d_1^2 - (\sum d_1)^2}{n_1} \right\} + \left\{ \frac{\sum d_2^2 - (\sum d_2)^2}{n_2} \right\} \right] \\ &= \frac{1}{4+4-2} \left[ \left\{ \frac{25.104 - (-0.02)^2}{4} \right\} + \left\{ \frac{269.12 - (0.01)^2}{4} \right\} \right] \\ &= 49.04 \end{aligned}$$

Hence,

Null Hypothesis ( $H_0$ ):  $\mu_x = \mu_y$ , i.e. There is no significant difference between mean ratio of loan and advance to total deposit of total commercial banking system and NBL.

Alternative Hypothesis ( $H_1$ ):  $\mu_x \neq \mu_y$  (two tailed), i.e. there is significant difference between mean ratio of loan and advance to total deposit ratio of total commercial banking system and NBL.

Now,

Calculating the value to 't' :

$$\begin{aligned} t &= \frac{X - Y}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} \\ &= \frac{61.27 - 48.2}{\sqrt{49.4 \left( \frac{1}{4} + \frac{1}{4} \right)}} \\ &= 2.64 \end{aligned}$$

Therefore;  $t = 2.64$

Tabulated value of 't' (two- tailed test) for  $(n_1+n_2-2)$  (i.e. 6) degree of freedom, at 5% level of significance is 2.447.

**Decision:**

Since calculated value of 't' is greater than its tabulated value, we accept alternative hypothesis( H1). In other words, there is significant difference between mean ratio of loan and advance to total deposit of total commercial banking system and NBL.

**4.2.3.2.2 Test of Hypothesis on Loan and Advance to Total Deposit Ratio of Total Commercial Banking System and SCBNL**

**Table No. 4.15**

**Test of hypothesis on L&A to total deposit ratio of total and SCBNL**

| year         | Total  |                        |                                | SCBNL   |                        |                                |
|--------------|--------|------------------------|--------------------------------|---------|------------------------|--------------------------------|
|              | x      | d <sub>1</sub> =(x-x̄) | (d <sub>1</sub> ) <sup>2</sup> | y       | d <sub>2</sub> =(y-ȳ) | (d <sub>2</sub> ) <sup>2</sup> |
| 2005         | 61.27  | 0                      | 0                              | 35.89   | 0                      | 0                              |
| 2006         | 61.09  | -0.18                  | 0.03                           | 32.42   | -3.47                  | 12.04                          |
| 2007         | 57.8   | -3.47                  | 12.04                          | 31.8    | -4.09                  | 16.73                          |
| 2008         | 64.88  | 3.61                   | 13.03                          | 42.46   | 6.57                   | 43.16                          |
| 2009         | 61.33  | 0.06                   | 0.004                          | 36.9    | 1.01                   | 1.02                           |
| <b>Total</b> | =245.1 | =0.02                  | =25.104                        | =143.58 | =0.02                  | =72.95                         |

$$\bar{x} = \frac{\sum x}{N} = \frac{245}{4} = 61.27 \qquad \bar{y} = \frac{\sum y}{N} = \frac{143.58}{4} = 35.89$$

$$S^2 = \frac{1}{n_1 + n_2 - 2} \left[ \left\{ \sum d_1^2 - \frac{(\sum d_1)^2}{n_1} \right\} + \left\{ \sum d_2^2 - \frac{(\sum d_2)^2}{n_2} \right\} \right]$$

$$= \frac{1}{4+4-2} \left[ \left\{ 25.104 - \frac{(-0.02)^2}{4} \right\} + \left\{ 72.95 - \frac{(0.02)^2}{4} \right\} \right]$$

$$= 16.34$$

Hence,



Null Hypothesis ( $H_0$ ):  $\mu_x = \mu_y$ , i.e. there is no significant difference between mean ratio of loan and advance to total deposit of total commercial banking system and SCBNL.

Alternative Hypothesis ( $H_1$ ):  $\mu_x \neq \mu_y$  (two tailed), i.e. there is significant difference between mean ratio of loan and advance to total deposit ratio of total commercial banking system and SCBNL.

Now,

Calculating the value to 't':

$$\begin{aligned} t &= \frac{\bar{X} - \bar{Y}}{\frac{S^2(\frac{1}{n_1} + \frac{1}{n_2})}{}} \\ &= \frac{61.27 - 35.89}{\frac{16.34(\frac{1}{4} + \frac{1}{4})}{}} \\ &= 8.87 \end{aligned}$$

Therefore;  $t = 8.87$

Tabulated value of 't' (two- tailed test) for  $(n_1+n_2-2)$  (i.e. 6) degree of freedom, At 5% level of significance is 2.447.

**Decision:**

Since calculated value of 't' is greater than its tabulated value, we accept alternative hypothesis(  $H_1$ ). In other words, there is significant difference between mean ratio of loan and advance to total deposit of total commercial banking system and SCBNL.

### **4.3 Major findings of the study**

In this research, data have been basically obtained, by the secondary sources. The analysis is made with the help of Financial and statistical tools. In the financial tools, ratio analysis has been used for the analysis of the financial activities of commercial banks, especially total commercial banking system, NBL and SCBNL.

Considering the statistical analysis as the easy path for meeting the objective some statistical tools have been used for the analysis. In statistical tools, correlation coefficient, trend analysis and t-statistic have been used. This unit focuses on the major findings, which are derived from the analysis of the data related to the total commercial banking system, NBL and SCBNL. This study has been made on the basis of the related data for four years from 2006 to 2009. The major finding of the financial analysis and statistical analysis are presented below.

#### **I. Growth ratio**

Growth ratios show the performance level of the commercial banks. The smooth growth of the performance show the perfect efficiency but this can not be found in real practice in general life. In this study the growth of both sampled banks and total commercial banking system are analyzed and compared with each other.

Growth of deposit is one of the indicators showing the performance efficiency of commercial banks. Analyzing the growth of total deposit ratio total commercial banking system and SCBNL has fluctuating ratios during the study period. The ratios of them have fallen in 2008 and taken the recovery in 2009. In case of NBL the ratios are falling during the study period. SCBNL has highest average growth of deposit during the study period in comparison to total commercial banking system and NBL. It means SCBNL representing the private sector bank is more successful than government owned commercial banks in winning the belief of the customers.

Loan and advance is the most important element for investing the funds of commercial banks. Analyzing the growth ratios of loan and advance, the ratios of both sampled banks and total commercial banking system are in falling trend. The statistics

of NBL is showing the negative growth in loan and advance. The reason for falling growth in all commercial banks may be of the application of the policy of financial restructuring. NBL facing the great problem of default of recovery of loan has been concentrating its effort for recovery of loan than making further loan so this bank may have the negative growth in loan and advance. Another reason for falling growth may be the political instability and unfavorable environment for the trade and industry. Though the ratios of both sampled banks are falling and both the sampled banks have smaller average growth rate than the average growth rate of total commercial banking system, SCBNL has the positive growth rate so this bank can be considered as the efficient bank in this analysis.

Investment is another sector where the banks mobilize their funds. Increasing investment is the signal of economic recovery of the nation and financial efficiency of the commercial banks. Analyzing the growth of investment, the ratios of both sampled banks and total commercial banking system are fluctuating during the study period. The ratios of SCBNL are more positive than that of NBL and SCBNL has the highest average growth of investment in the study period. So it can be generalized that the private sector commercial banks are more successful in making investment in comparison to the government owned commercial banks.

Profit making is one of the most important objectives of commercial banks. If the bank is successful in making smooth growth in profit by passes of time the bank can be considered as managerially successful bank and that can easily sustain in long term. Analyzing the growth of return, both sampled banks have the fluctuating growth during the study period. SCBNL has highest mean growth of return during the period. Though NBL has negative average growth of return it has done well on the final year of the study.

## **II. Coefficient of Correlation**

Analyzing the correlation coefficient between deposit and total investment NBL has negative relationship between these variables and SCBNL has positive relationship between these variables. Considering the probable error, the coefficient of correlation (i.e.  $r$ ) of NBL is smaller than the value of  $6PEr$  (i.e.  $-0.77 < 0.84$  ). It means the relationship is not significant. On the other hand the value of coefficient of correlation

(I.e.  $r$ ) of SCBNL is greater than the value of  $6PEr$  (i.e.  $0.99 > 0.04$ ). It means the relationship between the variables is significant.

In the analysis of correlation coefficient between deposit and loan and advance, total commercial banking system and SCBNL have the positive relationship and NBL has the negative relationship. Considering the probable error the value of coefficient of correlation (i.e.  $r$ ) of NBL is smaller than the value of  $6PEr$  (i.e.  $-0.15 < 1.98$ ). So the relationship between the variables is significant. The value of coefficient of correlation (i.e.  $r$ ) of SCBNL is smaller than the value of  $6 \times PEr$  (i.e.  $0.55 > 0.44$ ). The relationship between the variables of SCBNL is significant.

Analyzing the correlation coefficient between total assets and profit, total commercial banking system and SCBNL have the positive relationship and NBL has negative relationship between these variables. Considering the probable error, total commercial banking system and SCBNL have the value of coefficient of correlation (i.e.  $r$ ) greater than the value six times probable error ( $6PEr$ ) (i.e.  $0.8 > 0.72$  and  $0.98 > 0.9$ ). It means the relationship between the variables of total commercial banking system and SCBNL are significant. While comparing the value of coefficient of correlation (i.e.  $r$ ) with the value six times probable error ( $6PEr$ ) of NBL the value of coefficient of correlation is smaller than the value of ( $6PEr$ ) (i.e.  $-0.75 < 0.9$ ). So the relationship between the variables of NBL is not significant.

### **III. Trend analysis**

Trend analysis show the moving direction of some factors by the time passes on. In this study the trend of total investment to total deposit ratio and loan & advance to total deposit ratio is analyzed for meeting the objective of the study.

Analyzing the trend values of total investment to total deposit ratio for the four years of study period, the trend line of NBL and SCBNL have presented the increasing trend. But the trend of total commercial banking system has fallen on the final year of the study. It means both sampled banks are doing well in comparison to total commercial banking industry.

Observing the trend of loan and advance to total deposit ratio total commercial banking system and SCBNL have increasing trend and NBL has decreasing trend. This ratio of NBL may have fallen due to its efforts on recovery of default of loan.

#### **IV. Test of Hypothesis**

For the test of hypothesis t-test is selected because the total number of population (i.e. total number of commercial banks operating within Nepalese economy) is smaller than thirty (i.e.  $17 < 30$ ). Analyzing the hypothesis test result of investment to total deposit ratio of total commercial banking system with NBL and SCBNL both test have yield the result of acceptance of alternative hypothesis. It means the ratios of both sampled banks are significantly different from the ratio of total commercial banking system. On another hypothesis test of the ratios of NBL and SCBNL, it has yield the result of acceptance of null hypothesis. It means there is no significant difference between the mean ratios of two banks.

In the analysis of test result of loan and advance to total deposit ratio of total commercial banking system with NBL and SCBNL, both test have yield the result of acceptance of alternative hypothesis (H1) .It means there is significant difference between the mean ratio of total commercial banking system and the mean ratio of NBL and SCBNL. The test of hypothesis of loan and advance to total deposit ratio of NBL with the ratio of SCBNL has yield the result of acceptance of null hypothesis (H0). It means there is no significant difference between the mean ratios of NBL and SCBNL.

Finally with the analysis of these six hypothesis tests it is found that the sampled banks have no significant difference between them, but these both banks are significantly different from other banks of total commercial banking system in the view point of deposit mobilization.

# **CHAPTER V**

## **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 SUMMARY**

Mobilization as well as canalization of saving in the productive sector is important for the economic development of the country without inflationary pressure in the economy. No doubt commercial banks play a crucial role for the economic development by formulation of capital, which is key variable in the economic development of the country. Scattered recourses hold no meaning unless and until they mobilized and utilized efficiently in some productive sectors. Commercial banks contribute to the process of capital formation by converting dispersed saving into meaningful capital investment in order to aid industry, trade, commerce and agriculture for the economic development of a nation. It should not be forgotten that a country could hardly achieve its growth of economic development without a strong capital base. Commercial banks play a vital role in performing such base for financial and economic development by way of deposit mobilization. It is quite true that a strong financial institution is of great need in the developing country like Nepal. Because all the economic conditions are based on the financial institution and the development of a country depend upon the active participation of the banks in the different activities in the economy.

Deposits are the obligation of the commercial banks. So, commercial banks must allocate the funds in different loans and advances and investments. In these study two banks NBL representing the government bank and SCBNL representing the private sector bank are compared with total commercial banking system and with each another. In this study data of four years from 2006 to 2009 have been considered for the targeted analysis.

Analyzing the liquidity position of the banks, both banks have satisfactory level of liquidity but SCBNL has the larger portion of liquid assets in total assets. Return on liquid fund of NBL is not more satisfactory and the portions of liquid fund to total

deposit of both banks are in satisfactory level in comparison to total commercial banking system. Generalizing the findings of the study it can be observed that private sector commercial banks are strong in liquidity management but government owned banks also are not in dissatisfactory conditions.

In assets management ratios both sampled banks seemed stronger than total commercial banking system in total deposit liabilities ratio , total investment to total deposit ratio and investment on government bond to total deposit ratio. Both banks are weak in loan and advance to total deposit ratio and loan and advance to total assets ratio. Comparing these all ratios of two sampled banks it is found that SCBNL is stronger than NBL in all the ratios excepting loan and advance to total assets ratio. And NBL is seemed to be stronger than the SCBNL in the view point of collecting the mid-term and long-term deposits.

In the analysis of profitability ratios both sampled banks are stronger than total commercial banking system in return on loan and advance ratio and return on total assets ratio. Both banks are weaker than the total commercial banking system in interest expenses to total expenses ratio. Comparing these ratios of two sampled commercial banks it is found that SCBNL is stronger than the NBL in all ratios excepting interest expenses to total expenses ratio.

In the analysis of growth ratios of total commercial banking system, NBL and SCBNL, these all have the positive growth in deposit and investment but NBL has the negative growth in loan and advance and return. In the growth point of view SCBNL is stronger than NBL and NBL is seemed weaker than SCBNL and even than total commercial banking system in these ratios. In the analysis of correlation coefficient between the selected variables, NBL has the negative results on each test. It means the selected variables of NBL are not significantly correlated with each other during this period. Such results may have appeared because of the restructuring programs lunched for the betterment of the bank.

In trend analysis both sampled banks are seemed stronger than the total commercial banking system in the trend of total investment to total deposit ratios and NBL seemed to be weaker than total commercial banking system and SCBNL in the trend analysis of loan and advance to total deposit ratio.

In the hypothesis test it is found that the sampled banks are significantly different from total commercial banking system. But both sampled banks are not significantly different. In other words the sampled banks have no significant difference between the mean ratios of investment to total deposit and the mean ratio of loan and advance to total deposit.

Finally, in conclusion, it can be concluded that the deposit mobilization position of both (government owned commercial banks and private sector commercial banks) are better than the total commercial banking system but the position of private sector commercial banks is better than the position of government owned commercial banks.

## **5.2 Conclusion**

Banks are the very necessary elements of the economy of a country. The word banks generally denote the commercial banks. The commercial bank helps in the formation of capital that is the most important for the economic growth of the country. The commercial banks, in Nepal are doing well but they are not giving satisfactory result due to some, internal and external factors. The deposits and its investment in productive sector by commercial banks are not stable and these are going thoroughly by the time passes on. A deposit is indeed the major organ of commercial banks. Higher the deposit higher will be the capacity of investment and higher will be the chance of mobilization of fund and make the satisfactory profit for the long term sustainability of an organization.

Banks should be careful while granting loan because loan is the blood of commercial banks for survival. If commercial bank does not adopt the sound investment policy, it will be in greater trouble in future in the collection of loan amount. Banks should invest its funds in various portfolios after the profound study of the project. It keeps the bank far from the problem of default of payment that certainly keeps the bank safe from the bankruptcy. Diversification of investment is very much important for banks because a bank uses the money of people for the benefit of the depositors and the benefit of its own.



From the analysis made in last chapter it is found that total commercial banking system, NBL and SCBNL are able to mobilize average 83.05%, 82.2% and 72.92% of their deposits to the loan and advance and in investment. This figure show the stronger position of NBL than SCBNL in deposit mobilization but comparing the return ratios, i.e. interest income to total income ratio NBL has smaller return than SCBNL (i.e.  $70.84 < 78.82$ ). It means both the banks are efficient in deposit mobilization but NBL is weak in collecting interest and even the principal amount of the loan. The analysis of growth of deposit, loan and advance and the investment also reflects the weak position of NBL in deposit mobilization in comparison to SCBNL.

Analyzing the trend of investment of both sampled banks there are increasing trend and there is no significant difference between the trend values of the NBL and SCBNL. But the trend values of loan and advance to total deposit ratio of NBL is falling during the study period. This value of SCBNL is increasing during the same period. It means SCBNL is managing its loan and advance well. But NBL is sifting from loan and advance to secured investment.

Various analysis yield different results but summarizing the results it can be generalized that there is no more difference between the deposit mobilizations of government owned commercial banks and private sector commercial banks. But the private sector commercial banks are seemed more efficient than the government owned commercial banks in deposit mobilization.

Every sector is facing the problem in Nepal due to the violence and political instability. The commercial banking system also could not escape out from this situation. All the banks within this system have been facing the problem but this problem of NBL became great, because this is the government owned commercial bank which is serving even in remote areas by largest number of branches. Most of the loans became the bad debt due to the unfavorable economic environment. But the positions of this bank have been falling due to the managerial inefficiency and political interference in the management in some extent.

### 5.3 Recommendations

The problems related to deposit mobilization of NBL and SCBNL representing the government owned commercial banks and private sector commercial banks respectively have been discussed. In accordance with facts found in previous sections, the following recommendations are made for the further improvement of the deposit mobilization of the government owned commercial banks and private sector commercial banks especially NBL and SCBNL.

- SCBNL has high degree of liquidity than NBL but comparing the return on liquid assets SCBNL has higher return it means though NBL has mobilized the liquid funds the liquidity management is not strong and there is some lapses on the deposit mobilization policy. So NBL is better to revise the liquidity management policy and implement the revised policy strongly.
- The ever mounting amount of deposits is now got to be properly mobilized in the different sectors of the economy. For the proper mobilization of deposit, banks must be prepared to take more risk on their lending and investments to encourage the borrowing by the units of the economy. In other words, it's time for them to divert their traditional collateral taking process into more realistic and potential aspects. They must provide loan for a project on the basis of its potentiality instead of sound and safe collateral.
- In order to develop the banking and saving habit of the people of remote areas in the nation, commercial banks are suggested not to be surrounded and limited within the urban areas and not to be gathered around the big clients ( e.g. multinational companies. Large industries, manufacturer and exporters, NGO's and INGO's, etc.). Reduction in the minimum required threshold balance and extension of its services towards rural area and priority sector indicated by the government is must for boosting up the living standard of lower level people.
- Since, commercial banks used to provide less loan and advances in comparison to its total deposits, commercial banks are strongly recommended to follow the liberal lending policy more percentage of deposits can be invested to different profitable sector as well as towards loan and advances. Because, analysis showed

investment and loan and advances as a significant factor this affects the net profit of the banks. Subsequently, a skillful administration is the must for these assets because negligence may become a reason liquidity crisis and more liberal lending may lead to the default of repayment of loan.

- Considering the current economic scenario, banks are suggested to further advance their retail banking through newer and innovative products. They should expand their transaction in new services such as tax revenue collection, business enterprise's bill amount collection etc. Both banks are doing these works in some extent but that is not satisfactory to the customers of all regions.
- Commercial banks themselves should seek for new investment opportunities rather than investing in identified areas. Commercial banks should establish the efficient R&D department for this purpose.
- All commercial banks should make an attractive publicity of the bank and than people will have knowledge about the bank and it encourages them to save the money. When there is more publicity, people may have great desire to save money in order to earn interest and use the bank to lend money instead of money lenders the banks should also pay attention to publish bulletin, brochures and others so as to make people familiarizes with its performance and activities.
- Training and observation tours should be organized on regular basis to increases the efficiency of the employees. Proper evaluation of the performance of the staff should be done in time. Continuous and timely evaluation of performance is must for improving the managerial efficiency of the bank. Job analysis should be done to find out the skill, knowledge, abilities etc. of the staffs that is needed for the better performance.

Finally, for the speedy development of the nation, the government owned banks as well as the private sector banks are suggested to follow decentralization policy in order to extend the modern and computerized banking facilities towards the marginal areas and for assuring the reach of remote area people in modern banking facilities.

## **BIBLIOGRAPHY**

### **Books:**

Bashu, A.K. & Mukherjee, A. K, “**Fundamental of Banking Theory and Practices**”.

Bhatta R. (2054 BS), "**Financial Policies to Prevent Financial Crisis**"

Crowther (1985), "**Banking Principles and Practices**" P: 58

Desai V.R. (1967), "**Banking Development in India**", PC private Ltd. Bombay.

**Encyclopedia America** (1985), vol. 3, P:302 and vol.14, P:605

Knootz, Harold & Hienz, Weihrich (1989), "**Essentials of Management**" 5<sup>th</sup> ed., New Delhi:TaTa/McGraw-Hill.

Kothari, C.R. (1989), "**Research Methodology, Methods and Techniques**" 6<sup>th</sup> ed., New Delhi:Willey Easterly Ltd..

**Oxford Dictionary of Economics** (2006) First Indian Edition

Rose, Peter S. (2002), **Commercial Bank Management**, 5<sup>th</sup> ed., New York:

Sayers,R.S. (1972) “**Modern Banking Principal**” P:17-18.

**The world Book Encyclopedia**, 1966, P: 232

William, F. Sharpe. & Alexander J Gorden (1987) .” **Investment Policy**” Himalayan publishing house Bombay.

Wolf and Pant (2000), "**A Hand Book For Social Science Research and Thesis Writing**" P:30.

## **Thesis:**

Agrawal R. (2000) **“A Study On Deposit And Investment Position Of Yeti Finance Company Ltd.”** CDM, T.U.

Karmacharya, M.N (1998), **" A Study On The Deposit Mobilization By The Nepal Bank Ltd."** CDM TU.

K.C Krishna Ram (2006), **"Deposit Mobilization Of Commercial Banks In Nepal"** CDM TU

Khadka, Raja Ram. (1998), **“A Study On The Investment Policy Of Nepal Arab Bank Ltd. In Comparison Other Joint Venture Banks In Nepal.”** CDM TU.

Pradhan, N.M (1980), **“A Study on Investment Policy of NABIL”** CDM, T.U.

Tandukar,S.M (2005),**“Role of NRB In Deposit Mobilization Of Commercial Banks”** CDM,T.U.

Thapa Samiksha (2000), **“A Comparative Study On Investment Policy Of Nepal Bangladesh Bank Ltd. And Other Joint Venture Banks Of Nepal"** CDM TU.

## **Journal:**

Bajracharay, Bodhi.(2047 BS) **“Monitary Policy And Deposit Mobilization In Nepal”** Rajat Jayanti Smarak RBB.

Fry H.K. (1974) **“Resources Mobilization & Financial Development In Nepal”** P:15.

Joshi S.R. (1994), **" Rural Saving Mobilization In Nepal"** P:65-66.

Joshi S.R.(1994)," **Resource Mobilization And Financial Development In Nepal**" P:15.

Kafle B(2053 BS)," **NRB And Its Policies For Monetary Control**" P:15.

Koirala, Prakash & Bajracharya Pushkar, (2006) "**Nepalese Capital Markets: Issues And Challenges**", Nepal Rastra Bank, Economic Review

NRB (1984)," **Bankers Prakashan**"no.24, P:10-12.

NRB (2037 BS)," **Nepal Bank Patrica**" no.4, P:7

NRB. 2008, "**Banking and Financial Statistics**"

Paudel Shree Prasad (2006),"**Financial System, Impaired Assets and Their Resolution in Nepal**", Nepal Rastra Bank Samachar.

Pradhan Sekhar Bahadur (2053 BS),"**Deposit Mobilization and its Problem and Prospects**" P: 9-10.

RBB (2054 BS), "**Upahar**" no.3, P: 15.

Shrestha, Ganesh Kumar (2006), "**Financial Sectors Reforms In Nepal**", Nepal Rastra Bank, Economic Review

Shrestha, Shiba Raj (2006), "**Effective Domestic Debt Management In Nepal**", Nepal Rastra Bank Samachar.

## ANNEX

### 1. Financial Analysis:

#### 1.1.i Growth of loan and advance:

| <b>Total</b> |                         | <b>(Rs. in million)</b> |
|--------------|-------------------------|-------------------------|
| <b>year</b>  | <b>loan and advance</b> | <b>growth%</b>          |
| 2006         | 124499.8                |                         |
| 2007         | 139951.33               | 0.1241                  |
| 2008         | 163689.05               | 0.1696                  |
| 2009         | 178623.48               | 0.0912                  |

| <b>NBL</b>  |                         | <b>(Rs. in million)</b> |
|-------------|-------------------------|-------------------------|
| <b>year</b> | <b>loan and advance</b> | <b>growth%</b>          |
| 2006        | 19266.1                 |                         |
| 2007        | 19141.7                 | -0.0065                 |
| 2008        | 17456                   | -0.0881                 |
| 2009        | 12180                   | -0.3022                 |

| <b>SCBL</b> |                         | <b>(Rs. in million)</b> |
|-------------|-------------------------|-------------------------|
| <b>year</b> | <b>loan and advance</b> | <b>growth%</b>          |
| 2006        | 6080.7                  |                         |
| 2007        | 6729.6                  | 0.1067                  |
| 2008        | 8214                    | 0.2206                  |
| 2009        | 8505                    | 0.0354                  |

#### 1.1.ii Growth of investment:

| <b>Total</b> |                   | <b>(Rs. in million)</b> |
|--------------|-------------------|-------------------------|
| <b>year</b>  | <b>investment</b> | <b>growth %</b>         |
| 2006         | 45385.87          |                         |
| 2007         | 49641.95          | 0.0938                  |
| 2008         | 60181.68          | 0.2123                  |
| 2009         | 57639.1           | -0.0422                 |

| <b>NBL</b>  |                   | <b>(Rs. in million)</b> |
|-------------|-------------------|-------------------------|
| <b>year</b> | <b>investment</b> | <b>growth%</b>          |
| 2006        | 11722.8           |                         |
| 2007        | 10593.8           | -0.0963                 |
| 2008        | 13838.6           | 0.3063                  |
| 2009        | 11776.3           | -0.1490                 |

| <b>SCBL</b> |                   | <b>(Rs. in million)</b> |
|-------------|-------------------|-------------------------|
| <b>year</b> | <b>investment</b> | <b>growth%</b>          |
| 2006        | 6722.8            |                         |
| 2007        | 7948.2            | 0.1823                  |
| 2008        | 7204.6            | -0.0936                 |
| 2009        | 8644.5            | 0.1999                  |

#### 1.4.iv. Growth of return:

| <b>Total</b> |               | <b>(Rs. in million)</b> |
|--------------|---------------|-------------------------|
| <b>year</b>  | <b>return</b> | <b>growth %</b>         |
| 2006         | 4003.7        |                         |
| 2007         | 3483.9        | -0.1298                 |
| 2008         | 5192.6        | 0.4905                  |
| 2009         | 8785.1        | 0.6918                  |

| <b>NBL</b>  |               | <b>(Rs. in million)</b> |
|-------------|---------------|-------------------------|
| <b>year</b> | <b>return</b> | <b>growth%</b>          |
| 2006        | -482.9        |                         |
| 2007        | -371          | -0.2317                 |
| 2008        | 1399.5        | -4.7722                 |
| 2009        | 2329.7        | 0.6647                  |

| <b>SCBL</b> |               | <b>(Rs. in million)</b> |
|-------------|---------------|-------------------------|
| <b>year</b> | <b>return</b> | <b>growth%</b>          |
| 2006        | 469.9         |                         |
| 2007        | 556.7         | 0.1847                  |
| 2008        | 537.9         | -0.0338                 |
| 2009        | 662.2         | 0.2311                  |

## 2. Statistical analysis:

### 2.1. Analysis of correlation coefficients:

#### 2.1.i. Analysis of correlation coefficient between deposit and total investment:

$$\text{Karl Pearson's co-relation coefficient}(r) = \frac{XY - X \cdot Y}{x^2 \quad y^2}$$

#### **Total**

| <b>total deposit(x)</b> | <b>total investment(y)</b> | <b>X = (x-x̄)</b> | <b>X<sup>2</sup></b>    | <b>Y = (y-ȳ)</b> | <b>Y<sup>2</sup></b>  | <b>XY</b>             |
|-------------------------|----------------------------|-------------------|-------------------------|------------------|-----------------------|-----------------------|
| 203,804.13              | 45,385.87                  | (41,511.17)       | 1,723,177,027.21        | (7,826.28)       | 61,250,658.64         | 324,878,019.98        |
| 233,903.04              | 49,641.95                  | (11,412.26)       | 130,239,621.25          | (3,570.20)       | 12,746,328.04         | 40,744,041.73         |
| 252,294.30              | 60,181.68                  | 6,979.00          | 48,706,475.90           | 6,969.53         | 48,574,348.42         | 48,640,367.29         |
| 291,259.72              | 57,639.10                  | 45,944.42         | 2,110,889,958.86        | 4,426.95         | 19,597,886.30         | 203,393,661.19        |
| <b>245,315.30</b>       | <b>53,212.15</b>           | <b>0.00</b>       | <b>4,013,013,083.21</b> | <b>(0.00)</b>    | <b>142,169,221.40</b> | <b>617,656,090.19</b> |

**Correlation coefficient = 0.82**



**NBL**

| total deposit(x) | total investment(y) | X=(x-x̄) | X <sup>2</sup>      | Y=(y-ȳ)   | Y <sup>2</sup>      | XY                    |
|------------------|---------------------|----------|---------------------|------------|---------------------|-----------------------|
| 34,737.40        | 11,722.80           | (566.20) | 320,582.44          | (260.08)   | 67,639.01           | 147,254.47            |
| 36,288.50        | 10,593.80           | 984.90   | 970,028.01          | (1,389.08) | 1,929,529.36        | (1,368,099.97)        |
| 34,744.20        | 13,838.60           | (559.40) | 312,928.36          | 1,855.73   | 3,443,715.28        | (1,038,092.57)        |
| 35,444.30        | 11,776.30           | 140.70   | 19,796.49           | (206.58)   | 42,673.23           | (29,065.10)           |
| <b>35,303.60</b> | <b>11,982.88</b>    |          | <b>1,623,335.30</b> |            | <b>5,483,556.87</b> | <b>(2,288,003.17)</b> |

**Correlation coefficient = -0.77**

**SCBNL**

| total deposit(x) | total investment(y) | X=(x-x̄) | X <sup>2</sup>     | Y=(y-ȳ) | Y <sup>2</sup>     | XY                 |
|------------------|---------------------|----------|--------------------|----------|--------------------|--------------------|
| 18755.5          | 6722.8              | -1822.35 | 3320959.522        | -907.225 | 823057.2008        | 1653281.479        |
| 21161.4          | 7948.2              | 583.55   | 340530.6025        | 318.175  | 101235.3306        | 185671.0213        |
| 19344            | 7204.6              | -1233.85 | 1522385.823        | -425.425 | 180986.4306        | 524910.6362        |
| 23050.5          | 8644.5              | 2472.65  | 6113998.023        | 1014.475 | 1029159.526        | 2508441.609        |
| <b>20577.85</b>  | <b>7630.025</b>     |          | <b>11297873.97</b> |          | <b>2134438.488</b> | <b>4872304.745</b> |

**Correlation coefficient = 0.99**

**2.1.ii. Correlation coefficient between deposit and loan and advance:****Total**

| total deposit(x)   | loan & advance    | X=(x-x̄) | X <sup>2</sup>    | Y=(y-ȳ)   | Y <sup>2</sup>    | XY                |
|--------------------|-------------------|----------|-------------------|------------|-------------------|-------------------|
| 203804.13          | 124499.8          | -        | 41511.17          | 1723177027 | -                 | 27191.115         |
| 233903.04          | 139951.33         | 11412.26 | 130239621.2       | 11739.585  | 137817856         | 739356734.9       |
| 252294.3           | 163689.05         | 6979.003 | 48706475.9        | 11998.135  | 143955243.5       | 1128734929        |
| 291259.72          | 178623.48         | 45944.42 | 2110889959        | 26932.565  | 725363057.5       | 133975167         |
| <b>245315.2975</b> | <b>151690.915</b> |          | <b>4013013083</b> |            | <b>1746492892</b> | <b>2583846256</b> |

**Correlation coefficient = 0.98**

**NBL**

| total deposit(x) | loan & advance  | X=(x-x̄) | X <sup>2</sup>   | Y=(y-ȳ) | Y <sup>2</sup>     | XY                |
|------------------|-----------------|----------|------------------|----------|--------------------|-------------------|
| 34737.4          | 19266.1         | -566.2   | 320582.44        | 2255.15  | 5085701.522        | -1276865.93       |
| 36288.5          | 19141.7         | 984.9    | 970028.01        | 2130.75  | 4540095.563        | 2098575.675       |
| 34744.2          | 17456           | -559.4   | 312928.36        | 445.05   | 198069.5025        | -248960.97        |
| 35444.3          | 12180           | 140.7    | 19796.49         | -4830.95 | 23338077.9         | -679714.665       |
| <b>35303.6</b>   | <b>17010.95</b> |          | <b>1623335.3</b> |          | <b>33161944.49</b> | <b>-106965.89</b> |

**Correlation coefficient = -0.015**

### SCBNL

| total deposit(x) | loan & advance  | X=(x-x̄) | X <sup>2</sup>     | Y=(y-ȳ)  | Y <sup>2</sup>     | XY                 |
|------------------|-----------------|----------|--------------------|-----------|--------------------|--------------------|
| 18755.5          | 6080.7          | -1822.35 | 3320959.522        | -1301.625 | 1694227.641        | 2372016.319        |
| 21161.4          | 6729.6          | 583.55   | 340530.6025        | -652.725  | 426049.9256        | -380897.6738       |
| 19344            | 8214            | -1233.85 | 1522385.823        | 831.675   | 691683.3056        | -1026162.199       |
| 23050.5          | 8505            | 2472.65  | 6113998.023        | 1122.675  | 1260399.156        | 2775982.339        |
| <b>20577.85</b>  | <b>7382.325</b> |          | <b>11297873.97</b> |           | <b>4072360.028</b> | <b>3740938.785</b> |

**Correlation coefficient = 0.55**

### 2.1.iii. Correlation coefficient between total assets and profit:

#### Total

| total assets(x)   | profit(y)       | X=(x-x̄)    | X <sup>2</sup>     | Y=(y-ȳ)   | Y <sup>2</sup>     | XY                 |
|-------------------|-----------------|-------------|--------------------|------------|--------------------|--------------------|
| 305,635.57        | 4,003.70        | (65,700.86) | 4316602676         | (1,362.63) | 1856746.891        | 89525630.95        |
| 339,778.04        | 3,483.90        | (31,558.39) | 995931821.6        | (1,882.43) | 3543523.881        | 59406297.59        |
| 411,240.55        | 5,192.60        | 39,904.12   | 1592338992         | (173.73)   | 30180.37563        | -6932343.681       |
| 428,691.55        | 8,785.10        | 57,355.12   | 3289610077         | 3,418.78   | 11688022.5         | 196084258.9        |
| <b>371,336.43</b> | <b>5,366.33</b> |             | <b>10194483567</b> |            | <b>17118473.65</b> | <b>338083843.8</b> |

**Correlation coefficient = 0.81**

### NBL

| total assets(x)  | profit(y)     | X=(x-x̄)   | X <sup>2</sup>     | Y=(y-ȳ)   | Y <sup>2</sup>     | XY                  |
|------------------|---------------|------------|--------------------|------------|--------------------|---------------------|
| 56,329.50        | (482.90)      | 3,693.17   | 13639504.65        | (1,201.73) | 1444142.976        | -4438174.718        |
| 54,063.80        | (371.00)      | 1,427.47   | 2037670.601        | (1,089.83) | 1187718.531        | -1555692.493        |
| 55,658.91        | 1,399.50      | 3,022.58   | 9135989.856        | 680.68     | 463318.4556        | 2057394.642         |
| 44,493.11        | 2,329.70      | (8,143.22) | 66312031.97        | 1,610.88   | 2594918.266        | -13117709.52        |
| <b>52,636.33</b> | <b>718.83</b> |            | <b>91125197.07</b> |            | <b>5690098.228</b> | <b>-17054182.09</b> |

**Correlation coefficient = -0.75**

### SCBNL

| total assets(x)  | profit(y)     | X=(x-x̄)   | X <sup>2</sup>     | Y=(y-ȳ) | Y <sup>2</sup>    | XY                 |
|------------------|---------------|------------|--------------------|----------|-------------------|--------------------|
| 21,001.00        | 469.90        | (2,250.50) | 5064761.503        | (86.78)  | 7529.900625       | 195287.3544        |
| 23,642.00        | 556.70        | 390.50     | 152488.2975        | 0.03     | 0.000625          | 9.7624375          |
| 22,171.24        | 537.90        | (1,080.26) | 1166967.069        | (18.78)  | 352.500625        | 20281.92844        |
| 26,191.77        | 662.20        | 2,940.27   | 8645172.972        | 105.53   | 11135.52563       | 310271.7279        |
| <b>23,251.50</b> | <b>556.68</b> |            | <b>15029389.84</b> |          | <b>19017.9275</b> | <b>525850.7733</b> |

**Correlation coefficient = 0.98**

## 1.2. Trend analysis:

For calculating the trend value we have;  $Y_c = a + bX$

Where,

$$a = \frac{Y}{N}$$

$$\text{And, } b = \frac{XY}{X^2}$$

### 2.2.i. Trend analysis of total investment to total deposit ratio:

**Total**

| year(x)      | ratio(y) | X= (x-2006.5) | X <sup>2</sup> | XY     | Yc=a+bX |
|--------------|----------|---------------|----------------|--------|---------|
| 2006         | 22.27    | -1.5          | 2.25           | -33.41 | 22.6    |
| 2007         | 21.22    | -0.5          | 0.25           | -10.61 | 22.06   |
| 2008         | 23.85    | 0.5           | 0.25           | 11.93  | 21.51   |
| 2009         | 19.79    | 1.5           | 2.25           | 29.69  | 20.96   |
| <b>Total</b> | 87.13    | 0             | 5              | -2.4   |         |

**NBL**

| year(x)      | ratio(y) | X= (x-2006.5) | X <sup>2</sup> | XY     | Yc=a+bX |
|--------------|----------|---------------|----------------|--------|---------|
| 2006         | 33.75    | -1.5          | 2.25           | -50.63 | 32.65   |
| 2007         | 29.19    | -0.5          | 0.25           | -14.6  | 33.55   |
| 2008         | 39.83    | 0.5           | 0.25           | 19.92  | 34.45   |
| 2009         | 33.22    | 1.5           | 2.25           | 49.83  | 35.35   |
| <b>Total</b> | 135.99   | 0             | 5              | 4.52   |         |

**SCBL**

| year(x)      | ratio(y) | X= (x-2006.5) | X <sup>2</sup> | XY     | Yc=a+bX |
|--------------|----------|---------------|----------------|--------|---------|
| 2006         | 35.84    | -1.5          | 2.25           | -53.76 | 36.33   |
| 2007         | 37.56    | -0.5          | 0.25           | -18.78 | 36.8    |
| 2008         | 37.24    | 0.5           | 0.25           | 18.62  | 37.27   |
| 2009         | 37.50    | 1.5           | 2.25           | 56.25  | 37.74   |
| <b>Total</b> | 148.14   | 0             | 5              | 2.33   |         |

### 2.2.ii. Trend analysis of loan and advance to total deposit ratio:

**Total**

| year(x)      | ratio(y) | X= (x-2006.5) | X <sup>2</sup> | XY     | Yc=a+bX |
|--------------|----------|---------------|----------------|--------|---------|
| 2006         | 61.09    | -1.5          | 2.25           | -91.64 | 60.1    |
| 2007         | 57.8     | -0.5          | 0.25           | -28.9  | 60.88   |
| 2008         | 64.88    | 0.5           | 0.25           | 32.44  | 61.66   |
| 2009         | 61.33    | 1.5           | 2.25           | 92     | 62.44   |
| <b>Total</b> | 245.1    | 0             | 5              | 3.9    |         |

**NBL**

| <b>year(x)</b> | <b>ratio(y)</b> | <b>X= (x-2006.5)</b> | <b>X<sup>2</sup></b> | <b>XY</b> | <b>Yc=a+bX</b> |
|----------------|-----------------|----------------------|----------------------|-----------|----------------|
| 2006           | 55.46           | -1.5                 | 2.25                 | -83.19    | 58.07          |
| 2007           | 52.75           | -0.5                 | 0.25                 | -26.38    | 51.49          |
| 2008           | 50.24           | 0.5                  | 0.25                 | 25.12     | 44.91          |
| 2009           | 34.36           | 1.5                  | 2.25                 | 51.54     | 38.33          |
| <b>Total</b>   | 192.81          | 0                    | 5                    | -32.91    |                |

**SCBL**

| <b>year(x)</b> | <b>ratio(y)</b> | <b>X= (x-2006.5)</b> | <b>X<sup>2</sup></b> | <b>XY</b> | <b>Yc=a+bX</b> |
|----------------|-----------------|----------------------|----------------------|-----------|----------------|
| 2006           | 32.42           | -1.5                 | 2.25                 | -48.63    | 32.28          |
| 2007           | 31.8            | -0.5                 | 0.25                 | -15.9     | 34.69          |
| 2008           | 42.46           | 0.5                  | 0.25                 | 21.23     | 37.1           |
| 2009           | 36.9            | 1.5                  | 2.25                 | 55.35     | 39.51          |
| <b>Total</b>   | 143.58          | 0                    | 5                    | 12.05     |                |