

# CHAPTER – I

## INTRODUCTION

### 1.1 Background of Study

The field of finance is very broad and dynamic which affects the lives of every person and organization directly and indirectly. Financial management is mainly concerned with the acquisition and investment of fund in the productive sectors for the purpose of enhancing wealth. Investment requires collection of necessary funds and utilization of those funds towards productive sectors. Investment is the exploitation of opportunities by transferring funds from surplus to needed sectors through the transaction of financial instruments.

Investment, in its broadest sense, means the sacrifice of current currencies and resources for the sake of future currencies and resources. An investment is one of the decisions of finance function that involves the decision of capital to establish commercial or industrial venture. In other words it involves commitment of funds into long-term assets that would yield benefits in coming future period. Two aspects of the investment decisions are:

1. The evaluation of the prospective profitability of the investment.
2. The measurement and comparison of cut-off rate against that the Prospective return of the investment could be compared.

Investment is primary factor for economic development of any country. Investment is refers to as using present money to get long term benefit. Investment in its broadest sense means the sacrifice of current money for future money. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward or result of sacrifice comes later and the magnitude is generally uncertain. Time and risk are predominates for investment. Such as Investment in government bonds time is predominates whereas in common stock time and risk both are important. (Sharpe, Gordon, Alexander and Bailey: 2000:1)

Investment also refers to the expenditure of funds for capital goods such as factories, farm, equipment, livestock and machinery. Capital goods are used to produce other goods or services.

The main source of investment is saving. A distinction is often made between investments and saving. Saving is defined as forgone consumption; investment is restricted to real investment of the sort that increases national output in the future. This definition classified investment as real and financial investments. Real investments generally involve some kind of tangible assets such as land, machinery, or factories. Financial investment involves contracts written on pieces of paper, such as common stock and bonds. By and large, two forms of investments are complementary, not competitive.

Bank plays a very important role in Investment by collecting saving from individual and providing loans to individuals and industries for economic activities. Bank itself invests in different securities of the company and industries. It helps to mobilize the idle saving in financial activities. Banking has played a very important part in the economic development of all the nations of the world therefore it is termed as the life blood of modern commerce. The study mainly focuses on the Investment analysis of the commercial banks by comparing four main commercial banks of Nepal.

The term bank or banking can be referred to any person, firm or company accepting deposit of money subject to withdrawal by cheque, draft or order. While talking about investment we cannot forget that saving is primary factor for investment. If there been no saving none of the investment can be expected. So saving is the backbone of investment. Saving is needed to finance capital investment to increase and maintain the productive capacity of the country. It is commonly known fact that an investment is possible when there is adequate savings. If all the income and saving are consumed for basic needs; then there is no saving, neither existence of investment. Therefore, saving and investment are interrelated.

Financial institutions play an important role to develop the business activities by collecting from the public money. Financial institutions involve commercial banks, saving and loan associations, credit unions pension fund and insurance companies. Especially commercial banks play significant role for development of financial activities. They render various services to their customers facilitating their economic and social life. They not only collect idle money from public but also provide loan to investors, who are in need of fund. In addition they invest money in different securities.

### **1.2 Focus of the Study**

For the development of any country first it is required to have enough capital. It is the backbone for the development of the nation. Nepal lacks the adequate capital for its development planning. Due to this reason so many development planning are in pending. If there is enough capital available it can invest in the profitable project and contribute little bit in the national GDP. Investment promotes economic growth and contributes to a nation's wealth.

Due to the growth on banking sector in Nepal and huge competition, opportunity for investment are comparatively losses. In this critical situation joint ventures banks are most appropriate or best suited because of their abundant resources, new technologies, sufficient capital and above all high integrity. Joint ventures banks can easily redress the problem faces by others and avoids many risks in investment by formulating and implementing good policy for proper utilization of funds. The fundamental principles of investment must be followed thoroughly for profitable investment.

The establishment of the Joint Venture (Commercial) banks has given a new horizon to the financial sector of Nepal. The study is mainly focused on the investment policy of a joint-venture bank namely Standard Chartered Bank Nepal Ltd., Nabil Bank Ltd., Everest Bank Ltd., and Nepal SBI Bank Ltd., in the Five year period form 062/63 to 066/67.

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

Nowadays banking industries are facing various problems from external environment such as political legal, economic and social. The unstable politics is the main cause that has negative impact in the development of the banking sector. Banking sector is not growing, as it ought to be, though it is growing. Various policies launched by NRB may be advantageous from the viewpoint of nation but it is providing unnecessary interference in the daily transaction of the Commercial Banks. The other common problems faced by both joint ventures banks and state owned Commercial Banks is the cutthroat competition between them. New entry of banks and financial companies has made the tough competition compared to the joint venture banks due to their nature of work and social responsibility. In Nepal banks are acting only as the depositories of communities' savings and lent such savings to those who are in need and are acceptable to the banker to certain criteria. They are mainly guided by the objectives of profit maximization, which provides synergistic effect again to encourage savings. These Commercial Banks are active only in the urban area because they expect great opportunities for the maximization of profit. Rural areas are being neglected. Because of the increased banking industries, competition is tough today and they are facing the problem of proper investment opportunities. They collect adequate finance from mass but could not find or locate new investment sectors required to mobilize their funds. Many banks or companies succumbed to liquidation although they had sustainable investment sectors. It has ensured bad impact on interest rate to the depositors, lower market value of share etc.

The main economic goal of developing countries is to accelerate the growth rate. Although most of the developing countries are predominantly agricultural, Industrial development is crying need of these countries for their economic development and investment is the dominant factor for industrial development. But rate of investment in Nepal is very low. The main cause behind it is political instability, low investor confidences, lack of knowledge on Investment management, lack of improved prospectus to investors, restriction on foreign portfolio investment of Nepal, lack of efficient capital market and slow privatization process.

Investment greatly depends on saving behavior of citizens but the saving rate of Nepalese is very low because most of the citizens are below poverty level. They don't have enough income for daily consumption. Some people hardly save some money but they want to save for future. Only few people invest in industries. People must be motivated to use their saving and mobilize their excess fund in economic activities.

Due to tough competition and lack of peace and political instability, Nepalese banks are facing problem to invest their funds in different sectors. So the banks have facing low liquidity transaction. In other side the demand of loan is very low.

Nepal is considered much liberal as banks and finance institution are opened for foreign Investment for quite a long time. As a result, the country now has 30 commercial banks which is a lot of improvement in the banking sectors. Most of the big commercial banks in Nepal are joint venture with a foreign bank. But some of the new banks were opened during last decade without foreign collaboration and some foreign banks have withdrawn their Investment from Nepal.

With some 31 commercial banks, 59 development banks and 78 financial companies operating in Nepal, the market seems overcrowded and the banks are now finding a tough competition among themselves. Since the entry barriers are not so high due to the governments liberal policy, this competition is expected to be more intense in the near future, as there is always the possibility of a new player entering this sector.

Nepalese commercial banks have not formulated their Investment policy in an organized manner. They mainly rely upon the instruction and guidelines of Nepal Rastra Bank. They don't have clear view towards Investment policy. There is a lack of sound Investment policy of commercial bank. Furthermore, the implementation of policy is not in an effective way. Commercial banks have to face tough competition due to limited and narrow capital market and investment opportunities. They are even discouraging depositors by offering very low interest and minimum threshold balance. This will definitely make bad impact on economy of a country. There is lack of knowledge on

financial risk, interest rate risk, management risk business risk, liquidity risk, default risk, purchasing risk etc.

Commercial banks don't seem to invest their funds in more profitable sector. They are found to be more interested Investment in risky and highly liquid sector i.e. treasury bills development bonds and other securities. They keep high liquid position and flow lower funds to the productive sectors, this result into lower profitability to commercial banks and ignorance to the national economic growth process. This is the main reason for crisis in the commercial banks and in the whole national economy as well.

In such a critical situation could commercial banks maintain their investment activities to growth the economy of nation? Could sample banks follow the rule of NRB and would they maintain for future?

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

Investment is necessary for economic development of the country. This study attempts to assess the role and impact of Investment on economic development of the country.

The main objectives of this study are as follows:

1. To see the Investment made by selected commercial banks in total Investment made by commercial banks.
2. To see Fund utilization or Investment trend and situation of selected banks.
3. To identify Investment sector of selected commercial banks.
4. To study the relationship between investment and Deposit of the banks.
5. To make the suggestion, recommendation of the study.

#### **1.5 Limitation of the Study**

This study is done for partial fulfillment for masters of Business studies (MBS). Time constraints financial problem and lack of research experience will be the primary limitations and other limitations are:-

- This study is confirmed to four commercial banks. These banks are of average in nature. They are expected to depict the true picture of banking in Nepal.

- Non-availability of various references or sources and lack of sufficient time is another limitation faced to complete this research work.
- Validity of secondary data depend on opens the source.
- This study is mainly based on the secondary data available and NRB and concerned banks.
- Validity of secondary data relies opens the source.

## **1.6 Organization of the Study**

The whole study will be divided into five chapters.

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

This chapter will deal with introduction. This includes background, statement of problem, objectives of the study, limitation of the study and organization of the study.

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

This chapter includes the review of the relevant studies. It deals with the review of available literature. It includes review of books, journals, previous thesis and web sides etc. Beside this it includes various related study of the articles and unpublished thesis.

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

This chapter explains the research methodology used in the study, which includes research design, source of data, population and samples, method of data analysis etc.

### **Chapter IV: - Data Presentation and Analysis**

The fourth, which is the important chapter of the study, will include presentation and analysis of data.

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

The fifth chapter summarizes the main conclusion the flows the study and offers suggestions, recommendation for further improvement and conclusion of the study. A bibliography and appendices will be attached at the end of the study.

## **CHAPTER –II**

### **REVIEW OF LITERATURE**

The term review of literature is very important for researcher or investigator in the area of concern problem. It distributes the knowledge and information for the researcher to discover the uncover things by other researcher. So, review of literature means reviewing the research studies or other relevant propositions in the related areas of the study. So that all the past studies, their conclusion and deficiencies may be known and further research can be conducted. It is an integral and mandatory process in research works.

The main reason for a full review of research in the past is to know the outcomes of those investigators in areas where similar concept and methodologies had been used successfully. Further an extensive or even exhaustive process of such review may offer vital links with the various trends and phases in the researches in one's area of specialization, familiarizing with characteristic percepts, concept and interpretation with special terminology with the rationale for understanding one's proposed investigation.

This chapter shows the background of the work and a review of recent and reticent literature. In this regard, basic academic course books specially related to topic, some of the major research works, major articles published in journals and the related thesis are reviewed.

This chapter of the study is basically concerned with conceptual framework and review of literature relevant to the investment analysis of commercial banks. Every study is much based on past data, knowledge and activities. The study of past knowledge should not be ignored as it provides foundation to the present study. So, the analysis and presentation of following parts define this chapter.

## **2.1 Conceptual Review**

### **Concept of Bank**

Most people store their money with bank, which keeps an account of how much money is customer deposit. People gain access to their money through cash machine, counter transaction or by writing cheques. Banks may provide interest when a certain amount of money is kept in the account, but will charge customers who borrow money. Banks also provide financial services, such as pensions and insurance policies. (The world Book Encyclopedia: 2003: 91)

According to World Bank, “Banks are financial institutions that accept funds in the form of deposit repayable on demand or in short notice.” (Joshi: 1990: 78)

In brief, bank is an institution, which accepts deposits in deposit in different accounts, provides loans of different types and creates credit.

In general, the term bank is used to mean commercial bank. The commercial bank is the oldest type of bank. The profit maximization is the main objective of this bank. The modern commercial banks collect deposits in current, saving and fixed account from general public and the institution. It provides loans to individuals and institution from the deposits. In this way bank mobilize saving for productive works and thus for industrial development. The modern commercial banks provide loan not only to traders but also to agriculture, industry and service. Although this bank concentrates itself on short-term loan, it has started to provide even medium and long-term loans to some extent. The difference between the rate of Investment on deposits and loan is the main source of its income. The function of a commercial bank is not unique in all countries.

The banks that collect deposits and advance loans are called commercial banks. According to these definition commercial banks accepts deposit and provide loans but other financial institutions also collect deposits. To differentiate commercial bank from other institution Dr. Shyam Joshi had defined it as a great institution that conducts the payment mechanism of a country. The individuals and institution make payment to each other through the mechanism of commercial bank. The commercial

bank plays a leading role in the smooth operation of an economy. It makes available all financial services to individuals and institutions. (Joshi: 1990: 81)

Commercial banks are those banks, which pool together the saving of the community and arrange them for the productive use. They accept deposits from the public and provide same deposits to the public as loan and advances. In fact, they circulate the money and create credit. The concept of the commercial banks made the economy strong. And now it's playing important role to make country economically strong. According to the Black's law Dictionary "Commercial Bank" means a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time-deposit boxes, and to provide similar services. Likewise section 2(a) of the Commercial Bank Act 2031 has defined that "Commercial Bank" means a bank which operates currency exchanges transactions, accepts deposits, provides loan perform, dealings, relating to commerce except the banks which have been specified for the co-operative, agricultural, industry of similar other specific object. (Bhandari; 2003; 3).

Hence, the term commercial bank is used taking meaning of all banking habits. That's why joint stock banks, member banks, and credit banks are frequently used interchangeably with the term commercial banks. But it is different that central bank. Central Bank cannot be interchangeable with other banks. In this way, a commercial bank is different from a central bank. While the primary objective of a commercial bank is the maximization of profit and central bank is primarily concerned with the effects of its operations on the functioning of the economy. Moreover, while there may certainly be many competing commercial banks, there exists only one central bank in a country. While the commercial banks compete against each other, the central bank comes out if any; ordinary banking business for the general public, incomplete if confines itself mainly to controlling the operations of the banking system in country.

In general, bank means an institution that accepts deposits in different accounts and provides loans of different types. Bank can be defined according to the functions of a bank or the service it provide such as commercial bank, central bank and industrial bank. In the words of leaf a bank is a person or corporation which holds it out to receive from the public, deposits payable on demand by cheque.

## **Concept of Investment**

Investment is a present sacrifice for the sake of future benefits. Therefore, investment always involves risk. Present decision about selecting the best alternatives should always take the future risk into consideration. The few alternatives of investment in the past have now expanded into hundreds. Hence, the complexity of investment has also been increasing day by day. To select the best alternative and to construct an efficient portfolio, a wise analysis and decision is required. Before making any decision on investment we must be well informed about the factors, which affect investment. Investment decision related with saving, capital formation, capital market, risk involve with it, return, inflation etc.

Investment, in its broadest sense, means the sacrifice of current rupees (dollars) and resources to the sake of future rupees (dollars) and resources. In other words, it is a commitment of money and other resources that are expected to generate additional money and resources in the future. Such a commitment takes place in the present and is certain to occur but the reward comes in the future and always remains uncertain. Therefore, every investment entails some degree of risk.

Investments are made in assets. Assets generally are two types: real assets (Land, Building, Factories etc) and financial assets (Stock, Bonds, T-Bills etc). These two types of investment are not competitive but complementary, highly developed institution for financial investment greatly facilitating real investment. (Bhattari: 2005: 1)

Country's growth rate is largely depending on Investment and commercial banks are key for investing funds in productive works as they deal with money. They collect funds and utilize it in a good Investment, which is not an easy task for them. Therefore an Investment of funds may be the question of life and death for the bank. They must have effective and good Investment policy to exist in this world of competition.

The problem of the investor is to select the funds whose objectives and degree of risk taking most closely match its own situation. The one that will accomplish for him what he would wish to do for himself if he could diversify and manage his own holding. (Bhalla :1983: 2)

Investment is the value of that part of economics output for any time period that takes the form of new structure, new producers' durable equipment and change in inventories. (Joshi: 2057: 89)

There is risk associated with Investment, as alas, there is risk associated with most elements of our lives. In the eyes of investors and creditors, a company's business risk complexion may change as a result of the investment it chooses. Because Investment proposals entail differing degrees of business risk, we must analyze not only their expected profitable but also the possible deviation from that expectation. Risk is expressed in terms of the dispersion of the probability distribution of possible net present values or possible internal rates of return and is measured by the standard deviation. Risk can be measured under the assumption of serial independence of cash flows over time or when cash flows from one period to the next are dependants over time. For dealing with situation of moderate correlation of cash flows over time, probability trees are useful. Simulation techniques often can be applied to analyze risk Investment. (Vanhorn: 2003: 124)

In world book (2003), it states that Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in a saving account in bank. For example, the bank may invest by lending the fund of various business companies. These firms, in return, may invest the money in new factories and equipment to increase their production. In addition to borrowing from the banks, most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion. Government also issue bonds to obtain funds to invest in such projects as the construction of dams, roads and schools. All such Investment by individuals, business and govt. involves a present sacrifice of income to get an expected future benefits. As a result, Investment raises a nation's standard of living. (The world Book Encyclopedia: 2003: 323)

The above statement clearly specifies the importance of Investment and the role of banks for the development of the country. Banks is the major financial need for the various developments. The banks can play the vital role for the financing activities in the business. The saving and Investment is most necessary for the developing country, which can be managed by banks. Capital accumulation also plays vital to accelerate

the economic marginal propensity of consumption. As a result, such countries are badly in trapped into the vicious circle of poverty. Therefore the basic problem of the developing of the countries is to raise the level of saving and thus Investment and the problem can be solved through well-established banks.

### **2.1.1 Features or Principle of Sound Investment Policy**

It is universally known fact that the most important problem in banking administration is that of investing its deposits and paid up capital in various forms of earning assets. This is also known as portfolio policy. The bank's portfolio being nothing but an arranged and digested scheme of its assets.

The funds of banks are generally invested either in those assets, which are non-profitable, or those, which are profitable. Non-profitable assets include cash reserve and the dead stock and profitable assets includes call money, investment, advances and loan, cash credits, overdrafts, discounting of bills and acceptances etc.

The guiding principal of sound Investment is as follows:

#### **1. Safety**

Safety would be the first guiding principal of a bank, so far as its advances and investment are concerned, because the very existence of a bank depends on the safety of its outstanding, which should never therefore be sacrifice to the profit-earning capacity of its advances. This has led people to believe that a bank will never advance any loan, unless it is fully secured. Such is no doubt the ideal conception of banking, but as a result of its competition from other banks, every bank has to grant a certain number of loans to its customers against their personal security. In such cases, the bank uses direction and never lends a sum obviously beyond its customer's resources. Consequently, to maintain a banking concern in sound condition should be above suspicion. Scrupulous care should be taken that the funds lent out are not subject to any risk of being lost.

#### **2. Liquidity**

While making advances and Investments, the bank must see that the money it is lending is not going to be locked up for a long time, which would make its loans and advances less liquid and more difficult to realize in cases of emergency. A bank can

afford to lend funds only for a short period, as its liabilities are either payable on demand or at short notice. If it makes advances for long term there is no likelihood of it being able to recall such loans in time to meet the demands of its depositors.

### **3. Diversification of Risk**

It is also necessary to remember that a prudent bank must avoid investing all its funds in meeting the needs of any one industry or any one group of industries for considerations of self-interest as well as the larger public good. The imprudence on putting one's own eggs into one basket cannot be too often reiterated. Therefore bank should invest their funds in different field than investing in same field or sector.

### **4. Return**

Another important factor that will determine the decision of the bank whether or not to grant loan or to make an Investment will depend upon the answer to the question whether or not it will get a fair return on its Investment. A bank always aims at securing maximum profits for its share-holders. The difference between borrowings and lending rate constitutes the gross profit and no bank ordinarily will think of an advance without a satisfaction margin of profit.

### **5. Marketability**

The investments of the bank should be such as can be easily sold and realized in cash readily. Loans given against commercial paper representing goods in transit or against stocks and shares of well-known companies are easily realizable while loans given against immovable property cannot be easily realized. The bank must make sure that the securities, in which he invests his funds, are easily saleable without appreciable loss.

### **6. Stability of Price**

The primary object of a bank in buying securities is not to gain by a possible rise in their prices, which is the aim of a speculating dabbler. Therefore the price of the securities should be liable to wide fluctuations.

## **7. Stock Exchange Securities**

This consists of government securities as well as securities of the joint stock companies. These securities are easily and quickly realizable. As they are quoted on the stock exchanges so their value can be easily ascertained. In case of need, a bank can either sell them or pledge them without any hesitation. But before accepting them, the bankers should see that the shares of the companies are not partly paid, that sufficient margin has been kept and they are negotiable. Speculative shares should not be accepted. **(Mali: 1965: 23)**

### **2.1.2 Some Important Terms**

The study in this section comprises of some important banking terms for which efforts have been made to clarify the meaning, which are frequently used in this study, which are given below.

#### **a. Loan and Advances**

Loan, advances and overdraft are the main source of income for a bank. Bank deposits can cross beyond a desired level but the level of loans, advances and overdraft will never cross it. The facilities of granting loan, advances and overdrafts are the main service in which customers of the bank can enjoy.

Funds borrowed from the banks are much cheaper than those borrowed from unorganized money lenders. The demand for loan has excessively increased due to cheaper interest rate. Furthermore, an increase in an economic and business activity always increases the demand for funds. Due to limited resources and increasing loans, there is some fear that commercial banks and other financial institutions too may take more preferential collateral while granting loans causing unnecessary botheration to the general customers. Such loans from these institutions would be available on special request only and there is a chance of utilization of resources in economically less productive fields. There lies the undesirable effect, of low interest rate.

In addition to this, some portion of loan, advances and overdraft includes that amount which is given to staff of the bank for house loan, vehicle loan, personal loan and others, in mobilization of commercial banks fund, loan, advances and overdrafts have occupied a large portion.

### **b. Investment on Government Securities, Share and Debenture**

Though a commercial bank can earn some interest and dividend from the investment on government securities, share and debentures, it is not the major portion of income, but it is treated as a second source of banking business. A commercial bank may extend credit by purchasing government securities bond and share for several reasons. Some of them are given as:

- It may want to space its maturate so that the inflow of cash coincide with expected withdrawals by depositors or large loan demands of its customers.
- It may wish to have high-grade marketable securities to liquidate if its primary reserve becomes inadequate.
- It may also be forced to invest because the demand for loans has decreased

or is not sufficient to absorb its excess reserves. However, investment portfolio of commercial bank is established and maintained primarily with a view of nature of banks liabilities that is since depositors' may demand funds in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in volume.

### **c. Investment on Other Company's Share and Debenture**

Due to excess funds and least opportunity to invest there funds in much more profitable sector and to meet the requirement of Nepal Rastra Bank's directives many commercial banks have to utilize their funds to purchase shares and debentures of many other financial and non-financial companies. Nowadays most of the commercial banks have purchased regional development bank's and other development bank's shares.

### **d. Deposits**

For a commercial bank, deposit is the most important source of the liquidity. For bank's financial strength, it is treated as a barometer. In the word of Eugene, "a bank's deposits are the amount that it owes to its customers." Deposit is the lifeblood of the commercial bank. Though, they constitute the great bulk liabilities, the success of a bank greatly depends upon the extent to which it may attract more and more

deposits, for accounting and analyzing purpose, deposits are categorized in three headings. They are: Current Deposits Saving Deposits Fixed Deposits

### **2.1.3 Review of Legislative Provision**

Legislative environment has significant impact on the commercial banks established, their mobilization and utilization of resources. All the commercial banks have to conform to the legislative provisions specified in the commercial bank act 2031 and the rules and regulation formulated to facilitate the smooth running of commercial banks.

Under the provision in Nepal Rastra Bank, (NRB) Act 2002, the NRB has formulated and implemented monetary policies so far. The focus of monetary policy has been to insure price, external and financial sector stability so as to create the environment supportive for high and sustainable economic growth.

NRB issues new monetary policy on July, 2010 for fiscal year 2010/11. The provision under this policy as follows:

- i. The compulsory cash reserve ratio (CRR) has been kept unchanged at minimum 5.5 Percent on account.
- ii. The capital adequacy ratio (CAR) should have to maintain 11.0 percentages.
- iii. Export credit refinance facility in domestic currency has been kept unchanged at 2.0 percent. Commercial banks are allowed not to charge more than 5.0 percent to the concerned borrower on such facility.
- iv. The penal rate for SLF has been kept unchanged at 3.0 percent along with the existing cap of 90 percent and maturity period of 5 days.
- v. The existing provision of refinance facility of Rs. 2 billion to sick industries and the refinance rate at 1.5 percent will be continued for 2010/11.
- vi. The commercial banks, development banks and finance companies are now required to invest in government securities at a ratio of 6.0 percent, 2.0 percent and 1.0 percent of their total domestic deposit mobilization respectively by second quarter of 2010/11. Such ratio should be

maintained at a rate of 8.0 percent, 3.0 percent and 2.0 percent respectively by the end of fourth quarter of 2010/11.

(Source: Monetary Policy for Fiscal Year 2010/11 NRB, Press Release on July 2010, Central office, Baluwatar, Kathmandu, Nepal)

## **Regulatory functions of NRB**

### **16 prudential regulations of Nepal Rastra bank are as follows:**

- ❖ Regulation regarding minimum capital fund.
- ❖ Regulation regarding Loan classification and provisioning.
- ❖ Regulation regarding single obligor limits and credit concentration.
- ❖ Regulation regarding Accounting policies and financial statements
- ❖ Regulation regarding Risk Management
- ❖ Regulation regarding Good corporate Governance.
- ❖ Compliance with supervision reports and reporting
- ❖ Regulation regarding Investments
- ❖ Financial reporting
- ❖ Buy and sale of promoter's share
- ❖ Regulation regarding consortium
- ❖ Regulation regarding interest rates, buy and sale of promoters share,
- ❖ Credit information and blacklisting etc.
- ❖ Regulation regarding CRR
- ❖ Regulation regarding expansion of Branches
- ❖ Regulation regarding Interest rates
- ❖ Regulation regarding resource Mobilization

## **2.2 Review of Articles**

With the title of '*Banking the future on competition*' Mr. Sharma wrote in Business age 2000 that the commercial banks are establishing and operating mostly in urban areas. From his studies he found that:

- Commercial banks are establishing and providing their service in urban area only. They don't have interest to establish in rural areas. Only the branch of Nepal Bank Ltd and Rastriya Banijya Bank Ltd. are running in those sectors.
- They have maximum tax concession.
- They don't properly analyze the credit system.

He found that due to the lack of Investment avenues, banks are tempted to invest without proper credit appraisal and personal guarantee, whose negatives side effects would show colors only after four or five years.

According to Pradhand and Yadav, in title of “*The Economic Journal of Nepal*”(2002), saving is income not consumed. It is one the important and perhaps the chief sources of Investment. In developing countries about 45% of the incremental saving is invested domestically, while in developed countries about 75% of the incremental saving is invested domestically. This suggests that capital is more mobile in developing countries than in developed countries. Saving are of great significance in a country’s development. While saving results in high economic growth rate, rapid development leads in turn high savings. Nepal’s saving rate is lower as to other developing countries, however, even to achieve 5 to 6 percent economic growth rate, more than 25 percent annual Investment of GDP is considered necessary. As the country’s current domestic saving are about 14% the economic resources are short by nearly 11% in proportion of the GDP.

The situation is such that huge portion of Investment has still to be made with external resources. The amount of saving of a typical household in Nepal is small because of the people have limited opportunities for Investment. They prefer to spend saving on commodities rather than on financial assets. This restricts the process of financial intermediation, which might otherwise bring benefits such as reduction of Investment risk and increase in liquidity. When capital is highly mobile international, saving from aboard can also finance the Investment needed at home. When capital is not mobile internationally, saving form abroad will limit Investment at home.

Wherever there is Investment there must be Capital formation. The development of an economy requires expansion of productive activities, which in turn is the result of the capital formation, which is the capital stock of the country. The change in the capital stock of the country is known as Investment. Therefore Capital formation is closely related to investment. Investment generally takes two forms:

- i. Financial Investment and
- ii. Physical Investment

Physical Investment related to real Investment in the economy or industry, which is known as capital formation. Capital formation shows the change in gross fixed assets of productive units of manufacturing industries.

Capital formation refers to the creation of physical productive facilities such as building tools, equipment and roads. The process of adding to the amount of stock of the real assets produces growth in the economy. It means increasing a country's stock of real capital. It implies additions to the existing supply of capital goods in a country. It represents an additional of new capital stock to existing stock after deducting depreciation, damage and other physical deterioration of the existing capital stock. Economic progress in country depends upon its rate of capital formation. Hence, a key factor in the development of an economy is the mobilization of domestic resources. In the process of capital formation, the capacity to save by certain classes of people and institution becomes quite important. These people have varied asset-preferences, which change from time to time. The need of entrepreneurs who actually use savings for productive purpose also varies over time.

Yadav Pant wrote in "*info Himalayan*" (2003), a bank is a service-oriented institution, which provides many kinds of services for its customer, all of which are equally important. Moreover, the quality of services should be up to the mark to meet the customer's requirement. Customers are the key players for a service organization, without whom such organization can never exist.

### **2.3 Review of Thesis**

There are a lot of research have been performed on Investment policy of Commercial banks. The findings of some of the studies are presented below.

S. Thapa (2001) made "*a comparative study on Investment policy of Nepal Bangladesh Bank Limited and other joint venture banks*". Her main objectives were as follows:

- ❖ To analyze the relationship between loan and advance and total investment with other financial variable of NB bank and compare with NABIL and NGBL.
- ❖ To evaluate the liquidity, asset management efficiency, profitability and risk position of NB bank in comparison to NABIL and NGBL

- ❖ To study the various risks in Investment of NB bank in comparison to NABIL and NGBL.

From her study she found that NB bank has good deposit collections, it has better liquidity position, it has made enough loan and advances but it has made the negligible amount of Investment in government securities. She found that credit risk ratio, interest risk ratio, capital risk ratio, and profitability position of NB bank is comparatively worse than that of NABIL and NGBL. She also found that there is significant relationship between deposit and loan and advances, outside assets and net profit of NB bank. But there is no significant relationship between deposit and Investment of NB bank and the position of NB bank in regard to utilization of fund to earn profit is not better in comparison to NABIL and NGBL. She recommended NB bank to invest more in government securities, to implement sound credit collection policy, to upgrade its banking facilities, to implement sound and liberal lending policy to make more improvement in loan and advances.

Mr. Shiba Raj Loudari (2001) conducted a study on “*A study on investment policy of Nepal Indosuez Bank Ltd. in comparison to Nepal SBI Bank Ltd.*” with the objectives of:

- ❖ To examine the liquidity asset management and profitability position and investment policy of NIBL in comparison to Nepal SBI Bank Ltd.
- ❖ To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal SBI Bank Ltd.
- ❖ To analyze relationship between deposit and investment, deposit and loans and advances, net profit and outside assets of Nepal Indosuez Bank Ltd. in comparison to Nepal SBI Bank Ltd.

The study was conducted through secondary data. The research findings of the study are as follows:

- ❖ Current ratios for both the Banks is satisfactory.
- ❖ Although cash reserve ratio (CRR) is managed by both banks as per Nepal Rastra Bank directives, both banks have not paid sufficient insight toward cash management. Their cash reserves have fluctuated in a high degree.
- ❖ Nepal SBI Bank Ltd. has increased investment in government securities where

as Nepal Indosuez Bank Ltd. has decreased.

- ❖ Deposit utilization of Nepal Indosuez Bank Ltd. is less effective than that of Nepal SBI Bank Ltd. Further Nepal Indosuez Bank Ltd. has invested lesser amount on government securities and share and debenture than that of Nepal SBI Bank Ltd.
- ❖ .The analysis of growth ratios shows that growth ratios of total deposits, loans and advances, total investment and net profit of Nepal Indosuez Bank Ltd. are less than that of Nepal SBI Bank Ltd.
- ❖ The trend value of loans and advances to total deposit ratio is decreasing in case of both the banks. The trend value of total investment to total deposits ratio is also decreasing in case of both the banks.

Mr. Lila Prasad Ojha (2002) conducted a study on “*Lending Practices: A study on NABIL Bank Ltd., SCB Nepal Ltd. and Himalayan Bank Ltd.*” with the objectives of:

- ❖ To determine the liquidity position, the impact of deposit in liquidity and its effect on; lending practices.
- ❖ To measure the bank’s lending strength.
- ❖ To analyze the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector.
- ❖ To measure the lending performances in quality, efficiency and its contribution in total income.

The study was conducted on the basis of secondary data. The research findings of the study are:

- ❖ The measurement of liquidity has revealed that the mean current ratio of all the three banks is not widely varied. All of them are capable in discharging their current liability by current asset.
- ❖ The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan Bank Ltd. has high volume of saving and fixed deposits as compared to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.

- ❖ The loan and advances and investment to deposit ratio has shown that NABIL Bank Ltd. has developed the highest proportion of its total deposits in earning activities. This is the indicative of that in fund mobilizing activities NABIL Bank Ltd. is significantly better.
- ❖ The lending in commercial purpose is highest in case of NABIL Bank Ltd. and least in case of SCBNL. SCBNL has highest contribution in service sector lending. It has contributed 25.47% of its total credit in general use and social purpose.
- ❖ The ratio of investment to investment and loan and advances has measured the total portion of investment in total of investment and loans and advances. The mean ratio among the banks does not have deviated significantly.

B. Bohara (2002) also made “*a comparative study on Investment Policy of Joint Venture Banks and finance companies of Nepal*”. With the objectives of:

- ❖ To study the growth ratios of loans and advances and investment to total deposit and net profit of JVBS in comparison to finance companies.
- ❖ To analyze relationship between deposit and investment, deposit and loans and advances, net profit and outside assets of JVBS in comparison to finance companies.
- ❖ To examine the liquidity asset management and profitability position and investment policy of JVBS in comparison to finance companies.
- ❖ To determine the liquidity position, the impact of deposit in liquidity and its effect on; lending practices.

They main results of his study were as follows:

- ❖ sample firms have the higher current ratio than 1, so the liquidity position of those firms is good, they can easily maintain the liquidity crisis, the cash and bank balance to total deposit ratios of finance companies is higher than that of JVBS.
- ❖ The average loan and advance to total deposit ratios of finance companies are higher than JVBS, which indicate that finance companies are successfully invested their deposit collections as loan and advances in comparison to JVBS.

- ❖ Total Investment to total deposit ratio of JVBS except BOKL is greater than that of finance companies.
- ❖ Profitability position of the JVBS except BOKL is better than that of finance companies. But return on total asset ratios is higher than that of JVBS.
- ❖ JVBS have a large amount of risk weighted assets than finance companies. Comparatively, interest-bearing liabilities are lower in JVBS and they have more interest bearing assets.
- ❖ The growth ratio of total Investment of finance companies is comparatively higher than that of JVBS.
- ❖ Finance companies have the higher correlation coefficient between total deposit and Investment.
- ❖ Trend values of total Investment and deposits of all the firms are in increasing trend.

He recommends evaluating the Investment opportunities and alternatives using statistical, capital budgeting and other financial tools to avoid the large amount of doubtful debt and risks. He also suggests expanding their branches in rural sectors, so that scattered fund can be mobilized and their available deposit collections can be granted for the development of the country and improvement of living standard of the people. He recommended the selected firms to prepare future Investment policies, plan after detail analysis of causes and effect of the variables. At the end he suggested the selected firms to make continuous effort for portfolio Investment.

P. Dhungana (2002) in his thesis, *“A Comparative Study on Investment Policy of Nepal, Bangladesh Bank and Other Joint Venture Banks”*, tries to compare the Investment policy of NBBL with HBL and NSBI. His main findings and conclusion were as follows:

- ❖ NBBL has not good deposit collection, it doesn't have made enough cash and bank balance and it has made negligible amount of Investment in government securities.
- ❖ The Asset management ratios were highly variable which reveals NBBL has not followed stable policy.

- ❖ NBBL's ratio of OBS operation to loan and Advances lower than that of HBL but its ratio is greater than that of NSBI.
- ❖ The profitability position on NBBL is comparatively not better than that of HBL but better than that of NSBI.
- ❖ The credit risk ratios and interest risk ratios of NBBL is higher than that of HBL and NSBI. Banks profitability is solely depends on Interest charged by a bank but the high interest rate risk of NBBL shows that bank is failure to maintain this.
- ❖ Trend of deposit collection, lending, Investment and net profit were not better than HBL but better than NSBI.

He recommended increasing liquidity position of NBBL and making more Investment in government securities. He also suggested NBBL to implement a sound collection policy and more mobilization of interest bearing assets. He further suggested NBBL to have effective portfolio management, to have liberal lending policy and to upgrade the banking facility.

T.K. Raya (2003) in his thesis, "*Investment Policy and Analysis of Commercial Banks in Nepal*" made a comparative study of SCBNL. With NIBL and NB Bank. His main objectives were as follows:

- ❖ To discuss fund mobilization and Investment policy of SCBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction.
- ❖ To evaluate the quality, efficiency and profitability and risk position.
- ❖ To evaluate trend of deposit, Investment, loan and advances and projection for next years.

His main findings were as follows:

- ❖ Mean current ratio of SCBL is slightly higher than that of SCBL and Nepal Investment bank.
- ❖ Mean ratio of cash and bank balance to total deposit of SCBL is lower than NIBL and NBBL.

- ❖ Liquidity position of SCBL is comparatively better than NIBL and NBBL. It has the lowest cash and bank balance to total deposit and cash and bank balance to current ratio. SCBL has a good deposit collection. It has made enough Investment on government securities but it has maintained low Investment policy on loan and advances.
- ❖ SCBL is comparatively average successful in it's on balance sheet operation. But off balance sheet operation activities in compared to NIBL and NBBL has maintained the strong position.
- ❖ SCBL is comparatively higher position than that of other banks, as well as its use to provide interest to the customers for different activities.
- ❖ There is significant relationship between deposit of loan and advances and between asset and net profit of SCBL.

He recommended the SCBL for effective portfolio management and for project oriented approach. He also suggested enhancing the Off Balance Sheet operation.

D. Shrestha (2003) in her thesis, "*Investment Analysis of Commercial Banks*" a comparative study of HBL and Nepal SBI bank said that only joint venture commercial banks are running in profit. And HBL is one of the successful commercial bank of Nepal. Nepal SBI is still in developing period. HBL has made a great achievement within last 10 years period. It has also invested in different sectors. These commercial banks should take favorable step for the development of rural parts of the country.

Banks plays a crucial role in sustainable development of least developed countries. Because of bottlenecks inherent in the economics of least developed countries are either unemployed or under-employed or only seasonally employed. It can absorb the population in gainful employment activities. Thus, they can play an important role in poverty alleviation in the country. The major sources for financial resources to industries in the least developed countries are the commercial banks. They account almost 80 to 90% of the total lending to enterprise. This study is concerned with the Investment analysis of commercial banks of Nepal.

K.S. Silwal (2004) in her thesis, *“Investment Policy of Commercial Bank” a comparative studies of NABIL and SBI Banks* on the basis of analysis and findings of the study as follows:

- ❖ The liquidity position of a bank is affected by external as well as internal factors. The affecting factors may be interest rates, position of loan and advances and savings, investment situations, central banks directives, the lending policies, capability of management and so forth. As NABIL has maintained ratios of cash and bank balance to total. So, NABIL is recommended to increase cash and bank balance to meet current obligation and loan demand.
- ❖ To get success in competitive banking environment, depositor’s money must be utilized as loan and advances. Negligence in administering this asset could be one of the main reasons of a bank failure. It has been found from the study that SBI has greater ratios of all because its large portion of fund is invested as loan and advances but neglected to invest on other sectors. NABIL has not properly used its existing fund as loan and advances. To overcome this situation NABIL is strongly recommended to follow liberal lending policy.
- ❖ Commercial banks cannot move away from their target that is profit and customers satisfaction. They should be careful in increasing profit to maintain the trust of shareholders, investors and customers. SBI profitability position is worse than that of NABIL. So, SBI is recommended to utilize risky assets and shareholders fund to gain highest profit margin.

Although the securities issued by government yields the lowest interest rates are considered to be risk free. From this study, it is found that SBI has maintained lowest in comparison to NABIL. Therefore, it is recommended to SBI that if it has idle funds it should invest them in government securities. It should always look from the “something is better than nothing” viewpoint. □

- ❖ Most of the JVBs have focused their banking services especially to big clients such as multinational companies, large-scale industries and so forth. The minimum level of bank balance and the amount needed to open an account in banks are very high. So, small depositors are very far from enjoying the

banking facilities provided by such JVBs. Therefore, these banks should open its door to the small depositors and entrepreneurs for promoting and mobilizing small investor's funds. □

- ❖ The project oriented approach has be encouraged in lending business of the banks, in which security is not necessary, risk is high but the project is important from the point of view of national economy. So, it is recommended to both banks to follow the project-oriented approach. □
- ❖ In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients.

B.B Aryal (2005) has conducted a study on “*Investment Policy of JVBs in Nepal*” a comparative study of EBL with NABIL Bank and NB Bank Ltd. He found that;

- ❖ The liquidity position of EBL is comparatively better than NABIL and NBBL. It has higher cash and bank balance to total deposit can cash bank balance to current assets ratio. It has made enough investment on government securities but has maintained moderated investment policy on loan and advances.
- ❖ EBL is comparatively average successful in it's on balance sheet operation as well as off balance sheet activities in compared to NABIL and NBBL.
- ❖ Profitability ratio of EBL is comparatively worse than the NABIL and NBBL.
- ❖ Risk ratio shows that EBL has maintained higher risk which indicates heterogeneous variability in its operation. Whereas there is moderate risk taken by NABIL and NBBL
- ❖ EBL has maintained high growth rates in total deposit, loan and advances but has moderate position in investment. EBL has less growth rate than NABIL and NBBL.
- ❖ EBL has the highest value of coefficient of correlation between deposit loan and advances that other compared banks. Likewise correlation coefficient between deposit and total investment is also higher than other compared banks. EBL is moderately successful in mobilization of fund and earn return i.e. net profit from such mobilized funds.
- ❖ The deposit of EBL, NABIL and NBBL are in increasing trend which leads its profit also to the increasing trend.
- ❖ There is no significance difference in between loan and advance to total

deposit, no differences to current assets ratio likewise no significance difference in between loan and advances to current assets ratio of EBL, NABIL and NBBL.

- ❖ There is significant different between OBS operation to loan and advances of EBL, NABIL and NBBL. Likewise there is significant difference in between total interest earned to total outside assets of EBL, NABIL and NBBL.

J .Joshi (2005) has conducted a study on “*Investment Policy of Commercial Bank of Nepal*” a comparative study of EBL with NABIL Bank and BOK and she found that;

- ❖ EBL has higher idle cash and bank balance. It may decrease profit of bank. EBL is recommended to mobilize its idle cash and bank balance in profitable sector as loan and advances.
- ❖ Before mobilizing funds, EBL is recommended to collect a large variety of deposit through schemes like cumulative deposit scheme, price bonds scheme, gift cheque scheme, house building deposit scheme, recurring deposit scheme, deposited linked life insurance scheme, monthly interest scheme, direct finance housing scheme, education loan and scheme, vehicle loan scheme, and many others.
- ❖ It is good to invest more on share & debentures as it encourage financial and economic development of the country. A commercial bank must mobilize its fund in different sector such as to purchase share & debentures of other financial and non financial companies out of total working fund. EBL has invested its more of the funds i.e. total investment on total deposit ratio, in comparison to other commercial banks but percentage of investment on share and debenture in very nominal so, EBL is recommended to invest more its fund in share and debentures of different companies.
- ❖ Portfolio condition of a bank should be regularly revised from the time to time. It should always try to maintain the equilibrium in the portfolio condition of the bank. So it can be said “all eggs should not be kept in the same basket”. The bank should make continuous effort to explore new, competitive and high yielding investment opportunities to optimize their investment portfolio.

- ❖ EBL has to make way for small depositors and entrepreneurs for the promotion and mobilization of small investor's fund. So it is recommended that the bank should fix minimum level of bank balance and the amount needed to open an account should also be affordable for such small depositor's.
- ❖ On the basis of above facts, it is seen that EBL has invested much of its fund in total outside assets but it has not achieved the desired result. So, it is hereby recommended that the EBL should play tactfully while investing its funds keeping in mind the interest rates so as to be earns high returns from the investment.

The risk taken by EBL, from the angle of credit and capital are in an average whereas the consistencies of the same are highly volatile which may result higher loss. The bank should not test those risks on an experiment basis as seen from the consistency angle. Rather, before taking any of the risk as stated above, EBL should carefully study it so as to achieve higher returns from the above risk.

## **2.4 Research Gap**

By the revision of above mentioned studies, it is found that different studies have different area of coverage. The author focuses this study in effectiveness on investment analysis of Nepal Standard Chartered Bank, Nabil Bank, Everest Bank and Nepal SBI Bank Ltd, comprehensive manner considering the major items. Some researchers have not focused on financial analysis and some others have not considered statistical analysis such as correlation, trend analysis etc. Furthermore, some researchers have made their studies on one or two simple only, in this contest, present study is different from these previous studies as researcher has used statistical tools (correlation coefficient, trend analysis) of four simple banks and tried to indicate the effectiveness of investment analysis of concern banks. Most of previous researcher has used secondary data but in this study, researcher has used both primary and secondary types of updated data are used as per required. In sum this study is different than the others related studies according to sampling procedure and size, methodology and mainly objectives.

## **CHAPTER –III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. Research methodology describes the methods and process applied in the entire subject of the study. This chapter attempts to have an insight into the Investment policy adopted by SCBNL, NABIL, EBL and Nepal SBI bank.

##### **3.1.1 Research Design**

A research design is the arrangement of conditions for collection and analysis of data that aims to combine relevance to the research purpose. Research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. (Kerlinker: 1996: 300)

By research design we mean an overall framework or plan for the collection and analysis of data.

(Wolff and Pant: 2003: 74)

To achieve the objectives of this study, descriptive and analytical research design has and descriptive techniques have been adopted to evaluate investment performance of SCBNL, NABIL, Nepal SBI and EBL.

##### **3.1.2 Sources of Data**

Mainly, the study is conducted on the basis of the secondary data. The data required for the analysis are directly obtained from the balance sheet and the P/L account of the concerned bank's annual reports. Supplementary data and information are collected from the number of institutions and regulating authorities like NRB, SEBON, NEPSE, Economic Survey and national planning commission etc. All the secondary data are compiled, processed and tabulated in the time series as per the

need and objectives. Formal and informal talks with the concerned authorities of the banks were also helpful to obtain the additional information of the related problem. Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources.

### **3.1.3 Population and Sample**

The limitation of time and unavailability of the relevant data has forced me to make research on the SCBNL, NABIL, EBL and Nepal SBI only even though there are 31 commercial banks established in Nepal which is selected from the population.

## **3.2 Methods of Data Analysis**

In the study, various financial, accounting and statistical tools have been used to achieve the objective of the study. The analysis of data will be done according to the pattern of data available. Due to limited time and resources, simple analytical statistical tools such as percentage graph, Karl Pearson's Coefficient of correlation are used in the study. Likewise, some financial tools such as ratio analysis and trend analysis have also been used for financial analysis. The various tools applied in this study, have been briefly presented as under.

### **3.2.1 Financial Tools**

Financial tools are used to examine the financial strength and weakness of bank. In this study financial tools like ratio analysis and financial statement analysis have been used.

#### **Ratio Analysis**

Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take output and credit decision. Thus ratio analysis is used to compare a firm's financial performance and status to that of other firm's or to itself. The qualitative financial performance of a firm can be done with help of ratio analysis. Even though, there are many ratios, only those ratios have been covered in this study, which are related to the Investment operation of the bank. This study contains following ratios.

### **1. Ratio of Commercial Banks Investment to Sample Bank Investment.**

Total commercial banks Investment to sample banks Investment ratio is used to analysis how much Investment has cover by the sample bank Investment. It is derived by following equation.

Total Commercial Banks Investment to Sample Banks Investment ratio =

$$\frac{\textit{Sample Bank Investment}}{\textit{Total Commercial Banks}}$$

### **2. Segregation of Total Investment of Sample Banks.**

It is used to analyze how the sample banks have invested its collected funds. Banks generally Investment in government securities, share and debentures of other companies and NRB bond. An attempt is made to analyze how much percentage is invested by the banks in different sectors. The following equation is used for this purpose.

$$\text{I. Total Investment to govt. sec. Investment} = \frac{\textit{Investment on Government Security}}{\textit{Total Investment}}$$

$$\text{II. Total Investment to share \& Debenture} = \frac{\textit{Investment on Share \& Debenture}}{\textit{Total Investment}}$$

$$\text{III. Total Investment to NRB Bond} = \frac{\textit{Investment on NRB Bond}}{\textit{Total Investment}}$$

$$\text{IV. Total Investment to Other} = \frac{\textit{Investment on Other Sector}}{\textit{Total Investment}}$$

### **3. Asset Management Ratio**

Asset management ratio measures how efficiently the bank manages the resources at its command. The following ratios are used under this assets management ratio.

**a. Investment to Total Deposit Ratio**

Investment is one of the major forms of credit created to earn income. This implies the utilization of firm's deposit on Investment in government securities and shares debentures of other companies and bank. The ratio can be calculated by dividing total Investment by total deposit. It can be expressed as follows

$$\text{Total Investment to Total Deposit} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

Total Investment consists of Investment on government securities, Investment on share and debentures, bond of other companies and other Investment.

**b. Investment Plus Loan and Advances to Total Deposit Ratio**

Loan and advances can also be regarded and Investment of banks. Investment as well as loan and advances both are done to generate income for the bank. Investment plus loan and advances to Total deposit ratio is calculated out, how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Greater ratio implies the better utilizing of total deposits. This ratio can be obtained by dividing Investment plus loan and advances by Total deposits, which can be states as,

$$\text{Investment plus Loan \& Advances to Total Deposit Ratio} = \frac{\text{Investment+Loan \& Advances}}{\text{Total Deposit}}$$

**c. Total Investment to Total Asset Ratio**

Investment is major component in the total working fund which indicates the ability of bank to channelize its deposits in the form of loan and Investment to earn high return. Investment and loan and advances are the only income generating source of bank. This ratio can be computed by dividing total of Investment, Loan and advances by total Assets. This can be stated as follows:

$$\text{Total Investment to Total Assets ratio} = \frac{\text{Total Investment}}{\text{Total Assets}}$$

Here, total Investment includes Investment on government securities, share and debentures of other company, other Investment and loan and advances. And total assets includes all assets of balance sheet, in other words, this includes current assets, net fixed assets, loans and development banks and other miscellaneous assets but exclude off balance sheet items like letter of credit, letter of guarantee etc.

**d. Investment on Government Securities to Total Assets Ratio**

Government securities are the safest place to invest the collected fund. Most of the commercial banks invest on securities issued by the government. Some banks do not invest sufficient funds in government securities. Others borrow frequently and thus lower the liquidity ratio.

Investment on government securities to total assets is calculated to find out the percentage of assets invested in government securities. This ratio is calculated by dividing Investment on government securities by Total assets. This is presented as,

$$\text{Investment on government securities to total assets ratios} = \frac{\text{Investment on Govt. Securities}}{\text{Total Assets}}$$

**e. Investment on Shares and Debentures to Total Assets Ratio**

Commercial banks hold shares of the other companies also. This ratio shows the banks Investment in shares and debentures of the subsidiary and other companies. This ratio can be derived by dividing Investment on shares debentures by total Assets.

It can expressed as,

Investment on share and Debentures to Total Assets ratio

$$= \frac{\text{Investment on Share \& Debentures}}{\text{Total Asset}}$$

**4. Growth Ratio**

Growth ratio represents how well the CBs are marinating their economic and financial status. Higher the ratio, better the executing of the bank and vice-versa. Under this title, three types of ratio are studied. They are directly related to the fund mobilization and investment of CB. These ratios are:

- a) Growth Ratio of Total Investment
- b) Growth ratio of Deposits
- c) Growth Ratio of Loan and Advances

## 5. Capital Adequacy Ratio (CAR)

CAR measure the relationship with the total capital fund & total risk weighted assets and also measures the bank's capital. This ratio measure whether the firm has maintained sufficient capital or not. The ratio is tested to ensure the safety and stability of the firm in the long run. By virtue of the capital adequacy norm the banks have to assess their risk assets and maintain a minimum amount of capital. It serves to protect depositors and maintain stability & efficiency of the financial system. This is the basic purpose of the capital adequacy norms.

According to NRB directives, Commercial banks in Nepal have to maintain 11% Capital Adequacy Ratio (CAR). Thus this parameter indicates whether a particular bank has enough to absorb unexpected losses. It is calculated as follows:

$$\text{Capital adequacy ratio} = \frac{\text{Capital Fund}}{\text{Risk Weighted Asset}}$$

## 6. Loan Loss Provision Ratio (LLPR)

Banks provides the loan and advances to other industries from the public deposits and enjoys the profit. Since, bank rotates the public money and generates the profit. It is also its liabilities to safeguard the public deposits. Thus, to ensure the public for the safe of their deposit loan loss provision is kept. Loan loss provision ratio determines the provision made in terms of total loan provided in a particular year. LLPR is calculated as follows:

$$\text{Loan Loss Provision Ratio} = \frac{\text{Total Loan Loss Provision}}{\text{Total Loan}} * 100$$

## 7. Credit Risk Ratio (CRR)

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to that bank. By definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances. Credit risk ratio is computed as:

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan \& Advances}}{\text{Total Assets}}$$

### 3.2.2 Statistical Tools

Some important tools are used to achieve the objective of this study. The statistical tools that are used for data analysis in this study are:

#### 1. Trend Analysis

Trend analysis describes the average relationship between two series where the one series relates to time and other series to the value of a variable. It is an analysis of a firm's financial ratios over time. This measures the change of data over a period of time. This reveals whether the firm's ratio are improving or deteriorating over time. Under segment, current and projected trend, total investment, total deposit and total loan are calculated.

- a) Trend analysis of Total Investment plus Loan & Advances
- b) Trend analysis of Total Deposits

#### 2. Co-efficient of Variations (C.V.)

The co-efficient of variation is the corresponding relative measure of dispersion, comparable across distribution, which is defines as the ration of the standard deviation to the mean expressed in resulting percentage. It is used in such problems where we want to command the variability of variation is greater is said to be more variable or conversely less consistent, less uniform, less stable, or less homogeneous. on the other hand, the series for which co-efficient of variation is less is said to be less variable or more consistent, more uniform, more stable or more homogenous. We can denote this by following formula:

$$\text{Coefficient of Variation} = \frac{\text{Standard deviation}}{\text{Mean}} \times 100$$

#### 3. Co-efficient of Correlation (r)

Correlation is the states statistical tool 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 figures. 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 and -1, when  $r = +1$ , it means there is perfect relationship between two variables and vice versa. When  $r=0$ , it means there is no relationship between two variables. The Pearson's 1 formula is:

$$r = \frac{\sum XY}{\sqrt{\sum X^2 \times \sum Y^2}}$$

Where,

$r$  = coefficient of correlation

$x$  = independent variable =  $(x - \bar{x})$

$y$  = dependent variable =  $(y - \bar{y})$

$n$  = no. of periods

#### **4. Coefficient of Determination ( $r^2$ ):**

The coefficient of determination is a measure of the degree of linear association or correlation between two variables one of which happens to be independent and other being dependent variable. In other words coefficient of determination measures the percentage total variation independent variables explained by independent variables. Zero to one is the ranging measurement of this coefficient of multiple determinations. If  $r^2$  is equal to 0.75, which indicates that the independent variables used in, regression model explained 75% of the total variation in the dependent variable. If the regression line is a perfect estimator  $r^2$  will be equal to +1, when there is no correlation, the value of  $r^2$  is zero.

#### **5. Probable Error of the Coefficient of Correlations (P.E.r)**

After the calculation of co-efficient of correlation the next thing is to find out the extent to which it is dependable. The probable error is a measure of as certainty of the value of a person's coefficient of correlation. For this purpose the probable error of the coefficient of correlation is calculated. If the probable error is added to and subtracted from the co-efficient of correlation it would give two such limits within which we can reasonably accept the value of co-efficient of correlation to vary. The formula for finding out the probable of error of the Karl Pearson's co-efficient of correlation is:

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

Where,

P.E.r = probable error of co-efficient of correlation

r= co-efficient of correlation

n= number of pairs of observations.

In order to conclude whether the co-efficient of correlation is significant or not. The following points would be kept in mind.

- If the co-efficient of correlations is less than its probable error, it is not at all significant.
- If the co-efficient of correlations is more than six times of probable error it is definitely significant.
- If the probable error is not much and if the co-efficient of correlation is 0.5 or more it is generally to be significant.

## 6. Arithmetic Mean

Arithmetic mean is the sum of all observations divided by the number of observations.

The arithmetic mean is denoted by  $(\bar{X})$ . It is computed as:

$$\text{Arithmetic mean}(\bar{X}) = \frac{\sum X}{n}$$

Arithmetic Mean is calculated to find the mean of the financial ratio.

## 7. Standard Deviation

Standard Deviation is calculated to measures dispersion. It is computed as:

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

## 8. Co-Variance (C.V.)

Co-Variance is calculated to find variance from the mean. It is computed as:

$$\text{C.V.} = \frac{\sigma}{\bar{x}}$$

## **CHAPTER - IV**

### **DATA PRESENTATION AND ANALYSIS**

This chapter is concerned with financial analysis and statistical analysis that is concerned about comparative analysis and interpretation of available data. Data are collected from various secondary sources. Various financial and statistic tools have been used in this part. Necessary figures and tables are also presented in this part to describe about the Investment mechanism of the banks. For this purpose, interpretations are categorized into two heading:

1. Analysis of Financial Ratio
2. Analysis of Statistical Ratio

#### **4.1 Analysis of Financial Ratio**

Herein, appropriate ratios are calculated and proper interpretations are made. The analysis of the financial ratios verifies the performance of the concerned banks.

##### **4.1.1 Ratio of Commercial Banks Investment to Sample Banks Investment**

###### **4.1.1.1 Ratio of SCBNL Investment to Total Commercial Banks Investment**

This ratio indicates the portion of Investment made by Standard Chartered Bank Nepal to total Investment made by commercial banks of Nepal. It shows how much Standard Chartered Bank Nepal is directly involved in Investment. And the ratio is derived by dividing Investment made by SCBNL by Total Investment made by commercial banks.

**Table No.1 .a Total Commercial Banks Investment to SCBNL Investment Ratio****(Rs. in millions)**

<b>Year</b>	<b>Total Investment of commercial banks</b>	<b>SCBNL Investment</b>	<b>Ratio (%)</b>
2062/63	82174	12851	15.64
2063/64	93531	13564	14.50
2064/65	108955	13903	12.76
2065/66	130857	18641	14.24
2066/67	134041	19848	14.81
<b>Mean</b>			<b>14.39</b>
<b>S.D</b>			<b>0.94</b>
<b>C.V.</b>			<b>0.07</b>

(Source: Banking and Financial Statistics, NRB)

Above table shows the Investment made by all commercial banks and by SCBNL bank alone. From the above table it shows that portion of Investment made by SCBNL is decreasing every year but in amount there is increasing. In the FY 2062/63 the ratio is almost 15.64%, which is optimum. The mean ratio is 14.39% during the study period.

**4.1.1.2 Ratio of NABIL Investment to Total Commercial Banks Investment**

This ratio indicates the portion of Investment made by Nabil bank to total Investment made by commercial banks of Nepal. It shows how much Nabil bank is directly involved in Investment. And the ratio is derived by dividing Investment made by NABIL by Total Investment made by commercial banks.

**Table No.1.b Total Commercial Banks Investment to NABIL Investment Ratio****(Rs in millions)**

<b>Year</b>	<b>Total Investment of commercial banks</b>	<b>NABIL Investment</b>	<b>Ratio (%)</b>
2062/63	82174	6175	7.51
2063/64	93531	8952	9.57
2064/65	108955	9967	9.15
2065/66	130857	10875	8.31
2066/67	134041	13612	10.16
<b>Mean</b>			<b>8.94</b>
<b>S.D</b>			<b>0.93</b>
<b>C.V.</b>			<b>0.10</b>

(Source: Banking and Financial Statistics, NRB)

Above table shows the Investment made by all commercial banks and by NABIL bank alone. From the above table it shows that portion of Investment made by NABIL

is increasing every year except in FY 2064/65 and FY 2065/66. In the FY 2066/67 the ratio is almost 10.16%, which is optimum among them. The mean ratio is 8.94% during the study period.

#### **4.1.1.3 Ratio of EBL Investment to Total Commercial Banks Investment**

This ratio indicates the portion of Investment made by EBL to total Investment made by commercial banks of Nepal. It shows how much EBL has invested. The ratio is derived by dividing Investment made by EBL by Total Investment made by commercial banks.

**Table No.1.c Total Commercial Banks Investment to EBL Investment Ratio**

**(Rs in millions)**

<b>Year</b>	<b>Total Investment of commercial banks</b>	<b>EBL Investment</b>	<b>Ratio (%)</b>
2062/63	82174	4201	5.11
2063/64	93531	4985	5.33
2064/65	108955	5061	4.65
2065/66	130857	5950	4.55
2066/67	134041	5010	3.74
<b>Mean</b>			<b>4.67</b>
<b>S.D</b>			<b>0.55</b>
<b>C.V.</b>			<b>0.12</b>

(Source: Banking and Financial Statistics, NRB)

Above table shows the Investment made by all commercial banks and by EBL alone. From the above table it shows that portion of Investment made by EBL is decreasing every year expect in FY 2063/64. The mean ratio is 4.67 during the study period.

#### **4.1.1.4 Ratio of NSBI Investment to Total Commercial Banks Investment**

This ratio indicates the portion of Investment made by NSBI to total Investment made by commercial banks of Nepal. It shows how much NSBI has invested. The ratio is derived by dividing Investment made by NSBI by Total Investment made by commercial banks.

**Table No.1.d Total Commercial Banks Investment to NSBI Bank Investment Ratio**

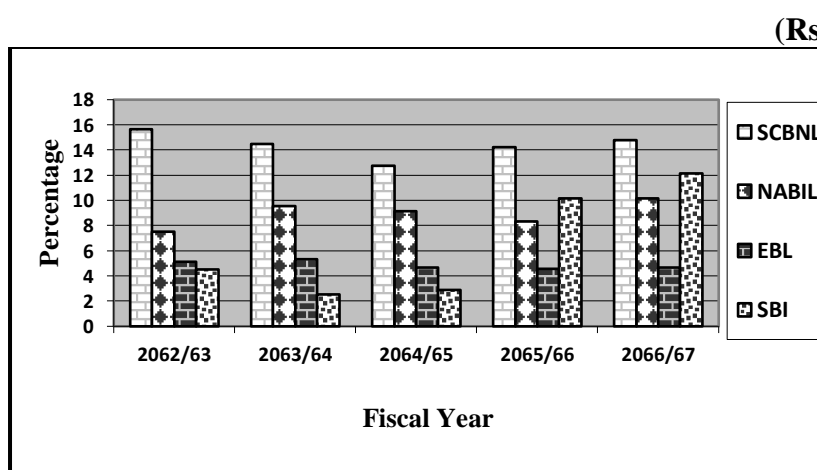
(Rs in millions)			
Year	Total Investment of commercial banks	NSBI Investment	Ratio (%)
2062/63	82174	3700	4.50
2063/64	93531	2378	2.54
2064/65	108955	3147	2.89
2065/66	130857	13286	10.15
2066/67	134041	16255	12.13
<b>Mean</b>			<b>6.44</b>
<b>S.D</b>			<b>3.94</b>
<b>C.V.</b>			<b>0.61</b>

(Source: Banking and Financial Statistics, NRB)

Above table shows the Investment made by all commercial banks and by NSBI alone. From the above table it shows that portion of Investment made by NSBI is increasing every year except in FY2063/064 and FY 2064/65. The mean ratio is 6.44 during the study period.

Above table no. 1.a to 1.d shows that SCBNL covers more percentage than other 3 banks and NSBI and EBL bank covers less percentage than other banks on investment made by total commercial banks. Mean of the ratios of SCBNL Investment is also higher than that of other banks. Similarly the standard deviation and coefficient of variation between the ratio of NSBI Investment to total commercial bank Investment is comparatively higher than that of other banks. It means there is more variability in Investment in NSBI than others. It is due to higher rate of fluctuations of Investment pattern in NSBI Bank.

**Figure No. 1: Total Commercial Banks Investment to Total Investment Ratio**



## 4.1.2 Segregation of Investment

### 4.1.2.1 Segregation of Investment of NIBL Bank

SCBNL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies and NRB bonds. Here an attempt is made to segregate the Investment made by SCBNL.

**Table No. 2.a Segregation of Investment of SCBNL**

**(Rs. In millions)**

Year	Investment	Gov. Sec.	%	Shares and debentures	%	NRB Bond	%	Other	%
2062/63	12851	8644.9	67.27	15.4	0.12			4190.3	32.61
2063/64	13564	7115.7	52.46	44.9	0.33			6403.4	47.21
2064/65	13903	8137.6	58.53	0	0.00			5756.7	41.47
2065/66	18641	9998.8	53.64	333.1	1.79			8300.1	44.57
2066/67	19848	8531.5	42.99	462.5	2.33			10845	54.68

(Source: Banking and Financial Statistics, P-22, NRB)

Above table show the Investment made by SCBNL in different sectors. SCBNL is found to invest its fund in Government securities, shares and debenture of other industries, NRB bond and others. From the FY 2062/63 to 2066/67 Investment in Government Securities and investment in share and debentures of other companies fluctuating trends but the investment in other sector is in increasing trends except FY 064/65.

### 4.1.2.2 Segregation of Investment of NABIL Bank

NABIL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies, NRB bonds and other sector. Here an attempt is made to segregate the Investment made by NABIL.

**Table No.2.b Segregation of Investment of NABIL****(Rs. In millions)**

Year	Investment	Gov. sec	%	Shares and Debenture	%	NRB Bond	%	Others	%
2061/62	6175	2297.9	37.21	91.3	1.48			3711.2	61.31
2062/63	8952	4805.7	53.68	71.6	0.80			3521.5	45.52
2063/64	9967	4646.9	46.62	81.8	0.82			4995.2	52.55
2064/65	10875	3706.2	34.08	161.7	1.49			6734.6	64.43
2066/67	13612	7941.3	58.34	92.7	0.68			5578.1	40.98

(Source: Banking and Financial Statistics, PN-20, NRB)

Above table show the Investment made by NABIL in different sectors. NABIL is found to invest its fund in Government securities, shares and debenture of other industries, NRB bond and others. From the FY 2062/63 to 2066/67 the investment in Government Securities, share and debentures of other companies and invest in other sectors have fluctuation trend.

**4.1.2.3 Segregation of Investment of EBL Bank**

EBL invests its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies, NRB bonds and other sector. Here an attempt is made to segregate the Investment made by EBL.

**Table No.2.c Segregation of Investment of EBL****(Rs in millions)**

Year	Investment	Gov. sec	%	Shares and Debenture	%	NRB Bond	%	Others	%
2062/63	4201	3548.6	84.46	6.5	0.15			646.2	15.38
2063/64	4985	4704.6	94.37	6.5	0.13			274	5.50
2064/65	5061	4906.5	96.95	16.2	0.32			138.4	2.73
2065/66	5950	5146	86.49	102	1.71			702	11.80
2066/67	5010	4354.4	86.92	363.8	7.26			291.7	5.82

(Source: Banking and Financial Statistics, PN-26, NRB)

Above table show the Investment made by EBL in different sectors. EBL is found to invest its fund in Government securities, shares and debenture of other industries. Most of its fund investment in government securities and less in share debenture of other industries. From the FY 2062/63 it invests in other sector.

#### 4.1.2.4 Segregation of Investment of NSBI

NSBI bank invests its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies, NRB bonds and other sector. Here an attempt is made to segregate the Investment made by NSBI.

**Table No.2.d Segregation of Investment of NSBI**

(Rs in millions)

Year	Investment	Gov. sec	%	Shares and Debenture	%	NRB Bond	%	Others	%
2062/63	3700	3680.4	99.47	19.5	0.53	0	0.00	0	0.00
2063/64	2378	2345.6	98.66	31.9	1.34		0.00	0	0.00
2064/65	3147	3093.6	98.31	53.3	1.69	0	0.00	0	0.00
2065/66	13286	3306.6	24.89	32.9	0.25	0	0.00	9946.7	74.86
2066/67	16255	4313.3	22.89	37	0.23	592.7	3.64	11904.8	73.24

(Source: Banking and Financial Statistics, PN-24, NRB)

Above table show the Investment made by NSBI in different sectors. NSBI is found to invest its fund in Government securities, shares and debenture of other industries. Most of its fund investment in government securities and less in share and debenture of other industries.

#### 4.1.3 Asset Management Ratio

A commercial bank must be able to manage its assets very well to earn high profit, to satisfy its customers and for its own existence. Asset management ratio measures how efficiently, the bank manages the resources at its commands.

##### 4.1.3.1 Ratio of Total Investment to Total Deposit

A commercial bank may finance its deposit fund to small industries building up of bank credit depends upon mutual connections and relationship between the banks and the customers. Banks needs to satisfy themselves regarding the technical knowledge and capacity for hard and sustained work on the part of borrows and the quality and marketability of the goods produced by them. Therefore commercial banks may mobilize its bank deposit by investing its fund in different securities issued by government and other financial or non-financial companies. Now effort has been

made to measure the extent to which the banks are successful in mobilizing the total deposits on Investment.

In the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement, central bank's norms etc. are to be considered in general. A high ratio is the indicator of high success to mobilize the banking fund as Investment and vice versa. This ratio is calculated by dividing total Investment by total deposit.

**Table No.3.a Total investment to Total Deposit Ratio of SCBNL**

**(Rs in millions)**

<b>Year</b>	<b>Investment</b>	<b>Deposit</b>	<b>Ratio (%)</b>
2062/63	12851	23051	55.75
2063/64	13564	24640	55.05
2064/65	13903	29744	46.74
2065/66	18641	35872	51.96
2066/67	19848	35183	56.41
<b>Mean</b>			<b>51.18</b>
<b>S.D.</b>			<b>3.56</b>
<b>C.V.</b>			<b>0.07</b>

(Source: Banking and Financial Statistics, PN-22, NRB)

The table shows the investment and deposit ratio of SCBNL. From the FY 2062/63 to 2066/67 the investment and deposit going on increasing trend. The average ratio of total investment to total deposit is 51.18, standard deviation is 3.56 and co-efficient of variation is 0.07 percent.

**Table No.3.b Total Investment to Total Deposit Ratio of NABIL**

**(Rs in millions)**

<b>Year</b>	<b>Investment</b>	<b>Deposit</b>	<b>Ratio (%)</b>
2062/63	6175	19348	31.91
2063/64	8952	23342	38.35
2064/65	9967	31915	31.23
2065/66	10875	37348	29.12
2066/67	13612	46335	29.38
<b>Mean</b>			<b>32.00</b>
<b>S.D.</b>			<b>3.35</b>
<b>C.V.</b>			<b>0.10</b>

(Source: Banking and Financial Statistics, NRB)

The table shows the investment and deposit ratio of NABIL. From the FY 2062/63 to 2066/67 the investment and deposit going on increasing trend. The average ratio of

total investment to total deposit is 32.00, standard deviation is 3.35 and co-efficient variation is 0.10 percent.

**Table No.3.c Total Investment to Total Deposit Ratio of EBL**

<b>(Rs in millions)</b>			
<b>Year</b>	<b>Investment</b>	<b>Deposit</b>	<b>Ratio (%)</b>
2062/63	4201	13803	30.44
2063/64	4985	19098	26.10
2064/65	5061	23976	21.11
2065/66	5950	33323	17.86
2066/67	5010	36932	13.57
<b>Mean</b>			<b>21.81</b>
<b>S.D.</b>			<b>5.95</b>
<b>C.V.</b>			<b>0.27</b>

(Source: Banking and Financial Statistics, PN-26, NRB)

Above table shows the investment and deposit ratio of EBL. From the FY 2062/63 to 2066/67 the investment and deposit goes on increasing trend up to FY 2065/66 except investment of FY 2066/67. The average ratio of total investment to total deposit is 21.81, standard deviation is 5.95 and co-efficient variation is 0.27 percent.

**Table No.3.d Total Investment to Total Deposit Ratio of NSBI**

<b>(Rs in millions)</b>			
<b>Year</b>	<b>Investment</b>	<b>Deposit</b>	<b>Ratio (%)</b>
2062/63	3700	10853	34.09
2063/64	2378	11445	20.77
2064/65	3147	13715	22.94
2065/66	13286	27957	47.52
2066/67	16255	34896	46.58
<b>Mean</b>			<b>34.38</b>
<b>S.D.</b>			<b>11.29</b>
<b>C.V.</b>			<b>0.33</b>

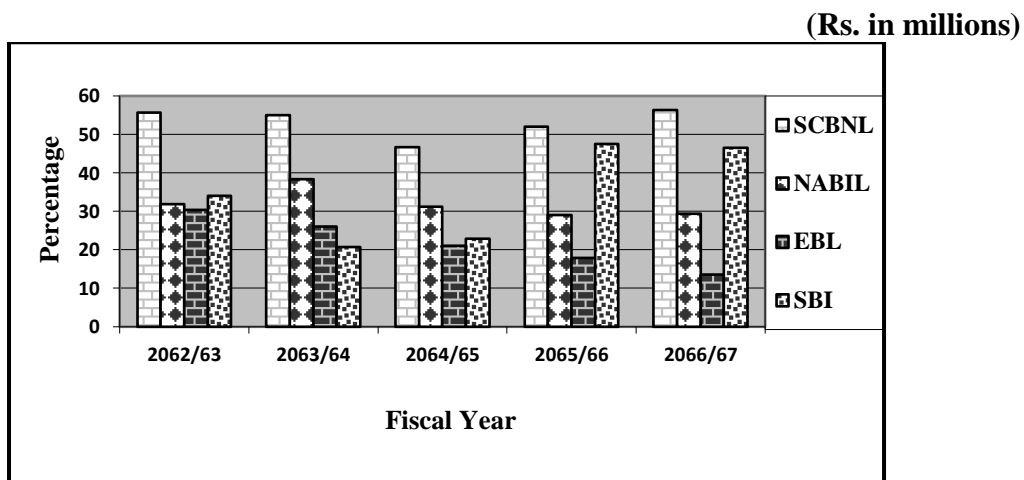
(Source: Banking and Financial Statistics, pg-24, NRB)

Above table shows the investment and deposit ratio of NSBI. From the FY 2062/63 to 2066/67 the investment and deposit goes on increasing trend except in FY 2063/64. The average ratio of total investment to total deposit is 34.38, standard deviation is 11.29 and co-efficient of variation is 0.33 percent.

Above tables 3a. to 3d. reveal that SCBNL has lower Investment to deposit ratio on

FY 2064/65 and it has increased its ratio up to 56.41 percent in the FY 2066/67. Whereas NABIL has maintain higher ratio on FY 2063/64 and lower ratio on FY 2065/66. Mean ratio of SCBNL is higher than that of other Banks but EBL has lower mean ratio than other Banks. Therefore, it is clear that SCBNL’s capacity to mobilize its deposits on Investment is better than that of other Banks. On the other hand, observing the C.V. of ratios, we can further conclude that ratio of SCBNL consistent then that of other Banks because of its lower C.V. i.e. 0.07. In conclusion, it can be said that SCBNL is successful in utilizing its resources on Investment than that of other Banks.

**Figure No. 2: Total Investment to Total Deposit Ratio**



#### 4.1.3.2 Ratio of Total Investment plus Loan and Advance with Deposits

Loan and Advancement is also another type of Investment of banks. Since the major functions of commercial banks are of deposits collection and lending, it is very important to have a look at the credit to deposit ratio. Lending is a high risk Investment for a bank and the main income source of the bank is also the interest earned from loan and advances. This ratio actually measures the extent to which the banks are successful to mobilize the total deposits on Investment plus loan and advances for the purpose of profit generation. A high ratio of Investment plus loan and advancement indicates better mobilization of collected deposits and vice-versa. But it should be noted that too high ratio may not be better from its liquidity point view. This ratio is calculated by dividing total Investment plus loan & advances by

total deposits. The following table exhibits the ratio of total Investment plus loan and advancement to total deposits of SCBNL, NABIL, EBL and NSBI.

**Table No. 4.a.**

**Total Investment plus Loan and Advancement to Deposits ratio of SCBNL**

(Rs in millions)

<b>Year</b>	<b>Investment + Loan &amp; Advances</b>	<b>Deposits</b>	<b>Ratio (%)</b>
2062/63	21756	<b>23051</b>	94.38
2063/64	24102	<b>24640</b>	97.82
2064/65	27258	<b>29744</b>	91.64
2065/66	31759	<b>35872</b>	88.54
2066/67	35780	<b>35183</b>	101.70
<b>Mean</b>			<b>94.81</b>
<b>S.D.</b>			<b>4.61</b>
<b>C.V.</b>			<b>0.05</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 4.b.**

**Total Investment plus Loan and Advancement to Deposits ratio of NABIL**

(Rs in millions)

<b>Year</b>	<b>Investment + Loan &amp; Advances</b>	<b>Deposits</b>	<b>Ratio (%)</b>
2062/63	19196.3	<b>19348</b>	99.21
2063/64	24609.1	<b>23342</b>	105.43
2064/65	31481.6	<b>31915</b>	98.64
2065/66	38691.6	<b>37348</b>	103.60
2066/67	46515	<b>46335</b>	100.39
<b>Mean</b>			<b>101.45</b>
<b>S.D.</b>			<b>2.62</b>
<b>C.V.</b>			<b>0.03</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 4.c.**

**Total Investment plus Loan and Advancement to Deposits ratio of EBL**

**(Rs in millions)**

<b>Year</b>	<b>Investment + Loan &amp; Advances</b>	<b>Deposits</b>	<b>Ratio (%)</b>
2062/63	<b>14325</b>	13803	103.79
2063/64	<b>19044</b>	19098	99.72
2064/65	<b>23875</b>	23976	99.58
2065/66	<b>30316</b>	33323	90.98
2066/67	<b>33140</b>	36932	89.73
<b>Mean</b>			<b>96.76</b>
<b>S.D.</b>			<b>5.46</b>
<b>C.V.</b>			<b>0.06</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 4.d.**

**Total Investment plus Loan and Advancement to Deposits ratio of NSBI**

**(Rs in millions)**

<b>Year</b>	<b>Investment + Loan &amp; Advances</b>	<b>Deposits</b>	<b>Ratio (%)</b>
2062/63	<b>11760</b>	10853	108.36
2063/64	<b>12224</b>	11445	106.81
2064/65	<b>15722</b>	13715	114.63
2065/66	<b>28751</b>	27957	102.84
2066/67	<b>34142</b>	34896	97.84
<b>Mean</b>			<b>106.09</b>
<b>S.D.</b>			<b>5.61</b>
<b>C.V.</b>			<b>0.05</b>

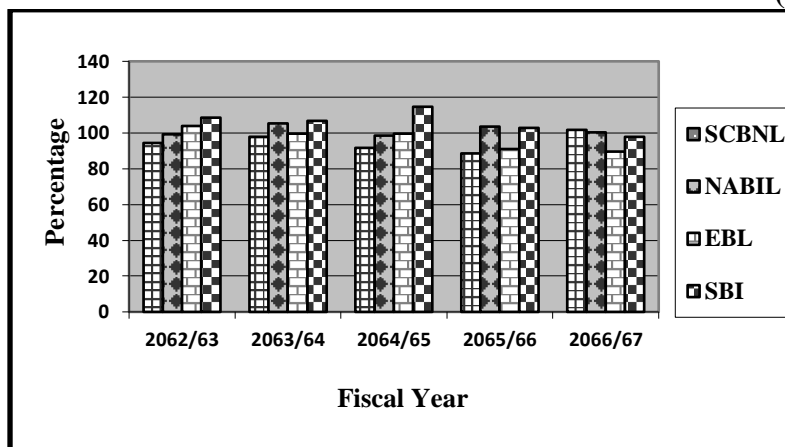
(Source: Banking and Financial Statistics, NRB)

Above table 4a to 4d shows that the ratio of total investment plus loan and advances to deposit. NSBI has maintained higher ratio than other banks likewise SCBNL, NABIL and EBL have got less ratio. A higher ratio of Investment plus Loan & Advances indicates the better mobilization of its collected deposit & vice-versa. From point of view of liquidity, NSBI is too low than other banks likewise SCBNL, NABIL and EBL. The average ratio of NSBI is 106.09, SCBNL is 94.81, NABIL is 101.45, and EBL is 96.76 percent. C.V of EBL is higher than other banks which mean that ratio of that Bank is more variable than other banks.

**Figure No. 3:**

**Total investment plus Loan and Advancement to Deposits ratio**

(Rs in millions)



**4.1.3.3 Ratio of Total Investment to Total Asset**

A commercial bank's working fund should play very active role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on Investment for the purpose of income generation. A high ratio indicates a better mobilization of fund as Investment and vice-versa. This ratio is calculated by dividing total Investment by total assets i.e. total working fund. The following table exhibits the ratio of Investment to total assets of SCBNL, NABIL, EBL and NSBI.

**Table No. 5.a. Total Investment to Total Assets Ratio of SCBNL**

(Rs in millions)

Year	Investment	Total Assets	Ratio (%)
2062/63	12851	<b>26798</b>	47.95
2063/64	13564	<b>29937</b>	45.31
2064/65	13903	<b>34313</b>	40.52
2065/66	18641	<b>41679</b>	44.72
2066/67	19848	<b>41525</b>	47.80
<b>Mean</b>			<b>45.26</b>
<b>S.D.</b>			<b>2.70</b>
<b>C.V.</b>			<b>0.06</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 5.b. Total Investment to Total Assets Ratio of NABIL**

(Rs in millions)

<b>Year</b>	<b>Investment</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	6175	24135	25.59
2063/64	8952	29660	30.18
2064/65	9967	38479	25.90
2065/66	10875	45942	23.67
2066/67	13612	54610	24.93
<b>Mean</b>			<b>26.05</b>
<b>S.D.</b>			<b>2.20</b>
<b>C.V.</b>			<b>0.08</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 5.c. Total Investment to Total Assets Ratio of EBL**

(Rs in millions)

<b>Year</b>	<b>Investment</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	4201	16715	25.13
2063/64	4985	23335	21.36
2064/65	5061	28566	17.72
2065/66	5950	38000	15.66
2066/67	5010	42053	11.91
<b>Mean</b>			<b>18.36</b>
<b>S.D.</b>			<b>4.56</b>
<b>C.V.</b>			<b>0.25</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 5.d. Total Investment to Total Assets Ratio of NSBI**

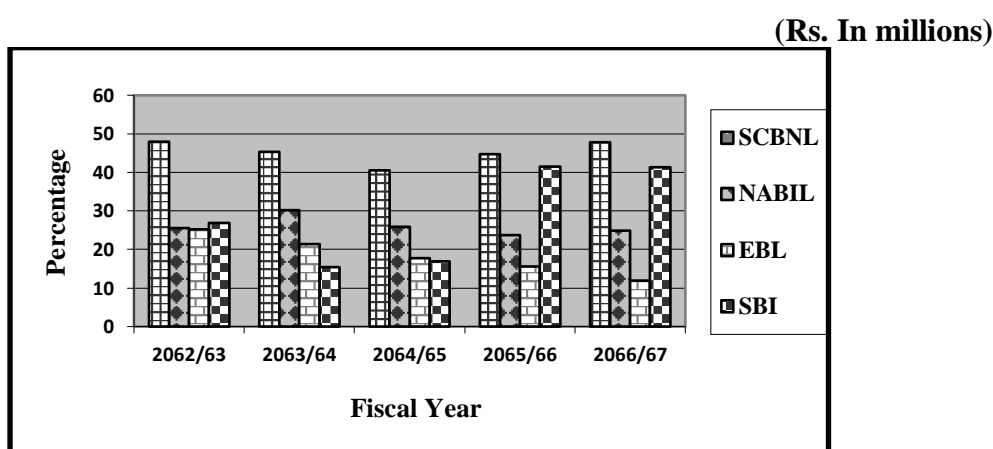
(Rs in millions)

<b>Year</b>	<b>Investment</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	3700	13736	26.94
2063/64	2378	15397	15.44
2064/65	3147	18594	16.92
2065/66	13286	31990	41.53
2066/67	16255	39381	41.28
<b>Mean</b>			<b>28.42</b>
<b>S.D.</b>			<b>11.31</b>
<b>C.V.</b>			<b>0.40</b>

(Source: Banking and Financial Statistics, NRB)

Above tables 5a. to 5d. Shows that the ratio of Total Investment to total asset. The average ratio of SCBNL is higher than other banks likewise NABIL, EBL and NSBI. The average ratio of SCBNL is 45.26, NABIL is 26.05, EBL is 18.36 and NSBI is 28.42 percentages. It means SCBNL has used more assets for investment and EBL has used fewer assets for investment than other banks. C.V. of NSBI is higher and SCBNL is lower than other banks which means that ratio of NSBI is more variable than other banks. Similarly S.D of NSBI's ratio is greater than other banks which show that NSBI is operating in higher risk than other banks.

**Figure No. 4: Total Investment to Total Assets Ratio**



#### 4.1.3.4. Investment on Government Securities to Total Assets Ratio

The commercial banks mostly invest its funds collected in various government securities issued by government because they consider them most liquid, that is, they can realize cash at short notice and without must loss in capital invested. And also such securities would serve as the basis for loan from the central bank at the bank rate. The government securities are the safest place to invest the funds. They can be easily sold in the market or they can be converted into the cash in other ways. But they are not so much liquid as cash and bank balance.

Here an effort is made to examine the position of a bank's total assets that is invested on different government securities. This ratio is very important to know the extent of which the banks are successful in mobilizing their total working fund on different types of government securities to maximize the income. All the deposits of the bank should not be utilized in loan and advances and other credit from security and

liquidity point of view. Therefore, to some extent, commercial banks seem to be interested to utilize their deposits by purchasing government securities. A high ratio indicates better mobilization of fund as Investment on government securities and vice-versa. This ratio is calculated by dividing Investment on government securities by total assets. The following table shows the ratios of Investment on government securities to total working fund of SCBNL, NABIL, EBL and NSBI.

**Table No. 6.a. Investment on Government Securities to Total Assets Ratio of SCBNL**

**(Rs in millions)**

<b>Year</b>	<b>Investment on government securities</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	8645	26798	32.26
2063/64	7116	29937	23.77
2064/65	8138	34313	23.72
2065/66	9999	41679	23.99
2066/67	8532	41525	20.55
<b>Mean</b>			<b>24.86</b>
<b>S.D.</b>			<b>3.91</b>
<b>C.V.</b>			<b>0.16</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 6.b. Investment on Government Securities to Total Assets Ratio of NABIL**

**(Rs in millions)**

<b>Year</b>	<b>Investment on government securities</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	2298	24135	9.52
2063/64	4806	29660	16.20
2064/65	4647	38479	12.08
2065/66	3706	45942	8.07
2066/67	7941	54610	14.54
<b>Mean</b>			<b>12.08</b>
<b>S.D.</b>			<b>3.02</b>
<b>C.V.</b>			<b>0.25</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 6.c. Investment on Government Securities to Total Assets Ratio of EBL**

(Rs in millions)			
Year	Investment on government securities	Total Assets	Ratio (%)
2062/63	3549	16715	21.23
2063/64	4705	23335	20.16
2064/65	4907	28566	17.18
2065/66	5146	38000	13.54
2066/67	4354	42053	10.35
<b>Mean</b>			<b>16.49</b>
<b>S.D.</b>			<b>4.07</b>
<b>C.V.</b>			<b>0.25</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 6.d. Investment on Government Securities to Total Assets Ratio of NSBI**

(Rs in millions)			
Year	Investment on government securities	Total Assets	Ratio (%)
2062/63	3680	13736	26.79
2063/64	2346	15397	15.23
2064/65	3094	18594	16.64
2065/66	3307	31990	10.34
2066/67	3721	39381	9.45
<b>Mean</b>			<b>15.69</b>
<b>S.D.</b>			<b>6.20</b>
<b>C.V.</b>			<b>0.39</b>

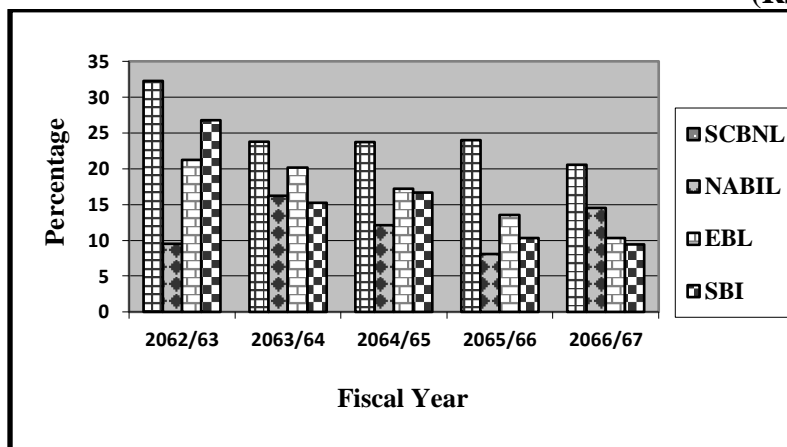
(Source: Banking and Financial Statistics, NRB)

Above table 6a. to 6d. Shows that the ratio of Investment on government securities to total assets. The average ratio of SCBNL is higher than other banks. Likewise NABIL, EBL and NSBI, it means SCBNL has mobilized their assets as investment in government securities more than other banks. C.V of NSBI is higher than other banks. Likewise NABIL, EBL and SCBNL, it shows that NSBI ratio is more variable than other banks. SCBNL ratio is less variable than other banks.

Therefore it can be said that, SCBNL has been able to mobilize its more assets by investing on government securities whereas NABIL has mobilized less assets on investing on government securities.

**Figure No. 5: Investment on government Securities to Total Assets Ratio**

(Rs. In millions)



#### 4.1.3.5 Investment on Shares and Debentures to Total Assets Ratio

To study the Investment management of SCBNL, NABIL, EBL and NSBI total Investment has been separated into two parts i.e. Investment on government securities and Investment on shares and debentures. Nowadays, a commercial bank is interested to invest its fund not only on government securities but also in shares and debenture of other different types of companies. During the study period, most of the commercial banks of Nepal have found to purchase the share of other companies too.

Investment on shares and debentures to total assets ratio reflects the extent to which the banks are successful to mobilize their assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund. A high ratio indicates more portion of Investment on shares and debentures out of total assets and vice-versa. This ratio is calculated by dividing Investment on share and debentures by total assets.

The following table shows the ratios of Investment on shares and debentures to total assets ratio of SCBNL, NABIL, EBL and NSBI.

**Table No. 7.a. Investment on Share and Debentures to Total Assets Ratio of SCBNL**

(Rs in millions)

<b>Year</b>	<b>Investment on Share and Debentures</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	15	26798	0.06
2063/64	45	29937	0.15
2064/65	0	34313	0.00
2065/66	333	41679	0.80
2066/67	463	41525	1.11
<b>Mean</b>			<b>0.42</b>
<b>S.D.</b>			<b>0.45</b>
<b>C.V.</b>			<b>1.07</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 7. b. Investment on Share and Debentures to Total Assets Ratio of NABIL**

(Rs in millions)

<b>Year</b>	<b>Investment on Share and Debentures</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	91	24135	0.38
2063/64	72	29660	0.24
2064/65	82	38479	0.21
2065/66	162	45942	0.35
2066/67	93	54610	0.17
<b>Mean</b>			<b>0.27</b>
<b>S.D.</b>			<b>0.08</b>
<b>C.V.</b>			<b>0.30</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 7.c. Investment on Share and Debentures to Total Assets Ratio of EBL**

(Rs in millions)

<b>Year</b>	<b>Investment on Share and Debentures</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2061/62	7	16715	0.04
2062/63	7	23335	0.03
2063/64	16	28566	0.06
2064/65	102	38000	0.27
2066/67	364	42053	0.87
<b>Mean</b>			<b>0.25</b>
<b>S.D.</b>			<b>0.32</b>
<b>C.V.</b>			<b>1.28</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 7. d. Investment on Share and Debentures to Total Assets Ratio of NSBI**

(Rs in millions)			
<b>Year</b>	<b>Investment on Share and Debentures</b>	<b>Total Assets</b>	<b>Ratio (%)</b>
2062/63	20	13736	0.14
2063/64	32	15397	0.21
2064/65	53	18594	0.29
2065/66	33	31990	0.10
2066/67	37	39381	0.09
<b>Mean</b>			<b>0.17</b>
<b>S.D.</b>			<b>0.07</b>
<b>C.V.</b>			<b>0.42</b>

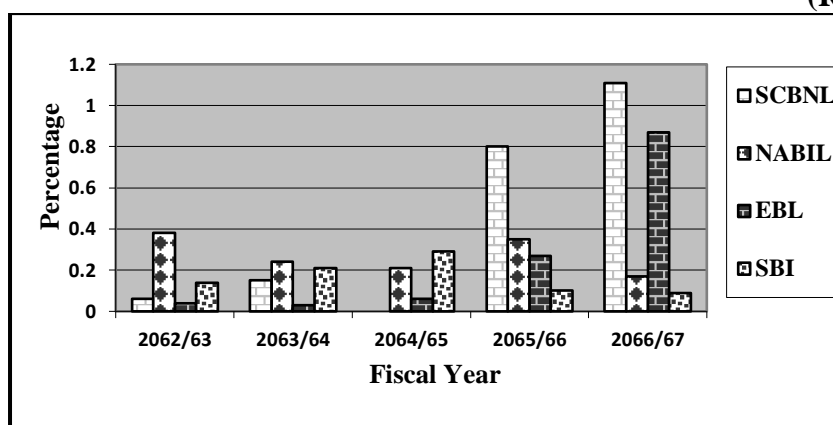
(Source: Banking and Financial Statistics, NRB)

Above table 7a. to 7d. Shows that the ratio of investment on share debenture to total assets. The average ratio of SCBNL is higher than other banks likewise NABIL, EBL and NSBI. On the basis of mean ratios, it can be stated that SCBNL has invested higher amount in shares and debentures in comparison to other banks. But it shows that all banks invest fewer funds in share and debentures of other companies. Similarly C.V. of EBL is higher than that of other banks likewise SCBNL, NABIL, and NSBI. It means that ratio of EBL is more variable than other banks.

From the above it can be concluded that all the banks doesn't invest much on share and debenture of other company. It may be because of higher risk involved with it. But commercial bank should invest in other company's shares also to develop the industry and to develop the country.

**Figure No. 6: Investment on Shares and Debentures to Total Assets Ratio**

(Rs in million)



#### 4.1.4 Growth Ratio

Growth Ratios represent how well the Commercial banks are maintaining their economic and financial position. Here those growth ratios are analyzed and interpreted which are directly related to the fund mobilization and Investment management of a commercial bank. The high ratio generally indicated better performance of a bank and vice-versa.

##### 4.1.4.1 Growth Ratio of Total Investment

This ratio shows whether the sample bank had increased the Total Investment or decreased the Investment. The following table shows the growth ratio of SCBNL, NABIL, EBL and NSBI banks.

**Table No. 8. Growth Ratio of Investment**

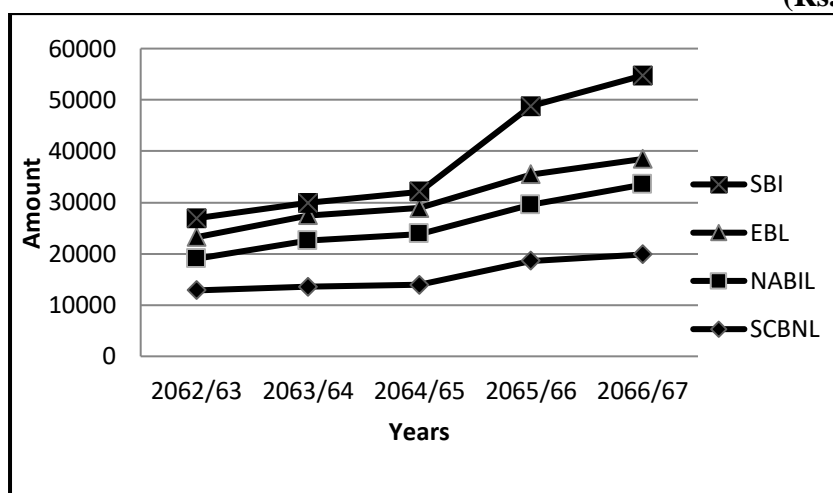
(Rs in millions)

Year	SCBNL	NABIL	EBL	NSBI
2062/63	12851	6175	4201	3700
2063/64	13564	8952	4985	2378
2064/65	13903	9967	5061	3147
2065/66	18641	10875	5950	13286
2066/67	19848	13612	5010	16255
<b>Growth Ratio %</b>	<b>11.48</b>	<b>21.85</b>	<b>4.5</b>	<b>44.78</b>

(Source: Banking and Financial Statistics, NRB)

**Figure No. 7. Growth Ratio of Investment**

(Rs. in millions)



The above table and graph shows that the growth rate of investment of sample bank. All banks increasing their investment in different sectors. NSBI has higher growth rate of investment than other banks Likewise SCBNL, NABIL, and EBL. SCBNL has higher investment than other banks likewise NABIL, EBL, and NSBI. The calculation method of growth ratios is shown in Annex-1.

#### 4.1.4.2 Growth Ratios of Deposits

The bank collects its deposit from public. The growth ratio of deposits represent whether the banks had been able to increase its deposit collection or not. The following table represents the growth ratios of deposits of SCBNL, NABIL, EBL and NSBI.

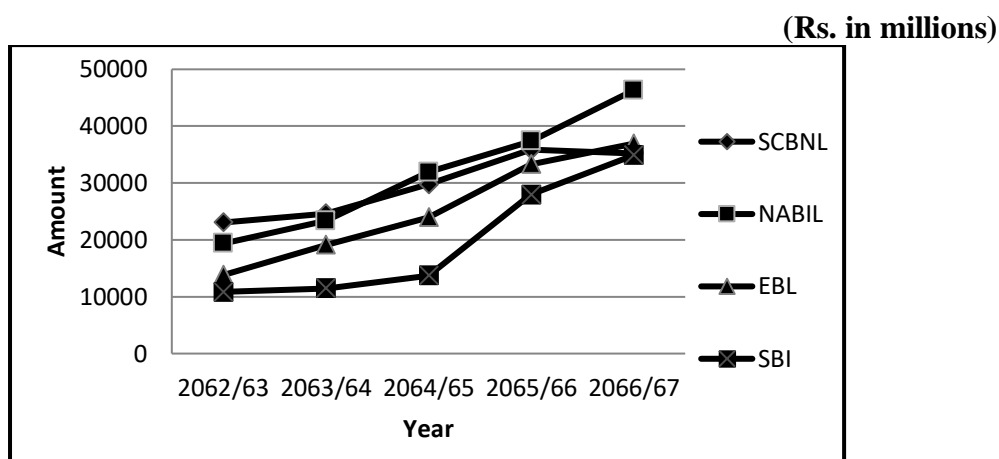
**Table No. 9. Growth Ratio of Deposit**

(Rs in millions)

Year	SCBNL	NABIL	EBL	NSBI
2062/63	23051	19348	13803	10853
2063/64	24640	23342	19098	11445
2064/65	29744	31915	23976	13715
2065/66	35872	37348	33323	27957
2066/67	35183	46335	36932	34896
<b>Growth Ratio %</b>	<b>11.15</b>	<b>24.40</b>	<b>27.90</b>	<b>33.91</b>

(Source: Banking and Financial Statistics, NRB)

**Figure No. 8. Growth Ratios of Deposits**



The above table and graph shows that the deposit collection of banks. All the banks are increasing their deposits. NSBI has higher growth ratio of deposit than other bank Likewise SCBNL, NABIL, and EBL. NABIL has collected higher deposit than other banks likewise SCBNL, EBL and NSBI. The calculation method of growth ratios is shown in Annex-2.

#### 4.1.4.3 Growth Ratio of Loan and Advances

Loan and Advances growth ratio shows whether the banks are increasing its loan and advances or decreasing. The following table shows the position of loan and advances of SCBNL, NABIL, EBL and NSBI banks.

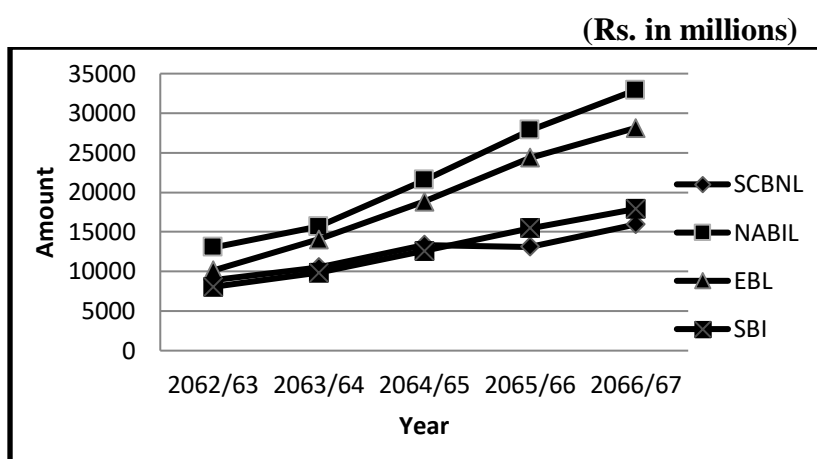
**Table No. 10. Growth Ratio of Loan and Advance**

(Rs in millions)

Year	SCBNL	NABIL	EBL	NSBI
2062/63	8905	13021	10124	8060
2063/64	10538	15657	14059	9847
2064/65	13355	21515	18814	12575
2065/66	13119	27817	24366	15465
2066/67	15932	32903	28130	17887
<b>Growth Ratio %</b>	<b>15.65</b>	<b>26.08</b>	<b>29.11</b>	<b>22.05</b>

(Source: Banking and Financial Statistics, NRB)

**Figure No. 9. Growth Ratios of Loan and Advances**



The above table and graph shows growth ratio of loan and advances. All the banks are increasing its loan and advances. EBL has higher growth ratio than other banks likewise SCBNL, NABIL and NSBI. NABIL has higher loan and advances than other banks likewise SCBNL, EBL and NSBI. The calculation method of growth ratios is shown in Annex-3.

#### 4.1.5 Capital Adequacy Ratio

CAR measure the relationship with the total capital fund & total risk weighted assets and also measures the bank's capital. This ratio measure whether the firm has maintained sufficient capital or not. The ratio is tested to ensure the safety and stability of the firm in the long run.

**Table No. 11.a. Capital Adequacy Ratio of SCBNL**

(Rs in millions)

Year	Capital Fund	Risk Weighted Asset	Ratio (%)
2062/63	2345	12256	19.13
2063/64	2225	14165	15.71
2064/65	3115	18544	16.80
2065/66	3190	21703	14.70
2066/67	3531	24185	14.60
<b>Mean</b>			<b>16.19</b>
<b>S.D.</b>			<b>1.67</b>
<b>C.V.</b>			<b>0.10</b>

(Source: Banking and Financial Statistics, Pg-16, NRB)

**Table No. 11.b. Capital Adequacy Ratio of NABIL****(Rs in millions)**

<b>Year</b>	<b>Capital Fund</b>	<b>Risk Weighted Asset</b>	<b>Ratio (%)</b>
2062/63	2568	17028	15.08
2063/64	2308	19166	12.04
2064/65	3208	26933	11.91
2065/66	4065	34716	11.71
2066/67	4391	41823	11.62
<b>Mean</b>			<b>12.47</b>
<b>S.D.</b>			<b>1.31</b>
<b>C.V.</b>			<b>0.10</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 11.c. Capital Adequacy Ratio of EBL****(Rs in millions)**

<b>Year</b>	<b>Capital Fund</b>	<b>Risk Weighted Asset</b>	<b>Ratio (%)</b>
2062/63	1415	11001	12.86
2063/64	1676	14979	11.19
2064/65	2387	21051	11.34
2065/66	2876	26050	11.04
2066/67	3257	30241	10.77
<b>Mean</b>			<b>11.44</b>
<b>S.D.</b>			<b>0.73</b>
<b>C.V.</b>			<b>0.06</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 11.d. Capital Adequacy Ratio of NSBI****(Rs in millions)**

<b>Year</b>	<b>Capital Fund</b>	<b>Risk Weighted Asset</b>	<b>Ratio (%)</b>
2062/63	1348	8981	15.01
2063/64	1445	10871	13.29
2064/65	1726	13764	12.54
2065/66	2048	16818	12.18
2066/67	2834	23135	12.25
<b>Mean</b>			<b>13.05</b>
<b>S.D.</b>			<b>1.05</b>
<b>C.V.</b>			<b>0.08</b>

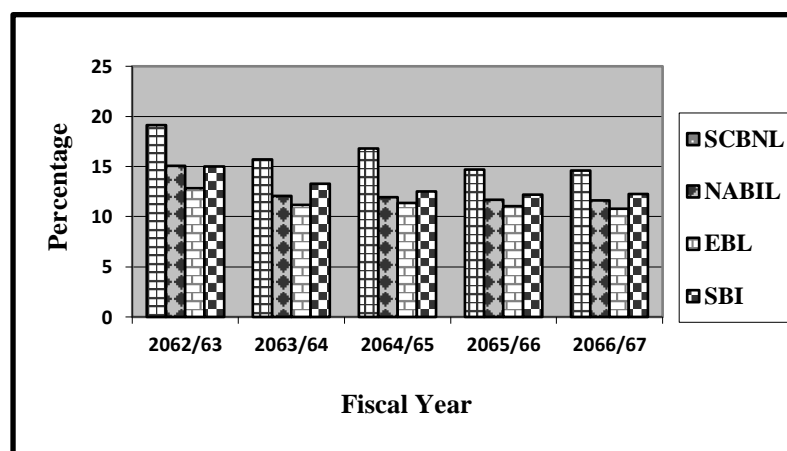
(Source: Banking and Financial Statistics, NRB)

Above table 11a. to 11d. Shows that the ratio of Capital Adequacy. The average ratio of SCBNL is higher than other banks likewise NABIL, EBL and NSBI. On the basis of mean ratios, it can be stated that SCBNL has maintained higher ratio in comparison to other banks. But it shows that all banks maintained NRB's required CAR i.e. greater than 11 percentages. Similarly C.V. of SCBNL and NABIL are also higher than that of other banks likewise EBL & NSBI. It means that ratio of SCBNL and NABIL are more variable than other banks. SCBNL and NABIL are increasing those capital funds than other banks.

From the above it can be concluded that all the banks maintained sufficient capital according to NRB' directives i.e. all banks maintain CAR greater than 11 percentages. Thus above data shows that it serves to protect depositors and maintain stability & efficiency of the financial system.

**Figure No. 10: Capital Adequacy Ratios**

(Rs in millions)



According to Nepal Rastra Bank rules and regulation bank should maintain 11% CAR. From above figure & table, it is seen that all four banks under study have maintained CAR in all five year as per the NRB standard. SCBNL has highest CAR in whereas EBL has lower CAR which is slightly above the NRB rule. From the above data can say that depositors and creditors of all the four banks are in safer position. Maintaining higher CAR is good, but in shareholder's point of view, it is not better because of idle fund and is not being transferred to credit which ultimately affect the profit.

#### 4.1.6 Loan Loss Provision

To ensure the public for the safe of public deposit or credit, loan loss provision is kept. Loan loss provision ratio determines the provision made in terms of total loan provided in a particular year. Also, it can be advocated from two opposite dimensions. From one dimension it is advocated that lower loan loss provision ratio is better because higher loan loss provision decreases profit for shareholder. While from another dimension it can be advocated that higher is better because there can be the chance of higher risk than it is estimated loan loss provision ratio has relationship with total loan loss provision and Total Loan and Advances.

**Table No. 12.a. Loan Loss Provision Ratio of SCBNL**

(Rs. in millions)

Year	Loan Loss Provision	Total Loan	Ratio (%)
2062/63	270	8905	3.04
2063/64	288	10538	2.73
2064/65	245	13355	1.84
2065/66	201	13119	1.53
2066/67	218	15932	1.37
<b>Mean</b>			<b>2.10</b>
<b>S.D.</b>			<b>0.66</b>
<b>C.V.</b>			<b>0.31</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 12.b. Loan Loss Provision Ratio of NABIL**

(Rs. in millions)

Year	Loan Loss Provision	Total Loan	Ratio (%)
2062/63	353	13021	2.71
2063/64	356	15657	2.28
2064/65	405	21515	1.88
2065/66	409	27817	1.47
2066/67	752	32903	2.29
<b>Mean</b>			<b>2.12</b>
<b>S.D.</b>			<b>0.42</b>
<b>C.V.</b>			<b>0.20</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 12.c. Loan Loss Provision Ratio of EBL**

(Rs. In millions)

Year	Loan Loss Provision	Total Loan	Ratio (%)
2062/63	356	10124	3.52
2063/64	419	14059	2.98
2064/65	497	18814	2.64
2065/66	585	24366	2.40
2066/67	600	28130	2.13
<b>Mean</b>			<b>2.73</b>
<b>S.D.</b>			<b>0.48</b>
<b>C.V.</b>			<b>0.18</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 12.d. Loan Loss Provision Ratio of NSBI**

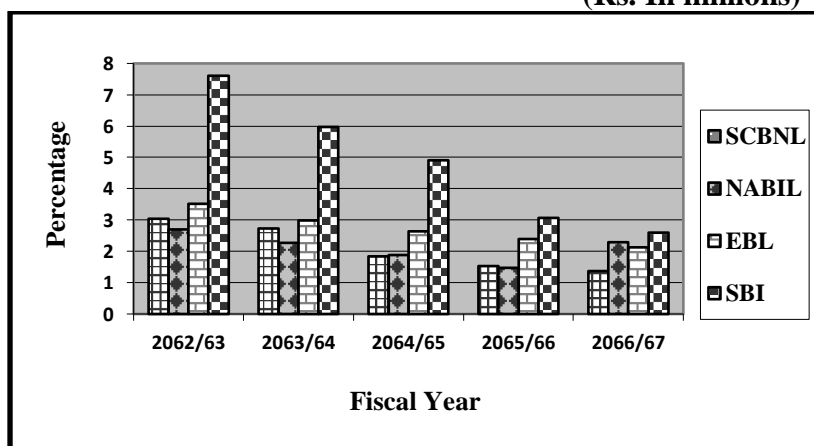
(Rs. In millions)

Year	Loan Loss Provision	Total Loan	Ratio (%)
2062/63	614	8060	7.61
2063/64	589	9847	5.98
2064/65	616	12575	4.90
2065/66	475	15465	3.07
2066/67	464	17887	2.59
<b>Mean</b>			<b>4.83</b>
<b>S.D.</b>			<b>1.85</b>
<b>C.V.</b>			<b>0.38</b>

(Source: Banking and Financial Statistics, NRB)

**Figure No. 11: Loan Loss Provision Ratios**

(Rs. In millions)



According to above figure and table it is seen that all four banks are decreasing its LLP Ratio, except FY2066/6 of NABIL. Among the banks NSBI has the highest LLP Ratio (4.83) than SCBNL, NABIL & EBL. It is so because of high NPL Ratio. There is direct relationship between NPL Ratio and LLP Ratio. Here SCBNL has maintained the lowest LLP Ratio so they have better credit management.

#### 4.1.7 Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid to that investment will deteriorate in quality or go into default with consequent loss to that bank. By definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances.

**Table No. 13.a. Credit Risk Ratio of SCBNL**

(Rs. In millions)

Year	Total Loan & Advances	Total Assets	Ratio (%)
2062/63	8905	26798	33.23
2063/64	10538	29937	35.20
2064/65	13355	34313	38.92
2065/66	13119	41679	31.48
2066/67	15932	41525	38.37
<b>Mean</b>			<b>35.44</b>
<b>S.D.</b>			<b>2.88</b>
<b>C.V.</b>			<b>0.08</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 13.b. Credit Risk Ratio of NABIL**

(Rs. In millions)

Year	Total Loan & Advances	Total Assets	Ratio (%)
2062/63	13021	24135	53.95
2063/64	15657	29660	52.79
2064/65	21515	38479	55.91
2065/66	27817	45942	60.55
2066/67	32903	54610	60.25
<b>Mean</b>			<b>56.69</b>
<b>S.D.</b>			<b>3.19</b>
<b>C.V.</b>			<b>0.06</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 13.c. Credit Risk Ratio of EBL**

(Rs. In millions)

Year	Total Loan & Advances	Total Assets	Ratio (%)
2062/63	10124	16715	60.57
2063/64	14059	23335	60.25
2064/65	18814	28566	65.86
2065/66	24366	38000	64.12
2066/67	28130	42053	66.89
<b>Mean</b>			<b>63.54</b>
<b>S.D.</b>			<b>2.71</b>
<b>C.V.</b>			<b>0.04</b>

(Source: Banking and Financial Statistics, NRB)

**Table No. 13.d. Credit Risk Ratio of NSBI**

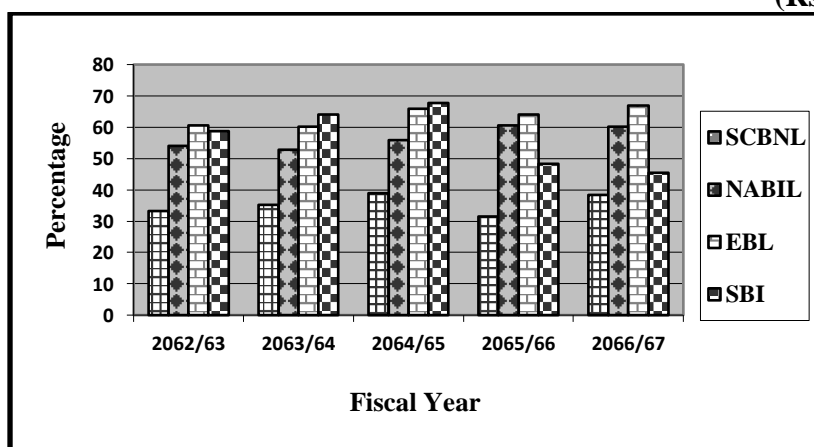
(Rs. In millions)

Year	Total Loan & Advances	Total Assets	Ratio (%)
2062/63	8060	13736	58.68
2063/64	9847	15397	63.95
2064/65	12575	18594	67.63
2065/66	15465	31990	48.34
2066/67	17887	39381	45.42
<b>Mean</b>			<b>56.80</b>
<b>S.D.</b>			<b>8.64</b>
<b>C.V.</b>			<b>0.15</b>

(Source: Banking and Financial Statistics, NRB)

**Figure No. 12: Credit Risk Ratios**

(Rs. In millions)



According to above table & figure shows that CRR of all four banks are fluctuating. EBL has highest ratio (63.54) than other SCBNL, NABIL, & NSBI. Comparatively, SCBNL has lowest risk ratio (35.44) than other banks. It indicates that SCBNL has low possibility of loss than that other bank.

## **4.2 Statistical Analysis**

In order to achieve the effective of this study, some essential statistical tools such as Coefficient of correlation analysis between variables, trend analysis of investment plus loan & advance and deposit are used.

### **4.2.1 Coefficient of Correlation**

#### **4.2.1.1. Co-efficient of Correlation Analysis between Investment plus loan & advances and Deposits**

Under this topic, Karl Person's coefficient of correlation has been used to find out the relationship between Deposit and Investment plus loan & advances. The main objective of the correlation analysis between deposit and investment plus loan & advance is to find out whether deposit is significantly used as investment plus loan & advance or not. It is already mentioned that Investment is dependent upon saving i.e. deposit. Longer the duration of deposit, higher the banker's ability to acquire long term asset. In the other words banker can't invest more on long asset if duration of deposit is short. In this sense it can be said that Investment is the function of deposit. Theoretically it is assumed that long-term asset yield higher return. It means longer the duration of deposit, higher would be the profitability of the bank. But Investment may not be the function of deposit only. Sometimes Investment is made from the funds raised from the sources. In such situation Investment is not dependent upon deposit only co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis deposits is independent variable (x) and Investment plus Loan and Advances is dependent variable (y).

The detail calculations in this regard are done in Annex-4 and the following table shows the value of  $r$ ,  $r^2$  and P.E.  $r$  and 6 P.E between those variables of SCBNL, NABIL, EBL and NSBI during the study period 2062/63 to 2066/67.

**Table No. 14. Correlation between Deposits and Investment plus Loan & Advances**

S. No.	Banks	$r$	$r^2$	P.E.	6 P.E.
1.	SCBNL	0.9513	0.9050	0.0286	0.1719
2.	NABIL	0.9972	0.9944	0.0017	0.0102
3.	EBL	0.9978	0.9953	0.0014	0.0084
4.	NSBI	0.9979	0.9958	0.0013	0.0078

(Source: Annex-4)

From the above table shows, coefficient of correlation between Investment plus loan & advances and deposit of SCBNL is 0.9513 which shows that there is a positive correlation between deposit and Investment plus loan & advances and the value of coefficient of determination ( $r^2$ ) is 0.9050. Which means 90.50 % Investment plus loan & advances is depending on deposit i.e. independent variable and 9.50 % Investment decision depends on other variables. And it's Probable Error (P.E.) is 0.0286 and similarly 6P.E. is 0.1719 which is less than coefficient of correlation ( $r$ ). It means correlation of coefficient between deposit and Investment plus loan & advance of SCBNL is also significant though there is positive relation between them. This indicates that SCBNL is successful to mobilize its deposit appropriately

Again in the case of NABIL, coefficient of correlation between Investment plus loan & advances and deposit of NABIL is 0.9972 which shows that there is a positive correlation between deposit and Investment plus loan & advances and the value of coefficient of determination ( $r^2$ ) is 0.9944. Which means 99.44 % Investment plus loan & advances is depend on deposit i.e. independent variable and 0.56 % Investment decision depends on other variables. And it's Probable Error (P.E.) is 0.0017 and similarly 6P.E. is 0.0102 which is less than coefficient of correlation ( $r$ ). It means correlation of coefficient between deposit and Investment plus loan & advance of NABIL is also significant though there is positive relation between them. This

indicates that NABIL is successful to mobilize its deposit appropriately

Again in the case of EBL, coefficient of correlation between Investment plus loan & advances and deposit of EBL is 0.9978 which shows that there is a positive correlation between deposit and Investment plus loan & advances and the value of coefficient of determination ( $r^2$ ) is 0.9953. Which means 99.53 % Investment plus loan & advances is depend on deposit i.e. independent variable and 0.47 % Investment decision depends on other variables. And it's Probable Error (P.E.) is 0.0014 and similarly 6P.E. is 0.0084 which is less than coefficient of correlation ( $r$ ). It means correlation of coefficient between deposit and Investment plus loan & advance of EBL is also significant though there is positive relation between them. This indicates that EBL is successful to mobilize its deposit appropriately

Likewise in the case of NSBI, coefficient of correlation between Investment plus loan & advances and deposit of NSBI is 0.9979 which shows that there is a positive correlation between deposit and Investment plus loan & advances and the value of coefficient of determination ( $r^2$ ) is 0.9958 Which means 99.58 % Investment plus loan & advances is depend on deposit i.e. independent variable and 0.42 % Investment decision depends on other variables. And it's Probable Error (P.E.) is 0.0013 and similarly 6P.E. is 0.0078 which is less than coefficient of correlation ( $r$ ). It means correlation of coefficient between deposit and Investment plus loan & advance of NSBI is also significant though there is positive relation between them. This indicates that NSBI is successful to mobilize its deposit appropriately.

In conclusion, we can say that there is positive relationship between deposit and investment plus loan & advances of four banks. This means if deposit increases then investment plus loan & advances of the bank also increases. It is clear from the table that correlation of coefficient and coefficient of determinant of NSBI is higher than that of NABIL, EBL & SCBNL bank respectively. This shows that NSBI is at the better position in mobilizing deposit and investment plus loan & advances in comparison to other banks. Calculation of co-relation between investment plus loan & advances and deposit is shown in Annex-4

## 4.2.2. Trend Analysis and Projection for Next 5 Years

The objective of this topic is to analysis trend of Investment, Deposit of SCBNL, NABIL, EBL and NSBI. To utilize investment and Deposit of a commercial bank may grant loan and advances and invest in government securities and shares and debentures of other companies. Under this topic an attempt is made to analyze trend of Investment and Deposit of SCBNL, NABIL, EBL and NSBI and also forecast their trend for next five years. The projections are based on the following assumptions:

- a. The main assumption is that other things will remain unchanged.
- b. The bank will run in present position.
- c. The economy will remain in the present stage.
- d. Nepal Rastra Bank will not change its guidelines to commercial banks.

### 4.2.2.1 Trend Analysis of Total Investment

Under this topic an attempt is made to analyze the trend of Investment of SCBNL, NABIL, EBL and NSBI and forecast the trend for next 5 years. Here, Investment includes Investment on government securities and investment in share and debenture of other companies plus loan and advances. Since loan and advances are also the investment of the bank, it is also included with total Investment. The following table shows the trend values of 10 years from 2062/63 B.S. to 2071/72 B.S. of SCBNL, NABIL, EBL and NSBI.

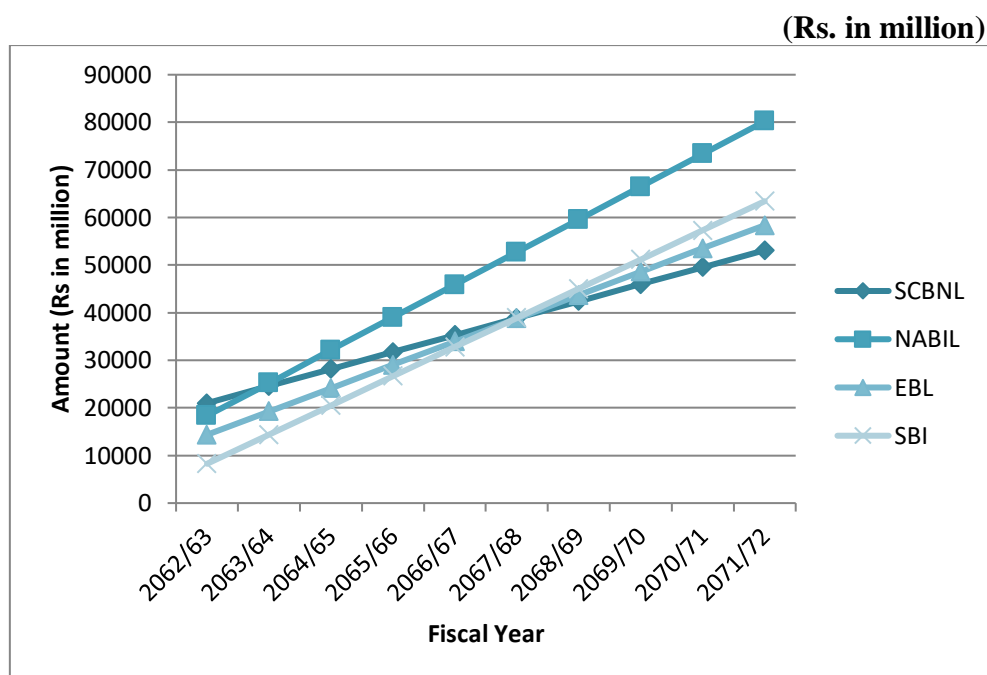
**Table No.15 Trend values of Investment**

(Rs in million)

Year	SCBNL	NABIL	EBL	NSBI
2062/63	20989.82	18354.80	14359.86	8261.34
2063/64	24560.38	25226.80	19250.02	14390.56
2064/65	28130.94	32098.80	24140.18	20519.78
2065/66	31701.5	38970.80	29030.34	26649.00
2066/67	35272.06	45842.80	43700.82	32778.22
2067/68	38842.6	52714.80	38810.66	38907.44
2068/69	42413.2	59586.80	43700.82	45036.66
2069/70	45983.7	66458.80	48590.08	51165.88
2070/71	49554.3	73330.80	53481.14	57295.1
2071/72	53124.9	80202.80	58371.30	63424.32

(Source: Annex-5a to 5d.)

**Figure No. 13: Trend value of investment**



From the above table no. 15 and figure no. 13, it is found that investment trend of commercial banks is in increasing trend. Other things remaining the same, in FY 2071/72, the investment of SCBNL, NABIL, EBL and NSBI will be Rs. 53124.90 million, Rs. 80202.80 million, Rs. 58371.30 million and Rs. 63424.32 million respectively in the same year. From the above investment trend, it is clear shows that NABIL deposit utilization position in relation to investment is greater than that the other remaining banks and also it has greater increasing growth rate than other banks. Therefore, it shows that total investment of NABIL can be in better position in the future.

In conclusion, we can say that all the commercial banks have followed the policy of maximizing the investment. Calculation of trend of investment is shown in Annex-5a to 5d.

#### **4.2.2.2 Trend Analysis of Total Deposit**

Under this topic an attempt is made to analyze the trend of Deposit of SCBNL, NABIL, EBL and NSBI and forecast the trend for next 5 years. The following table shows the trend values of 10 years from 2062/63 B.S. to 2071/72 B.S. of SCBNL, NABIL, EBL and NSBI.

**Table No.16 Trend values of Total Deposit**

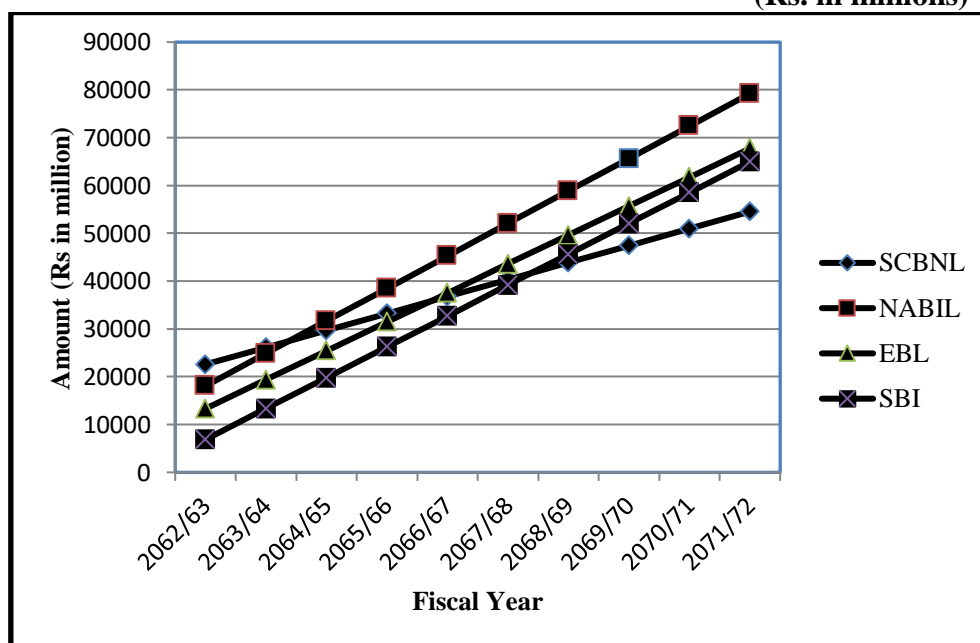
**(Rs in million)**

Year	SCBNL	NABIL	EBL	NSBI
2062/63	22598.6	18062	13329.44	6853.58
2063/64	26148.25	24859.91	19377.86	13313.44
2064/65	29697.9	31657.82	25426.28	19773.3
2065/66	33247.55	38455.73	31474.7	26233.16
2066/67	36797.2	45253.64	37523.12	32693.02
2067/68	40346.9	52051.55	43571.5	39152.9
2068/69	43896.5	58849.46	49620	45612.7
2069/70	47446.2	65647.37	55668.4	52072.6
2070/71	50995.8	72445.28	61716.8	58532.5
2071/72	54545.5	79243.19	67765.2	64992.3

(Source: Annex-6a to 6d)

**Figure No. 14: Trend value of deposit**

**(Rs. in millions)**



From the above table no. 16 and figure no. 14, it is found that deposit trend of commercial banks is in increasing trend. Other things remaining the same, in FY 2071/72, the deposit of SCBNL, NABIL, EBL and NSBI will be Rs. 54545.50 million, Rs. 79243.19 million, Rs. 67765.2 million and Rs. 64992.3 million respectively in the same year. From the above deposit trend, it is clearly shows that

NABIL deposit collection position from the market is greater than that the other remaining banks and also it has greater increasing growth rate than other banks. Therefore, it is forecasted that NABIL will be more successful to collect more deposit from the market.

### **4.3 Major Finding of the Study**

From the analysis of financial data and statistical data the main findings are as follows:

#### **4.3.1 Findings from ratio of Sample banks to Total Commercial banks:**

Mean ratio of SCBNL Investment to total commercial banks investment is 14.39% which is extremely higher than that of other banks to total commercial banks. The portion of HBL Investment is increasing every year in the total investment of commercial banks. The ratio of EBL is 4.67% which is less than other banks.

#### **4.3.2 Findings from the Investment pattern of Sample banks:**

NSBI had invested most of their fund in government securities than other banks. Likewise SCBNL, NABIL and EBL. EBL and NSBI had started to invest in other sector from FY 2062/63 and FY 2065/66 respectively. All the banks had invested fewer funds to share and capital of other company. The commercial banks mostly invest on government securities, NRB bond and share and debentures of other company.

#### **4.3.3 Findings from Assets Management Ratios:**

The mean ratio of Investment of Total deposit of SCBNL is 56.41% which is higher than other banks. Likewise NABIL, EBL and NSBI. The ratio of EBL is 21.81% which is less than other banks. Loan and advances is also another type of Investment of Commercial bank. The mean ratio of Investment plus loan and advances to deposit ratio of NSBI is 106.09% which is higher than other banks, SCBNL has less than other banks. It shows that the bank uses most of its fund from deposit on Investment and loan and advances. The mean ratio of total investment to total assets ratio of SCBNL is 45.26% which is greater than other banks. Similarly EBL has fewer ratios than other banks. The mean ratio of investment on government securities to total assets ratio of SCBNL is 24.86% which is higher than other banks and NABIL has

12.08% which is less ratio than other banks. The mean ratio of investment on share and debenture to total asset ratio of SCBNL is 0.42% which is higher than other banks. SCBNL has use its more fund on share and debenture of other companies than other banks. NSBI has 0.17% which is less ratio of investment on share and debenture of other companies than other banks. It means EBL less invest its fund on share and debenture.

#### **4.3.4 Findings from Growth Ratios:**

Growth ratio of Investment of NSBI is 77.78% which is higher than other banks. Likewise SCBNL, NABIL and EBL. All the banks increasing their investment. SCBNL has 17.73% which is less growth ratio than other banks. Growth ratio of loan and advance of EBL has 32.46% which is higher than that of other banks and EBL has 4.50% which is lower growth ratio of loan and advance. All the banks are increasing their loan and advance. Growth ratio of deposits of NSBI is 33.91% which is higher than that other banks and SCBNL has 11.15% which is lower growth ratio of deposit. All the banks are increasing their deposit.

#### **4.3.5 Findings from Capital Adequacy Ratios:**

The average capital adequacy ratio of SCBNL is 16.19% which is higher than other banks likewise NABIL, EBL and NSBI. On the basis of mean ratios, it can be stated that SCBNL has maintained higher ratio in comparison to other banks. But it shows that all banks maintained NRB's required CAR i.e. greater than 11 percentages. Similarly C.V. of SCBNL is also higher than that of other banks likewise NABIL, EBL & NSBI. It means that ratio of SCBNL is more variable than other banks. SCBNL is increasing its capital fund than other banks.

#### **4.3.6 Findings from Loan Loss Provision Ratios:**

The Loan Loss Provision of all four banks is decreasing except FY 2066/67 of NABIL. Among the banks NSBI has the highest LLP Ratio (4.83%) than SCBNL, NABIL and EBL. It is so because of high NPL Ratio. There is direct relationship between NPL Ratio and LLP Ratio. Here SCBNL has maintained the lowest LLP Ratio i.e. 2.10% so they have better credit management.

#### **4.3.7 Findings from Credit Risk Ratios:**

Credit Risk Ratio of all four banks is in fluctuating trends. EBL has highest ratio (63.54%) than other SCBNL, NABIL & NSBI. Comparatively, SCBNL has lowest risk ratio (35.44%) than other banks. It indicates that HBL has low possibility of loss than that other bank.

#### **4.3.8 Findings from Correlation Coefficient Analysis**

Total Investment and Total deposit of all four banks has positive relation. And correlation of co-efficient between deposit and investment of all four banks are significant and the value of co-efficient of determination ( $r^2$ ) of NSBI is 0.9958 which is higher than other banks it means 99.58% of Investment decision is dependent upon deposit and only 0.42% Investment is depend upon other variables. Similarly Probable Error (P.E.) is 0.0013 and 6P.E. is 0.0078 which shows that (r) is highly greater than 6P.E. Therefore it reveals that relationship between deposit and Investment is significant. In the case of SCBNL, coefficient of correlation between Investment and deposit is 0.9513 which is less than other banks it shows that there is a positive correlation between deposit and Investment and the value of co-efficient of determination ( $r^2$ ) is 0.9050. Which mean only 90.50% Investment is depend on deposit and 9.50% Investment decision depends on other variables. And its Probable Error (P.E.) is 0.0286 and similarly 6P.E.is 0.1719 which shows that (r) is higher than (6P.E). It means correlation of coefficient between deposit and Investment of SCBNL is significant though there is positive relation between them.

#### **4.3.9. Findings from Trend Analysis**

Total Investment of four banks is also in increasing trend. The estimated Investment of NABIL is 80202.80 million which is higher than that of other banks and EBL will be Rs. 58371.30 million in the FY 2071/72 B.S. which is less than that of other banks. NABIL uses relatively a large portion of its deposit as investment and it has greater increasing trend than other banks so, the NABIL will be in a better position in future.

The total deposit of all four banks is also in an increasing trend. The estimated deposit of NABIL is 79243.19 million which is higher than that of other banks and SCBNL will be Rs. 54545.50 million in the FY 2071/72 B.S which is less than that of other banks. NABIL's deposit collection position from the market is greater than other banks and also it has greater increasing growth rate than other banks. Therefore, it is forecasted that NABIL will be more successful to collect more deposit from the market.

## **CHAPTER – V**

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

The last chapter of this study is summary, conclusion and recommendation developed from the analysis of various aspects of the investment of commercial banks by using some financial as well as statistical tools. After completing the basic analysis required for the study the final and the most important task of the researcher is to be summarized the study and recommendation for the future importance.

#### **5.1 Summary**

The economic development of country depends upon the development of commerce and industry and there is no doubt that banking promotes the development of commerce because bank in itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was very slow in earlier years. It has caught its full swing after restoration of democracy in the country. At present, overall economic growth rate is still declining year by year. Reasons behind this decline are insecure situation faced by industry, decrease in the tourist arrival, and drop in the production and export of carpet, garment and pashmina industry and political situation.

Industrial development is very important for economic development of any country. And there must be Investment made on productive activities for Industrial development. Investment is one of the financial activities which involve the decision of capital to establish commercial or industrial venture. It involves uses of funds to long term assets that would yield benefits in the future. The beginning and establishment of financial institution depends upon the level of economic activities and monetary transaction in the country. In Nepal history of modern financial institution begins with the establishment of NBL in 1937A .D. Since then several financial institutions have come into existence. But Nepalese Industries have been facing challenges especially due to inadequacy of financial resources. Although

numerous financial institutions have emerged both in regional as well as in international financial centers to extend credit facilities to the financially viable enterprise. But there still a big gap between demand for and supply of financial resources and gap seems ever widening over the years. Globalization and freeing up of the economy, decentralization, restructuring and downswing of large firms, worldwide communication networks and transfer and acquisition of state of the art, technology and other application, all have brought the challenges and opportunities to entrepreneur. Those who can respond to these challenges and mobilize necessary financial resources become successful and those who do not, fall victim in their rapidly changing economic environment. Banks plays a crucial role in this matter. Commercial banks not only collect the scattered saving from individual by accepting deposits but also provides various types of loan. And it itself invest in various share and debentures of other companies. A healthy development of any bank depends heavily upon its Investment policy. A sound and variable Investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the pace of development. A good Investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and Investment. Establishment of commercial banks has continued in response to economic liberalization policies of the government. So, now in Nepal there are many commercial banks competition with each other in their business. These banks are mainly concentrated themselves on financing foreign trade commerce and industry.

The main objective of the study is to evaluate the Investment Analysis of Commercial Banks in Nepal. And to suggest measures to improve the investment policy of the banks. The study is based on secondary data from fiscal year 2062/63 to 2066/67. The data which were employed in this research are secondary in nature. They are obtained from annual report and financial statement, official records, periodicals, journals and bulletins, various published reports and relevant unpublished master degree thesis. Beside this personal contact with the banks personnel have also been made.

Financial as well as statistical tools have been developed in order to analyze and interpret the data information, under financial analysis, various financial ratios related to in investment function of commercial banks i.e. liquidity ratio, assets management ratio, capital adequacy ratio, loan loss Provision, credit risk ratio and

growth ratios have been analyzed and interpreted. Under statistical tools like percentage, mean, standard deviation, coefficient of variation, coefficient of correlation, probable error and trend analysis have been used for the analysis and interpretation of the data. This analysis gives a clear picture of the performance of the banks with regard to investment operation.

## **5.2 Conclusion**

After study and analysis of given data we conclude that banking is one of the business sectors. All the banks are running in profit. They invest in different sectors. NSBI is running successfully and the growth rate of deposit, investment is higher than that of other banks. It means NSBI will collect more deposit and invest in different sectors in future. From the analysis of data NABIL is running successfully. It has collected more deposit and loan and advance than that of other banks. SCBNL is also running successfully, its growth rate of deposit, investment and loan and advance is increasing. Growth rate of investment of NSBI is higher than that of other banks.

Through the assets management ratio, Standard Chartered Bank Nepal limited has better capacity to mobilize its deposits on investment and has consistent than other banks. NSBI Bank limited has stronger investment policy towards loan and advance to total deposit. Similarly SCBNL has mobilized their assets as investment in government securities more than other banks. From the view point of loan loss provision NSBI has higher LLP ratio but SCBNL has maintained the lower LLP ratio so they have better credit management.

The ratio of total investment plus loan and advances to deposit of EBL has strong investment policy than other banks likewise SCBNL, NABIL and NSBI have got fewer ratios. A higher ratio of Investment plus Loan & Advances indicates the better mobilization of its collected deposit & vice-versa.

Total Investment to total asset average ratio of SCBNL is higher than other banks likewise NABIL, EBL and NSBI. It means SCBNL has used more assets for investment and EBL has used fewer assets for investment than other banks.

Investment on government securities to total assets ratio of SCBNL is higher than other banks. It means SCBNL has mobilized their assets as investment in government securities more than other banks.

Investment on share debenture to total assets ratio of SCBNL is higher than other banks likewise NABIL, EBL and NSBI. On the basis of mean ratios, it can be stated that SCBNL has invested higher amount in shares and debentures in comparison to other banks. But it shows that all banks invest fewer funds in share and debentures of other companies. All the banks don't invest much on share and debenture of other company. It may be because of higher risk involved with it. But commercial bank should invest in other company's shares also to develop the industry and to develop the country.

All banks increasing their investment in different sectors. NSBI has higher growth rate of investment than other banks. Likewise SCBNL, NABIL and EBL. SCBNL has higher amount of investment than other banks.

All the banks are increasing their deposits. NSBI has higher growth ratio of deposit than other bank. NABIL has collected higher deposit than other banks.

All the banks are increasing its loan and advances. EBL has higher growth ratio than other banks likewise SCBNL, NABIL and NSBI. NABIL has higher loan and advances than other banks.

The capital adequacy ratio of SCBNL is higher than other banks. But it shows that all banks maintained NRB's required CAR i.e. greater than 11 percentages. Thus it serves to protect depositors and maintain stability & efficiency of the financial system. Maintaining higher CAR is good, but in shareholder's point of view, it is not better because of idle fund and is not being transferred to credit which ultimately affect the profit.

All four banks are decreasing its LLP Ratio. Among the banks NSBI has the highest LLP Ratio (4.83) than SCBNL, NABIL and EBL. It is so because of high NPL Ratio.

There is direct relationship between NPL Ratio and LLP Ratio. Here NABIL has maintained the lowest LLP Ratio so they have better credit management.

According to CRR of all four banks are in fluctuating trends. EBL has highest ratio (63.54%) than other SCBNL, NABIL, & NSBI. Comparatively, SCBNL has lowest risk ratio (35.44%) than other banks. It indicates that SCBNL has low possibility of loss than that other bank.

There is significant relationship between deposit and investment plus loan & advances of four banks. This means if deposit increases then investment plus loan & advances of the bank also increases. It is clear from the above table that correlation of coefficient and coefficient of determinant of NSBI is higher than that of SCBNL, NABIL & EBL bank respectively. This shows that NSBI is at the better position in mobilizing deposit and investment plus loan & advances in comparison to other banks.

Investment trend analysis of commercial banks is in increasing trend. Other things remaining the same, the Investment of NABIL will be higher than the other banks. Similarly SCBNL, EBL, and NSBI. From the above Investment trend it is clear that NABIL run far ahead than other banks.

Deposit trend analysis of commercial banks is in increasing trend. Other things remaining the same, the Deposit of NABIL will be higher than the other banks. Similarly SCBNL, EBL, and NSBI. From the above Deposit trend it indicates that the performance of NABIL to collect deposit is better comparison to other banks.

### **5.3 Recommendation**

On the basis of analysis of finding of study, the following recommendation and suggestion are forwarded:

- The average ratio of investment plus loan and advance to total deposit ratio of NSBI is higher than that of other banks, it means it has invested more than deposit so that its liquidity position is not good. So, it decreases its investment.
- EBL has invested its more funds only in government securities so it is

recommended that it should invest in other different sector.

- Growth ratio of deposit of SCBNL is too less than that of other banks so it is suggested that it should increased its deposit collection.
- Growth ratio of loan and advance of SCBNL is lower than that of other banks so it is recommended that it should increased its loan and advance.
- All that of banks invested fewer funds in share and debenture of other companies, so it is recommended that they should increase their investment in share and debenture.
- All banks have invested their funds only in government securities and share and debentures of other companies so it is recommended that they should invest other sector also.
- The commercial banks have been established gradually after the commercial banks act 2031 B.S. With the passage of time so many commercial banks, as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government of Nepal. But banks should provide some social response by expanding their operation in rural areas rather than urban areas. And banks can give response to poor and disadvantage groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for creditors.
- In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients.
- Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. All banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk higher will be the profit. Hence, all banks are recommended to diversify their investment in NRB bond, govt. non financial institution, other non-financial institution etc.
- Majority of commercial banks have been found to be profit oriented ignoring their social responsibility, which is not a proper strategy to sustain in long run. So all the banks are suggested to render their serves even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the goodwill of the banks in future.

- The Economic Liberalization policy adopted by Nepal government has created an environment of strict competition even in the banking sectors. In the context, all the banks are suggested to formulate and implement some sound and attractive financial; and non-financial strategies to meet required level of profitability as well as the social responsibility.
- The commercial banks i.e. Standard Chartered Bank Nepal, Nabil Bank, Everest Bank and Nepal NSBI Bank Limited should go for some new areas of investment like hydro electricity and infrastructure development of the economy as well as bank's operation.
- Standard Chartered Bank Nepal, Nabil Bank, Everest Bank and Nepal NSBI Bank Limited should target their business segment on the middle family. For this they have to keep the affordable minimum balance to open the account. So that they can earn more customer and generate more deposit amount.
- All four banks should support the social welfare event to promote the business. The bank should formulate new strategies of serving customers in a more convenient way.

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## ANNEX - 1

### Sample Calculation of Growth Rate of Total Investment

Growth rate is calculated from

$$D_{nth} = D_0(1 + g)^{n-1}$$

$D_{nth\ yrs}$  = Total Investment of nth year  $n$

$D_0$  = Total Investment of Initial year  $o$

$g$  = Growth Rate

$n$  = Number of Year

#### SCBNL

Here,

$$D_{66/67} = 19848$$

$$D_{62/63} = 12851$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 19848 = 12851(1+g)^4$$

$$\text{Or, } 1.5445 = (1+g)^4$$

$$\text{Or, } (1+g) = (1.5445)^{1/4}$$

$$\text{Or, } 1+g=1.1148$$

$$\text{Or, } g = 1.1148-1$$

$$\text{Or, } g=0.1148$$

$$\therefore g = 11.48\%$$

#### NABIL

Here,

$$D_{66/67} = 13612$$

$$D_{62/63} = 6175$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 13612 = 6175(1+g)^4$$

$$\text{Or, } 2.2044 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.2044)^{1/4}$$

$$\text{Or, } 1+g=1.2185$$

$$\text{Or, } g = 1.2185-1$$

$$\text{Or, } g=0.2185$$

$$\therefore g = 21.85\%$$

### **EBL**

Here,

$$D_{66/67} = 5010$$

$$D_{62/63} = 4201$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 5010 = 4201(1+g)^4$$

$$\text{Or, } 1.1926 = (1+g)^4$$

$$\text{Or, } (1+g) = (1.1926)^{1/4}$$

$$\text{Or, } 1+g=1.0450$$

$$\text{Or, } g = 1.0450-1$$

$$\text{Or, } g=0.0450$$

$$\therefore g = 4.5\%$$

### **SBI**

Here,

$$D_{66/67} = 16255$$

$$D_{62/63} = 3700$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 16255 = 3700(1+g)^4$$

$$\text{Or, } 4.3932 = (1+g)^4$$

$$\text{Or, } (1+g) = (4.3932)^{1/4}$$

$$\text{Or, } 1+g=1.4478$$

$$\text{Or, } g = 1.4478-1$$

$$\text{Or, } g=0.4478$$

$$\therefore g = 44.78\%$$

## ANNEX – 2

### Sample Calculation of Growth Rate of Deposit

#### SCBNL

Here,

$$D_{66/67} = 35183$$

$$D_{62/63} = 23051$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 35183 = 23051(1+g)^4$$

$$\text{Or, } 1.5263 = (1+g)^4$$

$$\text{Or, } (1+g) = (1.5263)^{1/4}$$

$$\text{Or, } 1+g=1.1115$$

$$\text{Or, } g = 1.1115-1$$

$$\text{Or, } g=0.1115$$

$$\therefore g = 11.15\%$$

#### NABIL

Here,

$$D_{66/67} = 46335$$

$$D_{62/63} = 19348$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 46335 = 19348(1+g)^4$$

$$\text{Or, } 2.3948 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.3948)^{1/4}$$

$$\text{Or, } 1+g=1.2440$$

$$\text{Or, } g = 1.2440-1$$

$$\text{Or, } g=0.2440$$

$$\therefore g = 24.40\%$$

### **EBL**

Here,

$$D_{66/67} = 36932$$

$$D_{62/63} = 13803$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 36932 = 13803(1+g)^4$$

$$\text{Or, } 2.6757 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.6757)^{1/4}$$

$$\text{Or, } 1+g=1.2790$$

$$\text{Or, } g = 1.2790-1$$

$$\text{Or, } g=0.2790$$

$$\therefore g = 27.90\%$$

### **SBI**

Here,

$$D_{66/67} = 34896$$

$$D_{62/63} = 10853$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 34896 = 10853(1+g)^4$$

$$\text{Or, } 3.2153 = (1+g)^4$$

$$\text{Or, } (1+g) = (3.2153)^{1/4}$$

$$\text{Or, } 1+g=1.3391$$

$$\text{Or, } g = 1.3391-1$$

$$\text{Or, } g=0.3391$$

$$\therefore g = 33.91\%$$

### ANNEX – 3

#### Sample Calculation of Growth Rate of Loan and Advances

##### SCBNL

Here,

$$D_{66/67} = 15932$$

$$D_{62/63} = 8905$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 15932 = 8905(1+g)^4$$

$$\text{Or, } 1.7891 = (1+g)^4$$

$$\text{Or, } (1+g) = (1.7891)^{1/4}$$

$$\text{Or, } 1+g=1.1565$$

$$\text{Or, } g = 1.1565-1$$

$$\text{Or, } g=0.1565$$

$$\therefore g = 15.65\%$$

##### NABIL

Here,

$$D_{66/67} = 32903$$

$$D_{62/63} = 13021$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 32903 = 13021(1+g)^4$$

$$\text{Or, } 2.5269 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.5269)^{1/4}$$

$$\text{Or, } 1+g=1.2608$$

$$\text{Or, } g = 1.2608-1$$

$$\text{Or, } g=0.2608$$

$$\therefore g = 26.08\%$$

### **EBL**

Here,

$$D_{66/67} = 28130$$

$$D_{62/63} = 10124$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 28130 = 10124(1+g)^4$$

$$\text{Or, } 2.7785 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.7785)^{1/4}$$

$$\text{Or, } 1+g=1.2911$$

$$\text{Or, } g = 1.2911-1$$

$$\text{Or, } g=0.2911$$

$$\therefore g = 29.11\%$$

### **SBI**

Here,

$$D_{66/67} = 17887$$

$$D_{62/63} = 8060$$

$$N = 5\text{yr}$$

$$D_{66/67} = D_{62/63}(1 + g)^{5-1}$$

$$\text{Or, } 17887 = 8060(1+g)^4$$

$$\text{Or, } 2.2192 = (1+g)^4$$

$$\text{Or, } (1+g) = (2.2192)^{1/4}$$

$$\text{Or, } 1+g=1.2205$$

$$\text{Or, } g = 1.2205-1$$

$$\text{Or, } g=.2205$$

$$\therefore g = 22.05\%$$

## ANNEX – 4

### a.) Calculation of co-relation between Deposit and Investment plus Loan & Advanced of SCBNL.

(Rs. in million)

Year	Deposit (x)	Investment +Loan & Advanced (y)	X= (x - $\bar{x}$ )	Y= (y - $\bar{y}$ )	XY	X <sup>2</sup>	Y <sup>2</sup>
2062/63	23051	21756	-6647	-6375	42378770.38	44187926.76	40643685.06
2063/64	24640	24102	-5058	-4029	20376261.18	25579317.76	16231551.75
2064/65	29744	27258	46	-873	-40164.44	2116	762373.4596
2065/66	35872	31759	6174	3628	22399897.02	38117041.21	13163544.99
2066/67	35183	35780	5485	7649	41955859.01	30086322.01	58508118.88
<b>Total</b>	<b>148490</b>	<b>140655</b>			<b>127070623.2</b>	<b>137972723.7</b>	<b>129309274.1</b>

$$\bar{x} = \frac{\sum X}{N} = \frac{148490}{5} = 29698$$

$$\bar{y} = \frac{\sum y}{N} = \frac{140655}{5} = 28131$$

$$\text{Coefficient of Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2 \times \sum Y^2}} = \frac{127070623.2}{\sqrt{137972723.7 \times 129309274.1}} = 0.9513$$

$$\text{Coefficient of determination (r}^2\text{)} = 0.9050$$

$$P.E(r) = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{(1-0.9050)}{\sqrt{5}} = 0.0286$$

$$6P.E(r) = 6 \times 0.0286 = 0.1719$$

**b) Calculation of co-relation between Deposit and Investment plus Loan & Advanced of NABIL.**

**(Rs. in millions)**

Year	Deposit (x)	Investment +Loan & Advanced (y)	X= (x - $\bar{x}$ )	Y= (y - $\bar{y}$ )	XY	X <sup>2</sup>	Y <sup>2</sup>
2062/63	<b>19348</b>	19196	-12309	-12902	158821306.8	151521820.7	166472441.
2063/64	<b>23342</b>	24609	-8315	-7490	62279335.94	69146209.78	56094407.7
2064/65	<b>31915</b>	31482	257	-617	-158710.9216	66141.5524	380837.094
2065/66	<b>37348</b>	38692	5690	6593	37516651.78	32381562.63	43466066.6
2066/67	<b>46335</b>	46515	14677	14416	211590336.5	215419612.8	207829129
<b>Total</b>	<b>158289</b>	<b>160494</b>			<b>470048920.1</b>	<b>468535347.4</b>	<b>474242882.</b>

$$\bar{x} = \frac{\sum X}{N} = \frac{158289}{5} = 31657.8$$

$$\bar{y} = \frac{\sum y}{N} = \frac{160494}{5} = 32098.8$$

$$\text{Coefficient of Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2 \times \sum Y^2}} = \frac{470048920.1}{\sqrt{468535347.4 \times 474242882.4}} = 0.9972$$

$$\text{Coefficient of determination (r}^2\text{)} = 0.9944$$

$$P.E(r) = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{(1-0.9944)}{\sqrt{5}} = 0.0017$$

$$6P.E(r) = 6 \times 0.0017 = 0.0102$$

c.) Calculation of co-relation between Deposit and Investment plus Loan & Advanced of EBL.

(Rs. in millions)

Year	Deposit (x)	Investment + Loan & Advanced (y)	X = (x - $\bar{x}$ )	Y = (y - $\bar{y}$ )	XY	X <sup>2</sup>	Y <sup>2</sup>
2062/63	13803	14325	-11624	-9815	114087168.2	135112261.5	96333832.4
2063/64	19098	19044	-6329	-5096	32250317.1	40050924.8	25969012.2
2064/65	23976	23875	-1450	-265	384070.7	2102442.0	70161.4
2065/66	33323	30316	7897	6176	48769683.1	62356607.4	38143223.0
2066/67	36932	33140	11506	9000	103549409.0	132381592.7	80996760.0
<b>Total</b>	<b>127131</b>	<b>120701</b>			<b>299040648.1</b>	<b>372003828.4</b>	<b>241512989.0</b>

$$\bar{x} = \frac{\sum X}{N} = \frac{127131}{5} = 25426.2$$

$$\bar{y} = \frac{\sum y}{N} = \frac{120701}{5} = 24140.2$$

$$\text{Coefficient of Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2 \times \sum Y^2}} = \frac{299040648.1}{\sqrt{372003828.4 \times 241512989.0}} = 0.9978$$

$$\text{Coefficient of determination (r}^2\text{)} = 0.9953$$

$$P.E(r) = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{(1-0.9953)}{\sqrt{5}} = 0.0014$$

$$6P.E(r) = 6 \times 0.0014 = 0.0084$$

d.) Calculation of co-relation between Deposit and Investment plus Loan & Advanced of SBI.

(Rs. In millions)

Year	Deposit (x)	Investment +Loan & Advanced (y)	X= (x - $\bar{x}$ )	Y= (y - $\bar{y}$ )	XY	X <sup>2</sup>	Y <sup>2</sup>
2062/63	10853	11760	-8921	-8760	78146953.8	79577104.4	76742505.7
2063/64	11445	12224	-8328	-8296	69086419.8	69357249.6	68816647.5
2064/65	13715	15722	-6058	-4798	29065683.0	36698152.4	23020612.1
2065/66	27957	28751	8184	8232	67366754.9	66976219.2	67759567.8
2066/67	34896	34142	15123	13622	206004746.4	228696055.3	185564877.7
<b>Total</b>	<b>98867</b>	<b>102599</b>			<b>449670557.9</b>	<b>481304780.9</b>	<b>421904210.8</b>

$$\bar{x} = \frac{\sum X}{N} = \frac{98867}{5} = 19773.4$$

$$\bar{y} = \frac{\sum y}{N} = \frac{102599}{5} = 20519.8$$

$$\text{Coefficient of Correlation (r)} = \frac{\sum XY}{\sqrt{\sum X^2 \times \sum Y^2}} = \frac{449670557.9}{\sqrt{481304780.9 \times 421904210.8}} = 0.9979$$

$$\text{Coefficient of determination (r}^2\text{)} = 0.9958$$

$$P.E(r) = 0.6745 \times \frac{(1-r^2)}{\sqrt{n}} = 0.6745 \times \frac{(1-0.9958)}{\sqrt{5}} = 0.0013$$

$$6P.E(r) = 6 \times 0.0013 = 0.0078$$

## Trend Analysis

### ANNEX – 5a

**Trend analysis of Total Investment of SCBNL for the year 2067/68 to 2071/72**

(Rs. in millions)

Year (t)	Investment (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	21756	-2	4	-43511.4	20989.82
2063/64	24102	-1	1	-24102.1	24560.38
2064/65	27258	0	0	0	28130.94
2065/66	31759	1	1	31759.1	31701.5
2066/67	35780	2	4	71560	35272.06
<b>Total</b>	<b>∑y=140655</b>	<b>∑x=0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=35705.60</b>	<b>140654.70</b>

**N = No. of years**

**∑y = Total Investment**

$$a = \frac{\sum y}{N}$$

$$= \frac{140655}{5}$$

$$= 28131$$

$$b = \frac{\sum xy}{\sum x^2}$$

$$= \frac{35705.60}{10}$$

$$= 3570.56$$

**Trend value of total Investment of SCBNL (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	38842.6
2068/69	4	42413.2
2069/70	5	45983.7
2070/71	6	49554.3
2071/72	7	53124.9

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 28131 + 3570.56x$$

## ANNEX – 5b

**Trend analysis of Total Investment of NABIL for the year 2067/68 to 2071/72**

(Rs. in millions)

Year (t)	Investment (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	19196	-2	4	-38392.6	18354.8
2063/64	24609	-1	1	-24609.1	25226.8
2064/65	31482	0	0	0	32098.8
2065/66	38692	1	1	38691.6	38970.8
2066/67	46515	2	4	93030	45842.8
<b>Total</b>	<b>∑y=160494</b>	<b>∑x = 0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=68719.90</b>	

**N = No. of years**

**∑y = Total Investment**

$$a = \frac{\sum y}{N}$$

$$= \frac{160494}{5}$$

$$= 32098.80$$

$$b = \frac{\sum xy}{x^2}$$

$$= \frac{68719.90}{10}$$

$$= 6871.99$$

**Trend value of total Investment of NABIL (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	52714.80
2068/69	4	59586.80
2069/70	5	66458.80
2070/71	6	73330.80
2071/72	7	80202.80

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 32098.80 + 6871.99x$$

## ANNEX – 5c

**Trend analysis of Total Investment of EBL for the year 2067/68 to 2071/72**

(Rs. in millions)

Year (t)	Investment (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	14325	-2	4	-28650.4	14359.86
2063/64	19044	-1	1	-19044.2	19250.02
2064/65	23875	0	0	0	24140.18
2065/66	30316	1	1	30316.2	29030.34
2066/67	33140	2	4	66280.0	43700.82
<b>Total</b>	<b>∑y=120700</b>	<b>∑x = 0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=48901.6</b>	

**N = No. of years**

**∑y = Total Investment**

$$a = \frac{\sum y}{N}$$

$$= \frac{120700}{5}$$

$$= 24140$$

$$b = \frac{\sum xy}{x^2}$$

$$= \frac{48901.6}{10}$$

$$= 4890.16$$

**Trend value of total Investment of EBL (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	38810.66
2068/69	4	43700.82
2069/70	5	48590.08
2070/71	6	53481.14
2071/72	7	58371.30

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 24140 + 4890.16x$$

## ANNEX – 5d

**Trend analysis of Total Investment of SBI for the year 2067/68 to 2071/72**

(Rs.in millions)

Year (t)	Investment (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	11760	-2	4	-23519	8261.34
2063/64	12224	-1	1	-12224.2	14390.56
2064/65	15722	0	0	0	20519.78
2065/66	28751	1	1	28751.4	26649.00
2066/67	34142	2	4	68284	32778.22
<b>Total</b>	<b>∑y=102599</b>	<b>∑x = 0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=61292.2</b>	

**N = No. of years**

**∑y = Total Investment**

$$a = \frac{\sum y}{N}$$

$$= \frac{102599}{5}$$

$$= 20519.8$$

$$b = \frac{\sum xy}{x^2}$$

$$= \frac{61292.2}{10}$$

$$= 6129.22$$

**Trend value of total Investment of SBI (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	38907.44
2068/69	4	45036.66
2069/70	5	51165.88
2070/71	6	57295.1
2071/72	7	63424.32

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 20519.8+6129.22x$$

## ANNEX – 6a

### Trend analysis of Total Deposit of SCBNL for the year 2067/68 to 2071/72

(Rs.in millions)

Year (t)	Deposit (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	23051	-2	4	-46101	22598.6
2063/64	24640	-1	1	-24640.3	26148.25
2064/65	29744	0	0	0	29697.9
2065/66	35872	1	1	35871.8	33247.55
2066/67	35183	2	4	70366	36797.2
<b>Total</b>	<b>∑y=148490</b>	<b>∑x=0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=35496.5</b>	

**N = No. of years**

**∑y = Total Deposit**

$$a = \frac{\sum y}{N}$$

$$= \frac{148490}{5}$$

$$= 29698$$

$$b = \frac{\sum xy}{\sum x^2}$$

$$= \frac{35496.5}{10}$$

$$= 3549.65$$

### Trend value of Total Deposit of SCBNL (2067/68 to 2071/72)

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	40346.9
2068/69	4	43896.5
2069/70	5	47446.2
2070/71	6	50995.8
2071/72	7	54545.5

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 29698 + 3549.65x$$

## ANNEX – 6b

**Trend analysis of Total Deposit of NABIL for the year 2067/68 to 2071/72**

(Rs.in millions)

Year (t)	Deposit (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	19348	-2	4	-38696.8	18062
2063/64	23342	-1	1	-23342.4	24859.91
2064/65	31915	0	0	0	31657.82
2065/66	37348	1	1	37348.3	38455.73
2066/67	46335	2	4	92670.0	45253.64
<b>Total</b>	<b>∑y=158289</b>	<b>∑x=0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=67979.1</b>	

**N = No. of years**

**∑y = Total Deposit**

$$a = \frac{\sum y}{N}$$

$$= \frac{158289}{5}$$

$$= 31657.8$$

$$b = \frac{\sum xy}{x^2}$$

$$= \frac{67979.1}{10}$$

$$= 6797.91$$

**Trend value of Total Deposit of NABIL (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	52051.55
2068/69	4	58849.46
2069/70	5	65647.37
2070/71	6	72445.28
2071/72	7	79243.19

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 31657.8 + 6797.91x$$

## ANNEX – 6c

**Trend analysis of Total Deposit of EBL for the year 2067/68 to 2071/72**

(Rs.in millions)

Year (t)	Deposit (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	13803	-2	4	-27605	13329.44
2063/64	19098	-1	1	-19097.7	19377.86
2064/65	23976	0	0	0	25426.28
2065/66	33323	1	1	33322.9	31474.7
2066/67	36932	2	4	73864	37523.12
<b>Total</b>	<b>∑y=127132</b>	<b>∑x=0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=60484.2</b>	

**N = No. of years**

**∑y = Total Deposit**

$$a = \frac{\sum y}{N}$$

$$= \frac{127132}{5}$$

$$= 25426.4$$

$$b = \frac{\sum xy}{x^2}$$

$$= \frac{60484.2}{10}$$

$$= 6048.42$$

**Trend value of Total Deposit of EBL (2067/68 to 2071/72)**

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	43571.5
2068/69	4	49620
2069/70	5	55668.4
2070/71	6	61716.8
2071/72	7	67765.2

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 25426.4+6048.42x$$

## ANNEX – 6d

### Trend analysis of Total Deposit of SBI for the year 2067/68 to 2071/72

(Rs.in millions)

Year (t)	Deposit (y)	x=t-2065	x <sup>2</sup>	xy	Y <sub>c</sub> =a+bx
2062/63	10853	-2	4	-21705.4	6853.58
2063/64	11445	-1	1	-11445.2	13313.44
2064/65	13715	0	0	0	19773.3
2065/66	27957	1	1	27957.2	26233.16
2066/67	34896	2	4	69792	32693.02
<b>Total</b>	<b>∑y=98866</b>	<b>∑x=0</b>	<b>∑x<sup>2</sup>=10</b>	<b>∑xy=64598.6</b>	

**N = No. of years**

**∑y = Total Deposit**

$$a = \frac{\sum y}{N}$$

$$= \frac{98866}{5}$$

$$= 19773.2$$

$$b = \frac{\sum xy}{\sum x^2}$$

$$= \frac{64598.6}{10}$$

$$= 6459.86$$

### Trend value of Total Deposit of SBI (2067/68 to 2071/72)

Year(t)	x=t-2065	Trend value (Y <sub>c</sub> = a+bx)
2067/68	3	39152.9
2068/69	4	45612.7
2069/70	5	52072.6
2070/71	6	58532.5
2071/72	7	64992.3

**The equation of straight line trend is Y<sub>c</sub> = a+bx**

$$Y_c = 19773.2+6459.86x$$

## ANNEX-7

### Sample of Commercial Banks & their Date of Operation in B.S.

S.N.	Name of the commercial Bank	Date of Operation in B.S.
1.	Nepal Bank Limited	1994/07/30
2	Rastriya Banijya Bank	2022/10/10
3	NABIL Bank Limited	2041/04/01
4	Nepal Investment Bank Limited	2042/11/26
5	Standard Chartered Bank Nepal Limited.	2043/10/16
6	Himalayan Bank Limited	2049/10/05
7	Nepal Bangladesh Bank Limited	2050/02/23
8	Nepal SBI Bank Limited	2050/03/23
9	Everest Bank Limited	2051/07/02
10	Bank of Kathmandu Limited	2051/11/28
11	Nepal Credit and Commerce Bank Limited	2053/06/28
12	NMB Bank Ltd.	2053/08/13
13	Lumbini Bank Limited	2055/04/01
14	Nepal Industrial & Commercial Bank Limited	2055/04/05
15	Siddhartha Bank Limited	2056/09/09
16	Machhapuchhre Bank Limited	2057/06/17
17	Development Credit Bank Ltd.	2057/10/10
18	Kumari Bank Limited	2057/12/21
19	Laxmi Bank Limited	2058/12/21
20	Agriculture Development Bank Ltd.	2062/11/19
21	Global Bank Ltd.	2063/09/18
22	Citizens Bank International Ltd.	2064/03/07
23	Prime Commercial Bank Ltd.	2064/06/07
24	Sun Rise Bank Ltd.	2064/06/25
25	Bank of Asia Nepal Ltd.	2064/06/25
26	Kist Bank Ltd.	
27	Janata Bank Ltd.	
28	Mega Bank Ltd.	
29	Commerze & Tourisum Bank	
30	Century Bank Ltd.	

(Source: Banking and Financial Statistic 51, Mid-July, 2008, p53)

### **Profiles of the Banks in study Profiles of the Banks in study**

#### **1. Standard Chartered Bank Nepal Limited**

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. There are 17 branches of

Standard Chartered bank Nepal Limited in operation. Authorized capital and paid up capital of Standard Chartered Bank Nepal Limited is Rs. 1000,000,000 and Rs. 931,966,400 respectively. Its market value per share at the end of Ashad 2066 is Rs. 6010 and book value per share Rs.327.53. Its earning per share is Rs. 109.99 according to financial statement of 2065/66.

## **2. NABIL Bank Limited:**

Nabil bank was established in 1984 as the first JVB in Nepal. Now it has the largest number of branches. Total of 35 branches currently operating and 6 upcoming branches in Nepal. Initially 50% of its share was owned by Dubai Bank Ltd. UAE and 20% of the share by Nepalese financial Institution, remaining share was undertaken by the general public of Nepal. The share owned by Dubai Bank Ltd. Were transferred to Emirates Bank International Limited. Dubai by virtue of its annexation with the later on Nabil sold its entire 50% equity holding to national bank Ltd. Bangladesh. National Bank Ltd. Bangladesh is managing the bank in accordance with the technical services agreement signed between it and the bank on June 1995. The bank have changed its name from Nepal Arab Bank Ltd to NABIL bank limited since 1st January 2002.

Initially the bank have 100 million rupees capital. 50 million rupees issued capital and paid up capital was 30 million rupees. Which is now reached at 1600 million rupees authorized capital, 965.75 million rupees of issued capital & paid up capital. Nepal Rastra Bank approval for opening its branch in other places. Nabil has continued to extent its network and has given emphasis for it is own office premise. It has also aid it's commitment for the managerial and technical skill development programs.

## **3. Nepal SBI Bank Limited:**

Nepal SBI Bank Limited was established in 1993, under the company Act. It is also a foreign joint venture bank and the foreign partner is State Bank of India, holding the 50% of equity share of Nepal SBI Bank Limited, is managing the Bank under joint venture and technical services agreement signed between it and Nepalese promoters. These are 32 branches and 6 extension counters and a commercial branch of Nepal SBI Bank Limited in operation. Authorized capital and paid-up capital of Nepal SBI Bank

Limited is Rs.2000, 000,000 and Rs.874,527,840 respectively. Its market value per share Rs.1900 and book value per share Rs.194.68 currently its earning per share is Rs.36.18.

#### **4. Everest Bank Limited:**

Everest Bank Limited was registered on November 17, 1992 and came into operation on October 18, 1994 with an objective of extending professionalized and efficient banking services to various segments of the society. The bank had an initial paid up capital of Rs 3 Crore. Today the bank has grown to become one of the leading banks in Nepal. It is also a foreign joint venture bank and the partner was United Bank of India and managed from very beginning till November 1996. Later on it handed over the management to the Punjab National Bank Ltd, India that holds 20% equity on the bank's share capital. Altogether 35 branches of Everest bank are in operation. Authorized capital and paid-up capital of Everest Bank Limited are Rs.1000,000,000 and Rs.838,821,000 respectively. Its market value per share Rs.2455 and book value is Rs.313.64 EPS is Rs.99.99.