<u>CHAPTER – I</u> INTRODUCTION

1.1 Background of the Study

Nepal is a land locked mountainous country situated between two Asian giants China & India, both having well developed economic condition. It is located on the southern part of the Himalaya range and covers an area of 147181 sq. km. Nepal is one of the least developed and the ninth poorest country in the world and has many implicit and explicit obstacles for the development.

Development of a nation depends upon the economic development of that country and economic development largely depends upon the financial infrastructure of that country. Therefore, the primary goal of any nation including Nepal is rapid economic development to promote the welfare of the people and the nation as well. Nepal being one of the least developed countries has been trying to embark upon the path of economic development by economic growth rate and developing all sectors of economy. Even though the process of economic development depends upon various factors, however economists are convinced that capital formation and its proper utilization plays a most important role.

One of the key factors in the economic development of a country is the proper mobilization and utilization of domestic resources. Similarly, integrated and speedy development of the country is only possible when competitive and reliable banking services are reached and operated to every corner of the country because the government can't contributes to the economic development all alone. Economic development demands transformation of saving into the actual investment. And, it is the financial institution that transfers funds from surplus spending units to deficit units. It has been well established that the economic activities of any country can hardly be carried without the assistance and support of financial institutions. Financial institutions have catalytic role in the proper functioning of an economy. The investment policy of financial institutions, especially banks has long term impact not only on their growth and sustainability but also on the economic development of the country. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of banks and other financial institutions. Good investment policy has a positive impact on economic development of the country and vice- versa.

In any firm, investment policy is taken as major financial decision, which affects the value of the firm. The initial step an investing policy involves is determining the investment objectives and the amount of one's investable fund. Investment is always related with risks and returns. It is appropriate to state that the objective is to make a lot of money by recognizing the possible losses. Therefore, investment objective should be stated in terms of both risks and returns. Setting a clear investment policy also involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio. The identification of assets depends upon many things, such as investment objectives, investable fund, tax consideration etc.

Irnvestment is a very risky job for a purposeful, safe and profitable investment. Bank must follow sound investment policy. The fundamental principle of investment must be followed thoroughly for profitable investment. Investment policy should ensure maximum amount of investment to all sectors with proper utilization. There is high liquidity in the market and it seems no profitable place to invest these days. A right balance should keep between safety liquidation and profitability. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum risk, which ultimately leads the bank to the path of success to achieve its organizational objectives of shareholders' wealth maximization.

The Commercial Bank Act, 2031 of Nepal has stated, "A commercial bank means banks which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions." Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy. Commercial banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus, commercial banks have become the heart of financial system.

Commercial banks must mobilize its deposits and other funds to profitable, secured, stable and marketable sector. Then only it can earn more profit as well as it should be secured and can be converted into cash whenever needed. But, commercial banks have to pay due consideration while formulating investment policy regarding loan and investment. Investment policy is one facet of overall spectrum of policies that guide bank's investment operations. The performance of any bank largely depends upon its investment policy. Investment policy ensures efficient allocation of funds to achieve the overall objectives. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Commercial bank should be careful while performing credit creation function. The banks should never invest its funds in those securities, which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute. The investment policy should be carefully analyzed. So they must invest their funds where they gain maximum profit.

Commercial banks must follow the rules and regulations as well as different directions issued by the central bank, ministry of finance, ministry of law and other regulatory bodies while mobilizing its funds. So, the bank should invest its funds in legal securities only. Investment policy should incorporate several elements such as regulatory environment, the availability of funds, the selection of risk, and loan portfolio balance and term structure of the liabilities. Thus, commercial banks should incorporate several elements while making investment policy. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial bank's investment are fully considered while making investment decisions.

The evolution of the organized financial sector in Nepal has a short history compared to that in other developing South Asian countries. In the context of Nepal, Tejarath Adda established during the tenure of the then Prime Minister Ranodip Singh during the year 1877 A.D. was the first step towards the institutional development of banking in Nepal. Tejarath Adda did not collect deposits from the public but gave loan to employees and public against the bullion. Consequently the major parts of the country remain untouched from these limited-banking activities. The development of trade with India and other countries increase the necessity of the institutional banker, which can act more widely to enhance the trade and commerce and to touch the remote nonbanking sector in the economy. Considering this situation, the "Udyog Parishad" was constituted in 1936 A.D. One year after its establishment, it formulated the "Company Act" and "Nepal Bank Act" in 1937 A.D. Banking in the modern sense started with the inception of Nepal Bank Ltd. (NBL) in 1937 A.D.(1994-07-30) as a first commercial bank of Nepal with authorized capital of Mrs. 10 million.

Modern banking practices emerged with the establishment of Nepal Bank Limited. However the stand of Nepal Bank limited alone in total monetary and financial sector was not sufficient and satisfactory. Thus Nepal Rastra Bank was set up on 1956 A.D. (2013.01.14) as a central bank under Nepal Rastra Bank Act 1956 A.D. (2012 B.S.) since then, it has been functioning as the government's bank and has contributed to the growth of financial sector ever since. The major challenge before NRB is to ensure the robust health of financial institutions. Similarly, on 1966 A.D. (2022-10-10) Rastriva Banijaya Bank (RBB) was established as a fully government owned commercial bank. With the emergence of RBB, banking service spread to both the urban and rural areas but customers failed to have taste of quality and competitive service, because of excessive political and bureaucratic interference. For industrial development, Industrial Development Center was set up in 1956 A.D. (2013 B.S.), which was converted to Nepal Industrial Development Corporation (NIDC) in 1959 A.D. (2016 B.S.). Similarly, Agriculture Development Bank (ADBL) was established in 1976 A.D. (2024.10.07) with an objective to provide agricultural products so that agricultural productivity could be enhanced through introduction of modern agricultural techniques. As the country moved towards economic liberalization in 1980 A.D., foreign Banks were invited to operate in Nepal. The financial scenario has changed with the introduction of joint venture banks in 1984. The number of commercial banks has been increasing. Since then, various financial institution like, Joint Venture Banks, Domestic Commercial Banks, Development Banks, Finance Companies, Micro Finance Companies, Credit Guarantee Corporation, Employee Provident Funds, Citizen Investment Trust, National Insurance Corporation, Nepal stock Exchange have come into existence to cater the financial needs of the country thereby assisting financial development of the country.

After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors are having greater network and access to national and international markets. They have to go with their portfolio management very efficiently and seriously for coping with various challenge in order to increase their regular basis of income as well as to enrich the quality base of service for the attraction of good clients. In this competitive and market oriented open economy, each and every commercial bank and financial institution has to play a determining role by widening various opportunities for the sake of expanding provisions of best service to their customers and by making themselves as a strong and potential financial intermediaries as per country's need of present scenario to obtain the desired level of economic development.

Joint venture banks are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors, financial and non financial institutions as well as private investors and their parent banks each supplying 50 percent of total investment. The parent banks, which have experiences in highly mechanized and efficient modern banking services in many parts of the world have come to Nepal with higher technology, advance management skills. Joint venture banks are established by joining different forces and with ability to achieve a common goal of each of the partners. They are more efficient and effective monetary institution in modern banking fields than other old type of bank in Nepalese context.

In Nepal, Commercial banks play an essential role in the economic growth. Its investments range from small-scale cottage industries to all types of social and commercial loans and large industries. Generally the investment of the Commercial Banks include the investment on Government securities like Treasury bills, development bonds, national savings bonds, foreign government securities, shares of government owned companies and non- government companies and investment on debentures. Commercial Banks also use their major part of funds in loan and advances.

1.2 Focus of the Study

The main focus of the study is highlighting the investment policies of commercial banks expecting that the study can be bridge the gap between deposits and investment policies. On the other hand, the study provides information to management of the bank that helps them to take collective action. Further from the study, the shareholders get information to make decision while making investment on shares of various banks. Study focuses the comparative study of two commercial banks only the period of five years.

1.3 Statement of Problem

Mushrooming of private sector banks is the present situation of Nepalese financial sector. Even though several financial institution have been acting their services in the country, sufficient return could not be achived due to lack of strong, stable and appropriate investment policics. The major problem in almost all underdeveloped countries and Nepal is no exception, is that of capital formation and proper utilization. In such counties, the commercial banks have to shoulder more responsibilities and act as development banks, due to lack of other specialized institutions.

Investment is the most important factor for a company. Though several financial companies have been established in the country with in short span of time, sufficient return could not have been achieved and strong, stable and appropriate investment policy has not been followed by these institutions. Due to throat cut competition of the financial environment these companies seem to be ready to grant much more loan, advances and other facilities against the client's insufficient deposit. Unsecured loan and investment may cause the liquidation of those financial companies. If the funds are wrongly invested without thinking any financial risk, business risk and other related factors, the company can not obtain profitable return as well as sometimes it may lose its principle.

Project appraisal method followed by commercial banks is also not sufficient one. So a large volume of credit extended by commercial banks is drifting from basic credit principle and found to have lower productivity. Loan supervision and follow ups regarding whether clients are properly utilizing the bank investment is found to be poor in many of commercial banks. Due to all these reasons, the proportion of non-performing assets on total loan and advances has been increasing significantly. It has become a major problem of two large commercial banks, NBL and RBB, and now private sector joint venture banks are also suffering from the NPA problem within the short time span of their operation.

Similarly, the investment portfolio position of the banks is not satisfactory. There are various problems in resources mobilization by financial institution in Nepal. The most important problem is poor investment climate prevailing in Nepal due to heavyhirexeda regulatory procedure, uncertain government policy, NRB's stringent directives, unsecured social environment etc. Lack of sound investment policy is another reason for a commercial bank that not to properly utilizing its deposits that is making loan and advances or lending for a profitable project. This condition may lead the commercial bank to the position of liquidation.

Commercial banks invest their funds in limited areas to achieve highest amount of profit. They are found to more interest in investment in less risky and highly liquid sectors like in T-Bills, development bonds and retail and consumer lending. There is an obvious hesitation to invest on long-term projects and in venture capital investment. So, many of them follow conservative and un-effective investment policy.

As with everything in Nepal, every commercial bank has an investment in the same sectors. They are in consumer lending, tourism, garments and in trading sector. They are the major sectors. But given the current situation of the country, it is not up to them to decide which sector they want to go into. The main factor for success of any organization is the security situation. Once the security situation stabilizes, then only commercial banks consider rationally as to where they should to invest and grow. So, security problem is the burning problem for every commercial bank to invest their funds in our any sectors.

Many of Nepalese commercial banks have not formulated their investment policy in an organized manner. Majority of them mainly rely upon the instruction and guidelines of Nepal Rastra Bank. They don't have clear view towards investment policy. Furthermore, the implementation of policy is not in an effective way. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has caused many problems to commercial banks.

Thus, in this scenario of Nepalese commercial banking sector, this study mainly seeks the answers of the following specific problems.

- a) Is Nepal Investment Bank Ltd's investment policy more effective and efficient than that of NABIL Bank?
- b) Is Nepal Investment Bank Ltd's investment strategy successful to utilize its available fund in comparison to the NABIL Bank?
- c) Are they maintaining sufficient liquidity, profitability and risk position?
- d) What is the relationship of investment on loan and advances with total deposits and total net profit?
- e) Does the investment decision affect the total earnings of the commercial bank?
- f) Is the fund mobilization and investment policy effective and stable?

g) What steps should be taken to improve the investment policy of the bank?

1.4 Objectives of the Study

Investment decision is one of the major decision functions of financial management. The main purpose of this study is to assess the investment policy and strategies followed by NABIL and Nepal Investment Bank Limited. The specific objectives of this study are given below:

- a) To examine the investment policy of the banks.
- b) To examine the utilization of available fund of Nepal Investment Bank Ltd's in comparison to NABIL Bank.
- c) To evaluate the liquidity, profitability and risk position of Nepal Investment Bank Ltd in comparison to NABIL Bank.
- d) To find out the empirical relationship between deposits loan and advances, investment, net profit and compare them between Nepal Investment Bank Limited & NABIL Bank.
- e) To analyze the trend of deposits, investment, net profit and loan and advances, for next five years of Nepal Investment Bank Ltd. and NABIL Bank.
- f) To provide the suggestion of improving the investment policy to Nepal Investment Bank Limited and NABIL Bank on the basis of the findings of the analysis.

1.5 Significance of the Study

At it is well known fact that the commercial banks can affect the economic condition of the whole country, the effort will made to highlight the investment policy of commercial banks expecting that the study can bridge the gap between deposits and investment policies. It is expected to be helpful in digging out the root problems in the investment policies of the commercial banks.

The needs and importance of this study has been felt for some important resons. In the context of Nepal there are less availability of research work, articles, and journals in investment policy of commercial banks. Success and prosperity of the bank relies heavily upon the successful investment of collected resource to the important sectors of economy. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of commercial banks. The study will certainly help the management of Nepal Investment Bank Limited and NABIL Bank to improve their performance and to take corrective action if necessary. The study has theoretical significance as it helps to add the existing literature of investment policy management. Moreover, the study is very useful to various groups in various ways such as government, general reader, students, investors, shareholders, brokers, financial agencies, Businessmen and general public.

1.6 Limitations of the Study

Basically the research is done for the partial fulfillment of MBS. Like every research study, it also has some limitations. So this has some limitations, which are listed below:

- a) The study is mainly based on secondary data collected from different sources.
- b) The study period is covered only 5 fiscal years.
- c) Out of the numerous affecting factors, this study concentrates only on those factors, which are related with investment policy, and available in the form required for analyzing the different issues.
- d) Due to wide range of data deficiencies only simple technique have been used for the analysis of the data.

- e) The study deals with only two commercial banks to compare with.
- f) Due to limited time all the concern areas might not be covered in the study.
- g) Lack of time and research experience is also major limitation of the study.

1.7 Organization of the Study

The whole study is organized into five different chapters. Those are as follows:

Chapter 1: Introduction

The introduction chapter of the study contains:

- a) background
- b) focus of the study
- c) statement of problem
- d) objective of the study
- e) significance of the study
- f) limitation of the study
- g) organization of the study

Chapter 2: Review of literature

This chapter deals the review of related literatures and available studies written and prepared by different experts and researchers in the field of investment policy.

Chapter 3: Research methodology

This chapter focuses on research design, population and sample, sources of data, procedure of data collection, tools for analysis, limitation of the methodology, method of analysis and presentation.

Chapter 4: Presentation and data analysis

This chapter fulfills the objectives of the study by presenting the data and analyzing them with the help of various financial and statistical tools followed by methodology.

Chapter 5: Summary, conclusion and recommendation

This chapter summarizes the whole study. Moreover, it draws the conclusion and forwards the suggestions and recommendation for the improvement of investment policy of the sample commercial banks.

Besides these, bibliography and appendices is also present at the end of the thesis. Similarly, acknowledgements, table of contents, list of tables, list of figures, abbreviations are included in the front part of the thesis report.

<u>CHAPTER –II</u> REVIEW OF LITERATURE

2. Introduction

This chapter deals with the theoretical aspect of the topic on investment policy in more detail and descriptive manner. It develops concepts and ideas about the selected topic by reviewing all the relevant materials regarding the study. In fact, review of literature begins with a search for a suitable topic and continues throughout the duration of the research work. It deals with a literature survey of the existing volumes of similar related subjects. Review of literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. It is an integral and a mandatory process in research works .The main reason for a full review of research in past is to know the outcomes of those investigations in areas where similar concepts and methodologies had been used successfully. It is also a way to avoid investigation problems that have already been definitely answered. Thus a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to do. The primary purpose of literature review is to learn not to accumulate.

It provides the foundation for developing a comprehensive theoretical framework and knowledge of the status relevant to the field of research in order to explore the relevant and true facts for the reporting purpose. Hence, in this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks. For this study, different books, journals, articles, annual reports and some research paper related with this topic have been reviewed. Therefore, this chapter is arranged in the following order:

a) Theoretical Review
b) Review of Previous Study

Review of Articles
Review of Research Papers
Review of Thesis

c) Review of Legislative Provisions

2.1 <u>Theoretical Review:</u>

Theoretical review provides the fundamental theoretical framework and foundation to the present study.

2.1.1 Investment

In general, investment means to pay out money to get more. It is the sacrifice of current money for future money. It is geared by two factors: time and risk. The sacrifice takes place in the present, is certain while the reward comes later, and is generally uncertain. Investment is nothing but deploying our savings in a manner that ensures safety of our money and provides a sustained return to supplement our regular income. The term investment covers a wide range of activities. It is commonly known fact that an investment is only possible where there are adequate savings. If all the incomes and savings are consumed to solve the problem of hand to mouth and to the other basic needs, then there is no existence of investment. Therefore, both savings and investment are interrelated.

Investments are made in assets. Assets in all are of two types, real assets (land, buildings, factories etc) and financial assets (stocks, bond, T-bill etc.). These two investments are not competitive but complementary. Highly – developed institutions for financial investment greatly facilitate real investment.

investment is the employment of funds with the aim of achieving additional income or growth in value .In other words investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns. Investment is defined as the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of an investor's wealth, which is the sum of current income and present value of all income.

2.1.2 Features of Sound Lending and Investing Policy

The income and profit of a financial institution depends upon to its lending procedure, lending policy and investment of its fund in different securities. A sound lending and investment policy is not only pre-requisite for bank's profitability but also of utmost significance for the promotion of commercial savings of an under developed and backward country like Nepal.

The factors that banks must consider for sound lending and investment policies are explained as under:

I) <u>Safety and Security</u>

While selecting the sectors for investing the funds, a bank should be very much conscious. It should never invest its funds in those securities, which are too volatile because a little difference may cause a great loss. Similarly, the businessman who is bankrupt at once or earns a million in a minute should not be financed at all. The banks invest its funds in legal securities only. The bank should accept that type of securities, which have marketability; ascertainability, stability & transferability and it also accept those securities, which are commercial, durable and high market prices. For the safety and security in investing funds the bank can use the investment portfolio tools also.

II) <u>Liquidity</u>

Liquidity generally refers to the cash or any assets that can be converted into cash immediately. Liquidity is defined as bank's capacity to pay cash in exchange of deposits. People deposit their money in banks because they believe that the bank will repay their money on demand. In order to retain good credit standing and trust and confidence of its customers every banks must maintain enough liquidity to meet its various obligations. In order to maintain the confidence to the depositors, the bank must always be ready to meet current or short-term obligations when they become due for repayment Liquidity is the capacity of bank to pay cash against deposits. Hence the liquidity position of a bank is such an important factor.

III) Profitability

Commercial banks must invest on those sectors from where they can earn maximum return because through maximizing the returns on its investment, bank can maximize its volume of wealth. Hence the investment or granting of loan & advances by them are highly influenced by the profit margin. Generally, the return of commercial bank depends upon the interest rate of the bank, volume of loan provided, time period of loan and nature of investment on different securities. Profitability is only the term, which always motivates commercial banks to invest their money more and more.

IV) Suitability

A banker should always know why a customer is in need of loan. If a borrower misuses the loan granted by the bank, he will never be able to repay the loan and bank will possess heavy bad debts. Therefore, in order to avoid such circumstances, advances should be allowed to select suitable borrowers and it should demand all the essential detailed information about the scheme of the project. Bank should also keep in mind the overall development plans of the nation and the credit policy guidelines of the central bank.

V) **Diversification**

The bank should be careful that while granting loan, it should not always be in one sector. To minimize risk and maximize the profit, a bank must diversify its investment on different sectors. As the saying goes "A bank should not put all its eggs in the same basket", therefore, in order to minimize the risk, a bank should diversify its investment in different securities. Diversification of loan helps to sustain loss according to the law of average because if securities of a company depreciated, there may be appreciation in the securities of other companies. In this way, the loss can be recovered. This diversification or portfolio investment helps to earn good return and at the same time minimize the risks and uncertainty.

VI) <u>Legality</u>

A commercial bank must follow the rules and regulations and statuary directives issued by Nepal Rastra Bank, Ministry of Finance and others while issuing securities and mobilizing their funds. In Nepal, NRB restricts financial institution licensed by it to invest in securities of each other.

2.1.3 <u>Sources of Funds for the Investment</u>

There are different sources of funds for the investment of the bank.

a) <u>Capital</u>

Capital is the lifeblood of the trade and commerce. Therefore, capital is needed for the operation of the bank as in other business. The capital fund consist of two elements like

- I. Issuing Shares
- II. General Reserves

I. Issuing Shares

Bank issues its share for the collections of capital. So this is one of the sources of fund to invest. By increasing in the issue of share, the bank can increase its capital.

II. General Reserves

Reserves are kept by the bank separated from the profit. This reserve is also invested at the time of contingency and to cover the loss in future.

If the capital is not sufficient and there is need have more money to invest in that case the bank uses the accumulated profit to invest. In the time of contingency also, the bank invests its accumulated profit for recovering its future loss.

c) <u>Deposits</u>

Deposits are the main source of funds. By providing certain rate of interest, commercial bank calls for the deposit from the customer. Mainly, three types of deposits are accepted by the bank like current deposit, fixed deposit, saving deposits. These different types of deposits are used for lending the money to different sectors like agriculture, production, trade, service sector and other industry. The deposits will lead to increase in the working capital of the bank.

d) External and Internal Borrowings

The funds can be collected by borrowing money through different banks or different institution. In a developing country like Nepal, those types of borrowings are very important. The commercial banks may not have sufficient fund to invest in different sector. In that case it has to borrow from other bank or other financial institutions. Generally the commercial bank borrows from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internally, the commercial banks borrow mainly from inter bank and Nepal Rastra Bank. So the commercial bank cannot provide loan or investment without the funds. From the fund collected from above different source, the commercial bank grants loan.

2.2 <u>Review of Previous Study</u>

Every scientific research is based on past knowledge. The previous studies cannot be ignored because they provided the foundation to the preset study. Therefore, in the light of this dissertation in this section review of articles, review of research papers & review of thesis of previous study are taken into consideration.

2.2.1 <u>Review of Articles</u>

Under this heading, efforts have been made to examine and review some of the related articles published in different economic journals, bulletin of World Bank, dissertation papers, magazines, newspapers and other related books.

F. Morris, in his discussion paper on "Latin America's Banking System in the 1980's", has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirements, credit allocation (investment decision) and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, high risk diversification of loan portfolio and investments, high risk concentration, related parties lending, etc, are major cause of investment and loan that has gone bad (Morris, 1990:81)

Sunity Shrestha, in her article, "Lending operation of commercial Banks of Nepal and its impact on GDP" has presented with the objectives to make an analysis of contribution of commercial banks' lending to the gross domestic product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz. agriculture, industrial, commercial service and general multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending have positive impact on GDP. Thus, in conclusion she has accepted the hypothesis that there has been positive impact by the lending of commercial banks in various sectors of economy, except service sector investment. (Dr. Sherestha: 2055:23-27).

Shree Prasad Poudel, Deputy Director, NRB in his article "Government Security Markets Rational and Development in Nepal" has concluded that the Security markets are center of the financial system. Debt securities market in the Nepal is highly dominated by government debt securities. Debt statistics evidenced that Nepal remained debt free nation till 1950's. From the beginning of 1960's foreign loans and domestic bonds have been alternative means of debt financing in Nepal as a result total debt as a percentage of GDP widened from 1% in 1960's to 65.3% in the year 2000.

According to Mr. Poudel, Government debt consists of Treasury bills (T-Bills), National Savings Certificates (NSCs), Development Bonds (DBs), Special Bonds (SBs), and Citizen Saving Certificates (CSCs).

He further added that NRB and commercial Banks are the main holders of government bonds. In his article he suggested following improving area in debt securities market in Nepal:

- To make government securities active instruments of open market operation, coupon rate on government securities has to be fixed closely to the market rate of interest.
- Exchange of government securities at market price has to be encouraged.

- Products of government debt securities need to be diversified to meet investor demands.
- Like equity shares the marketable government securities need to be exchanged in the floor of Nepal Stock Exchange at competitive price. (Poudel: 2059: 45-51)

Bodhi B. Bajracharya has mentioned in his article, "Monetary Policy and Deposit Mobilization in Nepal" has concluded that the mobilization of domestic savings is one of the monetary policies in Nepal. For this purpose commercial banks stood as the vital and active financial intermediary for generating resources in the form of deposit of the private sector so far providing credit to the investors in different aspects of the economy. (Bajracharya:1990: 93-97)

Mr Ramesh lal shrestha, in his article. "A study on dopisits and credit of commercial banks in Nepal," concluded that the credit deposit ratio would be 51.30%, other htings remaining the same, in 2004 A.D., which wasthe lowestunder the period of review. Therefore, he had strongly recommended that the commercial banksshould try to give more credit earning new field as far as possible. Otherwise, they might not be able to absorb even its total expenses. (2047:93-97)

Mr. Shekhar Bahadur Pradhan in his article "Deposit mobilization its problem and prospects" points out that deposit in the lifeblood of every financial institution. The latest financial/accounting figures of most bank and financial companies produce a strong feeling that serious review must be made with regards to problem and prospect of deposit sectors. Leaving a few joint venture banks other organizations rely heavily on the business deposit and credit disbursement.

Mr. Pradhan has highlighted the following problems of deposit mobilization in the Nepalese context.

- Most Nepalese people do not go for institutional savings due to lack of adequate knowledge. They are much used to savings in the form of cash and ornaments. Their half heartedness to deal with institutional system is governed by the lower level of understanding about financial organization process, withdrawal system, availability of deposit facilities and so on.
- ✤ Unavailability of institutional services in rural areas.
- Due to lesser office hours of banking system, people prefer holding cash in their personal possession.
- Improper mobilization and improvement of the employment of deposits towards various sectors.

For proper deposit mobilization, he has recommended the following:

- Provide sufficient institutional services in the rural areas.
- Cultivate the habit of using rural banking unit.
- ✤ Add service hours to the bank.
- NRB should organize training programs to develop skilled manpower.
- Spreading co-operatives to rural areas to develop mini-branch service. (Pradhan:1996:9)

2.2.2 <u>Review of Research Papers</u>

Under this heading, reviews of research papers of researchers are analyzed to find out the investment policies of commercial banks.

Dr. Govinda Bahadur Thapa, expresses his views in his research paper "Financial System of Nepal" that the commercial banks including foreign

joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the bank still seems to lack adequate funds. The banks are increasing their lending to non – traditional sectors along with the traditional sectors.

Out of all commercial banks (excluding two recently opened regional commercial banks), Nepal Bank Ltd. and Rastriya Banijya Bank are operating with a nominal profit, the later turning towards negative from time to time. Because of growing competition and limitation of investment sectors, the spread between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount. On the contrary, they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected.

On the other hand, the foreign joint venture banks have been functioning in an efficient way. They are making profit year after year and have been distributing bonus to their employees and dividends to their shareholders.

He concludes that by its very nature of the public sector, these two domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands (Dr. Thapa: 1994:29-37).

Dr. Radhe S. Pradhan, in his research paper "Role of Saving, Investment and Capital formation in Economic Development. A case of Nepal," has studied about the strong role and impact of saving, investment and capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role and impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equations used in this study have been estimated at current prices as well as in real terms with the entire study period divided into different sub periods.

The results presented in this paper suggest that in all cases, GDP is significantly associated with saving, investment and capital formation both at current prices and in real terms. The results of the empirical analysis led to three important conclusions: First, saving, investment and capital formation have positive impact on economic development. Second, the current values and past values of saving, investment and capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment. (Dr. Pradhan: 2003: 123-133)

2.2.3 <u>Review of Master Degree and Ph.D. Thesis</u>

Several thesis works have been conducted by various students regarding the various aspects of commercial banks such as lending policy, investment policy, investment planning, liquidity and investment position, trends of saving investment and capital formation, investment on priority sectors etc. Some of them as supposed to be relevant for the study are presented below.

Mrs. Ramala Bhattarai, in her thesis, "Lending Policy of Commercial Banks in Nepal," has made an effort to examine the lending policy of commercial banks. She has concluded that efficient utilization of resources is more important than collection of the same. Lower investment means lower capital formation that hampers economic development of the people and the country. So, she recommended that banks give emphasis on efficient utilization of resources (Bhattarai: 1978)

G. Acharya, in his thesis, "A comparative study of financial performance of NABIL and NIBL" concludes that NABIL pays more attention toward the attainment of nationalobjective through participation in the task of economic development and being more responsive to the national priorities like branch expansion, more employment opportunities and more resources mobilization. So, from the view point of shareholders and government, NABIL is performing much better than NIBL.

"This study has recommended the entire commercial banks to following ways."

- ✤ Increase portion of equity capital in their capital structure.
- Control operating cost
- ✤ Increase liquidity as per the new regulationh NRB.
- ✤ Meet social responcibility.
- ✤ Investment in production sector

Sunity Shrestha has conducted a study on "Investment Planning of Commercial Banks in Nepal" with the objectives:

- To evaluate the financial performance of commercial banks in Nepal.
- To examine the investment of commercial banks of Nepal with reference to securities, loans & advances.
- To establish the relationship of banks' portfolio variables with the national income and interest rates.
- ✤ The research findings of the study are summarized as:
- The general trend of commercial banks asset holding is growing. Deposits have been a major source of funds. The excess reserve level of the banks allows idle money and loss of opportunity. Debt equity ratios are very high, greater than 100%.

- The return ratios are on the average higher for foreign joint venture banks than for the Nepalese bank but return of asset found to be statistically some. Risk taking attitude is higher in foreign joint venture banks. The total management achievement index is higher in case of foreign banks in comparison to the Nepalese banks.
- The hypothesis that the commercial banks have non –professional style of decision making in investment has been accepted. The investment of commercial banks in shares and securities is normal and not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.
- Investment in various economic sectors shows industrial and commercial sector taking higher shares of loan till 1990.
- Investment in various sectors has a positive impact on the national income from their respective sectors.
- Lending in priority sector showed cottage and small industry sector sharing higher loans.
- Priority sector lending showed positive impact on the national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increase with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending and Treasury bill rate. The investment of commercial banks on government securities has been observed to be affected by total deposit, cash reserve requirements and Treasury bill and lending rates. Interest rates, lending rate, deposit rate were found to constitute a set of significant variables affecting the bank portfolio composition. (Dr.Sherestha: 1993) **Kishor Poudel**'s, in his thesis paper "Liquidity and Investment Position of Joint Venture Commercial Bank in Nepal" had made an attempt to evaluate liquidity and investment of joint venture Banks, special reference to Everest Bank Ltd. and NABIL Bank Ltd. He has concluded that liquidity position of EBL is comparatively better than NABIL. Growth rate of investment is higher in EBL than NABIL. He further found the banks do not have constant and consistent liquidity and investment policy. There is no standard and uniform rate or ratio for maintaining liquid assets by the commercial banks. A commercial bank at its own judgment may decide to maintain an appropriate level of liquid assets. So he has recommended exploring such investment and to increase its investment on share and debenture and the bank should have laid down policy for timely review of portfolio and to maintain risk and return.(Poudel:2002)

Sharad Wagle's Study; in his thesis paper "A study on trends of savings, investment and capital formation in Nepal", he concluded that in Nepal there is large gap between investment and saving rate. The low savings rate implies that majorities of people are poor. Low rate of saving and investment has been the continuing characteristic of the Nepalese economy as compared to some selected Asian countries. The need for the improving internal savings and investment performance in the country has been high in the agenda of Nepalese policy declarations but the performance in has remained rather poor. The rate of investment and capital formation is low in Nepal because of low saving. He has recommended that the government should review existing restriction on foreign direct investment. (Wagle: 2000)

Mrs. Rabina Bajracharya, in her thesis paper entitled, "Investment of Commercial Banks in Priority Sector" has made an effort to examine the banking procedures and services in disbursing loan in priority sector. She has found that:-

- The target of 12% investment of total outstanding liabilities in priority sector and 3% out of which has been invested in deprived sector has been met by Rastriya Banijya Bank.
- The trend of investment are continued to increase in the following years.
- The regression analysis of the investment and relationship between investment and repayment.
- Investment on agriculture is higher than investment on industry and service sector because investment on agriculture benefited a higher number of households. (Bajracharya: 2000)

Kul Chandra Pandit in his thesis, "A study on the investment policy analysis of Standard Chartered Bank Nepal Limited in comparison to NABIL and Nepal Bangaledesh Bank" has mainly found that SCB's loan & advances to total deposits ratios are significantly lower than that of NABIL and Nepal Bangladesh Bank, SCB is recommended to follow a liberal lending policy, invest more portion of deposition loan & advances. He has further stated that besides giving priority of investing on government securities, SCB is recommended to invest its fund in the purchase of shares and debentures of other financial, non-financials companies, hotels and government companies. This also helps in the maintenance of a sound portfolio of the banks. (Pandit: 2003)

Mukunda Prasad Lamichhane in his thesis, "Investment policy of the Joint Venture Banks in Nepal" had analyzed between investment policy and different variables like deposits, commission and discount, net profit, interest on loan and investment. He applied correlation, ratio analysis, t- test, and standard deviations.

He concluded that there is significant relationship between deposit and loan and advances as well as outside assets and net profit but not deposits and total investment in case of NABIL and other joint venture banks. Most of the joint venture banks have focused their banking services especially to big clients such as to purchase shares and debentures of other financial and non-financial companies. (Lamichhane: 2000)

2.3 <u>Review of Legislative Provisions</u>

In this section review of legislative framework under which the commercial banks are operating has been discussed. This legislative environment has significant impact on the commercial banks' establishment, their mobilization and utilization of resources. All the commercial banks have to conform to the legislative provisions specified in the Bank and Financial Institutions Ordinance and Companies Ordinance, NRB Directives and other rules and regulations formulated to facilitate the smooth running of commercial banks.

Investment Management Regulation

"A commercial bank formulating a written policy may decide to invest in shares and securities of an organized institution. However, such investment is restricted to 10% of paid up capital of the organization. However, the cumulative amount of such investment in all the companies in which the bank has financial interest shall by limited to 20% of the paid up capital of the bank. But the total amount of investment in share and securities of organized institution is restricted to 30% of the paid up capital of the bank."(Unified Directives No.8, NRB Banking operation department 81-82)

Likewise, commercial banks are not allowed to invest in any shares, securities, and hybrid capital instruments issued by any banks and financial institutions, licensed by NRB. Where such investment exists prior to issuance of this directive, such investment should be brought within the restrictive limitations by the fiscal year 2060/61. But investment on rural micro finance development banks' shares are not comes under such restriction. A commercial bank is directly related to the fact that how much fund must be collected as

paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are also important. But we discuss only those, which are related to investment function of commercial banks. The main provisions, established by NRB in the form of prudential norms in above relevant area are briefly discussed here under.

a) Provisions for investment in the deprived sector

Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial bank.

According to the new provision, with effect from the 3rd quarter of FY 1995/96, investment in shares of the rural development bank by CBs, which used to be counted for the priority sector lending, only is now to be included under the deprived sector lending.

According to the new provisions effective from FY 1997/98, NBL, RBB, NABIL, NGBL, NIBL are required to invest 3 percent, HBL, NSBL, NBBL, EBL, are required to invest 2 percent, Bank of Kathmandu is required to invest 1.75 percent, NBCL is required to invest 0.75 percent while new commercial banks are required to invest 0.25 percent of their total loans and advances to the deprived sector.

b) Provision for credit to the priority sector

NRB requires commercial banks to extend loan and advances, amounting at least to 12 p.c. of their total outstanding credit to the priority sector. Commercial banks credit to the deprived sector is also a part of priority sector. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit to service are counted commercial bank's loan to the co-operatives licensed by the NRB is also to be computed as the priority sector credit from the fiscal year 19955/96 onwards.

c) Provision for the investment in productive sector

Nepal, being a developing country needs to develop infrastructure and other primary productive sectors like agriculture, industry etc. For this, NRB has directed commercial banks to extend at least 40 p.c. of their total credit to the productive sectors. Loans to priority sector, agriculture sector, and industrial sector have to be included in productive sector investment.

d) Provision for the single borrower credit limit

With the objectives of lowering the risk of over concentration of bank loans to a few big borrowers and also to increase the access of small and middle size borrower to the bank loans, NRB directed CBs to set an upper limit on the amount of loan financed to an individual, firm, company or group of companies. According to this, CBs are required not to exceed the single borrower limit of 35 percent in the case of fund- based credit and 50 percent, in the case of non- fund based credit such as the letter of credit, guarantee, acceptance letter, commitment has been fixed is a proportion of capital funds of bank.

Similarly, NRB has graded six foreign joint venture banks now as the prestigious class "A" bank, which is NABIL, NGBL, NIBL, HBL, SBI, and NBBL. These banks have been kept outside the purview of the single borrower credit limit.

Likewise, in the case of consortium financing, commercial banks are permitted to extend an additional 10 percent credit above the limit fixed by the NRB as before.

In addition, Nepal Oil- Corporation, Agriculture-inputs Corporation and Nepal Food Corporation for their imports of petrol, diesel, kerosene, fertilizer and foodstuff respectively have been removed from the restrictions of single borrower credit limit.

e) Provision for Minimize liquidity Risk

Commercial banks are required monitor their liquidity risk. This is to minimize risk inherent in the activities and portfolio of the banks. According to the regulation a gap found between maturing assets and maturing liabilities is the liquidity risk. They are monitoring their assets and liabilities on the basis of maturity period. Maturity periods such as 0-90, 91-180,181-270, 271-365 days and above 1 year are classified for the purpose of checking.

f) Cash Reserve Requirements (CRR)

To ensure adequate liquidity in the commercial banks, to meet the depositors' demand for cash at anytime and to inject the confidence in depositors regarding the safety of their deposited funds, commercial banks are required to have maximum CRR. In this regard, NRB has directed commercial banks to deposit minimum 8 percent of current and saving and 6 percent of fixed deposits in the NRB as primary cash reserve the commercial banks are further required to have 3 percent cash of total deposits in their own bank as secondary reserve.

g) Loan Classification and Loss Provision

With a view to improving the quality of assets of commercial banks NRB has directed commercial banks to classify their out-standing loan and advances, investment and other assets into six categories. The classification is done in two ways. The loans of more than one lakh are to be classified as debt service charge ratio, repayment situation, financial condition of borrower, management efficiency, quality of collateral. The loans of less than one lakh have to be classified as per maturity period.

h) Directives regarding interest rate spread

The interest rate spread, the difference between interest charged on loan and advances and the interest paid to the depositors, has widened significantly in the aftermath of deregulation in interest rates. This has caused lower financial intermediation. Therefore, NRB has required commercial banks to limit interest rate spread between deposit and lending rates to a maximum extent of 5 percent. NRB has also provided commercial banks with new calculation method of interest rate spread for a certain period recently.

2.4 Research Gaps

The purpose of the research work is quite different from the studies made by the above persons (related to Joint Venture Banks). The author focuses this study in effectiveness on investment policy analysis of NABIL Bank (as comparative study with Nepal Investment Bank) in comprehensive manner considering the major items. The method of analysis is fully different. Financial tools and statistical tools are used in this study as ratio analysis, trend analysis, correlation and hypothesis.

This study is a little bit different than previous studies. It may be the first research study in the field of investment policy taking the comparative study of NABIL Bank with Investment Bank. This study has tried to indicate the effectiveness of investment policy of concerned banks.

<u>CHAPTER –III</u> RESEARCH METHODOLOGY

Research methodology is a way to solve research problems systematically, which includes many techniques and tools that is necessary in each and every steps of this study. It refers to the overall research process, which a researcher conducts during his/her study. A researcher can be conducted on the basis of primary and secondary data. In this study all the data from secondary sources and the observed data are analyzed with using appropriate financial and statistical tools.

3.1 <u>Research Design</u>

Generally research design is the structure and strategy of investigation conceived so as to obtain answer to research questions and to control the actual variance. The study is based on recent five year historical data. This study depends upon the secondary data. It includes all the process of collecting, verifying and evaluating of past evidence systematically and objectively to reach final conclusion. Some statistical and accounting tools have been adopted to examine factors in this study. The research designs followed for this study is basically a historical, empirical and descriptive cum. analytical design have been made.

3.2 **Populations and Sample**

All commercial banks functioning all over the nation are considered as the total population out of them this study is concerned with two commercial banks as sample. Those banks are: Nepal Investment Bank Limited, and NABIL Bank.

Population size = all commercial banks in Nepal.

Sample size = 2

3.2.1 Profile of Concerned Banks

In this section, general introduction of the banks under study is being attempted to furnish the easy reference of the samples to the research.

(A) NABIL Bank Ltd.

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe.

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

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Banglore, India, Internet banking system and Telebanking system.

Dubai Bank Ltd. was the initial joint venture partner with 80% equity investment .The shares owned by Dubai bank Ltd. (DBl) were transferred to Emirates Bank International Ltd. (EBIL) Dubai. Later on EBIL sold its entire stock to National Bank Ltd, Bangladesh (NBLB). National Bank Ltd. Bangladesh is managing the bank in accordance with the technical services agreement signed between it (NABIL) and the bank on June 1995.
The present configuration consist of 50% share capital of National Bank limited, Bangladesh.6.15% of NIDC, 9.67% of Rastriya Bema Sansthan, .33% of Nepal stock exchange and 30% of Nepalese public.

(B) <u>Nepal Investment Bank Limited</u>

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 21STjanuary 1986 as a joint venture between Nepalese and French partners as a third joint venture bank under the company act 1964. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- ✤ A group of companies holding 50% of the capital
- ✤ Rashtriya Banijya Bank holding 15% of the Capital.
- ✤ Rashtriya Beema Sansthan holding the same percentage.
- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

3.3 Source and Nature of Data

This study will mainly base on secondary data relating to investment. The main source of data is annual reports of respective banks, SEBON and NEPSE. Besides, journals and books related to this topic and thesis related to this study are also taken into consideration. The data collection entails labor and time and it is the most necessary step in project study without which the study cannot be done.

3.4 data processing procedure

All the data necessary for the research are collected from secondary sources. First of all the official websites have been browsed in order to download the financial reports of the concerned companies. The annual report of sample banks and their financial statement also collected.

The data extracted from the various sources are processed and interpreted considering the requirement of the study. The financial and statistical tools and techniques are applied in data processing procedure. The relevant data of five fiscal years are used.

3.5 Method of data analysis

Presentation and analysis of the collected data is the core of the research work. To achieve the objective of this study, some statistical, financial and accounting tools have been used. The data extracted from financial statement and other available information's are processed and tabulated in various tables and charts under different heading according to their nature. These data are used for required calculations.

3.6 Data Analysis Tools

Analysis and presentation of the data is the core of project study. This study needs some financial and statistical tools to accomplish the objectives of this study. The data extracted from financial, statistical and accounting tools have been used. These results are then compared with each other to interpret the results. Two kinds of tools have been used to achieve the purpose, namely:

- 1) Financial tools and
- 2) Statistical tools

3.6.1 Financial tools

Financial tools basically help to analyze the strength and weakness of a firm. Ratio analysis being one of the important financial tools has been used in this study. In financial analysis a ratio is used as a benchmark for evaluating the financial position and performance of a firm. Ratios help to summarize the large quantities of financial data and to make qualitative judgment about the firm's performance. The point to note is that a ratio indicates a quantitative relationship, which can be used to make a qualitative judgment. There are several ratios involved in analyzing and interpreting the financial statement. In this study, basically four types of ratios have been used which are related to Investment policy of banks. They are as follows:

(A) Liquidity Ratio

Liquidity Ratio measures the firm's ability to meet its current obligation. It reflects the short-term financial strength of the company.Commercial banks collect fund from the community with a commitment to return depositor's fund, facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio:

i) <u>Current Ratio</u>

The current ratio is calculated by dividing current assets by current liabilities:

$$Current Ratio = \frac{Current Assets}{Current Liabilities}$$

The current ratio is a measure of the firm's short-term solvency. It also shows the relationship between CA and CL of a firm. Current assets include cash and those assets which can be convened into cash within a year such as money at call or short notice, loans and advances, overdrafts, bills purchased and discounted, Investment in government securities, prepaid expenses, and other interest receivables and miscellaneous current assets.

All obligation maturing within a year are included in current liabilities such as deposit and other accounts, short term loans, outstanding or accrued expenses, bills payable, tax liability, staff bonus, dividend payable, long term debt maturing in current year and miscellaneous current liabilities. As a conventional rule a current ratio of 2:1 is considered satisfactory. A current ratio is a crude and quick measure of the firm's liquidity.

ii) <u>Cash and Bank Balance to Total Deposit Ratio (Cash Reserve</u> <u>Ratio)</u>

They are the most liquid of current assets to pay off depositors immediately. This ratio is calculated by dividing cash and bank balance by total deposits.Mathematically,

Cash & Bank Balance to Total Deposit Ratio
$$= \frac{Cash \& Bank Balance}{Total Deposit}$$

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, savings account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa.

iii) Cash and Bank Balance to Current Assets Ratio

This ratio measures the percentage of liquid assets i.e. cash and bank balance in the current assets of the firm. Higher ratio shows greater capacity of firms to meet cash demand. The ratio is calculated by dividing cash and bank balance by current assets. Mathematically,

Cash & Bank Balance to Current Assets Ratio $= \frac{Cash \& Bank Balance}{Current Assets}$

iv) Investment in Government Securities to Current Assets Ratio

This ratio is used to find the percentage of current assets invested in government securities, i.e. treasury bills, development bonds etc. Commercial banks are interested to invest some portion of their collected fund in government securities as they are risk-free and can easily sold in the market. Mathematically,

Investment in Government Securities to current Asset Ratio Total Investment in Government Securities Current Assets

v) Loan and Advances to Current Assets Ratio

The major portion of a bank's asset side of the balance sheet includes loan and advances. Loan and advance comprise of loan and advance, credit overdraft, bills purchased and discounted. In this research study, staff loan and advances have been treated as other assets to maintain status quo with the practice followed by banks.

It shows the percentage of total loan and advances to current assets. Mathematically,

Loan and Advances to Current Asset $= \frac{Total \ Loan \ and \ Advances}{Current \ Assets}$ Ratio

B) Asset Management Ratios (Activity ratio)

In order to satisfy its customers, earn profit and for its own survival a commercial bank must be well versed in managing its assets. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. In this study, it is used to measure the bank's ability to utilize their available resources. The following ratios related to investment policy are calculated under asset management ratio.

i) Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out how successfully the selected banks are utilizing their total deposits on loan and advances to generate profits. A higher ratio is indicative of better utilization of total deposits, but the same might not hold true from liquidity point of view. It is computed by dividing total loan and advances by total deposits. Mathematically,

Loan and Advance to Total Deposits Ratio = $\frac{Loan and Advance}{Total Deposits}$

ii)Loan and Advances to Total Working Fund Ratio

The major portion of a banks asset side of the sheet includes loan and advances. It is also the major component of the total working fund. This ratio shows the ability of a bank to channelize its assets in the form of loan and advances to earn higher profits. A high ratio indicates better mobilization of fund as loan and advances and vice-versa. Mathematically,

Loan and Advance to Total Working Fund Ratio $= \frac{Total \ Loan \ and \ Advance}{Total \ Working \ Fund}$

Where total working fund includes: all assets of balance sheet item i.e. current assets, net fixed assets and other miscellaneous assets.

iii) <u>Total Investment to Total Deposit Ratio</u>

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and vice-versa. This ratio can be calculated by dividing total investment by total deposits. Mathematically,

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

iv) <u>Investment on Government Securities to Total Working Fund</u> <u>Ratio</u>

This ratio shows the percentage of total working fund invested in government securities. In other words, this ratio measures the extent to which the banks have been successful in mobilizing their total working fund on different type of government securities. The logic behind Investment on government securities by banks is to diversify the risk by not putting all the eggs in the same basket. This is also beneficial in the sense that banks are assured of adequate liquidity. A high ratio indicates better mobilization of funds as Investment on government securities and vice-versa.

This ratio can be calculated by dividing total amount of investment in government securities by the total working fund. Mathematically,

v) <u>Investment on Shares and Debentures to Total Working Fund</u> <u>Ratio</u>

This ratio shows the percentage of total working fund invested in purchasing shares and bonds & debentures of other companies. Investment on shares and debentures to total working fund measures the extent to which the banks have been successful in mobilizing their total assets on shares and debenture of other companies to generate income. A high ratio indicates portion of investment on shares and debentures out of total working fund and vice-versa. This ratio is calculated by dividing the total amount of Investment is shares & debenture of other companies by total working fund. Mathematically,

Investment on Shares & Debentures to Total Working Fund Ratio

= Investment in Shares & Debentures Total Working Fund

C) Profitability Ratio

The profitability ratios are calculated to measure the overall efficiency of a firm in terms of profit earning and performance. Profit is one of the major indicators of efficient performance of banks. One of the major objectives of banks is to earn profit, so profit is very crucial for the survival of banks. To meet various objectives like, maintaining good liquidity position, meet internal obligations, expansion of banking services, finance short- term government needs, commercial banks need to earn sufficient profit. A higher profit ratio shows higher efficiency of a bank.

The following ratios related to investment policy are calculated under profitability ratios:

i)<u>Return on Loan and Advance Ratio</u>

Return on loan and advances ratio indicates how efficiently the bank has utilized its resources in the form of loan and advances to generate good return. It measures the earning capacity of a commercial bank. This ratio is calculated by dividing net profit by loan and advances. Mathematically, Return on Loan & Advances Ratio = $\frac{Net \operatorname{Pr} ofit / Loss}{Total Loan and Advances}$

ii) <u>Return on Total Working Fund Ratio</u>

Return on total assets shows the overall profitability of working fund or total assets. Return on working fund ratio is a measuring rod of the profitability with respect to each financial resource investment of banks asset. If the banks total working fund is well managed and utilized efficiently, return on such assets will be higher and vice-versa. This ratio is calculated by dividing net profit by total working fund. It is calculated by dividing net profit by total assets. Mathematically,

$$Re turn on Total Assets = \frac{Net Pr of it / Loss}{Total Working Fund}$$

iii)<u>Total Interest Earned to Total Working Fund Ratio</u>

This ratio is calculated to find the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their assets to generate high income. This ratio presents the earning capacity of a bank on its total working fund. Higher ratio indicates better performance or proper utilization of total assets in the form of interest earned on its working fund. This ratio is calculated by dividing total interest earned by total working fund. Mathematically,

Total	Interest	Earned	to	Total	Total Interest Earned
Working Fun	d Ratio =	:			Total Working Fund

iv) Total Interest Earned to Operating Income Ratio

This ratio is measured to find out the ratio of interest income with operating income of the bank. It shows how efficiently the banks have mobilized their resources in interest bearing assets i.e., loan and advances, investment in government securities. Total operating income includes interest income, commission fees & discount, dividend income, foreign exchange income etc. This ratio shows the magnitude of interest income in total income. It is calculated by dividing total interest earned by net operating income. Mathematically,

Total Interest Earned to TotalTotal Interest EarnedOperating Income Ratio =Total Operating Income

v) Total Interest Earned to Total Outside Assets Ratio

This ratio is calculated to find the percentage of interest earned to total outside assets of the bank, which includes loan and advances, Investment on Government securities, Investment on share and debentures and all other types of investment. It is calculated by dividing total interest earned by total outside assets. A high ratio indicates high return on total assets and vice-versa. Mathematically,

Total Interest Earned to OutsidesTotal Interest EarnedAssets =Total Outside Assets

vi) Total Interest Paid to Total Working Fund Ratio

This ratio measures the percentage of total interest expenses against total working fund. A high ratio is indicative of higher interest expenses on total working fund. This ratio is calculated by dividing by total interest paid by total working fund. Mathematically,

Total Interest Paid to Total Working	Total Interest Paid
Fund Ratio =	Total Working Fund

D)<u>Risk Ratio</u>

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes," no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently.

The following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Liquidity Risk Ratio

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks.

This ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A trade off between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit. Mathematically,

$$Liquidity Risk Ratio = \frac{Total Cash \& Bank Balance}{Total Deposits}$$

ii) Credit Risk Ratio

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets. Mathematically,

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

iii) <u>Capital Risk Ratio</u>

The capital risk ratios of a bank indicate how much asset values may decline before the position of depositors and other creditors jeopardize. The capital risk is directly related to the return on equity (ROE). Higher the ratio, low is the capital risk. This ratio is computed by dividing capital (Paid up Capital + Reserves) by risk- weighted assets as computed under BASLE committee's formula. This can be mentioned as,

Capital Risk Ratio =
$$\frac{Capital (Paid up + \text{Re serves})}{Risk Weighted Assets}$$

E) Growth Ratio

The growth ratios represent how the commercial banks are maintaining their economic and financial condition. As a conventional rule, a higher ratio is preferable. A high ratio indicates better performance of the banks and viceversa. The following growth ratios directly related to the fund-mobilization and investment of the banks are calculated:

- 1) Growth ratio of total deposit
- 2) Growth ratio of total investment
- 3) Growth ratio of loan and advances
- 4) Growth ratio of net profit

3.6.2 <u>Statistical Tools</u>

Some important statistical tools have been used to present and analyze the data for achieving the objectives of this study. Co-efficient of variance, Coefficient of correlation, standard deviation, least square, linear tend analysis etc. have been used for the purpose of investment policy analysis.

a) Karl Pearson's Correlation Co-efficient Analysis

This statistical tool interprets and identifies the relationship between two or more variables. It identifies whether two or more variables are positively correlated or negatively correlated Statistical tool helps to analyze the relationship between these variables and aids the selected banks to prepare appropriate investment policy relating to deposit collection, fund utilization (loan and advances and investment) and profit maximization. This study attempts to find out relationship between the following variables:

- 1) Co-efficient of co-relation between deposit and loan and advances.
- Co-efficient of correlation between total deposit and total investment.
- Co-efficient of correlation between total outside assets and net profit.
- 4) Co-efficient of correlation between deposits and net profit.
- 5) Co-efficient of correlation between deposits and interest earned.
- 6) Co-efficient of correlation between loan and advances and interest paid.
- Co-efficient correlation between total working fund and net profit.

Karl Pearson's correlation coefficient (r) can be obtained by using the following formulae.

$$\mathbf{r} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$
 Where $\mathbf{x} = (\mathbf{x} - \overline{x}), \quad \mathbf{y} = (\mathbf{y} - \overline{y})$

Here,

 $\Sigma x = Sum \text{ of observation in series } x$ $\Sigma y = Sum \text{ of observation in series } y$ $\Sigma x^2 = Sum \text{ of squared observation in series } x$ $\Sigma y^2 = Sum \text{ of squared observation in series } y$ $\Sigma xy = Sum \text{ of the product of observation in series } x \& y.$

The co-efficient of correlation (r) lies between -1 to +1, If r = +1 there exists a significant relationship between the two variables. If r = -1, then the two variables are negatively correlated or there is no significant relationship between the two variables.

b) Trend Analysis:

Under this topic we analyze the trend of deposits, loan and advances, investments and net profit of NABIL and Nepal Investment Bank from F/Y 1999/2000 to F/Y 2003/2004. It also aids in making forecasting for the next five years up to 2008/2009. The following trend value analysis has been used in this study.

- i) Trend Analysis of total deposits.
- ii) Trend Analysis of loan and advances.
- iii) Trend Analysis of total investment.
- iv) Trend analysis of net profit.

c) <u>Standard Deviation (S.D)</u>

The standard deviation measures the absolute dispersion. The lower the percentage of dispersion lowers the standard deviation. The lower percentage of dispersion also projects a high degree of uniformity of the observations as well as homogeneity of the series. A large value of standard deviation suggests exactly the opposite. In this study standard deviation of different ratios are calculated. Mathematically,

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

d) <u>Co-efficient of Variation (C.V.)</u>

C.V. is the proportion of standard deviation with mean multiplied by 100. Mathematically,

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

e) Test of Hypothesis

Under this analysis, effect has been made to test the significance level regarding the parameters of the population on the basis of sample drawn from the population. This test has been conducted on the following:

- 1. Test of hypothesis on loan and advances to total deposit ratio of NABIL and Nepal Investment Bank Ltd.
- 2. Test of hypothesis on Investment in Government securities to current assets ratio of NABIL and Nepal Investment Bank Ltd.
- Test of hypothesis of total investment to total deposit ratio of NABIL & Nepal Investment Bank Ltd.
- Test of hypothesis of return on loan and advances ratio of NABIL & Nepal Investment Bank Ltd.
- Test of hypothesis on total interest earned to total outside assets of NABIL and Nepal Investment Bank Ltd.

CHAPTR-IV

DATA PRESENTATION AND ANALYSIS

4.1 Financial Analysis

This is an analytical chapter, where the researcher has analyzed and evaluated those major financial items, which are mainly related to the investment management and fund mobilization of NABIL Bank limited in comparison to that of other commercial Bank namely Nepal Investment Bank Limited. From the point of view of the fund mobilization and investment policy only those ratios are calculated and analyzed which are relevant and important for this study. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned banks. The important and required financial ratios, which are to be calculated for the purpose of this study, are computed and analyzed in the following paragraphs.

4.1.1 Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community, to meet demands for deposits, withdrawals, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact in long run profit. In fact, analysis of liquidity needs is helpful to the preparation of cash budget and funds flow statement.

The following ratios are evaluated and interpreted under liquidity ratio: -

(i) Current Ratio

Current ratio indicates the ability of a bank to meet its current obligation. This is the broad measure of liquidity position of the financial institution. The widely accepted standard of current ration is 2:1 but accurate standard depends on circumstances in case of banking and seasonal business ratio such as 1:1 etc.

We have,

$Current ratio = \frac{Current Assets}{Current Liabilities}$

Where,

Current assets consist of cash and bank balance, money at call and short notice, investment in government securities and other interest receivable and other miscellaneous current assets where as current liabilities consist of deposits, loan and advances, bills payable, tax provision, staff bonus payable, dividend payable and miscellaneous current liabilities.

Table No: 4.1

Current Ratio (times)

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	0.96	0.94
2	2005/2006	0.89	0.92
3	2006/2007	0.91	0.95
4	2007/2008	0.91	0.97
5	2008/2009	0.89	0.98
Total		4.56	4.76
Mean		0.912	0.952
S.D.		0.0256	0.0213
C.V		0.0281	0.0224

Source: Appendix 1 'A' and 5 'A'

The above table no.4.1 shows that the current ratio of two commercial banks. It is calculated as per total mean, Standard deviation and coefficient of variation. In the case of NABIL and NIBL, the current ratio shows fluctuating trend. NABIL has the highest current ratio in F/Y 2004/2005 i.e., 0.96 and the lowest in F/Y 2005/2006 and 2008/2009 i.e., 0.89. Similarly NIBL has a high current ratio of 0.98 in F/Y 2008/2009 and a low of 0.92 in F/Y 2005/2006. The averages mean ratio of NIBL is slightly higher than NABIL; i.e. 0.952 >0.912. This shows that NIBL's liquidity position is slightly better than that of NABIL. The lower degree of standard deviation and coefficient of variation suggest that both the banks have maintained consistency in their ratios. Though as per the conventional rule current ratio above 1 also considered healthy and sound. In order to bring about consistency in this research, checks subject to clearing have been excluded from cash and bank balance and included in other assets.

(ii) Cash and Bank Balance to Total Deposit Ration (CRR)

Cash and bank balance are the most liquid assets. The ratio between cash and bank balance, and total deposit, measures the ability of the bank to meet the unanticipated cash demand or cash withdrawals from all types of deposits.

We have,

Cash and bank balance to total deposit ratio = $\frac{Cash and Bank Balance}{Total Deposit}$

Where,

Cash and bank balance includes cash on hand (local and foreign currency), cheques and other cash items, balance with domestic and foreign banks where as the total deposits include current deposits, saving deposits, call deposits, fixed deposits, money at call and short notice and other deposits.

Table No.4.2

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	3.83	9.40
2	2005/2006	3.26	12.34
3	2006/2007	6	9.97
4	2007/2008	8.37	10.90
5	2008/2009	9.03	16.95
Total		30.49	59.56
Mean		6.098	11.912
S.D.		2.3223	2.7081
C.V		0.3808	0.2273

Cash and Bank Balance to Total Deposit Ratio (%)

Source: Appendix 1 'B' and 5 'B'

The above table shows that the cash and bank balance to total deposit of both NABIL and NIBL are in fluctuating trend. NABIL had a high ratio of 9.03% in F/Y 2008/2009 and a low ratio of 3.26% in F/Y 2005/2006. Similarly, NIBL has a high of 16.95% in F/Y 2008/2009 and a low of 9.40% in F/Y 2004/2005. The averages mean ratio of NIBL is higher than NABIL i.e., 11.912%>6.098%. This shows, NIBL readiness to meet customer requirement better than NABIL. The C.V. of NIBL of is lower than that of NABIL i.e., 22.73 %< 38.08%. On its basis, it can be concluded that NIBL's ratios are more consistent than that of NABIL.

Although the above ratios implies a slightly better liquidity position of NIBL, a high ratio of non-earning cash and bank balance indicates the banks unavailability to invest its fund in income generation areas that might have helped it to improve its profitability.

(iii) Cash and Bank Balance to Current Asset Ratio

This ratio shows the banks' liquidity capacity on the basis of cash and bank balance that is the most liquid asset. So this ratio visualizes higher liquidity position than current ratio.

We have,

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

Where,

Cash and bank balance represents total of local and foreign currencies in hand, cheques in hand and various bank balances in local as well as foreign banks where as the current assets consists of cash and bank balance, money at call, short notice, loan and advances, investment in government securities and other interest receivable and others miscellaneous current assets.

Table No. 4.3

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	3.74	9.60
2	2005/2006	3.47	13.05
3	2006/2007	6.13	10.35
4	2007/2008	8.55	10.98
5	2008/2009	9.35	16.82
Total		31.24	60.8
Mean		6.248	12.16
S.D.		2.4059	2.5973
C.V		0.3851	0.2136

Cash and Bank Balance to Current Assets Ratio (%)

Source: Appendix 1 'C' 5 'C'

There above table shows that the cash and bank balance to current assets of both NABIL & NIBL are in a fluctuating trend. NABIL has maintained a high ratio of 9.35% in F/Y 2008/2009, and a low ratio of 3.47% in 2005/2006. It has decreasing trend (in FY 2004/2005 to 2005/2006) i.e. 3.74 to 3.47. But

then after it has increasing trend .Similarly, NIBL has a high of 16.82% in F/Y 2008/09 anticipating higher cash requirement depositors in this F/Y. It has a low ratio of 9.60% in F/Y 2004/2005. IT has fluctuating trend.

The average mean ratio of NIBL is higher than NABIL. The C.V. of NABIL is greater than that of NIBL i.e., 38.51%>21.36%. It shows NABIL ratios are less consistent than that of NIBL.

(iv) Investment on Government Securities to Current Assets Ratio

The government securities are not so much liquid as cash and bank balance. But they can easily be sold in the market or they can be converted into cash in other ways. Investment on government securities includes treasury bills and development bonds etc.

We have,

Investment on Government Securities to Current Assets Ratio

= Investment on government securities Current Assets

Table No. 4.4

Investment on Government Securities to Current Assets Ratio (%)

S.N.	Fiscal Year	NABI L	NIBL
1	2004/2005	16.12	13.95
2	2005/2006	12.69	14.09
3	2006/2007	21.06	13.81
4	2007/2008	14.87	9.23
5	2008/2009	10.27	5.38
Total		75.01	56.46
Mean		15.002	11.292
S.D.		3.6250	3.4767
C.V		0.2416	0.3079

Source: Appendix 1 'D' and 5 'D'

The above table clearly depicts that the investment on Government securities to current assets of both the sample banks have a fluctuating trend. Figures in the table show that investment on government securities to current assets ratio of NABIL has fluctuating trend.NIBL has increasing trend in first two FY i.e. 13.95 to 14.09 (FY 2004/2005) to (FY 2005/2006) but then after it follows decreasing trend

From the above five year picture, it is evident that the average mean ratio of NABIL is higher than that of NIBL i.e. 15.005%>11.292%. This shows that a greater portion of current assets of NABIL comprises of government securities. From the point of view of C.V. NABIL ratios have been more consistent. From the above analysis it is clear that NIBL has made lesser investment in government securities as it has injected more funds on other productive sectors. The reason behind NABIL higher ratio could be attributed to more deposit collection and unavailability of other secured and profitable investment sectors.

(v) Loan and Advances to Current Assets Ratio

To make a high profit and for mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. In the present study loan & advances represent to local and foreign bills discounted and purchased and loans, cash credit and overdraft in local currency as well as inconvertible foreign currency.

We have,

Loan and advances to current assets ratio = $\frac{\text{Loan and Advances}}{\text{Current Assets}}$

Table No. 4.5

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	70.71	72.50
2	2005/2006	71.26	71.35
3	2006/2007	68.09	73.31
4	2007/2008	68.39	78.98
5	2008/2009	76.46	76.98
Total		354.91	373.12
Mean		70.982	74.624
S.D.		3.0080	2.8804
C.V		0.0424	00386

Loan & Advances to Current Assets Ratio (%)

Source: Appendix 1 'E and 5 'E'

The average mean ratio of NIBL is higher compared to NABIL i.e. 74.624>70.982. NABIL had had a high ratio of 76.46% in 2008/2009 and a low ratio of 68.09% in F/Y 2006/2007. Similarly NIBL has experienced a high ratio of 78.98% in F/Y 2007/2008 and a low of 71.35% in F/Y 2005/2006. The above analysis reveals that NABIL has been more successful in identifying profitable investment sectors and increasing its earning. Mean value of this ratio of NABIL bank is 70.982%, which is less than that of NIBL 70.982 %< 74.624% .coefficient of variation is also greater than NIBL. This analysis shows that NABIL use to provide less loan & advances in comparison of NIBL. Its trend of providing loan & advances has less consistency than NIBL.

4.1.2 Asset Management Ratios (Activity Ratio)

Asset management ratios measure the efficiency of the bank to manage its asset in profitable and satisfactory manner. They indicate the speed with which assets are being converted into cash. Thus these ratios are used to measure the banks' ability to utilize their available resources.

Under this asset management ratio following ratios are studied.

i) Loan & Advances to Total Deposit Ratio

It shows the relationship between loans & advances to total deposit. The ratio measures the extent to which the banks are successful to mobilize their total deposit on loan & advances.

We have,

Loan & Advances to Total Deposit Ratio = $\frac{Loan \text{ and } Adavaces}{Total Deposit}$

Where,

Loan & advances include loans, advances, cash credit, local and foreign bill purchased and discounted. Total deposits include saving, fixed current, current and call deposit.

Table No. 4.6

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	72.57	71.04
2	2005/2006	66.79	67.50
3	2006/2007	66.60	70.59
4	2007/2008	66.94	58.36
5	2008/2009	73.87	77.61
Total		346.74	345.1
Mean		69.348	69.02
S.D.		3.3131	6.2654
C.V		0.0478	0.0908

Loan & Advances to Total Deposit Ratio (%)

Source: Appendix 2 'A' and 5 'F'

NABIL had a high ratio of 73.87% in F/Y 2008/2009 and a low ratio of 66.60% in F/Y 2006/2007. Accordingly, NIBL had a high of 77.61% in F/Y 2008/2009 and a low of 58.36% in F/Y 2007/2008.NABIL's loan and advances to total deposit has had a increasing trend over the years and NIBL has fluctuating trend. The mean value of NABIL is slightly higher than that of NIBL. Coefficient of variation of NABIL is also lower than that of NIBL. NABIL seems to be strong in terms of mobilization of its total deposits as loan and advances when compared to NIBL. On the contrary, a high ratio should not be perceived as a better state of affairs from the point of view of liquidity, as loan and advance are not as liquid as cash and bank balance and other investment. In portfolio management of bank various factors such as availability of funds, liquidity requirements, central bank norms etc. needs to be taken into account.

ii) Total Investment to Total Deposit Ratio

A commercial bank mobilizes its deposit by investing its fund in different securities issued by government and other financial or non-financial companies. This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities.

We have,

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

Where,

Total investment consist investment on government securities, investment on debenture and bonds, share in subsidiary companies, shares in other companies and other investment.

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	29.25	27.60
2	2005/2006	31.93	29.60
3	2006/2007	38.32	26.56
4	2007/2008	31.14	19.95
5	2008/2009	28.99	15.85
Total		159.63	119.56
Mean		31.926	23.912
S.D.		3.3847	5.1703
C.V		0.1060	0.2162

Table No. 4.7

Total Investment to Total Deposit Ratio (%)

Source: Appendix 2 'B' and 5 'G'

NABIL has a high ratio of 38.32% and a low ratio of 28.99% in F/Y 2006/2007 and 2008/2009 respectively. NIBL, on the other hand had a high ratio of 29.60% and a low ratio of 15.85% in F/Y2005/2006 and 2008/2009 respectively.NABIL has a high mean ratio than NIBL i.e., 31.926%>23.912%. From mean ratio perspective, NABIL has been more successful in mobilization of deposits on various forms of investment. From C.V.'s viewpoint, both the sample banks have been inconsistent, with NABIL being little better in terms of consistency than NIBL.

Form the analysis of above table it is clear that NABIL has become successful for better utilization of deposit to investment than NIBL and also NABIL has higher consistency to investment in securities. Its investment policy is better.

iii) Loan and Advances to Total Working Fund Ratio

The commercial bank must be very careful in mobilizing its total asset as loan & advances in appropriate level to generate profit. This ratio reflects the extent to which the commercial banks are successful in mobilizing their assets on loan & advances for the purpose of income generation. A high ratio indicates better in mobilization of funds as loan and advances and vice versa.

We have,

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

Where,

Total working fund consists of current assets, net fixed assets, loan for development banks and other miscellaneous assets.

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	61.60	62.22
2	2005/2006	57.87	59.90
3	2006/2007	57.04	62.65
4	2007/2008	57.54	69.45
5	2008/2009	62.89	68.37
Total		296.94	322.59
Mean		59.388	64.518
S.D.		2.3828	3.7218
C.V		0.0401	0.0577

Table No. 4.8

Loan and Advances to Total Working Fund Ratio (%)

Source: Appendix 2 'C' and 5 'H'

The above table shows a fluctuating trend of loan and advances total working fund of NABIL and NIBL. NABIL has maintained highest ratio of 62.89% in F/Y 2008/2029 and a low ratio of 57.04% in F/Y 2006/2007. Similarly, NIBL has maintained a high ratio of 68.37% in F/Y 2008/2009 and a low ratio of 59.90% in F/Y 2005/2006.

NIBL has a high average ratio of loan and advances to total working fund than NABIL i.e. 64.518%>59.388%. It reveals the strength of NIBL in mobilizing its total assets as loan and advances.NABIL has mobilized its fund lesser but it has higher consistency than that of NIBL.

iv) Investment on Government Securities to Total Working Fund Ratio

To some extent commercial banks seem to utilize their fund by purchasing government securities. Government securities are a safe medium of investment though it is not as liquid as cash and bank balance. This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund on different type of government securities to maximize its income and to minimize its risk assets.

We have,

Investment on Govt. Securities to Total Working Fund Ratio

 $=\frac{Interest \ on \ Govt. \ Securities}{Working \ Fund \ Ratio}$

Where,

Investment on government securities includes investment made on treasury bills and development bonds etc.

Table No. 4.9

Investment on Government Securities to Total Working Fund Ratio

(%)

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	14.04	11.97
2	2005/2006	10.31	11.82
3	2006/2007	17.64	11.80
4	2007/2008	12.51	8.12
5	2008/2009	8.45	4.77
Total		62.95	48.48
Mean		12.59	9.48
S.D.		3.1607	2.8586
C.V		0.2510	0.3015

Source: Appendix 2 'D' and 5 'I'

The above table reveals that NIBL has had a decreasing trend of Investment of Government securities to total working fund over the study period while NABIL has had more of a fluctuating trend. NABIL has a higher ratio 17.64% in F/Y 2006/2007 and a low ratio of 8.45% in F/Y 2008/2009. Similarly, NIBL has had a high ratio of 11.97% in F/Y 2004/2005 and low ratio of 4.77% in 2008/2009. When mean ratio is considered, NIBL seems to be weaker than NABIL in mobilizing of total assets as Investment in Government securities i.e. (9.48 %< 12.59%). Also, when we compare C.V. of both, it reflects that ratios of NIBL are less consistent than NABIL. From the above analysis, we can conclude that NABIL has invested larger portion of working fund in government securities than NABIL. The ratios also indicates that both the banks have no concrete or certain investment policy with regards to what percentage of working fund to be invested in purchasing government securities.

v) Investment on Shares and Debenture to Total Working Fund Ratio

There has been two types of investments i.e., investment on government securities and investment on shares & debenture. Investment on shares and

debentures to total working fund ratio reflects the extent to which the banks are successful to mobilize their total assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund.

We have,

Investment on Shares & Debentures to Total Working Fund Ratio

 $= \frac{Investment on Shares and Debentures}{Working Fund Ratio}$

Where,

Investment on shares and debentures includes investment on debentures bonds and share of the other companies.

Table no. 4.10

Investment on Shares and Debentures to Total Working Fund Ratio

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	2.58	0.11
2	2005/2006	0.46	0.08
3	2006/2007	0.77	0.13
4	2007/2008	0.87	0.15
5	2008/2009	0.81	0.12
Total		5.49	0.59
Mean		1.098	0.118
S.D.		0.7544	0.0231
C.V		0.6871	0.1958

Source: Appendix 2 'E' and 5 'J'

The above table clearly reveals that both the banks have invested miniscule percentage of total working fund in purchasing share and debentures of other companies. the investment on shares and debentures to total working fund ratio of NABIL has decreased in FY 2005/2006 i.e. 0.46 but it has increased in FY 2006/2007 and 2007/2008 i.e. 0.77 and 0.87, then after it has decreased to 0.81 in 2008/2009. Similarly NIBL's ratio has decreased in F/Y 2005/2006 from 2004/2005 ie. 0.08 from 0.11 then it has increased in next two year ie 0.13 to0.15 and then it has decressed to 0.12.NABIL has a mean ratio higher than NIBL. It indicates that NABIL has been more successful in mobilizing it funds as Investment in shares and debenture than NIBL, though the fund invested is marginal.

4.1.3 Profitability Ratios

Profitability ratios are very helpful to measure the overall efficiency of operation of financial institutions. Here, profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets. Higher the profit ratio, higher the efficiency of a bank.

The following profitability ratios are taken into account under this heading.

i) Return on Total Working Fund Ratio

This ratio measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the bank's working fund is well managed and efficiently utilized. Maximizing taxes within the legal options available will also improve the return.

We have,

Return on Total Working Fund Ratio =
$$\frac{Net \operatorname{Pr} ofit}{Working Fund Ratio}$$

Where,

Net profit includes the profit that is left to the internal equities after all costs, charge and expenses.

Table No. 4.11

Return on Total Working Fund Ratio (%)

S.N.	Fiscal Year	NABI	NIBL
------	-------------	------	------

		L	
1	2004/2005	3.03	1.43
2	2005/2006	2.84	1.64
3	2006/2007	2.47	1.81
4	2007/2008	2.01	1.79
5	2008/2009	2.35	1.70
Total		12.7	8.37
Mean	L	2.54	1.674
S.D.		0.3611	0.1366
C.V		0.1422	0.0816

Source: Appendix 3 'A' and 5 'K'

In case of NABIL upto F/Y 2007/2008 From F/Y 2004/2005 ie.2.01 from 3.03 the ratio has a decreasing trend then increased in F/Y 2008/2009 ie, 2.35. Similarly in the case of NIBL ratio has increased 1.43 to 1.81 in F/Y 2004/2005 to 2006/2007 then after it has decreasing trend, NABIL has had a high ratio of 3.03% in F/Y 2004/2005 and a low ratio of 2.01% in F/Y 2007/2008. Similarly, NIBL has had a high of 1.81% and a low of 1.43% in F/Y 2006/2007 and 2004/2005 respectively.

NABIL has a high mean ratio than NIBL i.e., 2.54>1.674. It reveals that NABIL has been able to earn high profit on total working fund in comparison to NIBL. From the viewpoint of C.V., NIBL's ratios are more consistent than NABIL. Both banks need to exert more effort in mobilizing its working assets more efficiently.

ii) Return on Loan & Advances Ratio

It measures the earning capacity of a commercial bank on its deposits mobilization, loan & advances. Higher the ratio greater will be the return and vice versa. We have

Return on Loan & Advances Ratio = $\frac{Net \operatorname{Pr} ofit}{Loan and Advances}$

4 1 0

Where,

Loan & Advances includes loans, cash credit, and overdraft and bills purchased and discounted.

Ta	ble	No.4.12	

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	4.91	2.29
2	2005/2006	4.91	2.74
3	2006/2007	4.33	2.90
4	2007/2008	3.49	2.58
5	2008/2009	3.74	2.49
Total		21.38	13
Mean		4.276	2.6
S.D.		0.5851	0.2089
C.V		0.1368	0.0803

Return on Loans & Advances Ratio (%)

Source: Appendix 3 'B' and 5 'L'

The above table shows that the ratio of return on loan and advances of NABIL are better than NIBL in all F/Y, through they have a fluctuating trend. NABIL's ratios is same in first two year ie.4.91 then it decresed in F/y 2006/2007 and thenafter they have witnessed a increasing trend. NABIL has recorded a high ratio of 4.91% in F/Y 2004/2005 and 2005/2006, and a low ratio of 3.49% in F/Y 2007/2008. Similarly, NIBL recorded a high of 2.90% in F/Y 2006/2007 and a low of 2.29% in F/Y 2004/2005. The comparison of mean ratio reveals that NABIL has a higher ratio

than NIBL. This shows that NABIL has been more successful in maintaining its higher return on loan and advances than NIBL. C.V. of NIBL is significantly lower than NABIL i.e. It proves that NABIL has higher variability of ratio than NIBL.

iii) Total Interest Earned to Total Outside Assets Ratio

It reflects that the extent to which the bank is successful to earn interest as major income on all the outside assets. Higher the ratio higher will be the earning power of total outside assets. This is very important ratio, as the main asset is the outside asset of a commercial bank and major income is the interest income in total income.

We have,

Total Interest Earned to Total Outside Assets Ratio = $\frac{Total Interest Earned}{Total Outside Assets}$

Where,

Total outside assets includes loan & advances, investment on government securities, share and debentures and other all types of investment.

Total Interest Earned to Total outside Assets Ratio (%)

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	7.19	6.31
2	2005/2006	6.86	6.38
3	2006/2007	6.48	6.66
4	2007/2008	6.32	6.48
5	2008/2009	7.28	7.49
Total		34.13	33.32
Mean		6.826	6.664

S.D.	0.3783	0.4294
C.V	0.0554	0.0644

Source: Appendix 3 'C' and 5 'M'

The above table reflects a fluctuating trend in Interest earned to total outside assets in case of NIBL, where as NABIL ratios have a decreasing trend but in F/Y 2008/2009 it increases. NABIL has recorded a high ratio of 7.28% in F/Y 2008/2009 and a low ratio of 6.32% in F/Y 2007/2008. NIBL has had a high ratio of 7.49% in FY 2008/2009 and a low ratio of 6.31% in F/Y 2004/2005. In case of mean ratio, NABIL has a slightly higher ratio than NIBL i.e. 6.826%>6.664%. It is clear that NABIL has earned higher amount of interest on its outside assets in comparison to NIBL. The C.V. of NABIL is quite lower than NIBL. This indicates that NABIL ratios are more stable than NIBL. From the above analysis, it can be concluded that NABIL seems to be more successful in earning high interest on its outside assets than NIBL.

iv) Total Interest Earned to Total Working Fund Ratio

It reflects the extent to which the banks are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of a commercial bank by mobilizing its working fund: A high ratio is indicator of high earning power of the bank on its total working fund and vice versa.

We have,

Total Interest Earned to Total Working Fund Ratio = $\frac{Total Interest Earned}{Total Working Fund}$

Table No. 4.14

Total Interest Earned to Total Working Fund Ratio

S.N.	Fiscal Year	NABI	NIBL
		L	

1	2004/2005	6.22	5.45
2	2005/2006	5.87	5.50
3	2006/2007	5.82	5.74
4	2007/2008	5.33	5.64
5	2008/2009	6.38	6.16
Total		29.62	28.49
Mean		5.924	5.698
S.D.		0.3639	0.2527
C.V		0.0614	0.0443

Source: Appendix 3 'D' and 5 'N'

NABIL has had a high ratio of 6.38% in F/Y 2008/2009 and a low ratio of 5.33% in F/Y 2007/2008. Similarly, NIBL has experienced a high of 6.16% in F/Y 2008/2009 and a low of 5.45% in F/Y 2004/2005. The average Interest earning ratio of NABIL is 5.924% where as the same for NIBL is 5.698%. This reflects that NABIL has been stronger in terms of interest earning power w.r.t. total working fund than NIBL.

From the above analysis, we can conclude that NABIL has been able to earn high interest on its total assets i.e., it has been more successful in mobilizing its assets to generate high income. The decreasing trend of interest earning ratio w.r.t. total working fund is a matter of concern, and both the banks need to look for ways to improve upon their interest earnings.

v) Total Interest Paid to Total Working Fund Ratio

Total interest paid to total working fund ratio measure the percentage of total interest paid against the total working fund. A high ratio indicates the higher interest expenses on total working fund and vice-versa.

We have,

Total Interest Paid to Total Working Fund Ratio $= \frac{Total Interest Paid}{Total Working Fund}$
Where,

Total interest paid includes total interest expenses on deposit liabilities, loan & advances (borrowing) and other deposits.

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	1.42	2.18
2	2005/2006	1.60	2.30
3	2006/2007	2.04	2.48
4	2007/2008	2.04	2.55
5	2008/2009	2.63	3.18
Total		9.73	12.69
Mean		1.946	2.538
S.D.		0.42	0.3465
C.V		0.2158	0.1365

Table No. 4.15Total Interest paid to Total Working Fund Ratio (%)

Source: Appendix 3 'E' and 5 'O'

The above table shows a increasing trend in total Interest paid to total working fund ratio of both the banks except. The average ratio of NABIL with regards to total interest paid to total working fund ratio is lower than that of NIBL i.e. 1.946%<2.538%. In terms of C.V., NIBL ratios are more stable than that of NABIL.

Overall, we can say that NABIL is in a better position form interest payment point of view that NIBL. NABIL seems to have collected its funds from cheaper sources than NIBL.

4.1.4 Risk Ratios

The possibility of risk makes banks' investment as a challenging task. Bank has to take risk to get return on investment. It increases effectiveness and profitability of the bank. If a bank expects high return on its investment it has to accept the risk and manage it efficiently.

Through following ratios, effort has been made to measure the level of risk.

i) Liquidity Risk Ratio

The liquidity risk ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the depositors' demand for cash. Higher the ratio, lower the liquidity risks.

We have,

Liquidity Risk Ratio $= \frac{Total Cash \& Bank Balance}{Total Deposit}$

Table No. 4.16

Liquidity Risk Ratio (%)

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	3.83	9.40
2	2005/2006	3.26	12.34
3	2006/2007	6	9.97
4	2007/2008	8.37	10.90
5	2008/2009	9.03	16.95
Total		30.49	59.56
Mean		6.098	11.912
S.D.		2.3223	2.7081
C.V		0.3808	0.2273

Source: Appendix 4 'A' and 5 'P'

The above table shows that the liquidity risk ratios of both the banks have fluctuating trend. NABIL has recorded a high ratio of 9.03% and a low ratio of 3.26%. Similarly, NIBL has recorded a high of 16.95% and a low of 9.40%.

When mean ratio are taken it is found that NIBL's liquidity risk is lower than that of NABIL i.e. 11.912>6.098. NIBL has more cash & bank balance than NABIL to meet its current obligations. On the other hand,too much idle cash might have an adverse impact on profitability. A trade off between liquidity and profitability must be maintained at all times.

On comparison of C.V.'s of both the banks, NIBL ratio's seems to be more stable and consistent than NABIL.

ii) Credit Risk Ratio

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 the bank. Actually credit risk ratio shows the proportion of nonperforming assets in total loan and advances of a bank.

We have,

Credit Risk Ratio = $\frac{Total \ Loan \ and \ Adavances}{Total \ Assets}$

Table No. 4.17

Credit risk ratio (%)

S.N.	Fiscal Year	NABI	NIBL
		L	
1	2004/2005	61.60	62.22
2	2005/2006	57.87	59.90
3	2006/2007	57.04	62.65

4	2007/2008	57.54	69.45
5	2008/2009	62.89	68.37
Total		296.94	322.59
Mean		59.388	64.518
S.D.		2.3828	3.7218
C.V		0.0401	0.0577

Source: Appendix 4 'B' and 5 'Q'

The above table shows that NABIL ratios are in a decreasing trend till F/Y 2006/2007. There after they have an increasing trend. The ratios of NIBL have a flacutating trend. NABIL has witnessed a high ratio of 62.89% in F/Y 2008/2009 and a low ratio of 57.04% F/Y 2006/2007. Similarly, NIBL has had a high ratio of 69.45% in F/Y 2007/2008 and a low ratio of 59.90% in F/Y 2005/2006.

The mean ratio of NABIL is lower than that of NIBL ie.,59.388%<64.518%.This indicates that NIBL has more exposure to credit risk than its counterpart.. From the point of view of C.V., NABIL seem to have had consistent ratios during the study period.

(iii) Capital Risk Ratio

Capital ratio measures bank's ability to attract deposits and inter bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk. The capital risk is directly related to return on equity.

We have,

Capital Risk Ratio = $\frac{Capital (Paid upcapital + Re serves)}{Risk Weighted Assets}$

(Only loan and advances are taken as risk weighted assets)

Table No. 4.18

Fiscal Year	NABI	NIBL
	L	
2004/2005	15.66	11.65
2005/2006	14.44	11.08
2006/2007	13.23	10.86
2007/2008	11.41	9.95
2008/2009	11.34	10.78
	66.08	54.32
	13.216	10.864
	1.6883	2.5102
	0.1277	0.2310
	Fiscal Year 2004/2005 2005/2006 2006/2007 2007/2008 2008/2009	Fiscal Year NABI 2004/2005 15.66 2005/2006 14.44 2006/2007 13.23 2007/2008 11.41 2008/2009 11.34 66.08 13.216 1.6883 0.1277

Capital Risk Ratio (%)

Source: Appendix 4 'C' and 5 'R'

The table no.4.18 shows the total mean, standard deviation & coefficient of variance of capital risk ratio of two commercial banks.

In above table capital risk ratio of NABIL has in decreasing trend. Capital risk of NIBL has also decreasing trend upto F/Y 2007/2008 then increase in F/Y 2008/2009.

If the mean ratios are observed NIBL's ratio is lesser than NABI. coefficient of variation of NABIL is lower than that of NIBL. It is concluded that the NABIL bank is more stable than the other.

4.1.5 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment management of the commercial bank. It represents how well the commercial banks are maintaining the economic and financial position. Higher the ratio, better the performance of the bank and vice-versa.

Mathematically it is calculated as:

$$Factor = \frac{Last Year Figure}{First Year Figure}$$

Factor = $(1+g)^{n-1}$ Where, g = growth ratio n = number of period

Again, growth ratio is measured in percentage.

Under this section growth ratio of total deposit, loan & advances, total investment and net profit are calculated.

i) Growth Ratio to Total Deposit

Table No. 4.19

Growth Ratio of Total Deposit (%)

S.N.	Fiscal year	NABIL	NIBL
1	2004/2005	14586.61	14254.57
2	2005/2006	19347.40	18927.30
3	2006/2007	23342.28	24488.85
4	2007/2008	31915.05	34451.73
5	2008/2009	37348.26	46698.10
	Growth ratio (%)	26.50	34.53

Source: Appendix 9

The above table no.4.19 shows that the growth ratio of NABIL bank is less than NIBL. We can see growth rate of NABIL i.e. 26.50% is less than that of NIBL ie.34.53%. The above position of growth rate indicates that NIBL used to increase its deposit collection very aggressively than NABIL.

ii) Growth Ratio of Loan & Advances

Table No. 4.20

Growth Ratio of Loan & Advances

S.N.	Fiscal year	NABIL	NIBL
1	2004/2005	10586.17	13967.78
2	2005/2006	12922.54	17906.12
3	2006/2007	15545.78	23580.98
4	2007/2008	21365.05	34183.44
5	2008/2009	27589.93	47081.16
	Growth ratio (%)	27.06	35.50

Source: Appendix 9

The above table no.20 shows the growth ratio of loan & advances. The growth ratio of NIBL bank is very high i.e. 35.50% where as NABIL bank's growth rate is low i.e. 27.06%. This position of growth ratio indicates that the performance of NIBL to grant loan and advances in comparison to NABIL is better.

iii) Growth Ratio of Total Investment

Table no.4.21

Growth Ratio of Total Investment

S.N.	Fiscal year	NABIL	NIBL
1	2004/2005	4267.23	3934.19
2	2005/2006	6178.53	5602.87
3	2006/2007	8945.31	6505.68
4	2007/2008	9939.77	6874.02
5	2008/2009	10826.38	7399.81

	Growth ratio (%)	26.21	17.11
Correct	A manadia O		

Source: Appendix 9

The above table no. 21 shows the growth ratio of total investment of NABIL and NIBL. Those are 26.21% and 17.11% respectively. It seems that growth ratio of NABIL is higher than NIBL.

iv) Growth Ratio of Net profit

Table No. 4.22

Growth Ratio of Net Profit

S.N.	Fiscal year	NABIL	NIBL
1	2004/2005	520.11	232.15
2	2005/2006	635.26	350.54
3	2006/2007	673.96	501.40
4	2007/2008	746.47	696.73
5	2008/2009	1031.05	900.62
	Growth ratio (%)	18.66	40.34

Source: Appendix 9

The above table no. 22 shows the growth ratio of net profit of NABIL and NIBL. Those are18.66%, and 40.34% respectively. The above position indicates that growth ratio of net profit of NIBL is higher than NABIL.

4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as trend analysis, co-efficient of correlation analysis between different variables, test of hypothesis are used.

4.2.1 Trend Analysis

This is known as time series analysis. Under this topic, analysis of trend of loan & advances to total deposit ratio as well as trend of total investment to total deposit ratios of NABIL and NIBL are calculated and forecasted for next five years. The forecast is based on the following assumptions.

- ✤ Other things will remain unchanged.
- ✤ The bank will run in present position.
- ✤ The economy will remain in the present stage
- The forecast will be true only when the limitation of least square method is carried out
- Nepal Rastra Bank will not change its guidelines to commercial banks.

i) Analysis of Trend value of Total Deposit

Under this topic, based on the trend values of deposit from F/Y 2004/2005 to 2008/2009, an attempt has been made to forecast the projection for next five years, i.e. upto F/Y 2014/2015.

The following table shows the trend value of deposits from F/Y 2004/2005 to 2008/2009.

Table No. 4.23

Trend Values of Total Deposit of NABIL and NIBL

S.N.	Fiscal Year	NABIL	NIBL
1	2004/2005	13689.73	11681.812
2	2005/2006	19498.825	19722.961
3	2006/2007	25307.92	27764.11
4	2007/2008	31117.015	35805.259
5	2008/2009	36926.11	43846.408
6	2009/2010	42735.205	51887.557
7	2010/2011	48544.3	59928.706

8	2011/2012	54353.395	67969.855
9	2012/2013	60162.49	76011.004
10	2013/2014	65971.585	84052.153

Source: Appendix 6 'A'

Figure 4.1

Trend Values of Total Deposit of NABIL and NIBL



From the above comparative table it is clear that trend values of NIBL are in an increasing trend. If other things remain unchanged the total deposit of NABIL is predicted to be RS. 65971.585 million and that of NIBL to be more than the deposit of NABIL by the end of F/Y 2013/2014 i.e. Rs. 84052.153 million.

From the above trend analysis, it is quite obvious that NIBL's deposit collection is proportionately much better than NABIL from F/Y 2004/2005 onwards. The trend values of total deposit of both NABIL and NIBL are fitted in the trend lines given in figure.

ii) Analysis of Trend Values of Loan and Advances

Here, the trend values of loan and advances of NABIL and NIBL have been calculated for five years from F/Y 2004/2005 to 2008/2009 and the

forecast for next five years. i.e. from F/Y 2009/2010 to F/Y 2013/2014 has been made

Table No. 4.24

S.N.	Fiscal Year	NABIL	NIBL
1	2004/2005	9111.888	10843.08
2	2005/2006	13356.891	19093.488
3	2006/2007	17601.894	27343.896
4	2007/2008	21846.897	35594.304
5	2008/2009	26091.9	43844.712
6	2009/2010	30336.903	52095.12
7	2010/2011	34581.906	60345.528
8	2011/2012	38826.909	68595.936
9	2012/2013	43071.912	76846.344
10	2013/2014	47316.915	85096.752

Trend Values of Loan and Advances of NABIL and NIBL

Source: Appendix 6 'B'



Trend Values of Loan and Advances of NABIL and NIBL



The above table clearly shows that the loan and advance of both the banks are in an increasing trend. Assuming that other things will remain constant, the loan and advances of NABIL at the end of F/Y 2013/2014 is predicted to be Rs. 47316.915 million. Similarly, the projection for NIBL at the end of F/Y 2013/2014 is Rs 85096.752 million.

From the above trend analysis, it is quite clear that NIBL's loan and advances in relation to NABIL is comparatively higher through out the trend projection period. The above trend values of loan and advances of NABIL and NIBL are fitted in the trend line given in Figure.

iii) Analysis of Trend Values of Total Investment

Under this topic, based on the trend values of Investment from F/Y 2004/2005 to 2008/2009, an attempt has been made to forecast the projections for next five years i.e. upto F/Y 2013/2014.

The following table shows the trend value investment from F/Y 2004/2005 to F/Y 2013/2014.

	Га	ble	No.	4.25
--	----	-----	-----	------

Trend Values of Total	Investment of NABII	and NIBL
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S.N.	Fiscal Year	NABIL	NIBL
1	2004/2005	4655.536	4422.836
2	2005/2006	6343.49	5243.075
3	2006/2007	8031.444	6063.314
4	2007/2008	9719.398	6883.553
5	2008/2009	11407.352	7703.792
6	2009/2010	13095.306	8524.031
7	2010/2011	14783.26	9344.27
8	2011/2012	16771.214	10164.509

9	2012/2013	18459.168	10984.748
10	2013/2014	20147.122	11804.987

Source: Appendix 6 'C'

Figure 4.3

Trend Values of Total Investment of NABIL and

NIBL



From the above table it is clear that the trend value of both the banks are in an increasing trend. If other things remain uncharged total investment of NABIL is predicted to be Rs. 20147.122 in F/Y 2013/2014 and that of NIBL to be Rs. 11804.987million. These values are highest under the review period.

The above table reveals that NABIL's total investment is higher than that of NIBL through out the trend projection period. It can be said that both NABIL has followed the policy of maximizing their investment. The above calculated trend values of NABIL and NIBL are fitted in the trend line given in Fig

iv) Analysis Trend Values of Net Profit

Under this topic, based on the trend values of net profit from F/Y2004/2005 to 2008/2009, an attempt has been made to forecast the projections for next five years i.e. upto F/Y 2013/2014.

The following table shows the trend value of net profit from F/Y 2004/2005 to F/Y 2013/2014.

Table No. 4.26

Trend Values of Net Profit of NABIL and NIBL

S.N.	Fiscal Year	NABIL	NIBL
1	2004/2005	494.752	199.662
2	2005/2006	608.061	367.975
3	2006/2007	721.37	536.288
4	2007/2008	834.679	704.601
5	2008/2009	947.988	872.914
6	2009/2010	1061.297	1041.227
7	2010/2011	1174.606	1209.54
8	2011/2012	1287.915	1377.853
9	2012/2013	1401.224	1546.166
10	2013/2014	1514.533	1714.479

Source: Appendix 6 'D'

Figure 4.4

Trend Values of Net Profit of NABIL and NIBL



From the above comparative table it is clear that the trend value of both the banks are in increasing trend. Other things remaining the same the trend value of both the banks are in increasing trend. The trend value of NABIL will be highest in F/Y 2013/2014 i.e. Rs.1514.533 million. In case of NIBL net profit will be Rs 1714.479 million in F/Y 2013/2014, which is the highest under the review period.

NIBL's net profit is higher than that of NABIL through the review period. It can be said that both the banks have followed the policy of maximizing their net profit.

However, we can draw a conclusion that NIBL has utilized its fund better than NABIL to earn higher amounts of profit. The above calculated trend values of net profit of NABIL and NIBL are fitted in the trend live given in figure.

4.2.2 Coefficient of Correlation Analysis

Under this topic, Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and loan and advances, deposit and total investment, outside assets and net profit, deposits and net profit, deposits and interest earned, loan and advances and interest paid, total working fund and net profit.

i) Co-efficient of Correlation between Deposits and Loan & Advances

Coefficient of correlation (r) between deposits and loans and advances measures the degree of relationship between these two variables. The purpose of correlation analysis between deposit and loan and advances is to find out whether deposit is significantly used as loan and advances. In this analysis deposit is independent variable (x) and loan & advances are dependent variables (y).

The following table shows the value of 'r' r^2 , PEr and 6PEr between total deposits and loan and advances of NABIL and NIBL during the study period

Contraction of Contraction between Deposit and Loan & Auvance			
Evaluation Criteria	NABIL	NIBL	
R	0.99	1	
R^2	0.98	1	
P.E.r	0.01	0	
6P.E.r	0.06	0	

Table No. 4.27

Coefficient of Correlation between Deposit and Loan & Advances

Source: Appendix 7 'A'

In the above table the coefficient of correlation between deposit and loan and advances in case of NABIL is 0.99. This indicates that there is a positive relationship between deposit and loan and advances. The calculated value of (r^2) or coefficient of determination is 0.98. This means 98% of variation of the dependent variable (loan and advances) has been explained by the independent variable (deposit). When the value of 'r' i.e., 0.99 is compared with six times the probably error or 6PEr. i.e., 0.04, we can say that there is significant relationship between deposits and loan advances because 'r' is Greater than six times PE.r i.e. 0.99 < 0.04. The coefficient of correlation 'r' between deposits and loan and advances incase of NIBL is 1, which gives us an indication of perfectly positive correlation between them. This further shows that the value of 'r' is significant. In other words, there is significant relationship between deposit and loan and advances. From the above analysis, we can conclude that both the banks show positive relationship between deposits and loan and advance. The relationship is highly significant in case of both bank and the value of (r²) shows higher percentage of dependency. It indicates NIBL has been more successful in utilizing its deposits in a proper manner than NABIL. Further, the increase in loan and advance is due to effective mobilization of deposits, and other factors have marginal role in increase in loan and advances.

ii) Coefficient of Correlation between Deposit and Total Investment.

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. The purpose of calculating this analysis is to find out whether deposit is significantly used as investment or not. In this analysis deposit is independent variable (x) and total investment is independent variable (y).

Table No. 4.28

Evaluation criteria	NABIL	NIBL
r	0.96	0.99
r ²	0.92	0.98
P.E.r	0.02	0.01
6P.E.R	0.12	0.06

Coefficient of Correlation between Deposit and Total Investment

Source: Appendix 7 'B'

The coefficient of correlation 'r' between deposits and total investment in case of NABIL is 0.96, which indicates a positive correlation between deposits and total investment. Coefficient of determination (r^2) is 0.92. This means 92% of variation of the dependent variable has been explained by

independent variable. The value of 'r' i.e. 0.96 is also greater than six times PEr. This states that there exists a significant relationship between deposits and total investment.

The coefficient of correlation 'r' between deposits and total investment in case of NIBL is 0.99, which indicates almost perfectly positive relationship between the two variables. The coefficient of determination (r^2) is 0.98. This indicates that 98% of the variation of the dependent variable has been explained by independent variable. Moreover 'r' is greater than six times P.E.r, which further states that there is a significant relationship between deposits and total investment.

In conclusion, it can be said that both the banks show significant relationship between total deposits and total investment.

iii) Coefficient of Correlation between outside Assets and Net Profit

Coefficient of correlation between outside asset and net profit measures the degree of relationship between these two variables. The purpose of computing these analysis is to find out whether net profit is significantly correlated with respect to total assets or not. In this analysis outside asset is independent variable (x) and net profit is independent variable (y).

Table No. 4.29

Evaluation criteria	NABIL	NIBL
r	0.95	1
r ²	0.90	1
P.E.r.	0.03	0
6 P.E.r.	0.18	0

Coefficient of Correlation between outside Assets and Net Profit

Source: Appendix 7 'C'

The coefficient of correlation 'r' between outside assets and net profit in case of NABIL is 0.95, which indicates a highly posative relationship between these two variables. Th coefficient of determination (r^2) is 0.90, which indicates than 90% of the variation of the dependent variable, has been explained by independent variable. The value of 6pEr i.e.0.18 is lower than the value of 'r' i.e.0.95. This states that there exists a significant relationship between outside assets and net profit of NABIL.

The coefficient of correlation between outside assets and net profit in case of NIBL is 1, which indicates a perfectly positive relationship between the two variables. The value of (r^2) is 1 which highlights that 100% of the variation of the dependent variable has been explained by the independent variable. Likewise when we compare 6PEr with the value of 'r' we can say that there exists a significant relationship between outside assets and net profit because 'r' is higher than six times PE.r. Thus NIBL has a significant correlation between mobilization of outside assets and net profit.

Thus, in view of above we can conclude that the relationship between outside assets and net profit incase of both the banks are significant.

iv) Coefficient of Correlation between Deposit and Net Profit.

The coefficient of correlation between deposit and net profit measures the degree of relationship between these two variables. Here, deposit is independent variable (x) and net profit is dependent variable (y). The main purpose of calculating between these two variables is to justify whether net profit is significantly correlated with deposits or not.

The following table shows the value of r, r^2 , PEr & 6Er of NABIL and NIBL during the study period .

Table No. 4.30

Evaluation criteria	NABIL	NIBL
r	0.94	0.99
r^2	0.88	0.98
P.E.r.	0.04	0.01
6 P.E.r.	0.24	0.06

Correlation between Deposit and Net Profit

Source: Appendix 7 'D'

The coefficient of correlation between deposits and net profit in case of NABIL is 0.94, which indicates a posativetive relationship between deposits and net profit. The coefficient of determination (r^2) is 0.88, which indicates 88% of the variation of the dependent variable (net profit) has been explained by the independent variable (deposits). The value of 6PEr is lower than 'r' i.e.This states that there exists a significant relationship between deposits and net profit.

The coefficient of correlation between deposits and net profit in case of NIBL is 0.99, which indicates a positive relationship between these variables. The value of (r2) is 0.98 indicates that 98% of the variation of the dependent variable has been explained by the independent variable. The value of 'r' is greater than 6PEr , which further states that these exists a significant relationship between deposit and net profit.

From the above analysis, we can conclude that both bank shows positive relationship between deposit and net profit.. The increase in net profit in case of both is due to effective mobilization of deposits and other factors have a lesser role to play in increase in net profits. NIBL has been more successful in mobilization of its deposits to yield higher profits year after year.

V) Co-efficient of Correlation between Deposits and Interest Earned

The coefficient of correlation between deposits and interest earned measure the relationship between these two variables. Here deposit is independent variable (x) and interest earned is dependent variable (y). The main objective of calculating 'r' between these two variables is to justify whether deposit is significantly used to earn interest or not.

The following table sows the values of r, r^2 , PEr & 6PEr of NABIL and NIBL during the study period.

-			
Evaluation criteria	NABIL	NIBL	
r	0.97	1	
r^2	0.94	1	
P.E.r.	0.02	0	
6 P.E.r.	0.12	0	

Table No. 4.31

Correlation between Deposit and Interest earned

Source: Appendix 7 'E'

The coefficient of correlation 'r' between deposit and interest earned in case of NABIL is 0.97, which indicates a positive relationship between these variables. When deposits increased, the interest income subsequently increased but when it fell the interest income also fell. The coefficient of determination (r^2) is 0.94, which shows that 94% of the variation of dependent variable has been explained by independent variable. The value of six times PEr is less than 'r' . This states that there is a significant relationship between deposit and interest earned.

The coefficient of correlation 'r' between deposit and interest earned in case of NIBL is 1, which projects a perfectly posative relationship between these variables. It's interest income has increased despite an increase in total deposits. The coefficient of determination (r^2) is 1, which shows that 100% of

the variation of dependent variable has been explained by the independent variable.. The value of six times PEr is less than 'r'. This states that there is a significant relationship between deposit and interest earned.

In conclusion, we can say that the relationship between deposit and interest earned in case of both banks are highly significant.

vi) Coefficient of Correlation between Loan and Advances and Interest Paid

The coefficient of correlation between loan and advances and interest paid measures the relationship between these two variables. Here, loan and advances is independent variable (x) and interest paid is dependent variable (y). The purpose of calculating 'r' between these variables is to establish whether increase in loan advances has any role to play in decrease in Interest expenses and vice-versa.

The following table shows the values of r, r^2 , PEr and 6PEr of NABIL and NIBL during the period of study.

Table No. 4.32

Correlation between Loan and Advances and Interest Paid

Evaluation criteria	NABIL	NIBL
r	0.99	0.99
r ²	0.98	0.98
P.E.r.	0.01	0.01
6 P.E.r.	0.06	0.06

Source: Appendix 7 'F'

The calculated values of 'r' of both the banks highly posative relationship between loan and advances and Interest paid.

the coefficient of correlation (r), coefficient of determination (r^2), P.E.r. in case of both banks are same which shows a higher degree of dependency than NABIL. The values of PEr is considerably greater than 'r' in both the cases, which states that there isn't any significant relationship between loan and advances and interest paid for the above mentioned banks.

In conclusion no relationship could be established between the variables of both the banks.

vii)Coefficient of Correlation between Total Working Fund and Net Profit

The coefficient of correlation between these variables measures the degree of relationship between them. In our analysis, total working fund is taken as independent variable (x) and net profit is taken as dependent variable (y). The main objective of calculating 'r' is to justify whether total working fund is significantly used to generate earnings or in other words whether total working fund and net profit are significantly correlated or not.

The following table shows the value of r, r^2 , PEr, and 6PEr between these two variables of NABIL and NIBL.

5		
Evaluation criteria	NABIL	NIBL
r	0.94	0.99
r ²	0.88	0.98
P.E.r.	0.04	0.01
6 P.E.r.	0.24	0.06

Table No. 4.33Correlation between Total working Fund and Net Profit

Source: Appendix 7 'G'

The coefficient of correlation 'r' between total working fund and net profit is case of NABIL is 0.94 which indicates a posative relationship between these variables. The coefficient of determination (r^2) is 0.88, which shows that 88% of the variation of the dependent variable has been explained by independent variable. The value of 6PEr is lower than 'r'. This further states that there exists an insignificant relation between the variables.

In the case of NIBL the coefficient of correlation 'r' between total working fund and net profit is 0.99, which shows a positive relationship between total working fund and net profit. The coefficient of determination (r2) is 0.98, which indicates that 98% of the variation of the dependent variable has been explained by the in dependent variable. The value of 6PEr is lower than 'r', which states that there is a significant relationship between these variables.

4.2.3 Test of Hypothesis

It is an assumption about the population, which may or may not be true; to determine whether it is true or not by taking some sample with followed some procedure is called testing of hypothesis. The test of hypothesis discloses the fact whether the difference between the computed statistic and hypothetical parameter is significant.

Types of Hypothesis: -

Null hypothesis Alternative hypothesis

Null Hypothesis (H₀): $\overline{X_1} = \overline{X_2}$: - It always rejected the difference & accepts they (assumption value & actual value) are same i.e. there is no significant difference between mean ratios of loan & advances to total deposits of NABIL and NIBL.

Alternative Hypothesis $(H_0): \overline{X_1} \neq \overline{X_2}:$ - Complementary of null is called alternative hypothesis i.e. there is significant difference between mean ratios of loan & advances to total deposits of NABIL and NIBL..

Generally, following steps are followed for the test of hypothesis.

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

In this topic t statistic is used to find out the test of significance regarding the parameter of the population on the basis of sample drawn from the population.

<u>t-test</u>

In this research study the sample is small i.e., n = 5. Hence, to deal with small sample 't' test is used. Suppose we want to test if two independent samples have been drawn from two normal populations having the same means, the population variances being equal.

We set up the Null hypothesis Ho: $\mu = \mu y$ i.e., the samples have been drawn from the normal population, or the sample means \overline{x} and \overline{y} do not differ significantly. Under the assumption that $a^2 = 6a^2$ i.e., population variances are equal but unknown, the test statistic under Ho is:

$$= \frac{\overline{x-y}}{\sqrt{S2 \times \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}} \sim \dots \text{ w.d.f.} \quad n_1 + n_2 - 2$$

Where
$$\overline{x} = \frac{\sum x}{n_1}$$
 $\overline{y} = \frac{\sum y}{n_2}$

And S² =
$$\frac{1}{n_1 + n_2 - 2}$$
 [$\sum (x - \bar{x})^2 + \sum (y - \bar{y})^2$]

is an unbiased estimate the common population variance 6^2 based on both the samples. By comparing the tabulated value of 't' for $n_1 + n_2 - 2$ d.f. at the desired level of significance. Usually 5% we reject or retain the mull hypothesis H_o.

Assumption made for using t-test in this case is that: -

- The parent populations from which samples are drawn are normally distributed.
- ✤ The two samples are random and independent of each other.
- ✤ The population variances are equal and unknown.

i) Test of Hypothesis on Loan and Advances to Total Deposit Ratio of NABIL and SCBNL.

Let loan and advances to total deposit of NABIL and NIBL be denoted by X and Y respectively.

Calculated $S^2 = 30.875$ (for detail see Appendix 8 'A') Solution:

<u>Null Hypothesis</u> (H₀): $\mu_1 = \mu_2$ i.e., there is no significant difference between mean ratio of loan and advances to total deposit of NABIL and NIBL. <u>Alternative Hypothesis</u> (H₁): $\mu_1 = \mu_2$ i.e., there is significant difference between mean ratio of loan and advances to total deposit of NABIL and NIBL. <u>Test Statistic</u>

Under H_0 , the test statistic is

t =0.0939

t =
$$\frac{\overline{X_1} - \overline{X_2}}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$
 (with d.f. = n₁ + n₂ - 2)

Decision:

The tabulated value of t for 8 d.f. at 5% level of significance is 2.306. Since calculated 't' is lower than tabulated 't', $H_0: \mu_1 = \mu_2$ is accepted and we can conclude that there is no significant difference between mean ratios of loan and advances to total deposit of NABIL and NIBL.

ii) Test of Hypothesis on total Investment to Total Deposits Ratio NABIL and NIBL.

Let, the total investment to total deposit ratio of NABIL and NIBL be denoted by X and Y.

Calculated $S^2 = 23.87$ (for detail see Appendix 8'B')

Solution:

<u>Null Hypothesis</u> (H₀): $\mu_1 = \mu_2$ _{i.e.}, There is no significant difference between the mean ratios of total investment to total deposit of NABIL and NIBL.

<u>Alternative Hypothesis</u> (H₁): $\mu_1 \# \mu_{2 i.e.}$, There is significant difference between the mean ratio of total investment to total deposit of NABIL and NIBL.

Test Statistic

Under H_{0} , the test statistic is

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \qquad (with \dots d.f. = n_1 + n_2 - 2)$$

Decision:

t = 2.59

The tabulated value of t for 8 d. of at 5% level of significance is 2.306. Since calculated is greater than tabulated value of 't' it is significant. Hence H0: $\mu_1 = \mu_2$ is rejected at 5% level of significance and we may conclude that there is significant difference between mean ratios of total investment to total deposit of NABIL and NIBL

iii) Test of Hypothesis on Investment in Government Securities to Current Assets Ratio of NABIL AND NIBL.

Let, the total Investment in Government securities to current assets ratio of NABIL and NIBL be denoted by X and Y.

Calculated $S^2 = 15.77$ (for detail see Appendix 8 'C') Solution:

<u>Null Hypothesis</u> (H₀): $\mu_1 = \mu_2$ i.e., there is no significant difference between the mean ratio of Investment in Government securities to current assets of NABIL and NIBL.

<u>Alternative Hypothesis</u> (H₁): $\mu_1 \neq \mu_2$ i.e., there is significant difference between the mean ratio of Investment in Government securities to current assets of NABIL and NIBL.

Test Statistic:

Under H_{0} , the test statistic is

t =
$$\frac{\overline{X_1} - \overline{X_2}}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$
 (with d.f. = N₁ + N₂ - 2)

Decision:

The tabulated value of t for 8 d.f. at 5% level of significance is 2.306. Since calculated 't' is lower than tabulated 't' it is not significant. Hence null Hypothesis H_0 : $\mu_1 = \mu_2$ is accepted at 5% level of significance and we may conclude that there is no significant difference between the mean ratios of Investment in Government securities to current assets ratio of NABIL and NIBL.

iv) Test of Hypothesis on Return on Loan and Advance Ratio

Let the return on loan and advance of NABIL and NIBL be denoted by X and Y.

 $S^2 = 0.24$ (for detail see Appendix 8 'D')

Solution:

<u>Null Hypothesis</u> (H_o): $\mu_1 = \mu_2$ i.e., there is no significant difference between the mean ratio of return on loan and advances of NABIL and NIBL.

<u>Alternative Hypothesis</u> (H₁): $\mu_1 \neq \mu_{2,}$ i.e. there is significant difference between the mean ratio of return on loan and advances of NABIL and NIBL.

Test Statistic

Under H₀ the test statistic is

t =
$$\frac{\overline{X_1} - \overline{X_2}}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$
 (with d.f. = N₁ + N₂ - 2)

$$t = 5.42$$

Decision:

The tabulated value of 't' at 5% level of significance is 2.306. Since calculated 't' is much greater than tabulated value of 't' it is highly significant. Hence Null Hypothesis Ho: $\mu_1 = \mu_2$ i.e., is rejected and Alternative Hypothesis H_1 : $\mu_1 \neq \mu_2$ is accepted at 5% level of significance and we can conclude that there is significant difference between the mean ratio of return on loan and advances of NABIL and NIBL.

v) Test of Hypothesis on Total Interest Earned to Total Outside Assets:

Let, the total interest earned to total outside assets of NABIL and NIBL be denoted by X and Y respectively.

Calculated $S^2 = 0.17$ (for detail see Appendix 8 'E')

Solution:

<u>Null Hypothesis</u> (Ho): $\mu_1 = \mu_2$ i.e., there is no significant difference between the mean ratio of total interest earned to total outside assets of NABIL and NIBL.

<u>Alternative Hypothesis</u> (H₁): $\mu_1 \neq \mu_2$ i.e., there is significant difference between the mean ratio of total interest earned to total outside assets of NABIL and NIBL.

Test Statistic

Under H₀ the test statistic is

t =
$$\frac{\overline{X_1} - \overline{X_2}}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$
 (with d.f. = N₁ + N₂ - 2)

$$t = 0.65$$

Decision:

The tabulated value of 't' at 5% level of significance is 2.306. Since calculated value of 't' is much less than tabulated value of 't' it is not significant. Hence, Null Hypothesis (H_o): $\mu_1 = \mu_2$ is accepted at 5% level of significance and we can conclude that there is no significant difference between total interest earned to total outside assets of NABIL and NIBL.

4.3 Major Findings of the Study

Having completed the basic analysis required for this study, the final and the most important task of the researcher is to enlist the findings. This will give meaning to the desired result. A comprehensive summary of the major findings of this study is presented below.

The main findings of the study derived from the analysis of financial data of NABIL and NIBL are given below.

Liquidity Ratio

The liquidity position of NABIL and NIBL reveals that:

- From the analysis of current ratio it is found that the mean ratio of NABIL is slightly lower than NIBL. The ratios of both the banks are highly consistent. The mean current ratio of both the banks is lower than 1.
- The mean ratio of cash and bank balance to total deposits of NIBL is higher than NABIL. NIBL has better liquidity position than NABIL because of high percentage of liquid assets. This shows NIBL readiness to meet its customer requirement. On the contrary, a high liquidity also indicates the iNABILity of the bank to mobilize its current assets. Also the ratios of NIBL are more consistent than NABIL.
- The mean ratio of cash and bank balance to current assets of NIBL is higher than NABIL. This shows SCBNL's greater capacity to meet its customer's daily cash requirement than NABIL. The ratios of NIBL are less variable and more consistent than NABIL.
- The mean ratio of investment in Government securities to current assets of NABIL is higher than NIBL. This shows that NABIL has invested more of its fund in Government securities than NIBL. The ratios of NABIL are less variable and more consistent than NIBL.
- The mean ratio of loan and advances to current assets of NIBL is comparatively higher than NABIL. The variability of ratios of NABIL is slightly greater than NIBL.

From the above findings, we can conclude that the liquidity position of NIBL is comparatively better than NABIL. It has the highest cash and bank balance to total deposit, cash and bank balance to current assets. NIBL is in a better position to meet its daily cash requirement. NABIL's mean investment in Government securities is better than NIBL.

Asset Management Ratio

The asset management ratio of NABIL and SCBNL reveals that:

- The mean ratio of loan and advances to total deposit ratio of NABIL is slightly higher than NIBL. In terms of consistency, NABIL has less CV than that of NIBL so it is more stabel and consistent.
- The mean ratio of total investment to total deposits of NABIL is higher than NIBL. And also the ratios of NABIL are more consistent and less variable than NIBL. It can be concluded that NABIL is success to better utilization of deposit to investment than NIBL
- The mean ratio of loan and advances to total working fund of NIBL is higher than NABIL. The ratios of NABIL are less variable and more consistent than NIBL. It can be concluded that NABIL has mobilizing its fund is lesser but it has more consistency than NIBL.
- The mean ratio of Investment in Government securities to total working fund ratio of NABIL is higher than NIBL. The ratios of NABIL are less variable and more consistent than NIBL.

The mean ratio of Investment in shares and debentures to total working fund ratio of NABIL is higher than NIBL. NABIL ratios are more variable than that of NIBL.

From the above analysis, it can be conclude that NABIL has highest investment policy towards investment to total deposits, shares and debentures to total working funds and government securities to total working fund but lower into loan and advances to total working fund. And NABIL has stable and consistent than that of NIBL. NABIL has fared better in purchasing shares and debentures of other companies, but both have invested marginal amount under this heading. Both the banks have successfully managed their assets towards different income generation activities.

Profitability Ratio

The profitability ratios of NABIL and NIBL reveal that,

- The mean ratio o return on total working fund of NABIL is higher than NIBL. The ratios of NABIL are less consistent and more variable than NIBL. it can be conclude the NABIL has success to maintain the high ratio in return on total working fund.
- The mean ratio of return on total loan and advances of NABIL has been found to be significantly greater than NIBL. The ratios of NIBL are less variable and more consistent than NABIL.
- The mean ratio of total interest earned to total working fund of NABIL is higher than NIBL. NABIL's ratios are more stable and less variable than NIBL.

- The mean ratio of total interest earned to total working fund of NABIL is higher than NIBL. NIBL 's ratios are more stable and less variable than NABIL.
- The mean ratio of total interest paid to total working fund ratio of NABIL is lower than NIBL. However, NABIL ratios are more variable than NIBL ratios.

On the basis of above, we can conclude that NABIL has been more successful in maintaining its higher return. To earn high profit in future the bank must maintain its high profit margin.

Risk Ratio

The Risk ratio of NABIL and NIBL reveals that,

- The mean liquidity risk ratio of NABIL is lower than NIBL. On the contrary, NIBL's ratios are more uniform then NABIL.
- The mean credit risk ratio of NABIL is lower than NIBL. Both the banks have been fairly consistent in their ratios.
- NABIL has maintained higher mean ratio of capital risk than NIBL. The ratio of NABIL is more consistent than NIBL.

Based on above findings we can conclude that NABIL has lower liquidity risk and credit risk than NIBL. NIBL has greater exposure to risk in its financial operations than NIBL. and NABIL has greater capital risk.

Growth Ratio

The growth ratio of NABIL and NIBL shows that;

- The mean growth rate of deposits of NIBL is significantly higher than NABIL. It indicated that the performance of NIBL to collect deposit is better than NABIL.
- The mean growth rate of total loan and advances of NIBL is higher than NABIL. It indicates that the performance of NABIL to grant loan & advances is not satisfactory.
- The mean growth rate of total investment of NABIL is significantly higher than NIBL.
- The mean growth rate of net profit of NIBL is higher than NABIL. It indicates that the NABIL has not successful to earn profit than NIBL.

Based on the above findings, we can conclude that, NIBL has been more successful in increasing its deposits, loan and advances and net profit during the study period, whereas, NABIL has been more efficient in terms of increasing its investment. While other banks have initiated a host of measures and schemes to attract customer deposits, NABIL's strategy of shedding deposits seemS to be off the tune. NABIL needs to seriously rethink its strategy.

Trend Analysis and Projection for Next Years.

The trend analysis of deposits, loan and advances, total investment and net profit and its projection for next five years of NABIL and NIBL reveals that:

The deposits of both the banks have an increasing trend. The total deposit of NABIL is predicted to be 65971.585 million and that
of NIBL to be 84052.153 million at the end of F/Y 2013/2014. The deposit collection trend of NIBL is much better than NABIL.

- The loan and advance of both the banks have an increasing trend. The total loan and advance of NABIL is predicted to be 47316.915 million and that of NIBL to be 85096.752 million at the end of F/Y 2013/2014. The loan and advances of NIBL is much better compared to NABIL.
- The total investments of both the bank have an increasing trend. The total investment of NABIL is projected at 20147.122 million and that of NIBL at 11804.987 million by the end of F/Y 2013/2014. NABIL seems to have a much-focused policy with regards to total investment than NIBL.
- The net profits of both the banks are in an increasing trend. The net profit of NABIL and NIBL is predicted at 1514.533 million and 1714.479 million respectively by the end of F/Y 2013/2014.

Co-efficient of Correlation Analysis

Co-efficient of correlation analysis between different variables of NABIL and NIBL reveals that:

- SCBNL has a higher value of coefficient of correlation between deposits and loan and advances than NABIL.
- The co-efficient of correlation between deposits and total investment of NIBL is slightly higher than NABIL. It shows the positive relationship between these two variables. It indicates that the total deposit in mobilizing as on investment of NABIL.

- The co-efficient of correlation between outside assets and net profit in case of both banks has posative relationship. co-efficient of of NIBL is higher then NABIL.
- The co-efficient of correlation between deposit and net profit of NIBL has a higher value of coefficient of correlation. both has higher posative relationship.
- The coefficient of correlation between deposits and interest earned in case of NIBL is perfectly posative relationship, whereas NABIL has also a higher degree of correlation.
- The co-efficient of correlation between loan and advances and interest paid of both banks have equal and highly posative relationship.
- The coefficient of correlation between total working fund and net profit of NIBL is higher than NABIL.both have posatively correlated.

From above findings, it can be concluded that there is significant relationship between all calculations.

Test of Hypothesis

The test of significance regarding the parameter of the population, on the basis of sample drawn from the population reveals that:

> There is no significant difference between mean ratios of loan and advances to total deposit of NABIL and NIBL.

- There is significant difference between mean ratios of total investment to total deposit of NABIL and NIBL
- There is no significant difference between the mean ratios of Investment in Government securities to current assets ratio of NABIL and NIBL.
- There is significant difference between the mean ratio of return on loan and advances of NABIL and NIBL.
- There is no significant difference between total interest earned to total outside assets of NABIL and NIBL.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The last chapter of this study is summary; conclusion and recommendations which have discussed and explored the facts and matters required for various parts of the study. Through the analytical chapter by using some important financial as well as statistical tools, makes a comparative analysis of various aspects of the investment of concern commercial banks.

Having completed the basic analysis required for the study, the researcher must point out the mistakes and errors and also correct them by giving suitable suggestions for further improvement. this summarized and recommended tasks of the researcher of the study would be meaningful to the top management of the bank to initiate the action and achieve the desired result.

5.1 Summary

The economic development of a country depends upon the development of commerce and industry and there is no doubt that banking promotes the development of commerce because banking 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 with the restoration democracy in the country. At present, overall economic growth rate still decline year by year. Reasons behind this decline are insecure situation faced by industry, decrease in the tourist arrival, drop in the production and export of carpet, garment and pashmina industry and political situation and Maoists insurgency. The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepalese context, the history of banking is not more than six decades. After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors have greater network and access to national and international markets. Commercial banks play a vital role which deals with other people's money and stimulate saving by mobilizing idle resources to those sectors having investment opportunities. Modern bank provides various services to their customers in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan and advances into profitable, secured and marketable sector. But commercial bank should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are too much fluctuating. Commercial banks must follow the rules and regulations as well as different directions issued by central bank and ministry of finance while mobilization the funds or the commercial banks should invest its funds only those securities, which are legal.

There has been number of commercial banks established, the research has taken into consideration the following two commercial banks:

'**Nabil Bank Ltd'** – Nabil Bank Limited was the first joint venture commercial bank incorporated in 1984 by joint investment of Dubai Bank Limited and Nepali promoters.

'Nepal Investment Bank Ltd' – Nepal Investment Bank Limited was the third joint venture bank established in 1986 under the Companies Act 1964 (now Companies Ordinance 2062) by joint investment of Banque Indosues of France and Nepali promoters. In the study, the word 'investment' covers a wide range of activities like investment of income, savings or other collected fund. If there is no savings, there is no existence of investment therefore, savings and investment are interrelated. Investment policy is a one facet of the overall spectrum of policies that guide banks' investment operations and it ensures efficient allocation of funds to achieve the sustainable economic development of the nation. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volumes and quality of deposits, loan and investment. Therefore, the investment policy should be carefully analyzed.

Some sources of funds for the investment of the bank are capital, general reserves, accumulated profit, deposits and external & internal borrowings. Similarly, some important banking terms, which are frequently used in this study, are loan and advances, investment on government securities, shares and debentures, deposits and other use of funds.

In this study, for the analysis and interpretation of the data different financial & statistical tools are used. In the financial tools liquidity ratios, assets management ratios, profitability ratios, risk ratios and growth ratio have been used. Where as in statistical tools mean, standard deviation, coefficient of variation, trend analysis, coefficient of correlation and test of hypothesis have been used. Only the secondary data have been used for the analysis in this research. The data are obtained from annual reports of concerned banks, likewise, the financial statement of five years i.e. 2004/2005 to 2008/2009 was selected for the purpose evaluation.

5.2 Conclusion

- This study reveals that the current ratio of both the banks is lower than 1, which should not be considered satisfactory. The liquidity position of NABIL is comparatively lower than NIBL but it has the highest investment on government securities to current assts ratio.
- Through the assts management ratio, Nabil has highest investment policy towards investment to total deposits, shares and debentures to total working funds and government securities to total working fund but lower into loan and advances to total working fund.
- In analysis of profitability NABIL has been more successful in maintaining its higher return.
- From the viewpoint of risk ratio, liquidity risk and credit risk of Nabil is lower than NIBL.in case of capital risk NABIL has greater ratio than NIBL.
- From the analysis of growth ratio, NIBL has been more successful in increasing its deposits, loan and advances and net profit during the study period, whereas, NABIL has been more efficient in terms of increasing its investment.
- Through the both trend analysis, It shows the NIBL's position will be better in future. NABIL seems to have a much-focused policy with regards to total investment than NIBL.

From the co-efficient of correlation between deposit and loan & advances, deposit & total investment, outside assets and net profit, deposit and net profit, deposit and interest earned, loan and advances and interest paid and total working fund and net profit, there is a significant relationship in case of both banks.

Through the analysis and findings we can summarize that NABIL's investment policy is better and profitability ratio is also good. However, liquidity position and growth rate is not good but it has lower risk ratio than NIBL.NABIL has been more successful to better utilization of its assets. NIBL has very good growth rate than NABIL and it has good liquidity position and lower capital risk ratio.

5.3 <u>Recommendations</u>

On the basis of analysis and findings of the two banks in previous section, NABIL and NIBL is recommended to go through following suggestion, which may overcome the weakness and less effectiveness of the existing fund mobilization and investment policy.

- ✤ A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the customers; however, external as well as internal factors affect the liquidity position of banks. Current ratio of both the banks is lower than 1, which should not be considered satisfactory. Thus it is recommended to increase cash and bank balance to make the immediate payment to the depositor and to meet the demand of loan & advances.
- To get success in competitive banking environment and maximize return, depositors' money must be utilized as loan and advances. If the largest item of asset side is loan and

advances it has negative implication over liquidity because loans and advance are less liquid than the investment in T-bills and development bonds but it will jeopardizes the profitability. Nabil's loan & advances to total deposit ratio is slightly higher and loan & advances to total working fund ratio is lower than NIBL. Nabil is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit and total working fund in loan & advances.

- Besides investing on government securities, Nabil is recommended to invest its fund in purchase of shares and debentures of other financial and non-financial companies. Government securities such as treasury bills have very lower yield than other companies' securities. This also helps to maintain the sound portfolio of the bank.
- Profitability is the main indicator of the financial performance of every business organization. In this study, profitability ratio is good from the angle of return but it seems that NIBL cannot earn higher interest through the outside assets and working fund. So NIBL is recommended to increase its interest earned in outside assets and working fund by investing more & more funds in loan & advances and different types of securities. Because higher interest earning capacity of the bank implies better performance of the bank.
- If a bank expects high return on its investment it has to accept the risk, it increases effectiveness and profitability of the bank.
 The risk taken by Nabil, from the angle of capital risk is an

higher whereas liquidity risk and credit risk is lower than that of NIBL and its consistency are highly volatile which may result higher loss. The bank should not take high risk, NIBL should carefully analyze in above risk to achieve higher returns.

- The growth ratios represent how well the commercial banks are maintaining their economic and financial position; it is directly related to the fund mobilization and investment. Nabil's growth ratio is not good than that of NIBL. Nabil is recommended that it should increase its growth ratio into deposits, loan and advances, investment & net profit.
- In order to collection much funds, Nabil is suggested not to be surrounded and limited only big clients i.e. multinational companies, large industries, manufacturing companies, NGOs and INGOs etc. It should also cater the lower and middle level people too. Through different kind of scheme such as ezee saving scheme, cumulative deposit scheme, house building deposit scheme, deposit linked life insurance scheme, recurring deposit scheme and many other the bank can collect a large fund from lower level people of the kingdom.
- In the light of growing competition in the banking sector, the business of the bank should be customer oriented. The bank is recommended to adopt new technology and services such as SWIFT, ATM cards, visa electron debit card, international credit card, locker services, lending against gold and silver services, 24 hours services, holiday banking etc. The bank should involve in different kind of social and community development activities. The bank has been able to provide more personalized services and a better environment for its customer, it is an effective tool to attract and retain the customers.

- Integrated and speedy development of the country is possible only when competitive banking services reaches nooks and corners of the country. NABIL and NIBL have shown no interest to open branches in rural areas. Both the banks are recommended to expand their branches and banking services and facilities in rural areas and communities to accelerate their economic development. NRB sould implement policies to encourage banks, which provide extensive services while distincentivising those who are not responsive to the banking needs of the community, including the underprivileged.
- The fee-based activities include commission, discount and fees. They yield high return to the bank. NABIL is not in a better position with regard to income from off-balance sheet activities. It is recommended to enhance the off-balance sheet operations as well.
- Portfolio management refers to the allocation of funds into different components of its assets, having different degree of risk and varying rate of return in such a manner that the conflicting goals of maximum yield and minimum risk can be achieved. The portfolio condition of the banks should be regularly revised from time to time. Appointing an investment specialist as a portfolio manager or assigning the task of portfolio management to Manager Finance and Planning could prove beneficial.
- Both the banks have invested nominal percentage of its funds in shares and debentures of other companies. They are recommended to invest more in shares and debentures of financial and non-financial companies across different sectors including government comporations. This will encourage overall economic development of the country.

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