

**A STUDY OF INVESTMENT POLICY OF JOINT
VENTURE COMMERCIAL BANK OF NEPAL
(With Special Reference to Nabil Bank Ltd. & Nepal
Investment Bank Ltd. in Nepal)**

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RECOMMENDATION

This is to certify that the thesis

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Entitled:

**A STUDY OF INVESTMENT POLICY OF JOINT VENTURE
COMMERCIAL BANK OF NEPAL
(With Special Reference to Nabil Bank Ltd. & Nepal
Investment Bank Ltd. in Nepal)**

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DECLARATION

I hereby declare that the work reported in this thesis entitled “**A Study of Investment Policy of Joint Venture Commercial Bank of Nepal (With Special Reference to Nabil Bank Ltd. & Nepal Investment Bank Ltd. in Nepal)**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Asso. Prof. Achyut Raj Bhattarai** of Shanker Dev Campus, T.U.

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Mangal Laxmi Manandhar

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ABBREVIATIONS

BOK	=	Bank of Kathmandu
C.Bs	=	Commercial Banks
EBL	=	Everest Bank Ltd.
EPS	=	Earning Per Share
HBL	=	Himalayan Bank Ltd.
JVB'S	=	Joint Venture Banks
NGBL	=	Nepal Grindlays Bank Ltd.
NIBL	=	Nepal Investment Bank
NRB	=	Nepal Rastra Bank
NSBI	=	Nepal Start Bank of Indian Ltd.
P. Er	=	Probable Error
r	=	Coefficient of Correlation
S.D	=	Standard Deviation
SCBN	=	Standard Charter Bank Ltd.

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Development of economy basically depends upon the development of financial sectors; banking sector is the main element of financial sectors. So banking sectors is known as the backbone of economy because it helps to formulate capital by collecting scattered amount among people and invest it to different productive sectors. The economic growth of any underdeveloped countries widely depends upon the utilization of available resources. The cause of Nepal's economic condition is not because of lack of resources but instead it is because of improper utilization of available resources. Half the people are jobless and 80% of populations are farmer in Nepal. Rapid pace of economic development and self reliance are the must in today's world which can only be achieved through the accelerate rate of investment and capital formation in the country. Nepal being a developing country is trying to embark upon the path of economic development by economic growth rate and developing all sectors of the economy.

It is impossible to handle and develop all the sectors by the government alone & again it is not possible to undertake large businesses by the private sector because of low per capita income and high propensity to consume. Low per capita income means low capital formation & capital formation is one of the important & basic factors for economic development. Capital formation leads to increase in the size of nation output, income and employment, solving the problem of inflation and balance of payment and making the economy free from the burden of foreign debt. Domestic capital formation is very necessary to make the country self sustainable.

Financial Institutions play a catalytic role in the process of economic development. The balanced and speedy development of the country is not impossible but proper banking activities is very important for such developments. Commercial banks have played a vital role for such developments having an important place in the framework of every economy as those banks provides capital raised from different sources for various investments with a primary objective of profit generation. A key factor in the development of any country is the mobilization of available domestic resources and

their investment in the various productive sectors. The banking sector has to play a developmental role to boost the economy by adapting the growth oriented investment policy and building up the financial structure for future economic development. Formulation of investment policies and coordinated and planned efforts pushes forward the forces of economic growth. Commercial Banks formulate sound investment policies which eventually contribute to the economic growth of the country.

Investment simply means sacrificing the current funds for the future returns. Investment is the expenditures on capital goods or on inventories of goods or raw materials that are used to produce other goods and services, causing future production and income to rise. It increases the productivity of labor and leads to a higher standard of living. It is necessary for production, employment and income generation. The essence of investment is to forgo present consumption of recourse in order. The sacrifice of current consumption takes place at present with certainty and the investor expects desired level of return at the end of the investment horizon. Sharpe, Alexander and Bailey (2003) state that Investment, in its broad sense, means the sacrifice of current dollars for future dollars. Some investments may produce more value than invested value, some may produce only equal to invested value, and some may not produce even lesser than invested value. A comprehensive investment policy should address a group of issues that includes.

- **Mission Statement**
A description of long run financial goals
- **Risk Tolerance**
The amount of risk that an investor is willing to bear in pursuit of the designated investment mission.
- **Investment Objectives**
The specific investment results that will indicate when the investment program has been successful.
- **Policy Asset Mission**
The investor's long -run allocation to broad asset classes that should meet the above issues.
- **Active Management**

For effective management of investment portfolio, every bank must have a written policy, Board of Directors formulates such policies & it may differ from bank to bank in terms of complexity and comprehensiveness. Investment Policy is one fact of the overall economic development because it ensures efficient allocation of funds to achieve the material and economic well being of the society as a whole. In this regard, commercial bank's investment policy is also a push drive to achieve priority of industries in the context of Nepalese economic development.

There are conflicting opinions regarding the relationship between financial intermediation and economic growth. Some have shown a positive relationship whereas others demonstrate an ambiguous linkage. Schumpeter argued that an efficient financial system assisted national economies in growing. McKinnon and Shaw outlined the constraints placed by an inefficient financial system on economic development and pointed that such economies are incapable in deriving benefits accruing from the liberalization of the financial sector. On the other hand, Lucas held that the role of financial institutions is 'overemphasized' in promoting growth whereas Robinson maintained that the demand for financial instruments is actually the outcome of economic growth and the financial institutions simply fulfill that demand. However, recent academic researches across many countries point at the crucial role of developed banking sectors and capital markets in supporting and facilitating economic growth.

Developmental stage of the financial intermediary institutions within the Nepali Financial System

Usually financial systems in most developing countries tend to be commercial bank-centric. The capital and stock markets are likely to be underdeveloped in these countries and as a result, the financial system is dominated by the commercial banks. And Nepal's case is no different. The financial sector in Nepal is marked by increased complexity and depth, at least, from the viewpoint of the available institutional framework since the late 1980s. Before this period, two state-owned commercial banks and two state-promoted development banks had a monopoly over the financial sector. The financial reforms, initiated during the mid-1980s, saw interest-rate deregulation and gradually opened the financial sector. During this period, joint-

venture commercial banks entered the Nepali financial sector and by January 2006, the number of commercial banks, in the private sector and as joint ventures, reached 17 (in 1983 and 1993, there were two and eight commercial banks respectively). At the same time, there were 29 development banks in operation by January 2006 (there were only four in 1993). The reforms also promoted alternate institutional arrangements in the financial sector. Finance companies came into existence in 1992 and by January 2006, they numbered 63. Non-government organizations (with limited banking license) initiated their operations in 1995. By January 2006, there were 47 of these institutions. Cooperative societies (with limited banking license) increased to 35 in 1998 from their beginning in 1994. However, only 19 were in operation in January 2006.

Of the total assets in the Nepali Financial system, about 65 per cent is owned by depository institutions (banks) and other depository institutions (finance companies, and non-government organizations and cooperative societies). The commercial banks have the lion's share of over 50 per cent. The share of the commercial banks in total deposits liabilities is over 80 per cent whereas their share in total credit is over 70 per cent. They also have a high share of the above 80 per cent in total investments and liquid funds. This dominance of the commercial banks is understandable since their scope of activities is much wider compared to other financial institutions and this makes them better-placed for investment purposes. The geographical spread of the commercial banks is also unparalleled (over 400 bank branches) and this allows them to tap a wider resource base at significantly lower costs and also invest on a national scale.

1.2 Focus of the Study

The establishment of joint venture (commercial) bank has given a new horizon to the financial sector of Nepal. The study is mainly focused on the investment policy of joint venture bank namely Nabil Bank Ltd. and NIBL in the five year period from 2063 to 2067. Investment analysis involves determining the investor's objectives and the amount of his /her investable wealth. Investor's objective should be stated in term. We must know how to a quantity risk morely saying "risk" or "no risk" does not

give any concrete idea to compare various financial assets & to reach to ideal decision.

A good investment analysis accepts both borrowers and lenders which help to increase the volume and quality of deposit , loan and investment.

Those fundamental principles of commercial bank's investment are fully considered while making investment analysis.

1.2.1 An Introduction of Nabil Bank

Nabil Bank limited, the first foreign joint venture bank of Nepal started its operation in July 1984 with an authorized capital of Rs. 100 Million and Paid up capital of Rs. 30 Million. At present, the bank is providing a full rang of commercial banking services to its client through 19 branches all over the country and 170 reputed correspondent banks across the globe . The present capital structure of the bank is as below:

Authorized Capital	:	500 Million
Issued Capital	:	491.654 Million
Paid up Capital	:	491.654 Million

Dubai Bank Ltd. was the initial foreign joint venture partner with 50% equity investment which later on was transferred to Emirates Bank International Limited which again sold its entire holding to N.B (International), Ireland. Nepal Arab Bank Limited, commonly known as Nabil Bank Limited with its head office in Kamaladi, Kathmandu is the pioneer in introducing many products and marketing concept in banking sector.

Nabil Bank corresponds with other International Banks worldwide to provide the added value services to its clients like Nostro Banks, where Nabil maintains an account (Nostro Banks). When you transfer your fund into your account in Nabil bank, you may use one of the following banks or route your fund through one of the following banks

Nabil Bank can issue drafts in the following currencies: NPR, USD, GBP, JPY, EUR, INR, SGD, AUD & CAD, drawing on the various banks globally.

Nabil bank has corporate with the objective of extending international standard modern banking services to various sectors of the society pursuing its objectives.

With the following banks, Nabil has entered into bilateral key exchange. Clients may use these banks for the following purposes:

1. Inward Fund Transfer through SWIFT
2. Outward Fund Transfer through SWIFT
3. Import LC Advice
4. Export LC Issuance
5. Counter Guarantee

NIBL has join hands with various banks worldwide to provide various services to its customers. With this relationship NIBL could issue draft in various currencies, Import LC Advice, Export LC Issuance, Issue counter guarantee, Inward/Outward Fund Transfer through SWIFT etc. Represents a milestone in the banking history of Nepal as it started on era of modern banks with customer satisfaction measured as a focus of objective while doing business.

1.2.2 An Introduction of Nepal Investment Bank Limited

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. 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 are Cole and to divest, a group a companies comprising of the bankers, professionals, industrialist & businessman have 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

- Rastriya Beema Sansthan holding 15% of the Capital.
- Rastriya Banijya Bank holding 15% of the Capital.

The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange). 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.

At present, the bank is providing the services to its client through 17 branches all over the country. The present capital structure of the bank is as below:

Authorized Capital	:	1000 Million
Issued Capital	:	801.352 Million
Paid up Capital	:	801.352 Million

NIBL has join hands with various banks worldwide to provide various services to its customers. With this relationship NIBL could issue draft in various currencies, Import LC Advice, Export LC Issuance, Issue counter guarantee, Inward/Outward Fund Transfer through SWIFT etc.

1.3 Statement of the Problem

Economic condition of any country mainly based on the different financial sectors established in the country. Commercial banks and financial institutions are the back bone of the Nepalese economy at present. The establishment of joint venture banks & new commercial banks has added more bricks in the construction of Nepalese economy that has provided financial assistance from small cottage industries to large industries.

The main reason attributed to unsound investment policy are lack of proper analysis of financial risk, investment, rate risk ,liquidity risk business risk. The high liquidity position of bank has resulted in a decrease in investment in productive sectors, still some emerging the existing commercial banks are tempted to invest without proper credit analysis and on personal guarantee. Another problem is that still persist for a

bank even today is to find a proper and viable project to ensure healthy profit , they have always feared high degree of risk and uncertainly owing to lack of profitable sector for their investment. the investment policies of such banks shall be very sound & far – sighted. Because of the lack in policy formulation and absence of strong commitment towards its proper implementation has create many problems to the bank. Commercial Banks have not formulated their investment policy in an organized manner. They rely upon the instruction and guidelines of NRB & don't have their clear view towards investment policy. Furthermore, the policies formulated are not implemented in an effective way. Thus, the present study will make an attempt to analyze the investment policy of Nabil Bank with reference to Nepal Investment Bank which shall answer the following questions.

- Are the fund mobilization and investment policies are effective?
- Are they maintaining the sufficient liquidity position?
- Is the degree of success in investment strategy successful to utilize its available fund?
- What is the relationship of investment and loan and advances with total deposits and total net profits?

1.4 Objective of the Study

The main objectives of this studies are to analyze, examine and interpret the investment policies adapted by Nabil Bank and compare the same with Nepal Investment Bank. Specific objectives are as follows:

- To see of liquidity, assets management, profitability position of Nabil and NIBL
- To see the investment pattern of Nabil and NIBL
- To see the trends of deposit utilization as well as net profit
- To see the growth of deposit mobilization
- To suggest and to provide recommendations according to data analysis with help of findings

Investment is the life blood of the any financial institution, Only accumulating deposits are not meaning. The success and prosperity of the bank heavily depend upon successful implementation and investment of collected resources. Good investment

policy of the bank has positive impact on economic development of the country and vice-versa.

- This study will provide clear picture how bank is investing its collecting fund .
- This study will also help others commercial banks to make good investment policy as well as help NRB to formulate the new investment policy

1.5 Limitation of the Study

The study is carried out for the partial fulfillment of the requirements for the degree of M.B.S. Like every research study, this study also has some limitation . which is not free from the following limitations;

- This study is based on secondary data collected from the banks.
- The study concentrates only with the factors related to investment.
- Only two commercial banks are taken into consideration for the study. Hence, the findings cannot be generalized to all commercial banks.
- The study is based on the past data of the last 5 years are only taken available from the bank. hence the conclusion drawn confines to the limited period only.
- Being a student, time constraint, lack of research experience, information asymmetry and financial problem has limited the scope of study.

1.6 Organization of the Study

The study has been divided into following 5 chapters:

Chapter – I Introduction

It shall deal with the introduction that includes background, profile of the banks, and statement of problem, objective, significance & limitation of the study.

Chapter – II Review of Literature

This chapter shall deals with the review of literature. It shall include a discussion on the conceptual framework and major relevant studies.

Chapter – III Research Methodology

This chapter shall explain the research Methodology used in the study which includes research design, sources of data, population and sampling, tools and method of analysis.

Chapter – IV Data Presentation and Analysis

It shall deal with presentation and analysis of data through a definite financial ratios and statistical analysis related to the study.

Chapter – V Summary, Conclusion and Recommendations

It shall discuss summary, conclusion, findings of the study as well as recommendations shall be done. Besides these, bibliography & appendixes shall also be included.

CHAPTER – II

REVIEW OF LITERATURE

This part of the study tries to describe conceptual framework, concept of commercial bank and Joint venture banks, very possible effort has been made to Conceptual frameworks given by different authors, research scholars, practitioners etc along with the research papers, articles & journals.

The attempts have been made to review useful bunch of literature relevant to study area as they have provide ideas, policies and data inputs to this research study. This chapter helps to take adequate feedback to broaden the information base and inputs to my study. Conceptual foundation is a most important part of every study without which the study may not go through right way. This review of reports related to commercial bank ,review of books, review of articles, review of research work and relevant study on this topics and review of previous thesis work .It also make them to grasp the knowledge and information that are available from libraries, document collection centers, other information managing bureaus and concerned commercial banks.

This chapter is basically divided into 3 parts.

- 1) Theoretical Review
- 2) Article review
- 3) Review of Previous research

Theoretical review will present the theoretical aspect of the study which will define the concept & meanings of different related terminology whereas research review will focus on the review of relevant past studies.

2.1 Theoretical Review

It includes the concept of Commercial banks, Development of commercial banks in Nepal, Functions of commercial banks, concept & characteristics of investment & investment policy, NRB directives on general investment policy & few other terminologies related to this research study.

2.1.1 Concept of Commercial Bank

Banks play an important role and contribution in the economic growth of any country. It is also resource of the economic development of world when properly organized, aids and facilitates the growth of trade and industry and hence of national economy. Commercial bank deals with others money. They have to fine way to keeping their assets liquid So that they could meet the demand to their customers. Liquidity is the lifeline of bank. Any bank perceived to be illiquid cannot attract deposit from the public. The depositor's confidence could be made to understand the bank is fully solvent. The depositor's confidence could be secured only if the bank is able to meet demand for cash promptly and fully. For this purpose, the bank has to keep adequate cash fort. Cash is idle assets .So Cash brings in no income to banks. Therefore the bank has to disbursement this assets in different investment sectors, which gives adequate profit and made them successful.

In the modern economy, banks are to be considered not as dealers but as the leaders of development. Banks are not just the storehouses of country's wealth but are the reservoirs of resources necessary for the economic development. Commercial banks are those financial institutions which play the role of financial intermediary in collection and disbursement of funds from surplus unit to deficit unit.

“A commercial bank is one which exchange money, deposits money, accepts deposits, grant loans and perform commercial banking functions and which is not a bank meant for cooperative, agriculture, industries or for such specific purpose”
(*Commercial Bank Act; 1974*).

“Corporation which accepts demand deposits subject to cheque's and makes short term loans to business enterprises, regardless of the scope of its other services”
(*American Institution of Banking; 1972: 325*).

Commercial banks provide short term debts necessary for trade and commerce. They take deposits from the public and grant loans in different forms. They purchase and discount bills of exchange, promissory notes and exchange foreign currency. They discharge various functions on behalf of their customers provided that they are paid for services.

“Traditional department stores of finance which serves a wide variety of savers and borrowers, historically they were the major institutions which handled checking accounts and through which the federal reserve system expanded or contracted the money supply” (*Brigham, Gapenski and Ehrhardt; 2001:171*).

2.1.2 History of Bank

Concept of the banking has been developed from the ancient history with the effort of ancient goldsmiths who developed the practice of storing people’s gold & valuable under such arrangement that the depositors would leave their gold for safekeeping & given a receipt by the goldsmith. Whenever the receipt was presented, the depositors would get back their gold & valuable after paying a small amount as fee for safekeeping& serving.

Several concepts have been put forward about the origin of the word “Banking” the term bank derives from the latin *bancus* which refers to the bench on the which banks would keep its money & his records. Some persons trace its origin to the French word “Banque” the Italian word “Banca” which means a bench for keeping; lending & exchanging go money the market.

The first bank of the world called the “Bank of Venice” was established in Venice, Italy in year 1157. The bank of Barcelona & bank of Genoa were established in 1401 & 1407, respectively. In England, the banking begins with English goldsmith only after 1640. The bank of Amsterdam was the great bank in seventeenth century.

2.1.3 Development of Commercial Banks in Nepal

There are limited records of traditional banking practiced in the history of Nepal. From the available information, it is very difficult to trace the correct chronological history of the traditional banking system due to the lack of historical reports of banking system. The historical records state that Guna Kama Dev, the king of Kathmandu, borrowed money to rebuild his kingdom in 728 AD.

Some efforts of banking were carried out during the Rana Regime. The “Tejarath Adda” was established during his period, which might be regarded as the father of

modern banking institute in Nepal. During the Prime Minister ship of Judha Shamsher in 1937 AD the “Tejarath Adda” was replaced by a commercial bank “ Nepal bank Ltd”, which could be considered as a milestone the marked the beginning of a new era in the history of modern banking in Nepal.

Banking in the modern since started with the inception of Nepal Bank Ltd. (NBL) in B.S 1994-07-30. It is the first commercial bank of Nepal. Nepal bank Ltd has a massive responsibility of attracting people towards the banking sector from the net of money landers and of expanding banking services. Being a commercial bank, it was natural that NBL paid more attention to profit generating business and preferred opening branches at urban centers.

However, Government has the onus of starting banking services to the book and corner of the country and also managing financial system in proper way. The need for a central bank was felt then Nepal Rastra Bank (NRB) was set up a central bank under Nepal Rastra Bank act 2012 B.S. Since then it has been functioning as a government’s bank and has contributed to the growth of financial sector even since. The major challenge before NRB is to ensure the rebust health of financial institutions integrated and speedy is possible only when competitive banking services reaches nooks and corner of the country with then in mind. About a decade later, government sep up Rastriya Banijay Bank (RBB) in B.S 2022-10-10 as a fully government owned commercial bank. After two years, a bank was established with the main objective of developing agriculture sectors & named as Agriculture Development Bank in 2024 B.S. In 2031 B.S the commercial bank act 2031 was regulated. As an open policy of the government to allow private & foreign investor to invest in banking under the commercial bank act 2031 B.S, many new banks was established ,and many more are coming into existence.

After 2041 B.S the government allowed joint venture banks to perate in the country. Then the board of joint venture public Ltd was opened whereby commercial banks started establishing the country. Nepal Arab Bank Limited as the first joint venture bank in 1984. Currently known as Nabil Bank Limited, which was established in 2041 B.S under the commercial bank act 2031 with the allocating of 50% share of Emirate

Bank Ltd Dubai, 20% share of Nepalese financial institutes & 30% share of general public Nepal Indosuez Bank Ltd as the second joint venture bank Ltd emerged in 1984. Currently known as Nabil Bank Limited, which was established under the commercial bank act.

After these banks, there was a progressive increase in the number of Joint Venture Commercial Bank in Nepal. Now a days , there are 31 Commercial banks 36 Development banks, 5 Grain Bikas Banks, 72 Finance Companies, 11 forth class (Gha barga) finance Ltd.,19 co-operative Ltd., 47 Non Government Organization and 117 Hulak Bachat banks operating in Nepal. The open and liberal policy in the financial sector has helped in establishing many commercial banks & financial institutions in the country. Of the total assets in the Nepali Financial system , about 65 per cent is owned by depository institutions (banks) and other depository institutions (finance companies, and non-government organizations and cooperative societies).

2.1.4 Functions of Commercial Banks

Banks should have specific and clear functions during their participation in economic development of any country .Nepal is one of under development country. Which has low per capita income, GDP and faces many economic constraints such as budget deficit, trade deficits, inflation, deflation of monetary trade. Such kind of problems can be removed involving commercial banks by the formulation of capital deficit spending units (Trade & Industry).

The function of commercial bank could be defined as to mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can be converted into cash whenever needed. For this purpose these banks and financial institution should gather the sufficient information about the firms or clients to which supported to be investment. These information include as like ability to repay the loan back ,banks background, nature of business, etc. However, American Institute of banking (1972) has fixed out 4 major functions:

- Receiving Payments
- Making Loans and Investment

- Creation of money by extension of credit
- Handling Payments

2.1.5 Investment

Investment can be define as the sacrifice of present consumption with expectation of return in future .Investment takes place at present but return can be expectation in future .But this return is uncertain .Uncertain is measured by risk, where is always involvement of risk in investment.

“The word investment brings forth vision of profit risk speculative and wealth”
(*Cheney and Edward; 2000: 65*)

“Investing involves making a current commitment of funds in order to obtain an uncertain future return” (*Clark;1998:86*).

“Investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time the funds are committed for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds. The success of any banks heavily depends upon the proper management of its invested funds. Investment can be categorized as Real Investments and Financial Investments. Real investments generally involve some kinds of tangible asset such as land, machineries or factories. Financial investments involve contracts written on pieces of paper, such as common stocks and bonds”
(*Sharpe and Bailley; 1994:1*).

Investment is made in assets. Assets in all are of two types as follows;

- Physical investment
- Financial investment

Physical assets are related to real assets (land, building factories etc.) which is known as capital formulation . Capital formulation shown the change in gross fixed assets of productive activity of manufacturing industries and financial assets(stock, bond ,t-bill etc.) .These two investments not competitive but complementary ,Highly-developed

institutions for financial investment greatly facility real investment” (*Bhattacharai; 2004: 142*)

For our purpose, in the study of financial institutions the investment problem revolves around the concept of managing the surplus financial asset in such a way, which leads to wealth maximization and providing a significant further source of income. Thus, the investment for various purposes is the management of the surplus resources in such a way as to make it for providing benefits to the suppliers of the funds by letting third party to use such resources.

2.1.6 Investment Policy of Bank

Investment promotes economic growth & contributes to national’s wealth. People deposit their surplus money in the bank & bank may lend these collected funds the various business & companies. These firms in return may invest in new factories & equipment to increase their production. As a result, investment raises the nation’s living standard. Now a days most companies issues stock & bonds to raise the capital needed for business expansion instead of borrowing from the banks . Similarly government also bonds obtain funds to invest in the projects like construction of road, bridge, dams and schools etc. All such investment by individual business as well as government involve a sacrifice of present value to an expected future benefits & income which is probably uncertain.

“The investment objective is to increase systematically the individuals wealth, define as assets minus level of desired wealth the higher must be received. As investor seeking higher return must be willing to take higher level of risk.” (*Cheney and Edward; 2000:65*).

“Investment is nothing but manners that ensures safety of our money & provide a sustained return to supplement our regular income. The term investment covers a wide range of activities. It is commonly known faced that an investment covers a possible where there are adequate saving. If all the incomes & saving the problems of hand to mouth & to other basis needs then there is non existence of investment. Therefore both saving and investment are interrelated (*Delhi Sock Exchange; 2002*).

A bank is legal organization, which can do nothing alone. Banks established without the aim of gaining profit of central Bank. Others banks are inspired with objective of earning of profit and development of economy and finally to take the responsibility of social.

“A investment policy involves to determining the investor’s objective and the amount of his/her investable wealth. Because there is positive relationship with risk and return for sensible investment strategies. It is not a appropriate for investors to say that his/her objectives are ‘to make a lot of money’. What is appropriate for investors in this situation is to state that the objectives is to attempt to make a lot of money while recognizing that there is some chance that large loose may be incurred. Investment objective should be stated in of both risk and return” (*Jack Clark Francis;2002:10*).

“A study in investment policy of Nepal bank Ltd in comparison to other joint venture banks of Nepal” Has recommended that “the banks must utilize depositors money as loan and advance to get success in competitive banking environment. The largest items of bank in the assets side is loans & advance. Negligence in a administering this asset could be the main cause of liquidity crisis in the bank & one of the main reasons of bank failure” (*Khadka; 1998:43*)

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

Investment policy is a combination of philosophy and planning. On the one hand, it expresses the investor’s attitudes toward important investment management issues such as “Why am I investing in the first place?” or “To what extent am I willing to accept the possibility of large losses?” The answers to those questions will vary among investors in accordance with their financial circumstances and temperaments.

Investment Policy is also a form of long – range strategic planning. It delineates the investor’s specific goals and how the investor expects those goals to be realized. In this sense, Investment Policy comprises the set of guidelines and procedures that direct the long term management of the investor’s assets.

A critical part of any investment policy involves the preparation of a written investment policy statement. An Investment Policy Statement summarizes the investor’s key investment policy decisions and explains the rationale for each decision. The level of Investment Policy Statement detail will vary among investors. Nevertheless, An Investment Policy Statement serves the same role for all investors; it enforces logical, disciplined investment decision making and limits the temptation to make counter productive changes to an investment program during period of market stress.

2.1.7 Some Investment policies and principle are as follow:

Principle of Safety

A bank should pay special emphasis on safety. If the investment is unsafe, it is not good for the bank. There is no doubt of loss whether it is little or great, if the bank has not invested in safe sector, the bank should think it with most sensitively.

Principle of Profitability

The objective of all invested banks are to earn profit. It should select the most profitability area. So that it can be able to maximize the shareholders wealth. The profit of commercial banks depends on the investment rate, volume of loan provided, maturity of period and nature of investment.

Principle of Capital Growth

Capital appreciation has today become an important principle. Reorganization the connection between corporation & industry growth & very large capital appreciation investors and their advisors constantly are seeking “growth stock” It is exceedingly difficult to make successful choice the idea “growth stock” is the right issue in the right industry bought at the right time.

Principle of Liquidity

Liquidity means the ability of the banks to pay cash in exchange of deposit. The bank should not forget the principle of liquidity, while it is following its investment policy. A bank should be able to return the deposit when demanded by the depositors. For this, bank needs liquid cash. If they invest the while deposit as loans and advances. They cannot give it at the time of demand by the depositors. So, the commercial banks should try to move liquidity and profit together.

Principle of Legality

Commercial banks should follow the directions provided by the Nepal Rastra Bank for the investment illegal securities will be bring out many problems for the investments. Though illegal investment is beneficial for the short term, hampers the bank at last and the bank may be bankrupted.

Principle of National Interest

A bank should adopt the principle of national interest. Banks should follow the rules & regulation as well as policy, directions given by Nepal Rastra Bank. The Bank should make its investment whether suitable to the national interest & carries benefits to the society.

Principle of Diversification

A bank should not keep its eggs in the same basket & should invest in various fields. So, the bank can reduce the risks. If the investment is in various sectors, it will be successful in keeping in it balance (*Annual Report; 2066*).

2.1.8 Relevant Act of Investment Policies and NRB Directives

All the commercial banks have to confirm to the act, provision specified in the commercial bank act 2031 and rules & regulation formulated to facilitate the smooth running of commercial bank. The General investment policy of a commercial bank is as set by directives issued by Neal Rastra Bank. So, the commercial banks are limited to certain boundaries and are not free to carry out investment activities on their own way.

As mentioned in this act, Central bank NRB has established a legal frame work by formulating various rule and regulation to mobilize or invest the deposit of the bank in different sectors of the different parts of the nation, to prevent them from the financial problems. These rule & regulations are discuss while are formulated by NRB in terms of investment & credit to priority sectors, deprived sector other institution, capital adequacy ratio, interest spread, loss provision, CCR, loan single borrower limit, productive sector investment. These directives must have directly or indirectly impact while making decisions.

Commercial bank is directly related to the fact that how much fund must be collected as paid up capital while establishing the bank at certain place of the nation, how much fund is needed to expand the branch & countries. But we discuss only those which are related to investment function of the commercial bank.

In our country the commercial bank will help in banking business by operating its branches in the different part of the country. These banks could no recognize the importance of the quality credit & banking sector failed to witness the expected development. Subsequently, the banking sector faced the many problem of bad debts, overdue loan, accrued interest, accumulation of non-banking assets & excess liquidity in the banking system.

In addition to these expected happenings new challenges were added to the Nepalese banking sector due to the adverse development in the domestic economic resulting from deteriorating peace & security situation and continuous persistence of natural calamities inside the country on one hand & the global recession primarily cause by international terrorism on the other. viewing the need of structural reform amidst these adverse implicational ,NRB issued directives to run commercial banks in a healthy competitive manner to ensure the sustainable development of the overall banking system.

The financial sector reform of the Nepal was initiated in mid 1980s. Since then NRB has been playing pioneer role in regulation supervision & monitory of commercial

banks by issuing directives. A present the number of guidelines issued by NRB to Commercial banks, which are as follows.

- The provision of minimum capital fund to be maintains by the commercial banks.
- The provision of loan classifications and loan loss provisioning on the credit.
- Regulating relating to minimization of risk inherent in the activities of commercial banks.

The provision of institutional good governance to be followed by commercial banks.

- commercial banks developing branch office of commercial banks.
- Provision relating to compulsory deposited amount of NRB.
- Provision relating to collection of financial sources.
- Provision relating to interest rates.
- Time frame for implementation of regulatory directives issued in connection with inspection and supervision and supervision of commercial banks.
- Regulating relating to sale & ownership transfer of promoters shares. commercial banks.
- Provision relating to limit on credit exposure & facilities to a single borrower group of related borrowers and single sector of the economy.

2.2 Articles Review/ Relevant Act

Pradhan (1994), carries out a study on “*Financial Management Practices in Nepal*” has studied about the major feature of financial management practices in Nepal. To address his issue, a survey of 78 enterprises was carried out by distributing a multiple questionnaire, which contained question on various aspects of financial management practices in Nepal. The study found that among of several Finance functions, the most important finance function appeared to be working capital management. The least important one appeared to be maintaining good relations with stakeholders. The finding reveals that banks and retained earning are the two most widely used financing sources. Most enterprises do not borrow from one bank only and they do switch between banks to whichever offers best interest rates. He further found that

among the bank loans, bank loans of less than one year are popular in public sector where as bank loans of 1-5 years are more popular in private sector.

Thapa (1994), conducted a study on “*Financial System of Nepal with the objective of presenting the investment policy and practices of commercial banks of Nepal*”. The major findings of the paper were 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 the high credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds. Out of the different commercial banks, Nepal Bank Ltd. & Rastriya Banjiya Bank are operating with a nominal profit and also turning towards negative from time to time. Because of non recovery of accrued interest, the margin between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount, through traditional off-balance sheet operations. On the contrary, they have got heavy burden of personnel and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit positions of these banks have been seriously affected. On the other hand, the foreign venture banks have been functioning in an extremely efficient way. They are making huge profit every year and have been distributing large amount of bonus and dividends to its employees and share holders. Because of their effective influence for loan recovery; overdue and defaulting loans have been limited resulting in high margins between interest income and interest expenses. Similarly, attentiveness of these banks to modern off-balance sheet activities and efficient personnel management has added to the maximization of their profits.

Kishi (1996), in his article, “*The changing face of the banking sector and the Nepal Government Recent Budgetary Policy.*” Nepal bank Patrika concludes that following an introduction of the reform in the banking sector as an integrate part of the liberal economic policy, more banks and finance companies have come up as a welcome measure of competition. Slowly and steadily, the two government controlled banks, Nepal Bank Limited and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growth with social justice bringing an significant benefit to the poor are yet to be achieved as envisaged by the Nepal Government.

Pradhan (1996), presented a short glimpse on investment in different sectors, its problem and prospects, through his article “*Deposit Mobilization, Its Problem and Prospects*”. In Nepal bank patrika, the article expressed that deposit is the life blood of any financial institution, be it commercial bank, finance company, co-operative or non-government organization. Further added, in consideration of 10 commercial banks and nearly three dozen of finance companies, the latest figure does produce a strong feeling that a serious review must be made of problems and prospects of deposit sector. Except few joint venture banks, other organizations rely heavily on the business deposit receiving and credit disbursement.

In the light of this Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective:

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

The study mentioned, deposit mobilization carried out effectively is in the interest of depositors, society, financial sector and the nation. Lower level of deposit raising allows squeezed level of loan delivery leaving more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

Shrestha (1998), carried out a study on “*Lending Operation of Commercial Banks of Nepal and its impact on GD*”. The objective of the study was to make an analysis of contribution of commercial banks lending to the Gross Domestic Product (GDP) of

Nepal. In her conclusion, there has been positive impact by the lending of commercial banks in various sectors of economy, except service sector investment.

Ghimire (1999), published his article on "*Banjiya Bank Haru Prathamikata Kshetra Ma Lagani Garna Bhandha Harjana Tirna Tayar.*" in a public house, he mentioned that most of the commercial banks of Nepal are ready to pay penalty in spite of investing on rural, priority sector, poverty stricken and deprived areas. In the directives of Nepal Rastra Bank it is clearly mentioned and directed that all the commercial banks (under NRB) should invest 12% of its total investments to the priority sectors. Out of this 12%, they should invest 3% to the lower class of countrymen (deprived sector). However these commercial banks are unable to meet the requirements of NRB.

Pradhan (2003), in this article paper "*Role of Saving, Investment and Capital Formulation in Economic Development; A case of Nepal.*" Research in Nepalese finance, he has studied about the strong role and impact of saving, investment and capital formulation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, capital formulation, investment and gross domestic product has been collected for the period of 1974/1975 to 2002/001. The regression equation used in this study have been estimated at current prices as well as in real terms with entire study period divided into different sub periods.

Pokhrel (2006), in the article entitled "*Financial Sector Reform & Challenges*" Agriculture credit publication stresses that high liquidity makes the financial institutions un-bankable by creating unnecessary burden of bearing the cost of capital. Dr. Pokhrel expresses that most of the financial institutions are lying on uneconomic situation due to ineffectiveness of portfolio management on the one hand & deficiencies of efficient modern management on the other. As for the betterment of the financial possibility in portfolio projects, like health residential budgeting, communication, land gardening etc. Pokhrel further suggests that commercial banks need to make strong strategy urgently shifting the money from fixed deposit in saving reducing the interest between deposit and interest spread in both sectors. He

highlights that fixed deposit has been increasing in the ratio of 0.44 to 0.95 from 1999 to 2001.

Shrestha (2006), has given a short foretaste in the “*Lending Management is Commercial Bank Theory & Practice.*” Nepal Rastra Bank Patrika highlighted the lending management becomes very importance for both individuals as well s institutional investors. Investors would like to select a best mix of investment assets subject to the following aspects.

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

2.2.1 Review of Previous Thesis

Before this, several thesis works have been conducted by various students regarding the various aspects of commercial banks such as financial performance, lending policy, investment policy, interest rate structure, resources mobilization, capital structure, etc. Some of them, as supposed to be relevant for the study are presented below.

Bajracharya (2000), conducted a study on “*Investment of Commercial Banks in Priority Sector*” with the objective of”:

- To analysis the trend of investments in Private sectors for 10 years from 2047 B.S. to 2056 B.S.
- To analyze the trend of repayment in private sectors for 10 years from 2047 B.S. to 2056 B.S.
- To measure the effectiveness of the program in terms of the investment and repayment in rural and urban sector.
- To evaluate the banking procedure and services in disbursing loan in this sector.
- To provide package of suggestion based on this study.

The research was conducted through primary and secondary data. For the primary data, pre-structured questionnaire was distributed to entrepreneur. Secondary data from different sources like reports, books, bulletins, journals, magazine and other publications of Rastriya Banijya bank, Nepal Rastra Bank etc. are also collected.

The findings of the study are:

- 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.
- Trend analysis for 10 years shows the increasing tend of investment in priority sectors which shows that the commercial banks are giving due consideration to increase investment in priority sector.
- Trend analysis of repayment for 10 years shows that the repayment has also increased in the following years.
- Interest charged on the loan disbursed in this sector is fairly less than the interest charge on loans for other purposes. In addition to this, there is high overhead cost incurred for supervision, administration and others in this program.
- Regression analysis shows positive relation between investment and repayment.
- The Chi square test of effectiveness of program shows that the program is more effective in rural and semi rural areas as compared to the urban areas.
- Investment on agriculture is higher than investment on industry and service sector.
- The study revealed that the procedure of loan disbursing itself is complicated for the borrowers to understand it.
- In fact, if the supervisors make the scheduled supervision and inspection and the frequent contact with the borrowers, the chance of misuse of the loan can be minimized.

Laudari (2001), conducted a study on A study on “*Investment Policy of Nepal Investment Bank Ltd. in comparison to Nepal SBI Bank Ltd.*” with the objectives of:

- To examine the liquidity, asset management and profitability position and investment policy of NIBL in comparison to Nepal SBI Bank Ltd.

- To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal SBI Bank Ltd.
- To analyze relationship between deposit and investments, deposits and loan and advances, net profit and outside assets of NIBL in comparison to Nepal SBI Bank Ltd.

The findings of the study are as follows:

- Current ratios for both the Banks is satisfactory.
- Although cash reserve ratio (CRR) is managed by both banks as per Nepal Rastra Bank directives, both banks have not paid sufficient insight toward cash management. Their cash reserve has fluctuated in a high degree.
- Nepal SBI Bank Ltd. has increased investment in government securities whereas NIBL has decreased.
- NIBL has maintained both current ratio and cash reserve ratio better than Nepal SBI Bank Ltd. But its cash and bank balance, investment in government securities and loan and advances in comparison to current assets are lower than that of Nepal SBI Bank Ltd.
- Deposit utilization of NIBL is less effective than that of Nepal SBI Bank Ltd. Further NIBL has invested lesser amount on government securities and shares and debenture than that of Nepal SBI Bank Ltd.
- NIBL did a better performance in return on total assets and loan and advances and interest earning, but it paid lower interest amount to working fund.
- The analysis of growth ratios shows that growth ratios of total deposit, loan and advances, total investment and net profit of NIBL are less than that of Nepal SBI Bank Ltd.
- The trend value of loan and advances to total deposit ratio is decreasing in case of both the banks. The trend value of total investment to total deposits ratio is also decreasing in case of both the banks.

Ojha (2002), conducted a study on “*Lending Practices: A Study on NABIL Bank Ltd., SCB Nepal Ltd. and Himalayan Bank Ltd.*”

- To determine the liquidity position, the impact of deposit in liquidity and its effect on lending practices.

- To measure the bank's lending strength.
- To analyze the portfolio behavior of lending and measuring the ratio and volume of loans and advances made in agriculture, priority and productive sector.
- To measure the lending performances in quality, efficiency and its contribution in total income.

The findings of the study are:

- The measurement of liquidity has revealed that the mean current ratio of all the 3 banks is not widely varied. All of them are capable in discharging the current liability by current asset.
- The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholders equity in the liability mix. HBL has high volume of saving and fixed deposits as compared to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.
- SCBNL's tendency to invest in government securities has resulted with the lowest ratio of loan and advances to total assets ratio whereas NABIL Bank has highest due to steady and high volume of loans and advances throughout the years.
- The ratio of investment to investment and loan and advances has measured the total portion of investment in total of investment and loans and advances. The mean ratio among the banks does not have deviated significantly.
- The loan and advances and investment to deposits ratio has shown that NABIL Bank Ltd. has deployed the highest proportion of its total deposits in earning activities. This is the indicative of that in fund mobilizing activities NABIL Bank Ltd. is significantly better.
- The absolute measures of lending strength have revealed that the mean volume of net assets and deposits is highest in SCBNL with moderate variation. The volume of net assets of HBL is the least due to the low share capital, reserves and surplus in its capital mix. But the volume contributed but HBL in case of loan and advances is highly appreciable as compared to its net assets. The volume of loan and advances contributed by NABIL Bank Ltd. is the greatest in

5 years of study period. The mean investment of NABIL Bank Ltd. is the highest but the investment on government securities of SCBNL is the highest.

- The portfolio analysis has revealed that the flow of loan and advances in agriculture sector is the lowest priority sector among these commercial banks. The contribution of all the banks in industrial sector is appreciable. The contribution made by HBL in industrial sector is the greatest and that of SCBNL is the least.
- The lending in commercial purpose is highest in case of NABIL Bank and least in case of SCBNL. SCBNL has highest contribution in service sector lending. It has contributed 25.47% of its total credit in general use and social purpose.
- The measurement of efficiency in lending has revealed that the loan loss provision to loan and advances analysis shows that NABIL Bank Ltd. has the highest mean ratio. According to Nepal Rastra Bank directive, the loan loss provision indicates the provision made against the performing loan (pass loan and sub-standard loan) only. It indicates that the volume of sub-standard loan in the loan mix of NABIL Bank Ltd. is higher and the volume of non-performing loan in the mix of NABIL Bank Ltd. is likely to increase in coming future.
- The mean ratio of interest income to income has concluded that the contribution of interest income in total income is higher in case of HBL and lower in case of SCBNL. The interest expenses to total deposit ratio indicate that the cost of fund in HBL is the highest and that of SCBNL is the least.
- The total income to total assets ratio measure the earning power of each rupees employed by the bank. NABIL's ratio in this case is the best. The ratio of total income to total expenses reflects the earning capacity of a rupee of expenses. The productivity of expenses in SCBNL is the best.

The performance of SCBNL is significantly better than other two banks in case of profitability. EPS is the highest in case of SCBNL.

Bhndari (2005), conducted a study on “*A study on the investment policy analysis of SCBNL Bank Nepal Ltd. in comparison to Nabil & Nepal Bangladesh Bank*” has mainly found that SCBNL's loan & advances to total deposit ratios are significantly lower than that of Nabil & Nepal Bangladesh Bank, SCBNL 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, SCBNL to invest its fund in the purchase of share & debenture of other financial, non financials companies, hotels & government companies. This also helps in the maintenance of a portfolio of the banks.

Joshi (2007), conducted a study on “*Investment Policy of Commercial Banks in Nepal, A Comparative Study of Everest Bank Ltd with Nabil Bank Ltd and Bank of Kathmandu*” with the objectives of :

- a. To discuss fund mobilization and investment policy of EBL, Nabil, and BOK Ltd.
- b. To evaluate the liquidity, efficiency and profitability and risk position.
- c. To evaluate the growth ratio of loan & advance and total investment with other financial variable.
- d. To analyze the trend of deposit utilization towards total investment different between the various important ratios of EBL, Nabil, BOKL.
- e. To conduct hypothetical test to find whether is significant different between the various important ratios o EBL, BABIL, BOKL.

In this study, major findings are as follows:

- a. The liquidity position of the EBL is comparatively better that NABIL and BOKL. EBL has the highest cash and bank balance to total deposit, cash and bank balance to total current assets ratios. Nabil has the lowest liquidity position than out of others two banks. EBL has good deposit collection and has made enough investment on government securities. But it has maintained moderate investment policy on loan and advances.
- b. From the analysis of assets management ratio on activity ratio, it can be concluded the EBL has comparatively or in between successful in compared to NABIL and BOKL. The total investment of EBL is in between in compared to others two banks.
- c. In the study, loan & advances to total deposit is higher in BOKL but the coefficient of variation is higher in EBL.

- d. In analysis of profitability of total investment earned at all but overall analysis of profitability, EBL has average profitability ratio. EBL is average in comparison to other banks i.e.; NABIL and BOKL. From the view point of risk ratio. EBL has higher capital risk ratio but average of credit risk ratio in compared of NABIL and BOKL.

Upreti (2008), in a study entitled, “*A Study of the Joint Venture Bank’s Profitability*”.

The main objectives of the study are as follows:

- a. To evaluating profitability position in relation of fund mobilization of NIBL and NGBL.
- b. To analyze the trend of Interest, commission & discount earning and foreign exchange income in investment sectors.
- c. To study the growth ratio of EPS & cash dividend per share in average.

He has presented following major finding;

- Interest income of NIBL is the highest
- Nabil’s commission & discount earning and foreign exchange income is higher than both NGBL& NIBL
- Nabil’s other operating income is appeared higher than other banks.
- NGBL has the highest EPS & cash dividend per share in average.

Shakya (2009), Conducted a study on “*Financial Analysis of Joint Venture Banks in Nepal with reference of Nabil & NGBL*” with the objectives of:

- a. To measure the financial performance
- b. To evaluate the liquidity position
- c. To analyze the trend of deposit utilization towards total loan and advance different between the various in percent ratio of Nabil and NGBL.

The major findings of the study are as follows:

- a. The cash & bank balance to total deposit ratio of Nabil bank Ltd is in fluctuating trend whereas the same ratio of NGBL is in decreasing trend
- b. NGBL’s liquidity position is comparatively better than that of Nabil bank Ltd.

- c. Loan and advances to total deposit ratio is in fluctuating trend in case of Nabil bank & the same for NGBL is firstly in increasing trend than following the declining trend.

Khanal (2009), in this thesis entitled "*Investment in Priority Sector by Commercial Banks (Study of Commercial Banks Kathmandu Valley)*"

The main objectives of the study are as follows:

- a. To analyze the trend of investment in priority sectors.
- b. To find out extent of profitability affected in this sector.
- c. To measure the efficiencies of the program in the rural & urban sector.
- d. To evaluate the banking procedures & services in disbursing loans.
- e. To explore the reasons for low investment.

The main findings of the research are as follows:

- a. The investment in priority sector has an increasing trend
- b. Banks are giving due consideration to increase investment in the priority sector.
- c. Due to low invest rate overhead cost increased in administration & showed low profitability
- d. The regression analysis has shown of negative relationship between profit and investment
- e. The chi- square test has shown that investment program in rural & semiurban areas in more effective than in urban areas.
- f. Banks procedure regarding loan disbursement in priority sector is such more complicated.
- g. There is wide gap between demand & supply of loan.
- h. Due to security and lack of proper legal documents most loan requester's have been regarded & even can celled same of the projects in different sectors.

Shrestha (2010), has conducted a thesis research entitled "*Investment Portfolio Analysis of JVBs*". The objectives of study are as follows:

- a. To analysis the risk and return ratio of commercial banks.
- b. To evaluate the financial performance of JVBs.

- c. To provide suggesting package based on the analysis of data.
- d. To study existing investment policies taken by NIBL in various sectors.
- e. To study portfolio structure of NIBL in investment as compared to other JVB's.
- f. Preference given by NIBL for investment between loan investments. Invest in real fixed assets investment in financial assets.

The main findings of the study are a follows:

- a. BOKL has the highest return in share holders fund and total assets. It has also been successful in mobilization its deposits as investments. NBL and EBL have invested high amount of deposits as loan and advances in comparison to BOKL, NIBL and HBL.
- b. Among the JVBs looking at the investment portfolio, EBL has investment highest amount of funds in government securities, NBB has invested highest amount of funds on shares and debenture has invested highest amount of funds on NRB bonds in comparison to other JVB's.
- c. BOKL has the highest EPS and EBL the lowest EPS among the JVB's.

Tapol (2011), conducted a study on “*Investment Practice of Commercial Banks in Nepal*” The objectives of the study are a follows:

- a. To measure the financial performance.
- b. To find out comparative and comparative position of two JVBs banks of Nepal.
- c. Measuring risk of Nabil & NIBL bank.
- d. To find out the relationship between different variables like investment, deposit, Loan & advances, net profit & compare them between Nabil and NIBL.
- e. To recommended measure for the improvement of the financial performance and efficiency on the basis of the conclusion drawn from the research.

The main findings of the study are as follows:

- a. The mean ratio of return on loan and advances of NIBL is lower than that of Nabil. On the other hand, NIBL's variability between ratios is lower than that of Nabil.
- b. The mean ratio of credit risk ratio of NIBL is higher than that of Nabil & NIBL's ratios are more homogeneous than that of Nabil.

- c. From the analysis of growth ratio, Nabil has lower growth rate on total deposits, loan & advances, total investment & net profit than NIBL. Therefore NIBL has successfully collected and utilized fund amount of its customers than Nabil.
- d. Banks are recommended to activate foreign technology & investment in Nepal by means of their wide international banking sector & make Nepalese personnel capable of operating these banks as efficiency as international banks.
- e. Complain boxes should be kept in each and every branch & bank personnel try to eliminate those deficits which are in the complain box in order to maintain better relation with its customers.

Research Gap

Since many years the study has been done on the topic “An investment analysis”. Most of the studies are related with secondary data. The mainly focus on the data available. This research work is quite different form the studies made by the about scholars. This policy analysis of Nabil bank & NIBL bank. Banking comprehensive manner considering the major items .the researcher has attempted to evaluate the secondary data by conducting field survey, in order to know somehow about the practical experience of investment analysis .Different financial statistical tools, primary data and secondary data have been used in this study. So this study will be fruitful to all kind of people as like student, teacher, civil society, businessman, government and other those interested persons.

CHAPTER – III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a way to solve research problems systematically and process applied by the researcher in studying research problem with certain objectives in view. Methodology refers together data and tools employing and using in its interpretation discussion this section under the dealing namely research design, population and sample ,nature and sources of data collection techniques, data analysis tools and limitations of the methodology and financial statistical tools for analysis of data . A research methodology helps us to find out accuracy, validity and suitability of our study. The justification in the present study cannot be obtained without the help of proper methodology.

This chapter aims to present and reflect the methods and techniques adapted and followed during the research study. It includes the research design, population and sample, sources of data, data collection techniques, data analysis tools and limitations of the methodology.

“Research Methodology refers to the various sequential steps to adapt by a researcher in studying a problem with certain objectives in view” (*Kothari; 1990: 552*).

Here, the principal objective of this research work is to analyze the investment policy of Nabil Bank in compare to Nepal Investment Bank.

3.2 Research Design

“A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (*Kothari; 1990: 86*).

Research design is the plan, structure and strategy to investigation conceived so as to obtain answer to research question and control variance (*Wolf and Pant; 1975: 43*).

In this chapter the various methods are discussed and presented in such a way that can be used for the analysis of collected data. Research design is plan, structure and strategy to investigation conceived so as to obtain answer to research question and to control variance. A research design is the specification of methods and procedure for acquiring the information needed. It is the overall operational pattern of framework, of the project that stipulates what information is to be collected from which source by what procedure.

Research design is an integrated framework of the whole study that guides the researcher in formulating, implementing and controlling the research work. It is the arrangement of conditions for collection and analysis of data to achieve the objectives of this study, descriptive and analytical research design has been used. A research design is simple form but it covers the main comprehension of the study. Research design show the investment situation of the banks are derived from the using five year data from internally generated according records maintained by Nabil Bank Ltd and NIBL. It emphasizes upon comparative analytical method and studies the changes in key variables (Investment) over time. The study is designed within the framework of case study research design.

3.3 Population and Sample

There are altogether 32 commercial banks operating all over Nepal. Among them only two joint venture banks viz. Nabil and NIBL have selected for research purposes.

3.4 Nature and Sources of Data

The study is based on secondary data collected for regular time intervals and analyzes the trends in the past and uses such trends in order to make future prediction. For the major source of secondary data collections are balance sheet, P&L account of concerned banks, Nepal stock exchange; NEPSE, concern banks report, annual report, other relating data are obtained directly from authorized person of concerned banks. Supplementary data and information are collected from number of institutions and regulating authorities like:

- NRB Reports & Bulletins
- Security Exchange Board

- Nepal Stock Exchange Ltd.
- Ministry of Finance
- Economic Survey and National Planning Commission
- Various publications dealing in the subject matter of the study
- Published and unpublished articles/reports from various sources
- Economic journals, periodicals, bulletins, magazines etc.
- Websites/ internet, E-mail
- Central library T.U
- Securities exchange bond
- News paper .economic Journals, periodicals, bulletins, magazines etc.

Formal & informal talks with the concerned authorities of the banks were also helpful to obtain the additional information.

3.5 Data Collection Procedure

Most of the data and information used in the study is collected from secondary source. Published data from the concerned banks are downloaded from official site of these banks. Some of other related data are borrowed from related dissertations, articles, magazines, and newspapers.

This is the age of information technology. Different tools of information like Magazine, Newspaper, Radio, Television, encyclopedias, and websites are the main sources of information and data. For this study, maximum secondary data are downloaded from website. www.nabilbank.com.np which is the official website of Nabil Bank Limited and www.nibl.com.np which is the official website of Nepal Investment Bank Limited and anyone can easily read, download and use the available data from those sites.

3.6 Data Analysis Tools

Analysis & presentation of data is the core of project study. This study needs some financial & statistical tools to accomplished the objectives of this study. The information and data received from different sources in different aspect were firstly arranged for tabulation and analysis. The data were tabulated into different tables,

formats and conditions according to the required subject matter. Then, the descriptive tools and statistical tools have been applied in the way of analysis to create the actual and clear findings. Financial ratios are the major tools for analysis. Descriptive tools are used in this research to get the meaningful result of the collected data and to meet the research objectives.

Beside these, some graph charts and tables have been presented to analyze and interpret the findings of the study. The major tools applied during this study are discussed in the ensuing section. There are two kinds of tools used to achieve the purpose, namely;

- Financial Tools and
- Statistical Tools

Descriptive tools are used in this research to get the meaningful result of the collected data and to meet the research objectives.

3.6.1 Financial Tools/Financial Analysis

Financial tools are used to evaluate the firm's financial condition or position and performance. Financial ratios are the major tools for analysis. Various ratios are used for the study. An arithmetical relationship between two figure is known as ratio. Ratio analysis is important technique of interpretation and analysis of financial statement through mathematical expression to achieve financial performance of a company. The ratio analysis involves comparison for a useful interpretation of the financial statements. A single ratio in itself does not indicate favorable or unfavorable condition. It should be compared with some standard. Standards of comparison may consist of:

- Ratios calculated from the past financial statements of the same firm.
- Ratios developed using the projected or pro forma financial statement of the same firm.
- Ratios of some selected firms, especially the most progressive and successful, at the same point in time.
- Ratios of the industry to which the firm belongs.

3.6.1.1 Liquidity Ratio

The liquidity is related with all types of assets and liability. The liquidity ratios measure the ability of a firm to meet its short term obligations and reflect the short term financial strength/solvency of a firm. Analysis of liquidity needs the preparation of cash budgets and cash flows statements, but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provides a quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity and also that it is not too much highly liquid. The following ratios are compared under liquidity ratios:

i). Current Ratio

The Current ratio is the ratio of Total Current Assets to Total Current Liabilities. Its calculation is based on the comparison between current assets and current liabilities. It measures short term solvency and it is often called liability solvency ratio and working capital. Current ratio is estimated with the help of following formulas;

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

Current Assets include cash and those assets which can be converted into cash within a year, such as marketable securities, debtors and stock. Same way Current liabilities includes all obligations maturing within a year, such as creditors, bills payable, accrued expenses, bank overdraft, income tax liability etc.

A relatively high value of the current ratio is considered as an indication that the firm is liquid and has the ability to pay its bill. On the other hand, a relatively low value is considered as an indication that the firm will find difficulty in paying its bills. It represents a margin of safety i.e. a “Cushion” of protection for creditors.

An arbitrary standard of current ratio is 2:1; however it should not be blindly followed because the current ratio is a test of quantity, not quality. However, it is a crude and quick measure of the firm’s liquidity.

ii) Cash and Bank Balance to Total Deposit Ratio

Dividing Cash & Bank Balance by Total Deposit gives us the analysis of this ratio which can be stated as:

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

Cash & bank balance to total deposit ratio reflects the ability of bank's immediate funds to meet their current deposit, margin call & saving deposit. This ratio is computed by dividing the amount of cash and bank balance by the total deposit. Cash & Bank Balance includes cash on Hand, Cheques & other cash items, Bank balance with domestic bank and balance held abroad. The total deposit consists of current deposits, saving deposits, fixed deposits, money at call and short notice and other deposits.

iii) Cash and Bank Balance to Current Assets Ratio

It can be stated as:

$$= \frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

iv) Investment on Government Securities to Current Assets

This ratio is calculated by dividing investment on government securities by current assets. Investment on government securities includes treasury bills, development bonds, saving bonds etc. It can be stated as:

$$= \frac{\text{Investment on Government Securities}}{\text{Current Assets}}$$

v) Loan and Advance to Current Assets Ratio

This ratio is calculated by dividing total loan & advances by current assets. The numerator consists of loan, advances, cash credit, loan and foreign bills purchased and discounted which can be stated as:

$$= \frac{\text{Loan and Advance}}{\text{Current Assets}}$$

3.6.1.2 Assets Management Ratio/Activity Ratio

Assets Management ratio measures how efficiently the bank manages the resources at its command. Under this analysis we will compute the following ratios:

i. Loan and Advances to Total Deposit Ratio

This ratio describes how successfully the banks are utilizing their total deposits on loans and advances for the purpose of generating profit. Formulary, this can be stated as:

$$= \frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

ii. Total Investment to Total Deposit Ratio

Investment is the major credits created to earn income. This implies the utilization of firm's deposit on investment in various sectors as Government securities, Share & Debentures of other companies and banks etc. Formulary, this can be stated as:

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

iii. Loan and Advances to Working Fund Ratio

Loan and Advances is the major component in the total working fund (total assets) which indicates the ability of bank to mobilize its deposits in the form of loan and advances to earn high return. This ratio is computed as:

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

iv. Investment on Government Securities to Total Working Fund Ratio

This ratio is calculated as:

$$= \frac{\text{Investment on Government Securities}}{\text{Total Working Funds}}$$

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

This ratio shows the bank investment in share and debentures of subsidiary and other companies. This ratio is calculated as:

$$= \frac{\text{Investment on Share and Debentures}}{\text{Total Working Funds}}$$

3.6.1.3 Profitability Ratio

Profit maximization is the major objective of any firms. Management, owner & creditors of the bank accept reasonable & more return. Overall efficiency of operations of any firms can be measured by in term of profit. This is a true indicator of the financial performance of any institution. It is notable that higher the profitability ratio is better the financial performance and vice versa. Profitability positions can be viewed in different ways.

(i) Return on Total Working Fund Ratio

This ratio is calculated by dividing net profit by total working fund.

$$= \frac{\text{Net Profit}}{\text{Total Working Funds}}$$

The numerator indicates with portion of income is left to the internal equities after all costs, charges have been deducted.

(ii) Return on Investment Ratio

This ratio measures the company's return from investment or the capacity to generate profit from its investment. This ratio is calculated as:

$$= \frac{\text{Net Profit}}{\text{Total Investment}}$$

(iii) Return on Loan and Advances Ratio

This ratio is calculated by dividing net profit by Loan and advances. Formulary:

$$= \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

(iv) Earning Per Share Ratio

Dividing the profit available after tax to the shareholders by the number of outstanding shares gives us the earning per share ratio. This ratio measures the profit available to the common shareholders as per share basis i.e. the amount they get from every share. Formulary,

$$= \frac{\text{Net Profit}}{\text{No.of Shares}}$$

(v) Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentage of interests earned to total assets (Working Funds). Higher ratio implies better performance of the bank, its term of interest, earning on its total working funds. Formulary,

$$= \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

(vi) Total Interest Paid to Total Working Fund Ratio

This ratio could be stated as:

$$= \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

The numerator consists of total interest expenses on deposit liabilities, loans and advances (borrowings) and other deposits.

(vii) Return on Total Assets

The Profitability with respect to total asset is measured with the help of the return on total assets ratios. In the present study, this ratio is calculated & analyzed to measure the profitability of all financial resources invested in the bank's assets. A higher ratio usually indicates efficiency in utilization its overall resources & vice- versa. This ratio is calculated as;

$$= \frac{\text{Net Profit}}{\text{Total Assets}}$$

3.6.1.4 Risk Ratios

There is always risk in the business. Risk ratio is very essential element. Risk ratio measures the risk associated with the banking variable. Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of bank. These ratios indicate the amount of risk associated with various banking operations, which ultimately influences the bank investment policy. A bank must consider risk associate with it. Higher the ratio, higher will be profit and vice- versa.

The following ratios are evaluated under this:

(i). Credit Risk Ratio

It 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. By definition, credit risk ratio is expressed as the percentage of non performing loan to total loan and advances. Formulary this ratio is derived as:

$$= \frac{\text{Total Loan and Advances}}{\text{Total Assets}}$$

(ii). Capital Risk Ratio

The capital risk ratio of a bank indicates how much assets values may decline before the position of depositors and other creditors risk. The capital risk is directly related to the return to the equity (ROE). Higher the ratio, lower is the capital risk. This ratio is computed by dividing capital (Paid up capital + reserve) by risk weighted assets as computed under BASLE committee's formula. Formulary,

$$= \frac{\text{Capital (Paid Up + Reserve)}}{\text{Risk Weighted Assets (RWA)}}$$

3.6.1.5 Growth Ratio

To examine and analyze the expansion and growth of the bank's business. Following growth ratios are calculated in this study.

- a. Growth ratio of total investment
- b. Growth ratio of total deposit
- c. Growth ratio of loan and advances.
- d. Growth ratio of net profits.

Mathematically it is calculated as:

$$D^n = D_0 + g^{n-1}$$

Here,

D_n = Total nth year

D_0 = Total initial year

g = Growth Rate

3.6.2 Statistical Tools

Under this topic, some important statistical tools are used to achieve the objective of the study. In this study, statistical tools such as correlation coefficient analysis, standard deviation, coefficient of variance, least square, liner trend and hypothesis testing (t-statistic) have been used to achieve the objective of the study. The basic analyses are:

(i). Coefficient of Correlation between Different Variables

This analysis identifies and interprets the relationship between 2 or more variables in the case of highly correlated variables, the effect on 1 variable may have effect on other correlated variable. Under this topic Karl Pearson's coefficient of correlation has been used to find out the relationship between the following variables:

- a. Deposit and Total Investment
- b. Deposit and Loan and Advance
- c. Total Investment and Net Profit
- d. Loan and Advances and Net Profit

This analysis identifies and interprets the relationship between 2 or more variables in the case of highly correlated variables. The effect on 1 variable may have effect on other correlated variable. This tool analyzes the relationship between these variables and helps the bank to make appropriate policy regarding deposit collection, fund utilization.

To estimate the relationship above mentioned variables given formula is used:

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

Where,

$$X = (X - \bar{X})$$

$$Y = (Y - \bar{Y})$$

The result of coefficient is always between -1 to +1, where $r = +1$, it means there is significant relationship between two variables and where $r = -1$, it means there is no significant relationship between two variables.

(ii). Trend Analysis of Important Variables

This is known as time series analysis. Trend analysis (the least square method) describes the average relationship between two series, where one series relates to time and other series to the variable. It shows that the line of best –fit or straight line is obtained or not. The line of the best –fit describes the change in a given series accompanying a unit change in time. This tool analyzes the trend of deposits, loans and advances, investment and net profit of Nabil & NIB from 2002/03 to 2006/07 and makes the forecast for the next 5 years. Under this following tools have been presented.

- a. Trend analysis of total deposits
- b. Trend analysis of total investment
- c. Trend analysis of loan and advances
- d. Trend analysis of net profit

Let, the trend line between the dependent variable y and independent variable x i.e time be represented by:

$$Y = a + bx$$

Where,

a = y intercept or value of y when x

b = slop of trend line or amount of change that comes in y for a unit change in x

(iii). Test of Hypothesis of Important Variables

It is an assumption about the population which may not be true to determine whether it is true or not by taking with followed some with followed testing hypothesis. In forming hypothesis the investigator must not current know the outcome of a potentially satisfying test or that it remains reasonably under contenting investigation.

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population.

Types of hypothesis

- Null hypothesis
- Alternative hypothesis

Null hypothesis	$\mu_0 ; \mu_0 = \mu_1$
Alternative hypothesis	$\mu_1 ; \mu_1 \neq \mu_2$
	: $\mu_0 \geq \mu_1$
	: $\mu_0 \leq \mu_2$

The steps are generally presented in their order of performance as follows:

- Formulation of hypothesis
- Choosing the test statistics
- Finding the level of significant & the sample size
- Finding the critical region
- Deciding two –tailed test or one –tailed test

This test has been conducted on the various ratios related to the banking business.

- a. Test of hypothesis on loan and advances to total deposit ratio of Nabil & NIB.
- b. Test of hypothesis on total investment to total deposit ratio of Nabil & NIB.
- c. Test of hypothesis on return on loan and advances to total deposit ratio of Nabil & NIB.
- d. Test of hypothesis on return on investment ratio of Nabil & NIB
- e. Test of hypothesis on total interest earned to total working fund ratio of Nabil & NIB.

3.7 Standard Deviation

Standard deviation is an important and widely used tools to measure dispersion. It is denoted by sigma. Standard deviation is the positive square root of the arithmetic mean of the square of the deviation of the observation from the arithmetic mean. Minimum deviation of a variable from one place to other one replication to other is considered as stable and consistent variable. In this topic, standard deviation of different parameters expressed as ratio is calculates.

The formula of S.D is given below;

$$\sigma = \sqrt{\frac{\sum x^2}{N}}$$

Where, $x = X - \bar{X}$

$$\sigma = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

Where,

X = Variable

\bar{X} = Mean

n = No. of Observations

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

The purpose of this chapter is related to the presentation, the major financial performances evaluate and analysis of data collected from various secondary source which are mainly related to the investment management and fund mobilization of NABIL bank in comparison to NIBL. To make the analysis better, the calculated financial ratios and statistical figures are evaluated, analyzed and interpreted from the results outcome. This chapter has been divided into 3 headings:

- Financial Analysis
- Statistical Analysis
- Major findings of the study

4.1 Financial Analysis

Under this heading, researcher has analyzed and evaluated those major financial ratios are evaluated and analyzed and then interpretations are made which are mainly related to the investment ,deposit, total assets and loan & advances of Nabil bank in comparison to NIBL. It is notable that all types of financial ratios are not studied here. Only those ratios are calculated and analyzed which are very much important in the point of view of fund mobilization of a commercial bank. From the point of view of the investment policies only those ratios are calculated and analyzed which are relevant and important for this study. The important ratios that are studied for this purpose are:

4.1.1 Liquidity Ratio

It measures the ability of the firm to meet its current or maturity short term obligations. Commercial banks collect fund from the community with a commitment to return depositors fund facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity & also that it does not have excess liquidity . A commercial bank must maintain its satisfactory liquidity position to satisfy the credit needs of the community to meet the demands for deposits, withdrawals, pay maturity in time and convert non cash assets into cash to satisfy immediate need without loss to bank and consequent impact or long run profit.

Following liquidity ratios are evaluated to compare the liquidity positions of Nabil & NIBL.

4.1.1.1 Current Ratio

Current ratio is calculated by dividing current asset by current liabilities. It indicates the ability of the bank to meet its current obligation and measure of the firm's short-term solvency. It also shows that relationship between CA & CL of a firm. Current asset included cash and those assets which can be converted into cash within a year such as money at call or short notice, loan & advance, overdraft bills purchase and discounted, investment in government securities, prepaid expenses & other interest receivable and miscellaneous current assets. Standard of current ratio is 2:1 for banking and seasonal business current ratio of 1:1 is considered the standard norms. We have,

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

The current ratio of Nabil & NIBL during the study period is shown in the table and figure are given below:

Table 4.1
Current Ratios (Times)

Bank	Fiscal Year					Mean	S.D	C.V.
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	0.98	0.89	0.91	1.29	1.30	1.07	0.41	0.38%
NIBL	2.56	1.62	1.91	2.32	2.21	2.12	0.73	0.35%

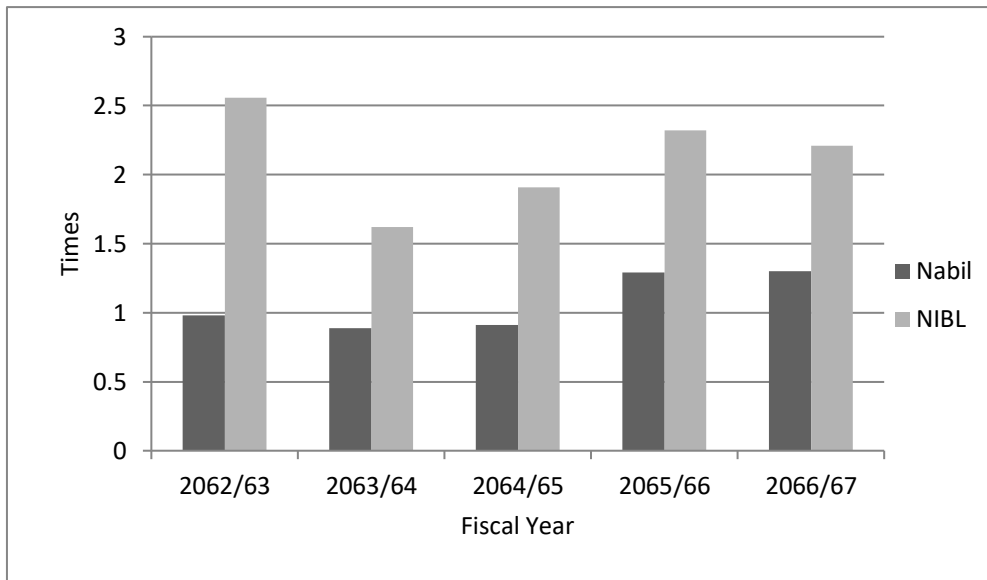
Source:-Annex 1

From the above table, it is clear that Nabil has low current asset than current liabilities for first 3 year and reverse in its forth & fifth year. NIBL has more current assets than current liabilities. The current ratio of both Banks is in increasing trend during the study period. Nabil's highest ratio is 1.30 and lowest ratio is 0.89 whereas NIBL's highest ratio is 2.56 and lowest is 1.62. Hence, NIBL's has a higher gap in between highest & lowest ratios during the study period.

In average, Liquidity position of NIBL is higher than Nabil due to higher mean ratio i.e. 2.12 > 1.074. Likewise, C.V. of NIBL is less than Nabil which indicates that NIBL is more consistent than Nabil.

From the above analysis, it can be said that NIBL doesn't seem to have sound liquidity position and consistent in comparison to Nabil.

Figure 4.1
Current Ratios (Times)



4.1.1.2 Cash and Bank Balance to Total Deposit Ratio

This ratio measures the ability of the bank to meet the unanticipated cash and all types of deposits, cash and bank balance is said to be the first defense of every cash transaction. Higher the ratio, the greater will be the ability to meet sudden demand of deposit but it is notable that every high ratio is not desirable since bank has to pay interest on deposits as it maximizes the cost of fund to the bank. We have,

$$\text{Cash and Bank Bal. to Total Deposit Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

Cash & Bank Balance and Total Deposit ratio of the two banks during the study period is shown in the table & figure below:

Table 4.2
Cash and Bank Balance to Total Deposit Ratio (%)

Bank	Fiscal Year					Mean	S. D	C.V.%
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	3.83	3.26	6.00	12.92	4.470	6.096	7.90	1.29
NIBL	12.33	8.786	8.16	7.88	16.23	10.68	7.16	0.67

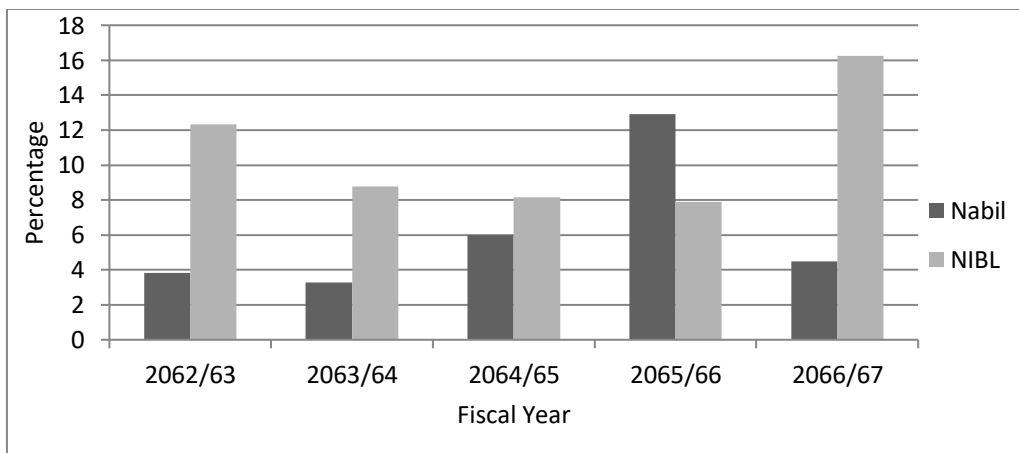
Source:-Annex 2

The above table shows the fluctuating trend of cash and bank balance to total deposit ratio of both the banks. Nabil has maximum ratio of 12.92% in the F/Y 2065/66 and minimum of 3.26 in the F/Y 2063/64 whereas NIBL has maximum ratio of 16.23% in the F/Y 2066/67 and minimum of 7.88% in the F/Y 2065/66. However, ratio is more consistent in NIBL rather than Nabil.

In average, NIBL has maintained higher cash & bank balance with respect to total deposit than Nabil i.e. $6.096 < 10.68$. It states that cash & Bank balance in liquidity position of NIBL is higher than Nabil. Similarly, C.V of NIBL is lower than Nabil, so NIBL has high consistency.

From the above analysis, the cash & bank balance position of NIBL with respect to deposit is not better against the readiness to serve its customer's deposit than Nabil. A high ratio of cash & bank balance may be unfit which indicates the inability of bank. Thus, NIBL may invest in more productive sectors to ensure enough liquidity which will help the bank to improve its profitability.

Figure 4.2
Cash and Bank Balance to Total Deposit Ratio (%)



4.1.1.3 Cash and Bank Balance to Current Assets Ratio

This ratio examines the bank's liquidity capacity on the basis of its most liquid assets, cash & bank balance. This ratio reveals the ability of the banks to make the payment of its customer deposits. A high ratio indicates the sound ability to meet the daily requirements of their customer deposits & vice versa. But both higher and lower ratios are not desirable because if a bank maintains higher ratio, it has to pay interest on deposit and some earnings may be lost. On the other hand, if a bank maintains low ratio of cash, it may fail to make the payment for presented cheques by its customers. Thus, an appropriate level of cash and Bank balance should be maintained properly. We have

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

The table & figure below shows the Cash and Bank Balance and Current Assets ratio of Nabil & NIBL during the study period.

The following table shows the Cash and Bank Balance to Current Assets Ratio of both banks.

Table 4.3
Cash and Bank Balance to Current Assets Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	3.74	3.48	6.13	10.21	4.74	5.66	5.49	0.97
NIBL	10.91	10.95	11.83	14.01	14.83	12.51	3.62	0.29

Source:-Annex 3

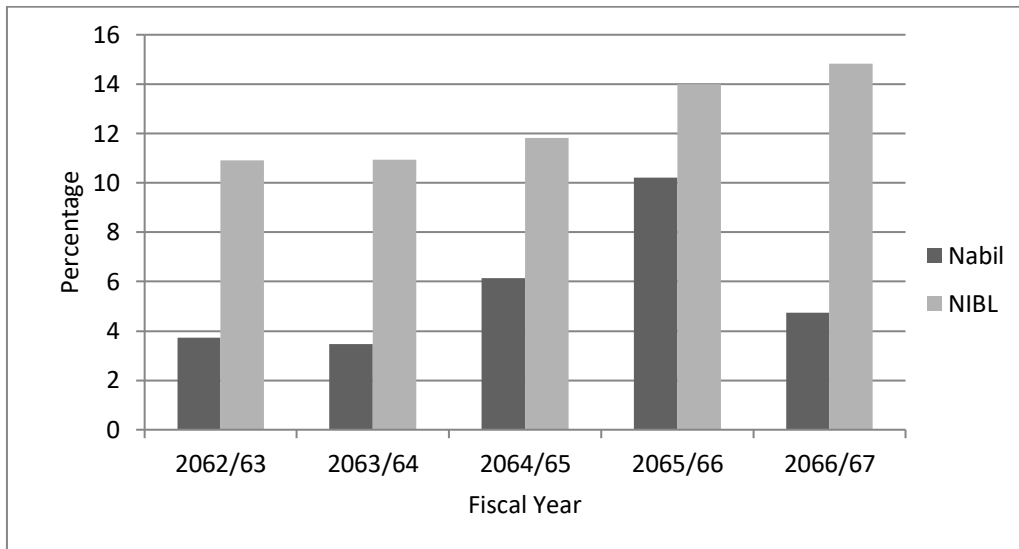
From the above table, Nabil bank has fluctuating trend and NIBL has increasing trend on Cash & Bank Balance to Current Assets ratio. Nabil has maximum ratio of 10.21% & minimum ratio of 3.48% whereas NIBL has maximum ratio of 14.83% & minimum ratio of 10.91%. The gap is high in Nabil Bank. In the first 5 years of study, the ratio is in rapidly increasing trend whereas NIBL seems more consistent during the study period.

The mean ratio of Nabil is lower than NIBL. We can say that in spite of fluctuating trend in the ratios, it has been unsuccessful to maintain its low cash & bank balance to

current ratio than NIBL. Likewise, C.V. of Nabil is higher than NIBL. But both the banks are not in a better position to maintain cash & bank balance. They should invest their fund in more productive sectors. However, NIBL is successful in comparison to Nabil in this aspect.

Figure 4.3

Cash and Bank Balance to Current Assets Ratio (%)



4.1.1.4 Investment on Government Securities to Current Assets Ratio

This ratio is used to examine the portion of a commercial bank’s current assets, which is invested on various government securities issued by government. More or less, each commercial bank wants to diversify their investment in the lower risk items such as government securities. But more fund investment on government securities by the bank is not preferable to achieve the bank’s goal of profit maximization as it doesn’t give more return in compare to other investments. Though the government securities are not so much liquid as cash and bank balance of commercial banks, they can be easily sold in the market or they can be converted into cash in other ways. We have,

Investment on Government Securities to Current Assets Ratio

$$= \frac{\text{Investment on Govt. Securities}}{\text{Current Assets}}$$

Investment on Government Securities and Current Assets ratio of Nabil & NIBL during the study period is presented in the table & figure below.

Table 4.4
Investment on Government Securities to Current Assets Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	23.97	20.25	10.57	7.78	15.94	15.702	13.35	0.85
NIBL	11.79	0.173	0.19	16.61	13.48	8.45	15.25	1.81

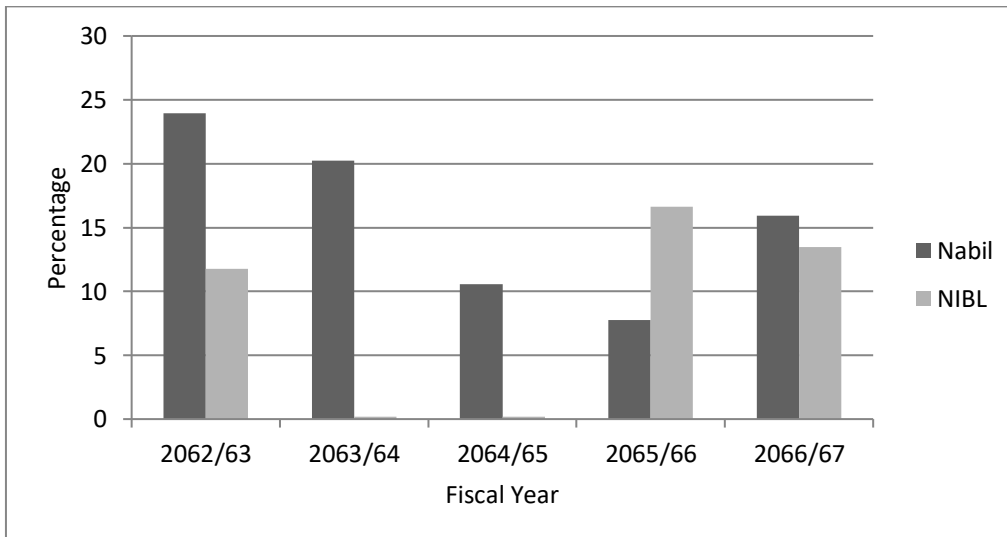
Source:- Annex-4

The above table shows the fluctuating trend of Investment on government securities to current assets ratio of both the banks, however, ratio is higher in Nabil in comparison to NIBL. In case of Nepal has maintained higher ratio in the 2062/63 i.e. 23.97 and lowest ratio of 7.78 in the F/Y 2065/66 Similarly, NIBL's highest ratio is 16.61 in the F/Y 2065/66 and lowest ratio is 0.173 in the F/Y 2063/64.

Comparatively, Nabil has invested more portions of current assets to government securities as it has high mean ratio than NIBL. On the other hand, C.V. of Nabil is less than NIBL which means the variability of ratios of Nabil is more consistent than that of NIBL.

From the above analysis, it can be said that Nabil has better liquidity position than that of NIBL from the investment on government securities point of view.

Figure 4.4
Investment on Government Securities to Current Assets Ratio



4.1.1.5 Loan and Advances to Current Assets Ratio

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 to make more profit by mobilizing its fund in the best way. It should pay interest on those unutilized deposit funds and may lose some earnings if sufficient loan and advances can't be granted but at the same time high loan and advances may also be harmful to keep the bank in liquid position. Thus a bank must maintain its loan and advances in appropriate level. We have,

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

The below table & figure shows Loan and Advances and Current Assets ratio of Nabil & NIBL.

Table 4.5
Loan and Advances to Current Assets Ratio (%)

Bank	2062/63					Mean	S.D	C.V (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	70.71	71.26	68.10	48.72	61.19	63.99	18.86	0.29
NIBL	61.61	87.42	99.19	82.66	76.33	81.44	27.78	0.34

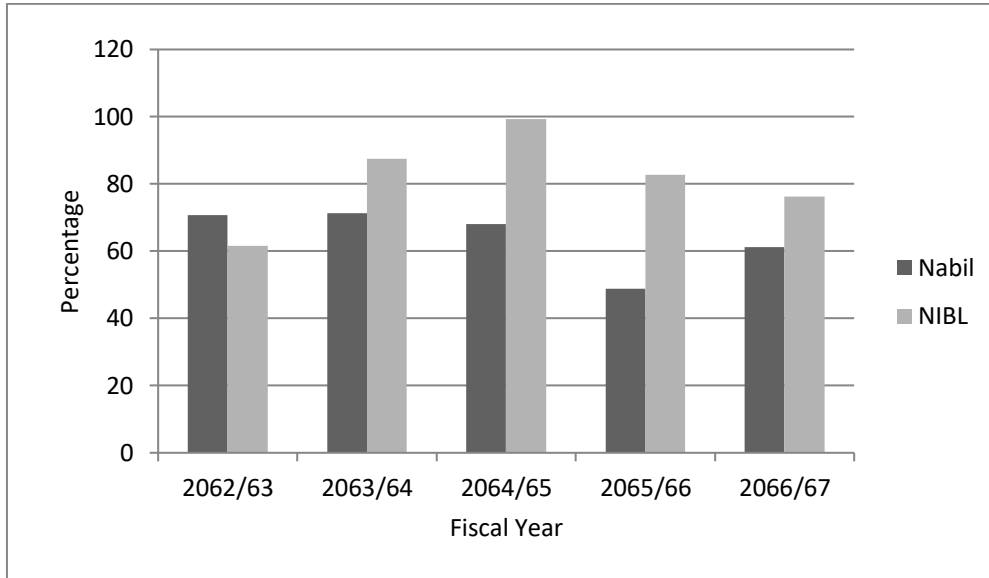
Source:- Annex-5

The above table shows that Nabil has fluctuating trend of loan and advances to current assets ratio. Nabil has maximum ratio of 71.26 in the F/Y 2063/64 and minimum ratio of 48.72 in the F/Y 2065/66. Similarly, NIBL has maintained maximum ratio of 99.19 in the F/Y 2064/65 and minimum ratio of 61.61 in the F/Y 2062/63.

Nabil has maintained the mean ratio of 63.99% which is less than ratio of NIBL i.e. 81.44%. It means Nabil has used its fewer portions of current assets to loan and advances than NIBL. On the other hand C.V. of NIBL is higher than Nabil which shows inconsistency of NIBL.

From the above analysis, it can be said that Nabil is not in better condition to mobilize its fund as loan and advances with respect to current assets in comparison to NIBL.

Figure 4.5
Loan and Advances to Current Assets Ratio (%)



4.1.2 Assets Management Ratio

A commercial bank must be able to manage its assets properly to earn high profit to satisfy its customers and for its own existence. Assets Management Ratio (Activity Ratio) measures how efficiently the bank manages the resources at its command. The following ratios are evaluated and interpreted under this asset management ratio to compare the asset management ability of Nabil & NIBL.

4.1.2.1 Loan and Advances to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize their total deposits on loan and advances for profit generating purpose. A high ratio of loan and advances indicates better mobilization of collected deposits and vice versa. But it should be noted that too high ratio may not be better from its liquidity point of view. We have,

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

The following table & figure exhibits the loan and advances to total deposit ratio of Nabil & NIBL during the study period.

Table 4.6
Loan and Advances to Total Deposit Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	72.57	66.79	66.60	61.69	57.76	65.08	11.27	1.72
NIBL	69.62	72.78	68.39	46.51	83.54	68.168	26.99	3.96

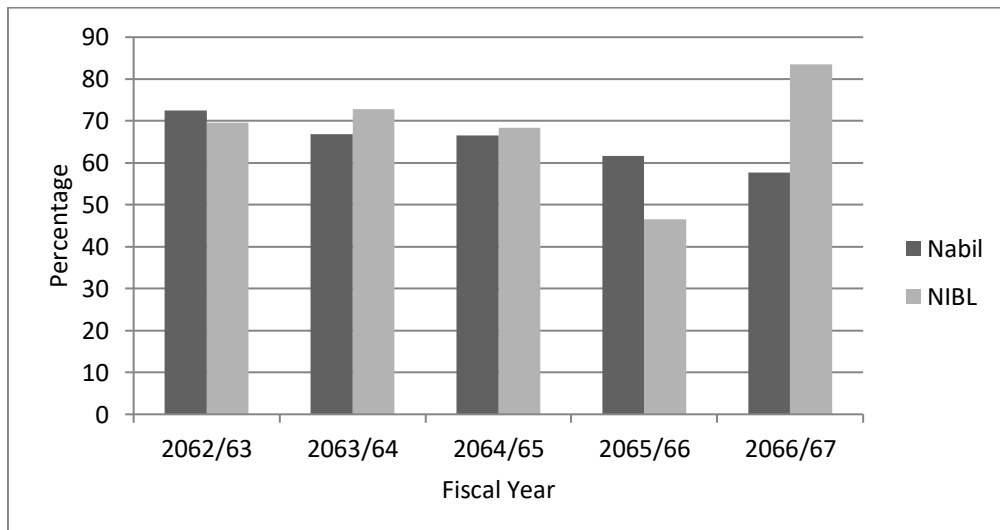
Source:- Annex-6

The above table shows that loan and advances to total deposit ratio of NIBL is in fluctuating trend. It has maintained maximum & minimum ratio of 83.54 & 46.51 in the F/Y 2066/67 & F/Y 2065/66 respectively. Similarly Nabil has maintained maximum ratio of 72.57 in the 2062/63 & minimum ratio of 57.67 in the F/Y 2066/67

In average, Nabil has maintained less loan and advance to total deposit ratio in comparison to NIBL i.e. 68.17 > 65.08. likewise C.V. of the Nabil is less than NIBL which indicates high consistency of Nabil.

From the above description, it can be concluded that Nabil is in less position in mobilizing it's total deposit as loan and advance in comparison to NIBL But Nabil should be noted that in process of loan management of bank assets, so many factors are to be considered such as risk analysis, diversification, social responsibility, bank's credit policy, compensation policy, limit of lending power etc.

Figure 4.6
Loan and Advances to Total Deposit Ratio (%)



4.1.2.2 Total Investment to Total Deposit Ratio

This ratio measures the extent to which the banks are successful in mobilizing the total deposits on investment in different sectors. A high ratio indicates the success in mobilizing the deposits and vice versa. We have,

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

The table & figure below shows the Total Investment and Total Deposit ratios of Nabil & NIBL during the study period.

Table 4.7
Total Investment to Total Deposit Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	29.31	31.93	38.32	52.01	32.19	36.75	18.29	4.98
NIBL	29.97	26.79	17.21	9.34	14.80	19.62	17.12	0.87

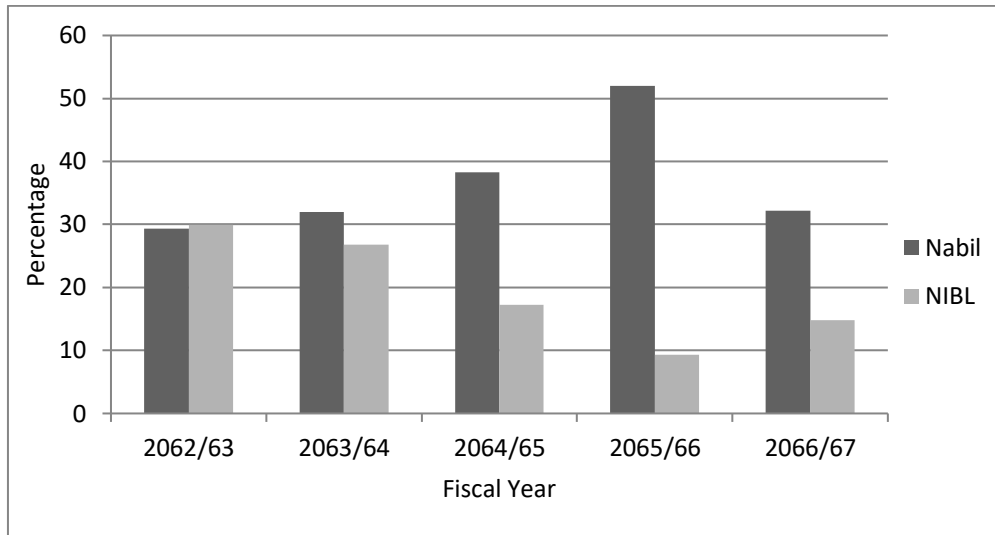
Source:- Annex-7

The above table shows that the total investment to total deposit of Nabil has increasing trend and NIBL has fluctuating /decreasing trend from 2062/63 till 2065/66 and reverse ratio is found in fifty year.

The mean ratio of Nabil is greater than NIBL which indicates better position of Nabil to mobilize its total deposits on total investment than NIBL. On the other hand, C.V. of NIBL is less which means NIBL is more consistent in mobilizing the total deposit. However, we could say that Nabil is successful in utilizing its resources on investment than NIBL.

Figure 4.7

Total Investment to Total Deposit Ratio (%)



4.1.2.3 Loan and Advances to Total Working Fund Ratio

Loan and advance is an important part of total working funds. Commercial bank must be very much careful in mobilizing total assets as loan and advances in appropriate level to generate profit. This ratio reflects the extent to which the commercial banks are succeeding in mobilizing their assets as loan and 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,

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

The table & figure below shows the loan & advances and Total working fund ratios of Nabil & NIBL during the study period.

Table 4.8

Loan and Advances to Total Working Fund Ratio (%)

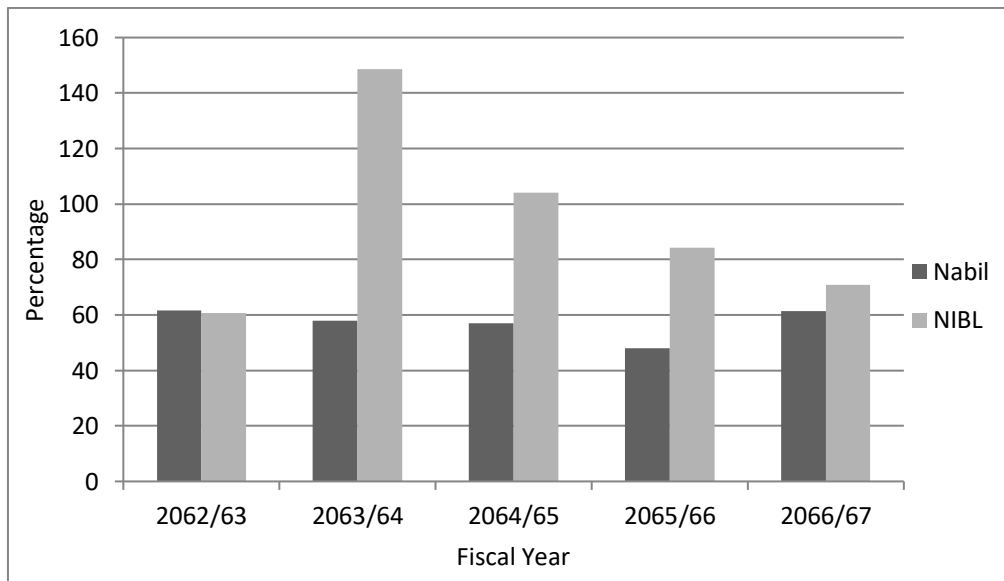
Bank	Fiscal Year					Mean	S.D	C.V (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	61.60	57.87	57.04	47.98	61.33	57.16	11.04	0.19
NIBL	60.63	148.57	103.98	84.16	70.82	93.63	69.46	0.74

Source:- Annex-8

The above table shows the loan and advance to the total working fund ratio of Nabil is in decreasing trend whereas NIBL is in increasing trend for first three years and decreasing trend in its fourth & fifth year. On the basis of mean ratio, Nabil is in weak position to mobilize its total working fund as loan and advances in comparison to NIBL as its mean ratio is less i.e. $57.16 < 93.63$. C.V. of NIBL is higher than Nabil which means NIBL is less consistent.

From the above analysis, it can be concluded that fund mobilization of Nabil in terms of loan and advances with respect to total working fund is not satisfactory in comparison to NIBL.

Figure 4.8
Loan and Advances to Total Working Ratio (%)



4.1.2.4 Investment in Government Securities to Total Working Fund Ratio

Although the investment in government securities doesn't help the commercial bank to achieve the objective of profit maximization. Commercial banks seem to be interested to utilize their deposits by purchasing government securities. It is because of security & liquidity and investment diversification. The ratio of investment on government securities to total working fund ratio is very helpful to know the extent on which the banks are mobilizing their total working fund on different types of government securities. We have,

Investment in Government Securities to Total Working Fund Ratio

$$= \frac{\text{Investment on Govt. Securities}}{\text{Total Working Fund}}$$

Investments in Government Securities and Total Working Fund of Nabil & NIBL during the study period is shown in the table and figure below.

Table 4.9

Investment in Government Securities to Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	20.88	16.45	8.86	7.67	15.98	13.97	11.12	0.79
NIBL	11.61	0.29	2.06	16.91	12.51	8.68	14.32	1.65

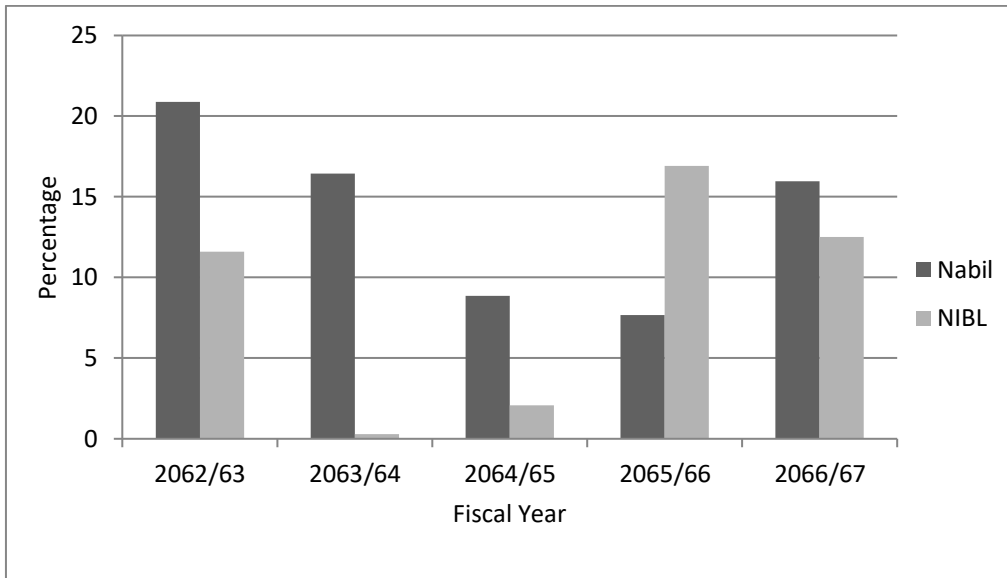
Source:-Annex-8

The Above table shows the fluctuating /decreasing trend of investment on government securities to total working fund ratio of both the banks. Nabil has higher ratio of 20.88% in the F/Y 2062/63 whereas NIBL has 16.91% in the F/Y 2065/66. Similarly Nabil has lower ratio of 7.69% in the F/Y 2065/66 whereas NIBL has 0.29% in the F/Y 2063/64

Nabil has maintained higher mean ratio of 13.97% in comparison to NIBL of 8.67% which means Nabil is in good position to mobilize its total working fund as investment on government securities. On the other hand, C.V. of Nabil is lesser than NIBL. Which shows high consistency of Nabil than NIBL. From the analysis, it can be said that Nabil has invested more portion of working fund to government securities in more consistent way.

Figure 4.9

Investment in Government Securities to Total Working Fund Ratio (%)



4.1.2.5 Investment on Share and Debentures to Total Working Fund Ratio

Though the investment on government securities is relatively safer than investment on shares and debentures of other company, Commercial banks are investing on shares and debentures of other companies for the purpose of income generation. This ratio shows to what extent the bank has successfully invested its assets on other company's share and debentures to generate income. A high ratio indicates more portion of investment on shares and debentures. We have,

Investment on Share and Debentures to Total Working Fund Ratio

$$= \frac{\text{Investment on Share and Debenture}}{\text{Total Working Fund}}$$

The following table & figure shows the investment on share and debentures and total working fund ratios of Nabil & NIBL during the study period of 5 years.

Table 4.10

Investment on Share and Debentures to Total Working Fund Ratio (%)

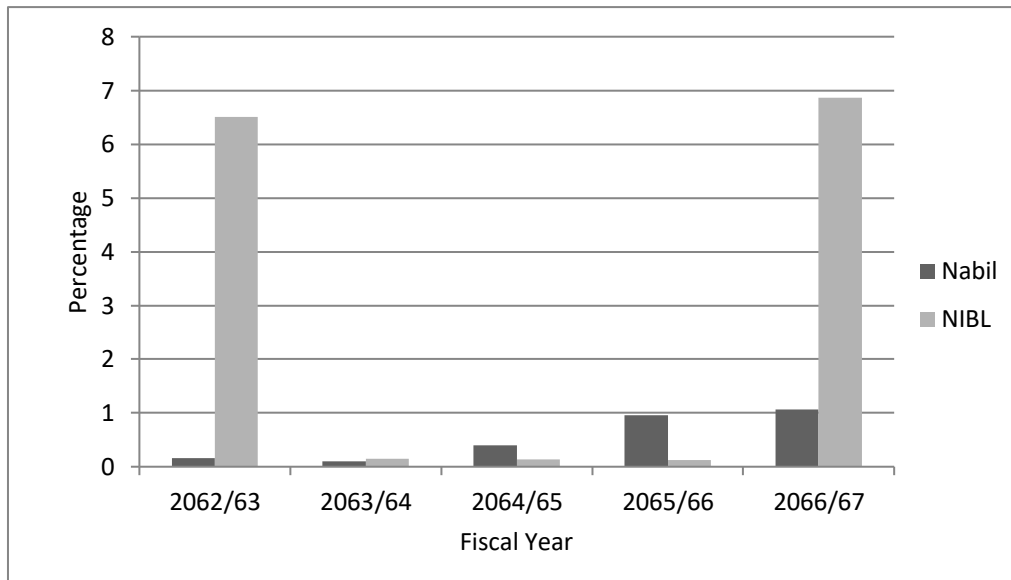
Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	0.16	0.10	0.40	0.96	1.07	0.54	0.90	1.68
NIBL	6.51	0.15	0.13	0.12	6.86	2.75	7.18	2.61

Source:-Annex-10

The above table shows that Nabil has increasing trend and NIBL has fluctuating/ decreasing trend. However, mean ratio shows that Nabil has invested less in share & debentures than NIBL while C.V. of NIBL is quite more than Nabil which shows the less consistency of NIBL. From this analysis, it is concluded that Nabil has less percent of investment on shares & debentures with respect to total working fund in comparison to NIBL.

Figure 4.10

Investment on Share and Debentures to Total Working Fund Ratio (%)



4.1.3 Profitability Ratio

Profitability ratio measures the efficiency of operation of a firm in terms of profit. Sufficient profit is must to have good liquidity, grab investment opportunities, expand banking transaction, finance government in need of development fund, overcome the future contingencies and meet fixed internal obligation for a bank. A bank acquires profit by providing different services to its customer or by making different kinds of investment. Profitability ratios measure the efficiency of a bank. Higher the ratio, greater will be the efficiency.

The following ratios are evaluated and interpreted under profitability ratio, which compare the efficiency of Nabil & NIBL.

4.1.3.1 Return on Total Working Fund Ratio

Return on working fund ratio is a measuring rod of the profitability with respect to each financial resources investment of the bank assets. If the bank's working fund is well managed and efficiently utilized, return on such assets will be higher and vice versa. The banks have to earn satisfactory return on assets for its survival. We have,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Profit}}{\text{Total Working Fund}}$$

The following table shows the return on total working fund ratio of Nabil & NIBL.

Table 4.11
Return on Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	0.85	0.87	0.86	2.03	2.96	1.51	1.97	1.30
NIBL	1.07	2.93	1.89	1.59	1.52	1.80	1.39	0.77

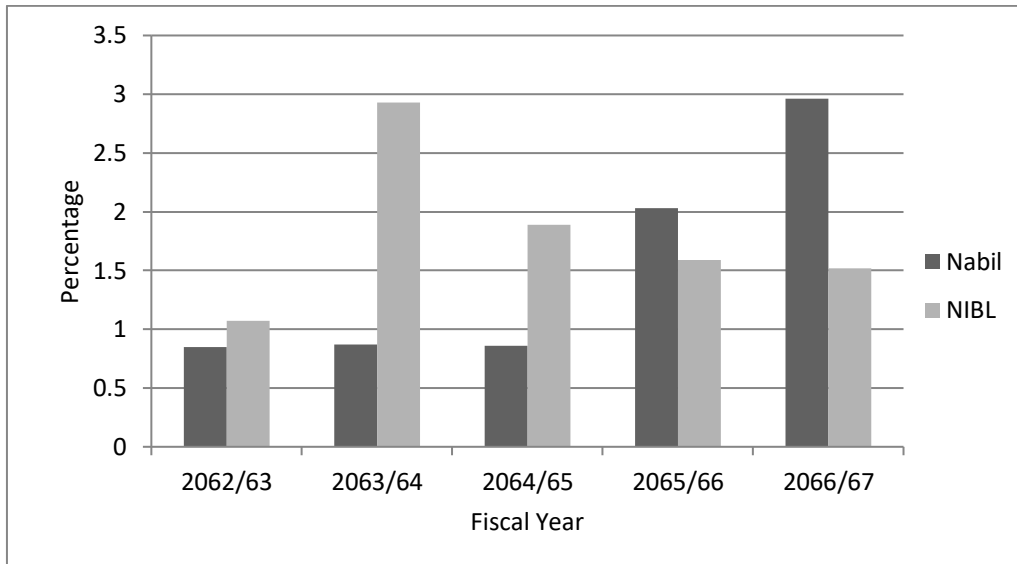
Source :- Annex-11

The above table shows that the ratio of return on total working fund of Nabil is increasing trend & NIBL bank is in fluctuating trend during the study period. The highest ratio Nabil has secured is 2.96% in the F/Y 2066/67 & the lowest is 0.85% in the F/Y 2062/63. Likewise NIBL has secured highest ratio of 2.93% in the F/Y 2063/64 & the lowest is 1.07% in the F/Y 2062/63

By observing the mean ratio, NIBL seems to be higher successful than Nabil to earn higher return on its working fund i.e. 1.80 > 1.51. On the other hand C.V. of Nabil is higher than that of NIBL i.e. 1.30 > 0.77 which shows Nabil is less consistent than NIBL.

From the above analysis, it could be said that though NIBL is in strong position in earning capacity by mobilizing the available resources. NIBL is more stable to earn capacity maintained and net profit generated in comparison to Nabil.

Figure 4.11
Return on Total Working Fund Ratio (%)



4.1.3.2 Return on Investment Ratio

It measures the capacity of the bank to generate profit from its investment in different sectors. Return will be higher if the investment diversification and portfolio has been good managed. We have,

$$\text{Return on Investment} = \frac{\text{Net Profit}}{\text{Total Investment}}$$

Table 4.12
Return on Investment Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V(%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	2.41	3.13	2.61	5.022	8.68	4.57	4.93	1.08
NIBL	4.09	5.36	7.24	9.42	12.13	7.65	6.43	0.84

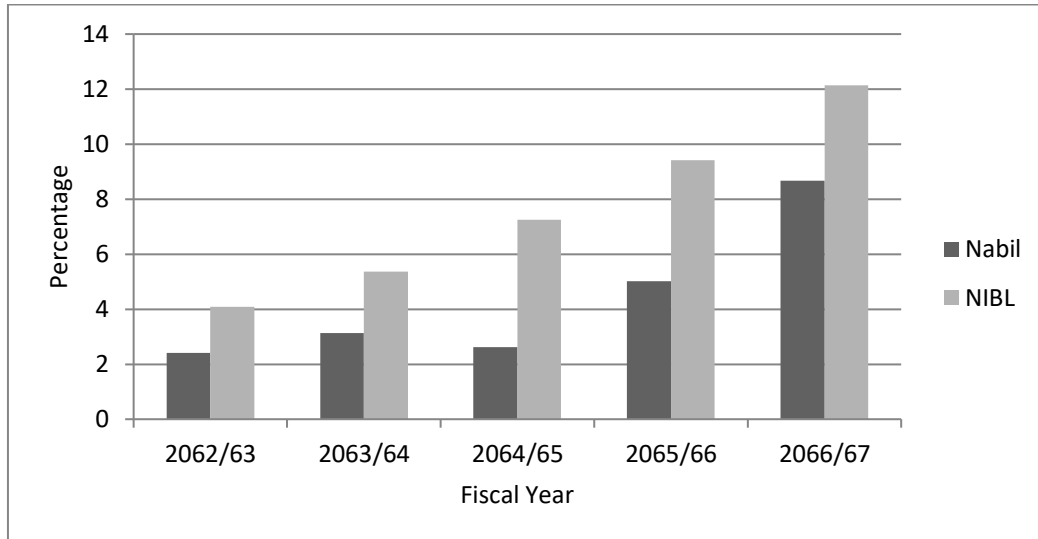
Source:- Annex-12

The above table shows return on investment ratio of NIBL is in increasing trend from the F/Y 2062/63 till 2066/67. But return on investment ratio of NABIL is fluctuating trend.

The highest ratio maintained by Nabil is 8.68% in the F/Y 2066/67 & lowest of 2.61% in the F/Y 2064/65. Likewise, NIBL's highest ratio maintained is 12.13% in the F/Y 2066/67 & lowest of 4.09% in the F/Y 2062/63.

Nabil has the lower mean ratio than NIBL i.e. 7.65 > 4.57 which indicates Nabil has more lesser return on investment than NIBL. C.V. of NIBL is lesser than Nabil which states that Nabil is less consistent to gain the return on investment.

Figure 4.12
Return on Investment Ratio (%)



4.1.3.3 Return on Loan and Advance Ratio

This ratio measures the earning capacity of commercial banks on its deposits mobilized on loan and advances. A high ratio indicates a high success to mobilize fund as loan and advances and vice versa. We have,

$$\text{Return on Loan and Advances} = \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

The following table shows the return on loan and advances details of the two banks.

Table 4.13
Return on Loan and Advances Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	1.38	1.40	1.50	4.23	4.83	2.67	2.43	1.28
NIBL	1.76	1.97	1.82	1.89	2.15	1.918	0.30	0.16

Source:- Annex-13

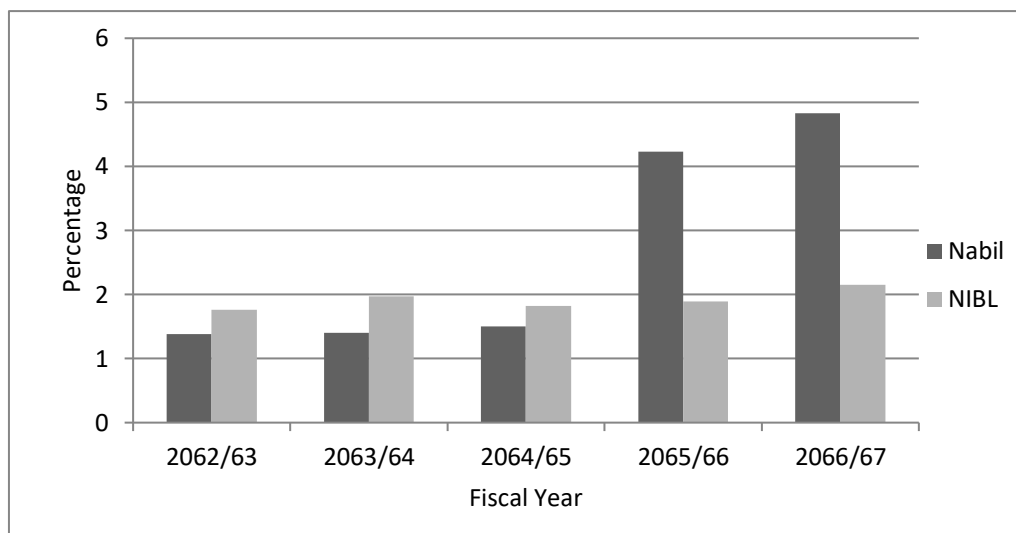
The above table shows increasing trend of return on loan and advances ratio of both banks (Nabil & NIBL). The mean ratio of NIBL is lesser than Nabil i.e. 2.67 > 1.92

which shows Nabil is quite successful to earn high return on loan and advances in comparison to NIBL. The C.V. of Nabil is higher than NIBL which states that Nabil is less consistent than NIBL.

From the above analysis, it could be said that Nabil is in strong position to mobilize the fund based on loan & advances to occur return in comparison to NIBL.

Figure 4.13

Return on Loan and Advances Ratio (%)



4.1.3.4 Earning Per Share

It measures the overall operational efficiency of the bank. The profitability of a firm especially from the point of view of the ordinary shareholders is EPS; measures the profit available to the each equity holders on per share basis. Higher the EPS, higher the satisfaction to equity shareholders and shows the operational efficiency. We have,

$$EPS = \frac{\text{Net Profit Available to Equity Shareholders}}{\text{No. of Outstanding Shares}}$$

Table 4.14

Earning Per Share Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	11.10	13.06	14.08	32.52	43.35	22.82	28.71	1.26
NIBL	36.36	48.08	42.48	49.22	47.95	44.82	10.81	0.24

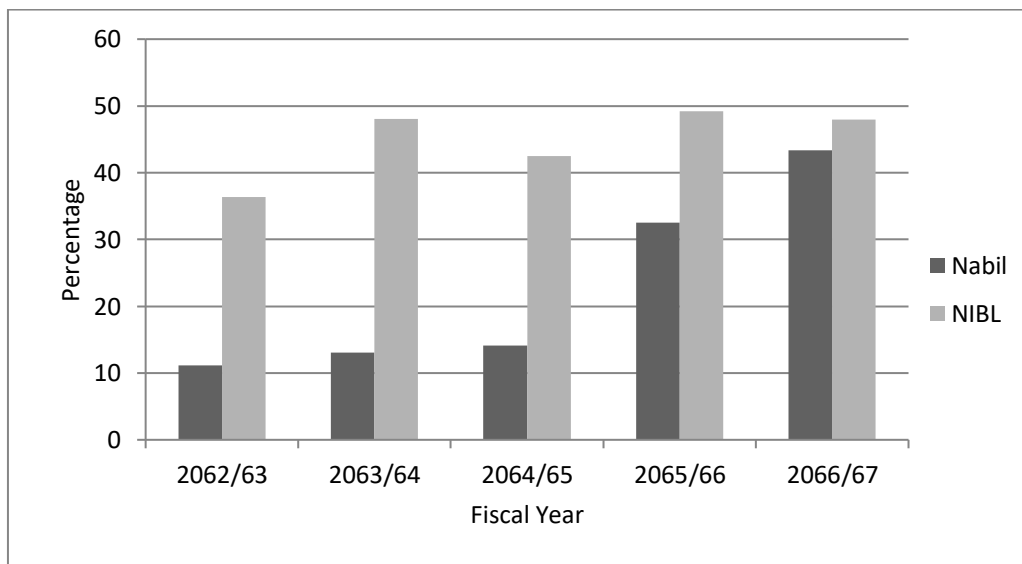
Source:- Annex-14

The above table shows that the EPS of Nabil is in increasing trend during the study period whereas its fluctuating in case of NIBL. Nabil has higher ratio of 43.35% in the F/Y 2066/67 whereas NIBL has 49.22% in the F/Y 2065/66. Similarly Nabil has lower ratio of 11.10% in the F/Y 2062/63 whereas NIBL has 36.36% in the F/Y 20621/63.

The mean ratio of NIBL is highly greater than that of Nabil i.e. $44.82 > 22.82$ which means Nabil is providing less EPS than NIBL. On the other hand, C.V. of Nabil is higher than NIBL i.e. $0.24 < 1.26$ which indicates that Nabil is less consistent than NIBL.

From the above analysis, it can be said that NIBL seems to be successful to give high return to its shareholders in comparison to Nabil.

Figure 4.14
Earning Per Share Ratio (%)



4.1.3.5 Total Interest Earned to Total Working Fund Ratio

This ratio depicts the extent on 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. Higher ratio implies better performance of the bank in terms Of interest earning on its total working fund. We have,

Total Interest Earned to Total Working Fund Ratio

$$= \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

The following table shows the Total Interest earned to total working fund ratio of two banks.

Table 4.15

Total Interest Earned to Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	6.22	5.87	5.83	5.53	7.09	6.11	1.20	0.20
NIBL	3.14	18.35	8.29	7.47	9.81	9.41	11.15	1.18

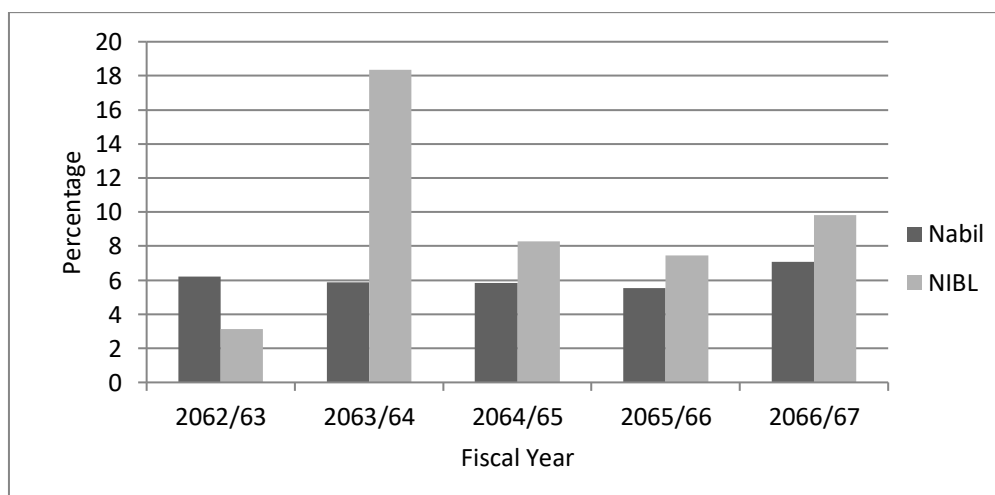
Source:- Annex-15

The above table shows the total interest earned to total working fund ratio of NIBL is in fluctuating trend & in decreasing trend in case of Nabil. The mean ratio of NIBL is higher than Nabil i.e. $9.41 > 6.11$ which means total interest earned in respect to total working fund of Nabil is less than NIBL. On the other hand, C.V of Nabil is lower than NIBL which shows that Nabil is more consistent than NIBL.

From the above analysis, it could be said that NIBL is strong in case of earning high interest from its total working fund by maintaining consistency in comparison to NIBL.

Figure 4.15

Total Interest Earned to Total Working Fund Ratio (%)



4.1.3.6 Total Interest Paid to Total Working Fund Ratio

This ratio measures the percentage of total interest paid against the total working fund. High ratio indicates higher interest expenses on the total working fund and vice versa. We have,

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

Table 4.16

Total Interest Paid to Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	1.42	1.60	2.04	1.48	1.76	1.66	0.50	0.30
NIB	2.26	8.29	3.75	3.85	6.12	4.85	4.73	0.97

Source:- Annex-16

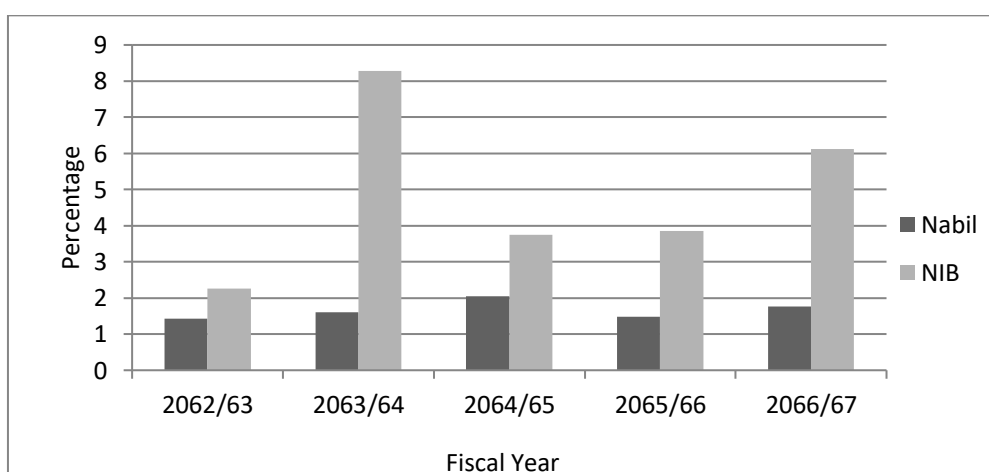
The above table shows that the Total interest paid to total working fund ratio of Nabil is in increasing trend in first 3 years and in fluctuating trend or decreasing in forth and fifth years and NIBL has in increasing trend.

The mean ratio of Nabil is lower than NIBL which means Nabil has not paid high interest and the C.V. of NIBL is higher than Nabil which shows that NIBL is less consistent than Nabil.

The above analysis shows that NIBL is in better position from the interest expenses point of view. It seems to be successful to collect its working fund from less expensive sources.

Figure 4.16

Total Interest Paid to Total Working Fund Ratio (%)



4.1.4 Risk Ratio

Risk is always associated with return. If there is return, risk is there. Higher the risk, higher will be the return. Risk is very closely associated with investment. A bank has to take the high risk if it expects high return on its investment. Therefore bank has to accept and manage high risk to get high profit. Risk has made the job of investment a very challenging one.

4.1.4.1 Credit Risk Ratio

This ratio is very much important to bank to scrutinize the project i.e. the risk involved in it to avoid default or non – payment of loan before making investment. This ratio measures the risk behind making investment or granting loan. Because of unavailability of data of performing assets; ratio is calculated with the help of loan and advance and total assets.

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

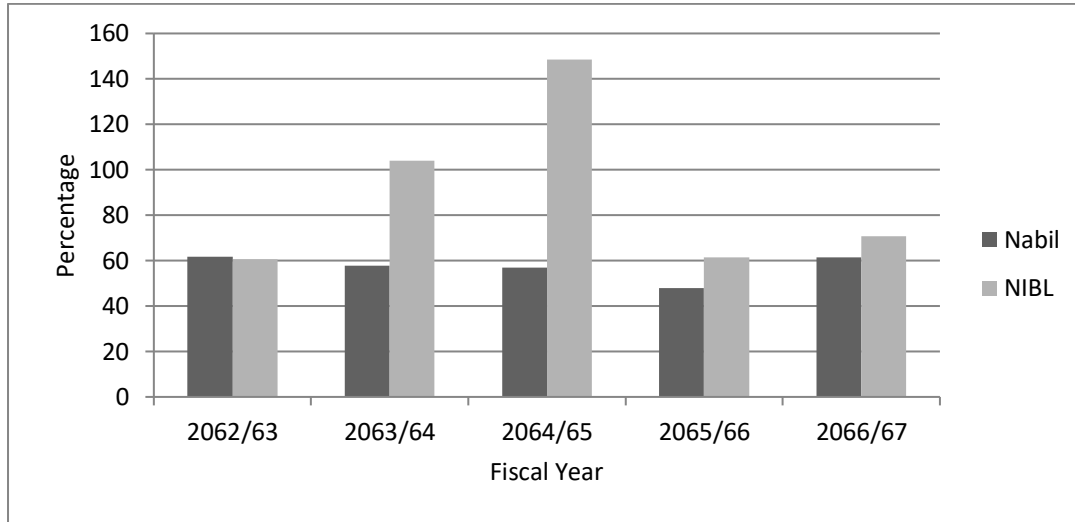
Table 4.17
Credit Risk Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	61.60	57.87	57.04	47.98	61.34	57.17	11.04	0.19
NIBL	60.64	103.98	148.57	61.31	70.82	89.00	75.33	0.84

Source:- Annex-17

The above table shows that the credit risk ratio of Nabil is decreasing from the F/Y 2062/63 till F/Y 2065/66 & increasing in 2066/67. Likewise, ratio of NIBL is in fluctuating trend. The mean ratio of Nabil is lower than NIBL which means Nabil has less credit risk in comparison to NIBL. The C.V. of Nabil is less than NIBL which states Nabil is more consistent.

Figure 4.17
Credit Risk Ratio (%)



4.1.4.2 Capital Risk Ratio

A bank must maintain adequate capital in relation to the nature and condition of its assets, its deposit liabilities and other corporate responsibilities. This ratio measures bank's ability to attract deposits and inter bank fund. It also determines the level of profit a bank can earn, if a bank chooses to make high capital risk, it's ROE (Return on Equity) will be higher and vice versa. We have,

$$\text{Capital Risk Ratio} = \frac{\text{Capital}}{\text{Risk Weighted Assets (T.A.)}}$$

Table 4.18
Capital Risk Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V. (%)
	2062/63	2063/64	2064/65	2065/66	2066/67			
Nabil	2.86	2.20	1.80	1.64	1.63	2.026	1.04	0.51
NIBL	1.87	3.40	1.53	0.93	0.69	1.68	2.13	1.27

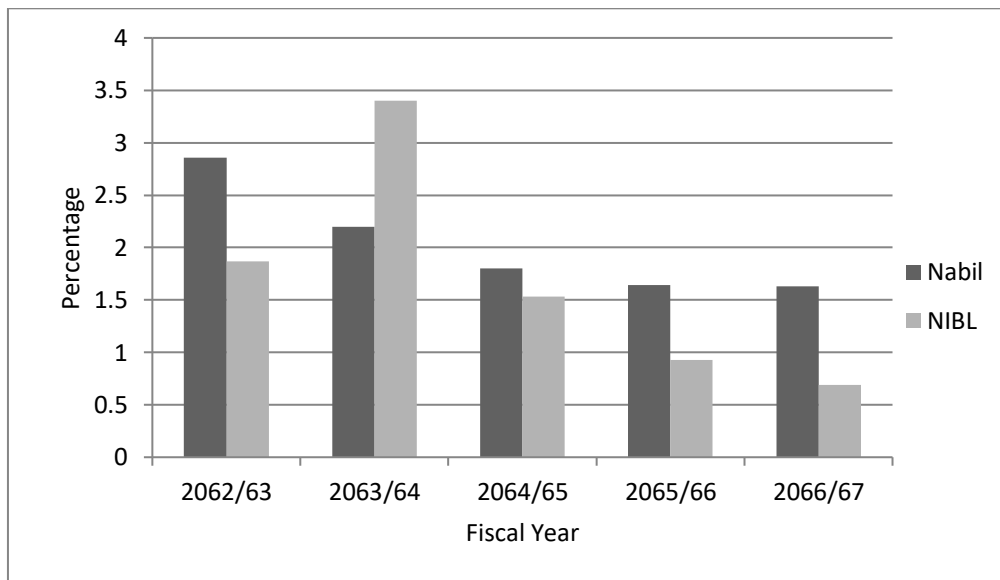
Source:- Annex-18

The above table shows that the capital risk ratio of Nabil is in decreasing trend whereas its fluctuating in case of NIBL. Nabil has maximum ratio of 2.86% in the beginning F/Y of the study whereas NIBL has maximum ratio of 3.40% in the F/Y

2063/64. Likewise, Nabil has lower ratio of 1.63% in the F/Y 2066/67 whereas NIBL has lower ratio of 0.69% in 2066/67

On the basis of mean ratio, Nabil has slightly more risk weighted assets with respect to capital in comparison to NIBL as Nabil has more mean ratio than NIBL i.e. 1.68 < 2.026. On the other hand C.V. of Nabil is lesser than NIBL, it means Nabil is more consistent than NIBL.

Figure 4.18
Capital Risk Ratio (%)



4.1.5 Growth Ratio

Here, those growth ratios are analysis and interpret which are directly related to the well fund mobilization and investment of a commercial banks. Growth ratio represent how the commercial banks are maintaining their economic position. The higher ratio generally indicated the better the performance of the bank & vice –versa.

4.1.5.1 Growth Ratio of Total Investment

This ratio shows whether the sample bank had increased the total investment or decreased in investment. The following table shows the growth ratio of Nabil and NIBL.

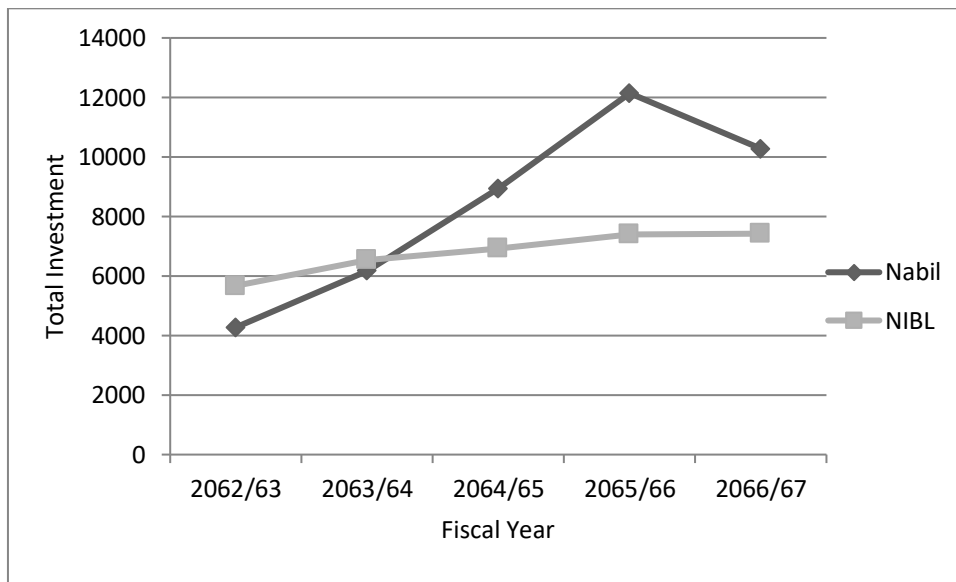
Table 4.19
Growth Ratio of Total Investment

(Rs. in Million)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth ratio%
Nabil	4275.52	6178.53	8945.31	12140.24	10275.23	24.51%
NIBL	5672.860	6540.93	6928.57	7399.81	7423.11	6.95%

Source:- Annex-19

Figure 4.19
Growth Ratio of Total Investment



The above table and graph shown that the total investment of banks. NIBL is increasing their investment. Nabil is increasing in four years but last year is decreasing trend. The Calculation method of growth ratio is shown in Appendix-1.

4.1.5.2 Growth Ratio of Total Deposit

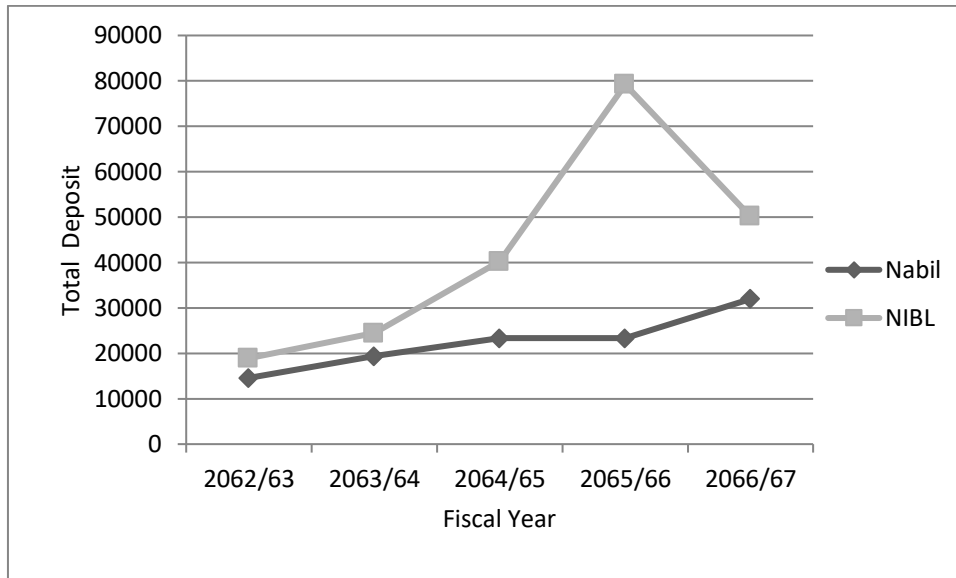
Table 4.20
Growth Ratio of Total Deposit

(Rs. in Million)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth ratio%
Nabil	14586.60	19347.40	23342.28	23342.30	31955.70	21.66%
NIBL	18927.31	24415.13	40249.40	79180.0	50138.122	27.57%

Source: Annex - 20

Figure 4.20
Growth Ratio of Total Deposit



The above table shows that the growth ratio of Nabil bank is less than that NIBL. It is shown that the growth rate of Nabil (21.66%) is less than that of NIBL (27.57%). The tabulated growth rate indicates the NIBL uses in increase its deposit compilation very highly than that of Nabil.

4.1.5.3 Growth Ratio of Loan & Advance

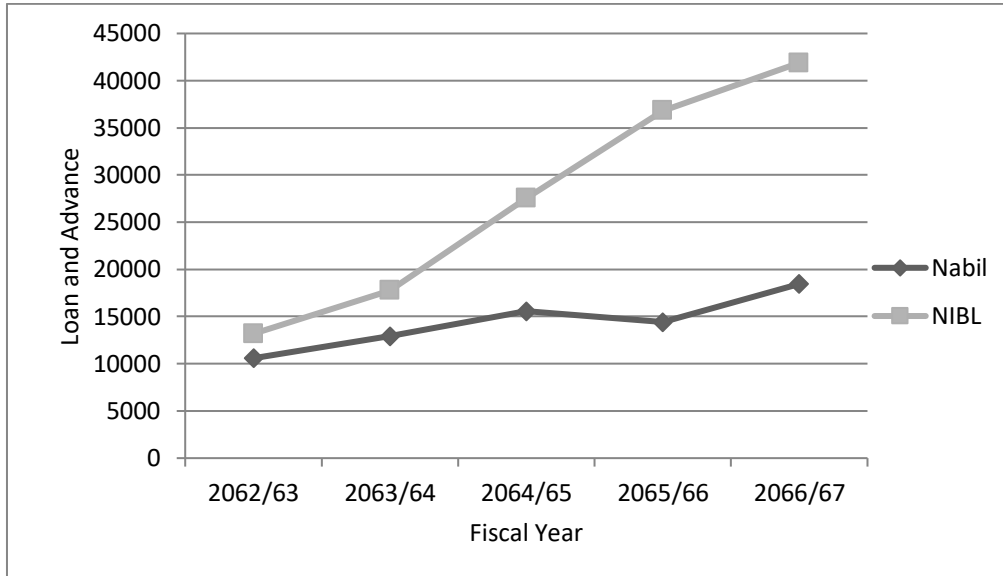
Table 4.21
Growth Ratio of Loan & Advance

(Rs. in Million)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth ratio%
Nabil	10586.17	12922.54	15545.78	14400.87	18453.09	14.95%
NIBL	13178.15	17769.09	27529.31	36827.16	41887.69	33.52%

Source: Annex - 21

Figure 4.21
Growth Ratio of Loan & Advance



The above table shows that the growth ratio of Nabil bank is less than that NIBL. It is shown that the growth rate of Nabil (14.95%) is less than that of NIBL (33.52%). The tabulated growth rate indicates the NIBL uses in increase its loan & advance compilation very highly than that of Nabil.

4.1.5.4 Growth Ratio of Net Profit

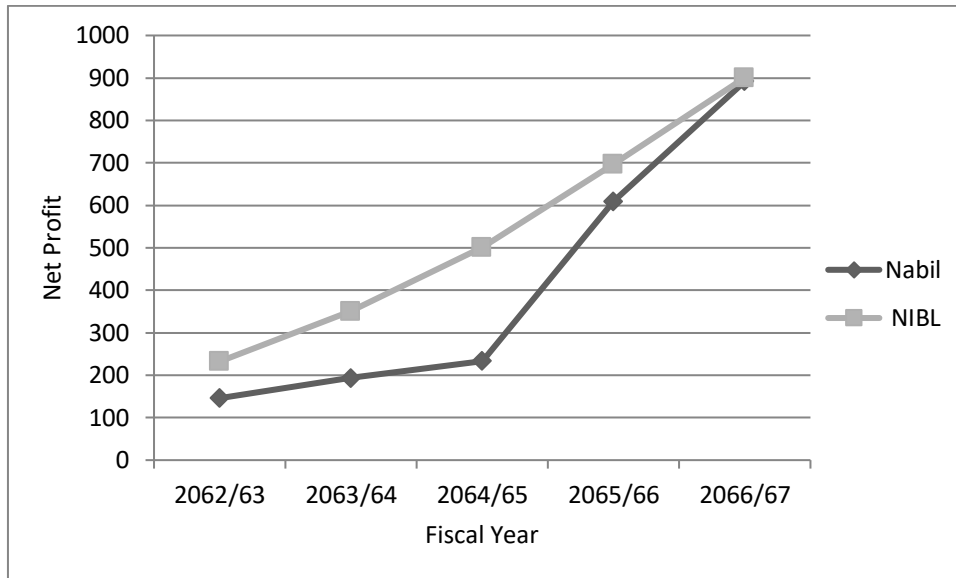
Table 4.22
Growth Ratio of Net Profit

(Rs. in Million)

Fiscal Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth Ratio%
Nabil	145.86	193.47	233.42	609.69	891.90	57.25%
NIBL	232.15	350.53	501.39	696.73	900.62	40.34%

Source: Annex -22

Figure 4.22
Growth Ratio of Net Profit



The above table shows that the growth ratio of NIBL is less than that of Nabil bank. It is shown that the growth rate of NIBL (40.34%) is less than that of Nabil (57.25%). The tabulated growth rate indicates that the better performance of Nabil to grant net profit comparison than that of NIBL.

4.2 Statistical Analysis

Under this chapter, some statistical tools are used to achieve the objective of the study. Following statistical tools are used for this purpose.

1. Coefficient of correlation Analysis
2. Test of Hypothesis
3. Trend Analysis

4.2.1 Coefficient of Correlation Analysis

Karl Pearson's coefficient of correlation has been used to find out the relationship between deposit and investment, deposit and loan and advances, investment and net profit, loan and advances and net profit.

4.2.1.1 Coefficient of Correlation Analysis

The Coefficient of correlation between deposits and total investment is to measure the degree of relationship between two variables; deposits and total investment. In

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

The following table shows the coefficient of correlation between deposits and total investment i.e. correlation (r), coefficient of determination (r^2), probable error (P.Er) and six times probable error (6P.Er) of Nabil & NIBL.

Table 4.23
Correlation between Total Deposit and Total Investment

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
Nabil	0.7568	0.5727	0.1289	0.7733
NIB	0.8318	0.6919	0.0982	0.5891

Source: Annex -23

From the above table, it is found that coefficient of correlation between deposits (independent variable) and total investments (dependent variable) value of r is 0.7568 in case of Nabil. It shows positive relationship between those two variables. By application of coefficient of determination, the value of r^2 is 0.5727, which indicates that 57.27% of the variation in the dependent variable (total investment) has been explained by the independent variable (deposits). Moreover, by considering the probable error, since the value of 6P.Er i.e. 0.7733 is higher than r 0.7568, it can be said that the value of 'r' is no significant & there is not significant relationship between deposits & total investment, Nabil is using the deposit in better way of investment.

In case of NIBL, the coefficient of correlation between deposits and total investment is 0.8318 which shows the positive relationship between those two variables. The value of ' r^2 ' is 0.6919 which means 69.19% in the dependent variable has been explained by the independent variable i.e. deposit. Further analysis shows that the value of 'r' is higher than the value of 6P.Er i.e. $0.8318 > 0.5576$ which indicates that the value of 'r' is significant. It means there is significant relationship between

deposits & total investment and the bank has taken the policy of maximizing the use of their deposits as investments.

From the above analysis, it is clear that NIBL bank has positive relationship between deposits & total investment and Nabil bank has negative relationship between deposits & total investment. Nabil has lower correlation than NIBL. Similarly, coefficient of determination of Nabil is quite lower in comparison to NIBL i.e. $0.5727 < 0.6919$. The value of 'r' is significant in both the banks. To conclude, we could say that NIBL is in strong position in mobilizing their deposits as investment.

Coefficient of correlation between deposit and loan and advances measure the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan and advances is dependent variable (Y). The main objective of this computation is to justify whether deposits are significantly used as loan and advances in proper way or not.

The table below exhibits the value of r, r^2 , P.Er and 6P.Er between deposits and loan and advances of Nabil & NIB for the study period.

Table 4.24
Correlation between Total Deposit and Loan and Advances

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
Nabil	0.9877	0.9756	0.0074	0.0444
NIBL	0.8277	0.6852	0.0949	0.5697

Source: Annex -24

From the above table, it is found that coefficient of correlation between deposits and loan and advances of Nabil is 0.9877 which explains the positive relationship between these two variables. The value of r^2 is 0.9756 which indicates 97.56% of variation in the dependent variable (Loan & Advances) has been explained by independent variable (deposits). Further, the value of 'r' is higher than 6P.Er which shows the significant value of 'r'. Hence, we could say that there is significant relationship between Deposit and Loan & Advances.

The bank has use the appropriate policy to mobilize its deposit on loan and advances.

Likewise in case of NIBL, coefficient of correlation between deposits and loan and advances is 0.8277 which explains the positive relationship between these two variables. The value of r^2 is 0.6852 which indicates 68.52% of variation in the dependent variable (Loan & Advances) has been explained by independent variable (deposits). Further, the value of 'r' is higher than 6P.Er i.e. $0.7942 > 0.5697$ which shows the significant value of 'r'. Hence, we could say that there is significant relationship between Deposit and Loan & Advances. The bank is successful to mobilize its deposit on loan and advances in proper way.

To conclude, the value of 'r' is significant in both the banks having positive relationship between Deposit and Loan & Advances, both the banks has properly utilized the deposit to grant Loan & advances.

4.2.1.3 Coefficient of Correlation between Total Investment and Net Profit

The degree of relationship between total investment and net profit is measured by coefficient of correlation between these two variables. In this analysis, the total investment is independent variable (X) and net profit is dependent variable (Y). The purpose of this computation is to justify whether the net profit is significantly correlated with the total investment or not.

The table below shows the value of r, r^2 , P.Er and 6P. Er between total investment and net profit of the two banks for the study period.

Table 4.25

Correlation between Total Investment and Net Profit

Banks	Evaluation Criteria			
	r	r^2	P.Er	6P.Er
Nabil	0.7655	0.5861	0.1248	0.7491
NIBL	0.9142	0.8358	0.0495	0.2972

Source: Annex -25

From the above table, it has been found that the coefficient of correlation between total investment and net profit of Nabil is 0.7655 which shows the positive

relationship between the two variables. Considering the coefficient of determination, the value of r^2 is 0.5861, which means that 58.61% only of the variation in the dependent variable (net profit) has been explained by the independent variable (Total investment). On the other hand, the value of 'r' is more than the value of 6P.Er i.e. $0.7491 < .7655$ which explains that there is significant relationship between total investment and net profit. The bank is earning profit by proper investment & needs to develop the sound investment policy in this aspect.

In case of NIBL, it has been found that the coefficient of correlation between total investment and net profit is 0.9142 which shows the positive relationship between the two variables. Considering the coefficient of determination, the value of r^2 is 0.8358, which means that 83.58% only of the variation in the dependent variable (net profit) has been explained by the independent variable (Total investment). The value of 'r' is higher than the value of 6P.Er i.e. $0.9142 > 0.2972$ which explains that there is significant relationship between total investment and net profit. The bank is capable of earning profit by proper investment & seems to have the sound investment policy in this aspect.

To conclude, NIBL has sound policy than Nabil to earn profit by proper utilization of total investment.

4.2.1.4 Coefficient of Correlation between Loan and Advances and Net Profit

It measures the degree of relationship between loan and advances and net profit. In this analysis, loan and advances id independent variable (X) and net profit is dependent variable (Y). The purpose of computing r between these two variables is to justify whether net profit is significantly correlated with respect to loan and advances or not.

The following table shows the value of r, r^2 , P.Er, 6P.Er between loan and advances and net profit of Nabil & NIBL.

Table 4.26
Correlation between Loan and Advances and Net Profit

Banks	Evaluation Criteria			
	r	r ²	P.Er	6P.Er
Nabil	0.8091	0.6546	0.1042	0.6252
NIBL	.8744	0.7646	0.0710	0.4260

Source: Annex -26

From the above listed table, it is found that coefficient of correlation between loan and advances to net profit of Nabil is 0.8091 which shows the positive relationship between the two variables. Considering the coefficient of determination, the value of r^2 is 0. 0.6546, which means that 65.46% only of the variation in the dependent variable (net profit) has been explained by the independent variable (Total investment). On the other hand, the value of 'r' is more than the value of 6P.Er i.e. $0.8091 > 0.6252$ which explains that there is significant relationship between total investment and net profit. The bank is earning profit by proper mobilization of loan and advances.

In case of NIBL, it has been found that the coefficient of correlation between total investment and net profit is 0.8744 which shows the positive relationship between the two variables. Considering the coefficient of determination, the value of r^2 is 0.7646, which means that 76.46% only of the variation in the dependent variable (net profit) has been explained by the independent variable (Total investment). The value of 'r' is higher than the value of 6P.Er i.e. $0.9486 > 0.4260$ which explains that there is significant relationship between total investment and net profit. The bank is capable of earning profit by proper mobilization of loans & advances & seems to have the sound policy in this aspect.

Nabil has slightly lower correlation, coefficient of determination between loan and advances and net profit in comparison to NIBL. Both the banks have significant relationship between the two variables and are successful in mobilization of loans & advances to earn profit.

4.2.2 Test of Hypothesis

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

- a. Formulating Hypothesis
 - Null Hypothesis and
 - Alternative hypothesis
 - Computing the test statistic
- b. Fixing the level of significance
- c. Finding criteria region
- d. Deciding two tailed or one tailed test
- e. Making decision

Some of the main hypothesis test is calculated and decisions are made as follows:

4.2.2.1 Test of Hypothesis on Loan and Advances to Total Deposit Ratio of Nabil & NIBL

Let, Loan and advances to total deposit ratios of Nabil & NIBL are x and y respectively.

Table 4.27

Test of Hypothesis on Loan and Advances to Total Deposit Ratio

Nabil			NIBL		
X	d = x - 65	d ²	y	D = y - 62	D ²
72.57	7.57	57.3049	69.62	7.62	58.0644
66.79	1.79	3.2041	72.78	10.78	116.2084
66.60	1.6	2.56	68.39	6.39	40.8321
61.69	-3.31	10.9561	46.51	-15.49	239.9401
57.76	-7.24	52.4176	83.54	21.54	463.9716
∑x = 325.41	∑d = 0.41	∑d² = 126.4427	∑y = 340.84	∑D = 30.84	∑D² = 919.0166

$$\bar{X} = A_1 + \frac{\sum d}{n_1} = 65 + \frac{325.41}{5} = 65.082$$

$$\bar{Y} = A_2 + \frac{\sum D}{n_2} = 65 + \frac{30.84}{5} = 68.168$$

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

$$S^2 = \frac{1}{5 + 5} - 2 \left[\frac{126.4427 - (0.41)^2 / 5}{5} \right] + \left[\frac{919.0166 - (30.84)^2 / 5}{5} \right]$$

$$S^2 = 106.9006$$

Hence,

Null Hypothesis (H_0): $\mu_x = \mu_y$

i.e. there is no significant difference between mean ratios of loan and advances to total deposit of Nabil & NIBL.

Alternative Hypothesis (H_1): $\mu_x \neq \mu_y$ (Two tailed)

i.e. there is significant difference between mean ratios of loan and advances to total deposit of Nabil & NIBL.

Under H_0 , the test statistic is:

$$t = \frac{\bar{x} - \bar{y}}{\sqrt{\frac{S^2}{\frac{1}{n_1} + \frac{1}{n_2}}}} \text{ with } \dots\dots\dots \text{d.f.} = n_1 + n_2 - 2$$

$$t = \frac{65.082 - 68.168}{\sqrt{\frac{106.9006}{\frac{1}{5} + \frac{1}{5}}}}$$

$$/t/ = -0.4719$$

Tabulated value of 't' (one tailed test) for $(n_1 + n_2 - 2)$ d.f. i.e. 8 d.f. at 5% level of significance is 1.860

Decision:

Since, calculated value of $/t/$ i.e. -0.4719 is lower than tabulated value of t i.e. (-1.860) is 1.860, H_0 is accepted. In other words and H_1 is rejected. There is no significant difference between mean ratios of loans & advances to total deposit of Nabil & NIBL.

4.2.2.2 Test of Hypothesis on Total Investment to Total Deposit Ratio of Nabil & NIBL

Let, Total Investment to total deposit ratio of Nabil & NIBL be x and y respectively.

Table 4.28

Test of Hypothesis on Total Investment to Total Deposit Ratio

Nabil			NIBL		
X	d = x - 36	d ²	y	D = y - 20	D ²
29.31	-6.69	44.7561	29.97	9.97	99.4009
31.93	-4.07	16.5649	26.79	6.79	46.1041
38.32	2.32	5.3824	17.21	-2.79	7.7841
52.01	16.01	256.3201	9.34	-10.66	113.6356
32.19	-3.81	14.5161	14.80	-5.2	27.04
Σx = 183.76	Σd = 3.85	Σd² = 337.5396	Σy = 182.22	ΣD = -1.89	ΣD² = 293.9647

$$\bar{X} = A_1 + \frac{\sum d}{n_1} = 36 + \frac{3.85}{5} = 36.77$$

$$\bar{Y} = A_2 + \frac{\sum D}{n_2} = 20 + \frac{-1.89}{5} = 19.622$$

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

$$S^2 = \frac{1}{5 + 5} - 2 \left[\frac{337.5396 - (3.85)^2 / 5}{5} \right] + \left[\frac{293.9647 - (-1.89)^2 / 5}{5} \right]$$

$$S^2 = 78.4782$$

Hence,

Null Hypothesis (H₀): $\mu_x = \mu_y$

i.e. there is no significant difference between mean ratios of total investment to total deposit of Nabil & NIB.

Alternative Hypothesis (H₁): $\mu_x \neq \mu_y$ (Two tailed)

i.e. there is significant difference between mean ratios of total investment to total deposit of Nabil & NIBL.

Under H_0 , the test statistic is:

$$t = \frac{\bar{x} - \bar{y}}{\sqrt{\frac{S^2}{\frac{1}{n_1} + \frac{1}{n_2}}}} \text{ with } \dots\dots\dots \text{d.f.} = n_1 + n_2 - 2$$

$$t = \frac{36.77 - 19.622}{\sqrt{\frac{78.4782}{\frac{1}{5} + \frac{1}{5}}}}$$

$$t = 3.0606$$

Tabulated value of 't' (one tailed test) for $(n_1 + n_2 - 2)$ d.f. i.e. 8 d.f. at 5% level of significance is 1.860

Decision:

Since, calculated value of /t/ i.e 3.0606 is higher than tabulated value of t i.e. 1.860, H_0 is rejected and H_1 accepted. In other words, there is significant difference between mean ratios of total investment to total deposit of Nabil & NIBL.

4.2.2.3 Test of Hypothesis on Return on Loan and Advances Ratio of Nabil & NIBL

Let, Return on loan and advances ratio of Nabil & NIBL be x and y respectively.

Table 4.29

Test of Hypothesis on Return on Loan and Advances Ratio

Nabil			NIBL		
X	d = x - 2	d ²	y	D = y - 1	D ²
1.38	-0.62	0.3844	4.07	1.76	0.5776
1.40	-0.60	0.36	5.36	1.97	0.9409
1.50	-0.50	0.25	12.46	0.82	0.6724
4.23	2.23	4.9729	9.42	0.89	0.7921
4.83	2.83	8.0089	12.13	1.15	1.3225
$\sum x = 13.34$	$\sum d = 3.34$	$\sum d^2 = 13.9762$	$\sum y = 9.59$	$\sum D = 4.59$	$\sum D^2 = 4.3055$

$$\bar{X} = A_1 + \frac{\sum d}{n_1} = 2 + \frac{3.34}{5} = 2.668$$

$$\bar{Y} = A_2 + \frac{\sum D}{n_2} = 1 + \frac{4.59}{5} = 1.918$$

$$S^2 = 1/n_1 + n_2 - 2 [\{\sum d^2 - (\sum d)^2/n_1\}] + [\{\sum D^2 - (\sum D)^2/n_2\}]$$

$$S^2 = 1/5 + 5 - 2 [\{13.9762 - (3.34)^2/5\}] + [\{4.3055 - (4.59)^2/5\}]$$

$$S^2 = 1.47962$$

Hence,

Null Hypothesis (H₀): $\mu_x = \mu_y$

i.e. there is no significant difference between mean ratios of return on loan and advances of Nabil & NIBL.

Alternative Hypothesis (H₁): $\mu_x \neq \mu_y$ (Two tailed)

i.e. there is significant difference between mean ratios of return on loan and advances of Nabil & NIBL.

Under H₀, the test statistic is:

$$t = \frac{\bar{x} - \bar{y}}{\sqrt{\frac{S^2}{\frac{1}{n_1} + \frac{1}{n_2}}}} \text{ with } \dots\dots\dots \text{d.f.} = n_1 + n_2 - 2$$

$$t = \frac{2.668 - 1.918}{\sqrt{\frac{1.47962}{\frac{1}{5} + \frac{1}{5}}}} = 0.9749$$

Tabulated value of 't' (one tailed test) for (n₁ + n₂ - 2) d.f. i.e. 8 d.f. at 5% level of significance is 1.860

Decision:

Since, calculated value of /t/ i.e. 0.9749 is lower than tabulated value of t value i.e, 1.860, H₀ is accepted and H₁ is rejected. In other words, there is no significant difference between mean ratios of return on loans & advances of Nabil & NIBL.

4.2.2.4 Test of Hypothesis on Return on Investment Ratio of Nabil & NIBL

Let, return on investment ratio of Nabil & NIBL be x and y respectively

Table 4.30

Test of Hypothesis on Return on Investment Ratio

Nabil			NIBL		
X	d = x - 10	d ²	Y	D = y - 9	D ²
3.41	-1.59	2.5281	4.09	-4.91	24.1081
3.13	-1.87	3.4969	5.36	-3.64	13.2496
2.61	-2.39	5.7121	7.24	-1.76	3.0976
5.022	0.022	0.0004	9.42	0.42	0.1764
8.68	3.681	13.5428	12.13	3.13	9.7969
∑x = 22.852	∑d = -2.148	∑d² = 25.2803	∑y = 38.24	∑D = -6.76	∑D² = 50.4277

$$\bar{X} = A_1 + \frac{\sum d}{n_1} = 5 + \frac{-2.148}{5} = 4.5704$$

$$\bar{Y} = A_2 + \frac{\sum D}{n_2} = 9 + \frac{-6.76}{5} = 7.648$$

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

$$S^2 = \frac{1}{5 + 5} - 2 \left[\frac{25.2803 - (-2.148)^2 / 5}{5} \right] + \left[\frac{50.4277 - (-6.76)^2 / 5}{5} \right]$$

$$S^2 = 8.2057$$

Hence,

Null Hypothesis (H₀): $\mu_x = \mu_y$

i.e. there is no significant difference between mean ratios of return on investment of Nabil & NIBL.

Alternative Hypothesis (H₁): $\mu_x \neq \mu_y$ (Two tailed)

i.e. there is significant difference between mean ratios of return on investment of Nabil & NIBL.

Under H_0 , the test statistic is:

$$t = \frac{\bar{x} - \bar{y}}{\sqrt{\frac{S^2}{\frac{1}{n_1} + \frac{1}{n_2}}}} \text{ with } \dots\dots\dots \text{d.f.} = n_1 + n_2 - 2$$

$$t = \frac{4.5704 - 7.648}{\sqrt{\frac{8.2057}{\frac{1}{5} + \frac{1}{5}}}}$$

$$t = -1.6987$$

Tabulated value of 't' (one tailed test) for $(n_1 + n_2 - 2)$ d.f. i.e. 8 d.f. at 5% level of significance is 1.860

Decision:

Since, calculated value of t i.e. -1.6987 is less than tabulated value of t i.e. (-1.860) is 1.860, Therefore Null hypothesis H_0 is accepted and H_1 is rejected. In other words, there is no significant difference between mean ratios of return on investment of Nabil & NIBL.

4.2.2.5 Test of Hypothesis on Total Interest Earned to Total Working Fund Ratio of Nabil & NIBL

Let, Total interest earned to total working fund ratio of Nabil & NIBL be x and y respectively.

Table 4.31

Test of Hypothesis on Total Interest Earned to Total Working Fund Ratio

Nabil			NIBL		
X	d = x - 6	d ²	y	D = y - 28	D ²
6.22	0.22	0.0484	3.14	-4.86	23.6196
5.87	-0.13	0.0169	18.35	10.35	107.1225
5.83	-0.17	0.0289	8.29	0.29	0.0841
5.53	-0.47	0.2209	7.47	-0.53	0.2809
7.09	1.09	1.1881	9.81	1.81	3.2761
Σx = 30.54	Σd = 0.54	Σd² = 1.5032	Σy = 47.06	ΣD = 7.06	ΣD² = 134.3832

$$\bar{X} = A_1 + \frac{\sum d}{n_1} = 6 + \frac{0.54}{5} = 6.108$$

$$\bar{Y} = A_2 + \frac{\sum D}{n_2} = 8 + \frac{7.06}{5} = 9.412$$

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

$$S^2 = \frac{1}{5 + 5} - 2 \left[\frac{\{1.5032 - (0.54)^2 / 5\}}{5} \right] + \left[\frac{\{134.3832 - (-7.06)^2 / 5\}}{5} \right]$$

$$S^2 = 15.7324$$

Hence,

Null Hypothesis (H_0): $\mu_x = \mu_y$

i.e. there is no significant difference between mean ratios of total interest earned to total working fund ratio of Nabil & NIBL.

Alternative Hypothesis (H_1): $\mu_x \neq \mu_y$ (Two tailed)

i.e. there is significant difference between mean ratios of total interest earned to total working fund ratio of Nabil & NIBL.

Under H_0 , the test statistic is:

$$t = \frac{\bar{x} - \bar{y}}{\sqrt{\frac{S^2}{\frac{1}{n_1} + \frac{1}{n_2}}}} \text{ with } \dots\dots\dots \text{d.f.} = n_1 + n_2 - 2$$

$$t = \frac{6.108 - 9.412}{\sqrt{\frac{15.7324}{\frac{1}{5} + \frac{1}{5}}}} = -1.3171$$

Tabulated value of 't' (one tailed test) for $(n_1 + n_2 - 2)$ d.f. i.e. 8 d.f. at 5% level of significance is 1.860

Decision:

Since, calculated value of t i.e. -1.3171 is less than tabulated value of t (-1.860) is 1.860. Therefore Null hypothesis H_0 is accepted and H_1 is rejected. In other words, there is no significant difference between mean ratios of total interest earned to total working fund ratio of Nabil & NIBL.

4.2.3 Trend Analysis and Projection of Next 5 Years

The purpose of this topic is to analyze the trend of deposit utilization of Nabil & NIBL. To utilize deposits, a commercial bank may grant loan and advances and investment in government securities and share and debentures of other companies. Under this topic, trend of deposit, loan and advances, total investment and net profit are analyzed for five years (study period) and forecasted for next years. The projections are based on the following assumptions:

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

4.2.3.1 Trend Analysis of Total Deposits

Under this topic, an effort has been made to analyze the trend value of deposit of Nabil & NIBL for 5 years from 2062/63 to 2066/67 and forecast for the same for next 5 years from the year 2067/68 to 2071/72.

The following table shows the trend value of deposit for 10 years from 2062/63 to 2071/72 of Nabil & NIBL.

Table 4.32
Trend value of Total Deposit of Nabil & NIBL

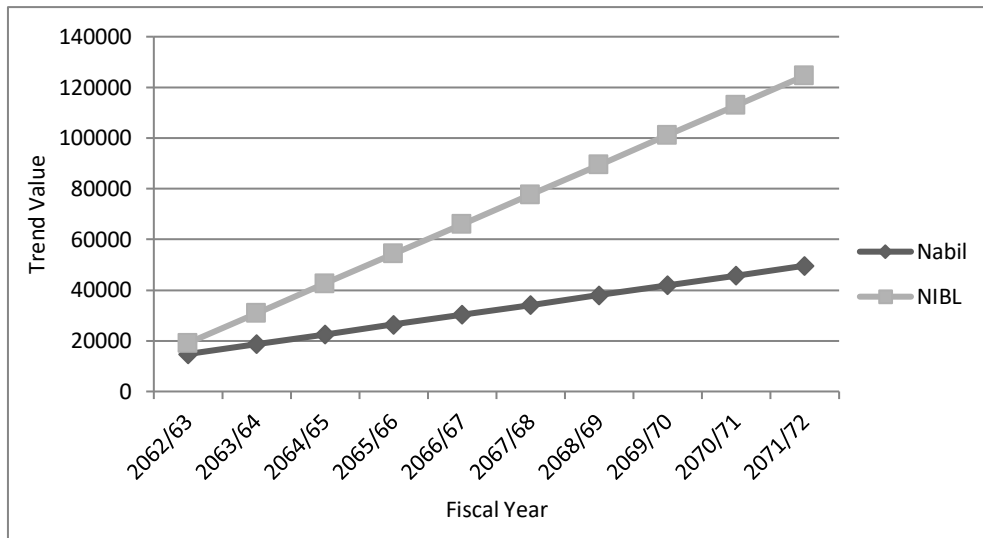
Fiscal Year	Trend Values of Nabil	Trend Values of NIBL
2062/63	14788.24	19144.69
2063/64	18661.55	30863.34
2064/65	22534.86	42581.99
2065/66	26408.17	54300.64
2066/67	30281.48	66019.29
2067/68	34154.79	77737.94
2068/69	38028.10	89456.59
2069/70	41901.41	101175.24
2070/71	45774.72	112893.89
2071/72	49648.03	124612.54

Source: Annex -27

The above table shows that the deposits of both banks are in increasing trend. If other things remain same, the total deposit of Nabil will be 49648.03 million by the F/Y 2071/72 which is the highest during the review period. Same way, deposits of NIBL is also in increasing trend & the deposit could reach upto 124612.54 million by the F/Y 2071/72, if other things remain same. However NIBL having better growth rate, it could raise its deposit to more than that of Nabil by F/Y 2071/72.

Figure 4.23

Trend Value of Total Deposit of Nabil & NIBL



4.2.3.2 Trend Analysis of Loan and Advances

Under this topic, an analysis of the trend values of loan and advances of Nabil & NIBL for 5 years from 2062/63 to 2066/67 and forecast the same for next 5 years from the year 2067/68 to 2071/72 is done.

The table below shows the trend value of loan and advances for 10 years from 2062/63 to 2071/72 of Nabil & NIBL.

Table 4.33

Trend Value of Loan and Advances of Nabil & NIBL

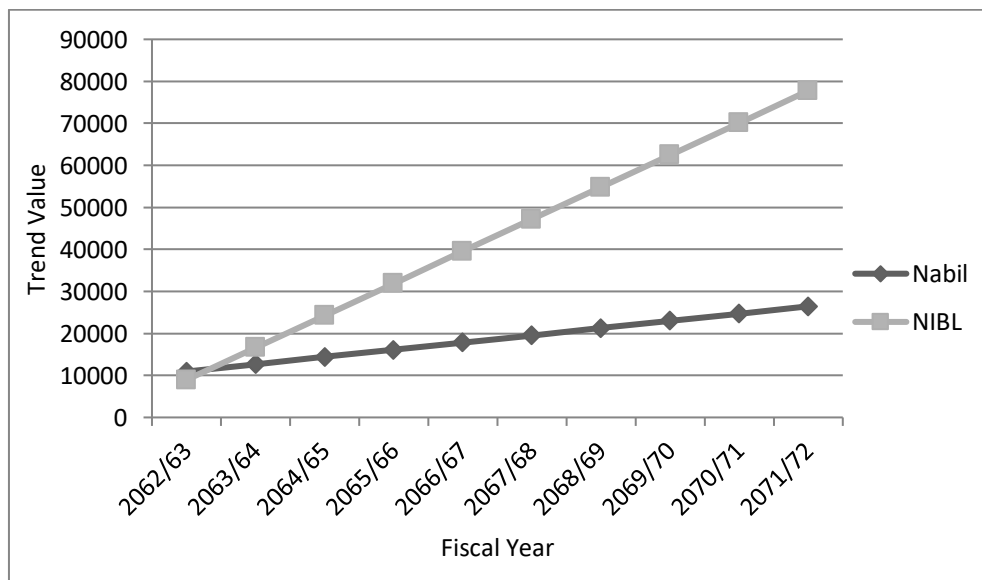
Fiscal Year	Trend Values of Nabil	Trend Values of NIBL
2062/63	10928.45	8942.86
2063/64	12653.22	16590.57
2064/65	14378.09	24238.28
2065/66	16102.91	31885.99
2066/67	17823.73	39533.70
2067/68	19552.55	47181.41
2068/69	21277.37	54829.12
2069/70	23002.19	62476.83
2070/71	24727.01	70124.54
2071/72	26451.83	77772.25

Source: Annex -28

The above table shows the increasing trend of loan and advances of both the banks. If other things remain the same, the loan and advances of Nabil will be 26451.83 million in the F/Y2071/72 which is the highest loan and advance during the study period. Similarly, NIBL will be having loan and advances of 77772.25 million by the F/Y 2071/72. NIBL growth rate is better than that of Nabil & hold a strong position from the third year onwards of study & review. It is seen that NIBL is in better position in mobilizing the deposits on Loan & Advances in comparison to Nabil.

Figure 4.24

Trend Value of Loan and Advances of Nabil & NIBL



4.2.3.3 Trend Analysis of Total Investment

Under this topic, an analysis of the trend values of total investment of Nabil & NIBL for 5 years from 2062/63 to 2067/68 and forecast for the same for next 5 years from the year 2068/69 to 2071/72 is done.

The following table shows the trend value of total investment for 10 years from 2068/69 to 2071/72 of Nabil & NIBL.

Table 4.34

Trend Value of Total Investment of Nabil & NIBL

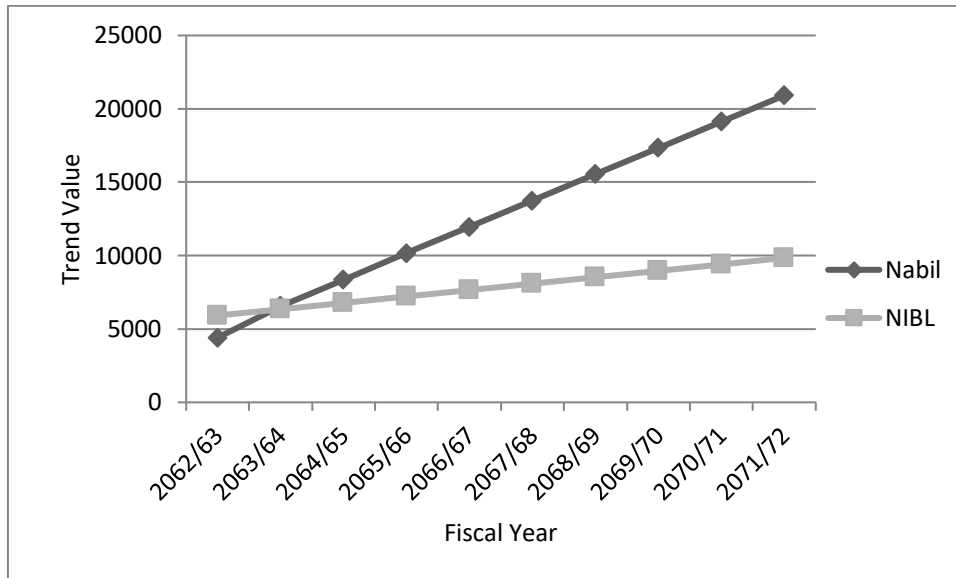
Fiscal Year	Trend Values of Nabil	Trend Values of NIBL
2062/63	4411.934	5921.18
2063/64	6567.45	6357.12
2064/65	8362.96	6793.056
2065/66	10158.47	7229.00
2066/67	11953.98	7664.94
2067/68	13749.49	8100.88
2068/69	15545.00	8536.82
2069/70	17340.51	8972.76
2070/71	19136.02	9408.7
2071/72	20913.53	9844.64

Source: Annex -29

From the above table, it is clear that the investment of both the banks is in increasing trend from the very beginning of the study period till the year of review. If other things remain same, the total investment of Nabil could reach upto 20913.53 Million by F/Y 2071/72 whereas NIBL could raise its total investment upto 9844.64 million during the same period. Here also, it is seen that the growth rate of NIBL is higher than that of Nabil. With lower position from the F/Y 2062/63 till F/Y 2071/72, if other things remain same. The figure below describes the progress of both the banks in terms of investment.

Figure 4.25

Trend Value of Total Investment of Nabil & NIBL



4.2.3.4 Trend Analysis of Net Profit

Under this topic, the trend values of net profit of Nabil & NIBL for 5 years from 2062/63 to 2067/68 have been calculated and forecast for the same for the next 5 years from the year 2068/69 to 2071/72

The following table shows the trend value of net profit for 10 years from 2068/69 to 2071/72 of Nabil & NIBL.

Table 4.35

Trend Value of Net Profit of Nabil & NIBL

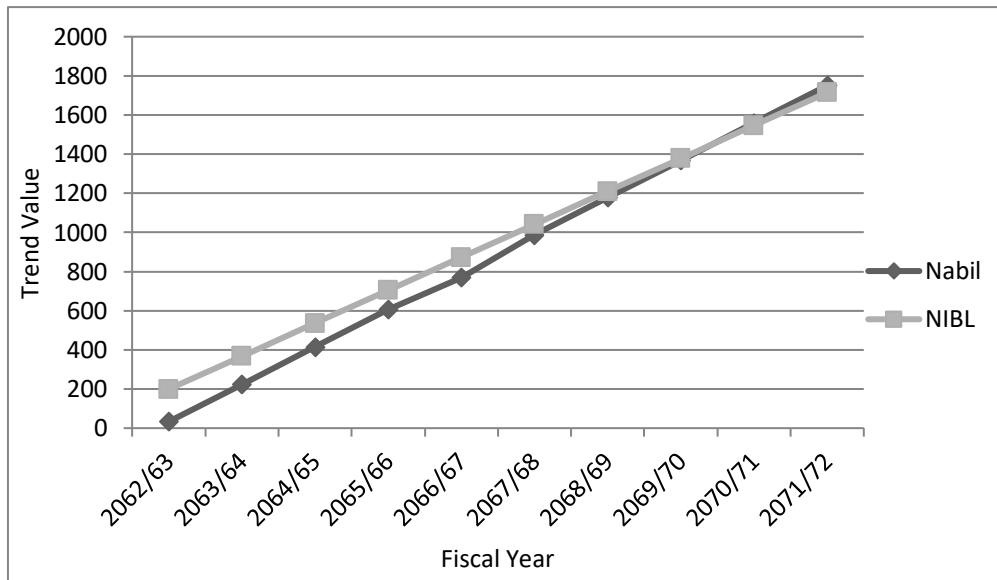
Fiscal Year	Trend Values of Nabil	Trend Values of NIBL
2062/63	33.21	199.66
2063/64	224.04	367.97
2064/65	414.87	536.28
2065/66	605.70	704.59
2066/67	769.53	872.90
2067/68	987.36	1041.21
2068/69	1178.19	1209.52
2069/70	1369.02	1377.83
2070/71	1559.85	1546.14
2071/72	1750.68	1714.45

Source: Annex -30

The above Table shows that the trend value of net profit of both banks Nabil & NIBL is in increasing trend. If other things remain same, the net profit of Nabil & NIBL could reach up to 1750.68 Million & 1714.45 Million respectively by F/Y 2071/72. However, the growth ratio of NIBL is better than that of Nabil. The figure below also shows that the gap between the two lines is getting narrower every year due to better progress of NIBL.

Figure 4.26

Trend Value of Net Profit of Nabil & NIBL



4.3 Major Findings of the Study

The major findings of the study are derived on the analysis of financial data of Nabil & NIBL, which are given below.

4.3.1 Liquidity Ratio

The liquidity position of Nabil & NIBL reveals that:

- The mean current ratio of NIBL is higher than Nabil. It means NIBL has maintained the higher liquidity in compare to Nabil. Similarly, NIBL is high consistent than Nabil.
- The mean cash & bank balance to total deposit ratio of Nabil is less than NIBL which states that the cash & bank balance in liquidity position of Nabil is no good in compare to NIBL. Likewise, NIBL seems more consistent in cash & bank balance to total deposit ratio than Nabil.

- The mean cash & bank balance to current assets ratio of Nabil is lower than NIBL which states that the cash & bank balance in liquidity position of Nabil is not good in compare to NIBL. Likewise, the cash & bank balance to current assets ratio of NIBL is more consistent than Nabil.
- The mean ratio of investment on government securities to current assets ratio of Nabil is higher than NIBL which states that the liquidity position of Nabil is better in compare to NIBL. Likewise, Nabil is more consistent than NIBL in this aspect.
- The mean ratio of loan and advances to current assets ratio of Nabil is lower than NIBL which states that the liquidity position of Nabil is not good in compare to NIBL. Likewise, Nabil is more consistent than NIBL in this aspect.

The above findings show that the liquidity position of Nabil is not good in respect to NIBL. Nabil should improve its liquidity position to meet the current obligations.

4.3.2 Assets Management Ratio

From the analysis on Assets Management Ratio done before, it is revealed that:

- The mean ratio of loan and advances to total deposit of Nabil is less than NIBL & Nabil's ratio also seems to be less stable and high consistent than that of NIBL due to less C.V.
- The mean ratio of total investment to total deposit of Nabil is greater than NIBL but Nabil's ratio seems more stable & less consistent than that of NIBL.
- The mean ratio of loan and advances to total working fund of Nabil is lower than NIBL & Nabil's ratio is more consistent than that of NIBL.
- The mean ratio of investment on government securities to total working fund of Nabil is higher, its ratio is high stable and more consistent than that of NIBL.
- The mean ratio of investment on share & debentures to total working fund of Nabil is less & less stable & but high consistent than that of NIBL.

From the above findings, it can be concluded that Nabil has tried to manage its assets in various ways but still it needs improvement to exist in the competition. Nabil should take the initiative to proper utilization of assets in various profitable sectors. Same way, NIBL is also not in satisfied position regarding it's on – balance activities.

It should formulate the definite policy to manage the assets to sustain in this competitive business market.

4.3.3 Profitability Ratios

The analysis of profitability ratios of Nabil & NIBL reveals that:

- The mean ratio of return on total working fund of Nabil is less & its ratio is less stable & consistent than NIBL.
- The mean ratio of return on investment of NIBL is much higher but its ratio is more stable & more consistent than Nabil.
- The mean ratio of return on loan and advances of Nabil is much higher & its ratio is more stable & less consistent than NIBL as well.
- The mean ratio of Earning per Share of NIBL is highly greater & its ratio is also stable & consistent in comparison to Nabil.
- The mean ratio of total interest earned to total working fund of NIBL is higher & Nabil is more consistent than NIBL as well.
- The mean ratio of total interest paid to total working fund of Nabil is lower & its ratio is very less stable & more consistent than NIBL.

From the above findings, it can be concluded that the profitability position of NIBL is very satisfactory than Nabil. NIBL shouldn't let down this position fall & shall maintain the same or better in future as well. However, Nabil shall develop the requisite policy to strengthen themselves in this aspect.

4.3.4 Risk Ratios

The analysis of risk ratios of Nabil & NIBL shows that:

- The mean credit risk ratio of Nabil is lower than that of NIBL & it is less stable in comparison to NIBL as well.
- The mean capital risk ratio of Nabil is much higher than that of NIBL but it is very higher stable in comparison to NIBL.

From the above findings, it is found that both risk ratios of Nabil is lower than that of NIBL. It is in a better position but shouldn't be careless about the risk to come in the future days. However, NIBL should be careful & take steps toward lowering the risk.

4.3.5 Growth Ratio

Growth ratio analysis between different variables of Nabil & NIBL reveals that:

- Growth rate of deposit Nabil is too less than that of NIBL. So it is recommended that it should increase its deposit collection. It needs to plan & develops different schemes to collect more deposit. Likewise increasing interest rate, insurance policy, decrease bank loan interest.
- Growth rate of loan and advance of Nabil is too less that of NIBL. So it is recommended that it should increase its loan and advance by reducing bank credit policies, loan interest rate.
- Growth rate of total investment of Nabil is (24.51%) too high than that of NIBL (6.95%). It indicated that the performance of to grant investment is better than of NIBL.
- Growth rate of net profit is high than that of NIBL. It indicated that the Nabil has successful to earn more profit than of NIBL.

4.3.6 Coefficient of Correlation Analysis

Coefficient of correlation analysis between different variables of Nabil & NIBL reveals that:

- It is found that there is significant relationship between deposit and total investment in case of both the banks. Moreover, the value of coefficient of correlation between deposits and total investment of Nabil is lower which indicates the poor position in mobilizing deposits as total investment in compare to NIBL.
- It is found that there is significant relationship between deposit and loan and advances in case of both the banks. Moreover, the value of coefficient of correlation between deposits and loan and advances of Nabil is high which indicates the high position in mobilizing deposits as loans & advances in compare to NIBL.
- The value of coefficient of correlation between total investment and net profit of Nabil is quite lower than that of NIBL which shows the weak position of Nabil with respect to NIBL. However both the banks show the significant relationship between two variables.

- It is found that there is significant relationship between loan and advances and net profit in case of both the banks. Moreover, the value of coefficient of correlation between loans and advances and net profit of Nabil is slightly lower which indicates the poor position in earning net profit as loans & advances in compare to NIBL.

From the above findings, we could conclude that Nabil is in weaker position in compare to performance of NIBL in those aspects. Nabil should formulate the appropriate policy to improve in the coming days.

4.3.7 Test of Hypothesis

By analyzing the test of significant difference of regarding the parameter of the population, it is found that:

- There is no significant difference between mean ratios of loan and advances to total deposit of Nabil & NIBL.
- There is significant difference between mean ratios of total investment to total deposit of Nabil & NIBL.
- There is no significant difference between mean ratios of return on loan and advances of Nabil & NIBL.
- There is no significant difference between mean ratios of return on investment of Nabil & NIBL.
- There is no significant difference between mean ratios of total interest earned to total working fund ratio of Nabil & NIBL.

From the above findings, it is known that there is significant relationship between all the calculated mean ratios accept in mean ratios of loan and advances to total deposit ratio of Nabil & NIBL.

4.3.8 Trend Analysis

Trend Analysis of total deposit, loan and advances, total investment and net profit and projection for the next 5 years of Nabil & NIBL reveals that:

- Trend value of total deposit of both banks is increasing. However, increasing trend of NIBL is better than that of Nabil. The trend value of deposit of Nabil by

F/Y 2071/72 will 49648.03 be million whereas NIBL will stand at 124612.54 million.

- Trend value of loan and advances of both banks is increasing. However, increasing trend of NIBL is better than that of Nabil. The trend value of loan and advances of Nabil by F/Y 2071/72 will be 26451.83 million whereas NIBL will stand at 77772.25 million.
- Trend value of total investment of both banks is increasing. However, increasing trend of is Nabil better than that of NIBL. The trend value of total investment of Nabil by F/Y 2071/72 will be 20931.53 million whereas NIBL will stand at 9844.64 million.
- Trend value of net profit of both banks is increasing. However, increasing trend of Nabil is better than that of NIBL. The trend value of net profit of Nabil by F/Y 2071/72 will be 1750.68 million whereas NIBL will stand at 1714.45 million.

From the above findings, it can be concluded that, though both the banks has increasing trend value in total deposit, loan and advances, total investment and net profit, NIBL increasing ratio is higher which shows the proficiency of NIBL in those aspects.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter highlights some selected actionable conclusions and recommendations on the basis of the main findings, which are derived from the analysis of Nabil & NIBL. In order to carry out this study, data have been basically obtained from secondary sources. The analysis is done with the help of financial & statistical tools & analysis is associated with comparison and interpretation. Under financial analysis, various financial ratios related to the investment function of commercial banks; Liquidity ratio, assets management ratio, profitability ratio and risk ratio and under statistical analysis, some relevant statistical tools; coefficient of correlation, trend analysis and test of hypothesis are used.

5.1 Summary

In this study, the financial tools ratio analysis viz. liquidity ratio, asset management ratio, profitability ratio, risk ratio and statistical tools like mean, standard deviation, coefficient of variation, coefficient of correlation, test of hypothesis and trend analysis have been used for the analysis and interpretation of the data. The data which were employed in the research are secondary in nature. They are obtained from the annual reports of the concerned banks. Likewise, the financial statements of 5 years beginning from F/Y 2062/63 till F/Y 2066/67 were selected for the purpose of evaluation.

Since, the liquidity position of Nabil have not found satisfactory. It is therefore suggested them to improve the Cash and Bank Balance to meet current obligations. Nabil's Loan and Advance to Total Deposit Ratio is slightly higher than NIBL and profitability position of Nabil is also lower than NIBL, it is therefore recommended to follow liberal lending policy for enhancement of fund mobilization. Although assets management position of Nabil is found better than that of NIBL, it should maintain the same environment as well as shall find some more profitable sector to invest their assets. Risk ratio of Nabil is lower than NIBL, however Nabil shall not leave their care towards maintaining the same risk ratios or lower in coming days. The

relationship between various variable under coefficient of correlation analysis is found to be significant, however, NIBL's position is better in this aspect.

5.2 Conclusion

Economic liberalization policy of the government has encouraged the establishment and growth of commercial banks in the country within short span of time. In a situation when the existing financial institutions, especially government's commercial banks were unable to supply credit timely and carry capital market activities, private joint venture banks have contributed a lot.

The overall performance to joint venture commercial banks is satisfactory and Nepal Rastra Bank to play more active role to enhance the operation. The analysis of liquidity position of the banks under study is found to be satisfactory. Nabil has lower liquidity position than that of NIBL. The profitability position, lending and investment activities of Nabil have lower position whereas NIBL's position is also not satisfactory. The asset management position of Nabil is higher than that of NIBL. The coefficient of correlation of deposit and loan and advances of Nabil is better than NIBL. Other coefficient of correlation analysis shows the Nabil in weaker position. In case of trend analysis, both the banks has increasing trend value in total deposit, loan and advances, total investment and net profit, NIBL increasing ratio is higher which shows the proficiency of NIBL in those aspects.

Strengthening and the institutionalization of the commercial banks is very important to have meaningful relationship between commercial banks and national development through shift of credit to the productive industrial sector. At the same time the series of reforms such as consolidation of commercial banks, directing attention to venture capital financing, appropriate risk return trade off by linking credit to timely repayment schedules, avoiding imperfections, allowing flexibility in lending, need of strong supervision and monitoring from NRB, and diversify scope of activities for commercial banks, professional culture within commercial banks etc. All are necessary to ensure better future performance of commercial banks that have already been established and growing in Nepal.

The commercial banks have to prove that they can really contribute to the national economy, are efficient and viable agencies for mobilization of saving and its channelization into productive sectors, are professionally managed and competent enough to ensure adequate rate of return on investment and are strategically well planned to be competitive with other agencies and are trust worthy.

5.3 Recommendations

On the basis of analysis and findings of the study, following recommendations can be advised to overcome weakness, inefficiency and to improve present fund mobilization and investment of Nabil & NIBL.

- The liquidity position of a bank may be affected by external as well as internal factors. The affecting factors may be interest rates, supply and demand position of loan and advances as well as savings, investment situations, central bank's directives, the lending policies, capability of management, strategic planning and funds flow situations. As Nabil has maintained the ratios of Cash & Bank Balance to Current Assets considerably lower than that of NIBL and Nabil's Cash & Bank Balance to Total Deposit is higher than NIBL, Nabil is recommended to increase the cash and bank balance to meet current obligations and loan demand.
- To get the success in competitive banking environment, depositors' money must be utilized as loan and advances. It has been found from the study that NIBL has greater ratio than Nabil, because its large portions of fund invested as loan and advances and negligence to invest in other sectors. Nabil has not properly used their existing funds as loan and advances. To overcome this situation, Nabil is strongly recommended to follow liberal lending policy.
- As a private commercial bank, it cannot keep their eyes closed from profit motive. They should be careful in increasing profit in real sense to maintain the confidence of shareholder, depositors and its all customers. NIBL's profitability to utilize risky assets and shareholder's fund to gain highest profit margin. Similarly, it should reduce expenses and should try to collect cheap fund being more profitable.
- Through the Government Securities issued by the government are considered to be free of risk, such securities yield the lowest interest rate of particular maturity

due to low risk feature. NIBL to use the idle funds to invest in government securities.

- Out of working fund, Nabil has more return of investment. So, its more fund as total investment in comparison to NIBL. Therefore, it is recommended to NIBL to invest their funds more in different types of companies in different sectors & areas.
- Portfolio condition of the banks should be examined carefully from time to time and attention should be made to maintain equilibrium in the portfolio condition as far as applicable. As it is said “*All eggs should not be kept in the same basket*”, the bank should make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize their investment portfolio.
- In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool of attracting and retaining customers. For this purpose, the banks should develop an “*Innovative approach to Bank marketing*” and formulate new strategies of serving the customers in a more convenient and satisfactory way.

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ANNEXURE

Annex -1

Current Assets & Current Liabilities of Nabil & NIBL

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Current Assets	Nabil	14971.80	18133.81	22829.53	29557.95	30156.85
	NIBL	21388.63	20325.71	27751.45	44550.24	54875.09
Current Liabilities	Nabil	15298.56	20352.55	25095.29	22844.53	23189.18
	NIBL	8359.45	12506.96	14488.95	19229.21	24855.18
Ratio(%)	Nabil	0.98	0.89	0.91	1.29	1.30
	NIBL	2.56	1.62	1.91	2.32	2.21

Annual Report of Nabil Bank & NIBL Bank

Annex- 2

Cash & Bank Balance and Total Deposit of Nabil & NIBL

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Cash & Bank Balance	Nabil	559.38	630.24	1399.83	3016.83	1428.52
	NIBL	2335.52	2145.34	3284.48	6244.59	8140.37
Total Deposit	Nabil	14586.60	19347.40	23342.28	23342.30	31955.70
	NIBL	18927.31	24415.13	40249.40	79180.0	50138.122
Ratio(%)	Nabil	3.83	3.26	6.00	12.92	4.470
	NIBL	12.33	8.786	8.16	7.88	16.23

Annual Report of Nabil Bank & NIBL Bank

Annex- 3

Cash and Bank Balance and Current Assets of Nabil & NIBL

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Cash & Bank Balance	Nabil	559.38	630.24	1399.83	3016.83	1428.52
	NIBL	2335.52	2145.34	3284.48	6244.59	8140.37
Current Assets	Nabil	14971.80	18133.81	22829.53	29557.95	30156.85
	NIBL	21388.63	20325.71	27751.45	44550.24	54875.09
Ratio(%)	Nabil	3.74	3.48	6.13	10.21	4.74
	NIBL	10.91	10.95	11.83	14.01	14.83

Annual Report of Nabil Bank & NIBL Bank

Annex- 4**Investment on Government Securities and Current Assets of Nabil & NIBL**

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Inv. On Govt. Securities	Nabil	3588.77	3672.63	2413.94	2301.46	4808.35
	NIBL	2522.300	35.25	54.54	7399.81	7399.81
Current Assets	Nabil	14971.80	18133.81	22829.53	29557.95	30156.85
	NIBL	21388.63	20325.71	27751.45	44550.24	54875.09
Ratio(%)	Nabil	23.97	20.25	10.57	7.78	15.94
	NIBL	11.79	0.173	0.19	16.61	13.48

*Annual Report of Nabil Bank & NIBL Bank***Annex- 5****Loan and Advances to Current Assets of Nabil & NIBL**

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Loan and Advances	Nabil	10586.17	12922.54	15545.78	14400.87	18453.09
	NIBL	13178.15	17769.09	27529.31	36827.16	41887.69
Current Assets	Nabil	14971.80	18133.81	22829.53	29557.95	30156.85
	NIBL	21388.63	20325.71	27751.45	44550.24	54875.09
Ratio(%)	Nabil	70.71	71.26	68.10	48.72	61.19
	NIBL	61.61	87.42	99.19	82.66	76.33

*Annual Report of Nabil Bank & NIBL Bank***Annex - 6****Loan and Advances and Total Deposit of Nabil & NIBL**

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Loan and Advances	Nabil	10586.17	12922.54	15545.78	14400.87	18453.09
	NIBL	13178.15	17769.09	27529.31	36827.16	41887.69
Total Deposit	Nabil	14586.60	19347.40	23342.28	23342.30	31955.70
	NIBL	18927.31	24415.13	40249.40	79180.0	50138.122
Ratio(%)	Nabil	72.57	66.79	66.60	61.69	57.76
	NIBL	69.62	72.78	68.39	46.51	83.54

Annual Report of Nabil Bank & NIBL Bank

Annex- 7

Total Investment and Total Deposit of Nabil & NIBL

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Total Investment	Nabil	4275.52	6178.53	8945.31	12140.24	10275.23
	NIBL	5672.860	6540.93	6928.57	7399.81	7423.11
Total Deposit	Nabil	14586.60	19347.40	23342.28	23342.30	31955.70
	NIBL	18927.31	24415.13	40249.40	79180.0	50138.122
Ratio(%)	Nabil	29.31	31.93	38.32	52.01	32.19
	NIBL	29.97	26.79	17.21	9.34	14.80

Annual Report of Nabil Bank & NIBL Bank

Annex- 8

Loan and Advances to Total Working Fund of Nabil & NIBL

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Loan & Advances	Nabil	10586.17	12922.54	15545.78	14400.87	18453.09
	NIBL	13178.15	17769.09	27529.31	36827.16	41887.69
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	61.60	57.87	57.04	47.98	61.33
	NIBL	60.63	148.57	103.98	84.16	70.82

Annual Report of Nabil Bank & NIBL Bank

Annex- 9

Investment in Govt. Securities & Total Working Fund of Nabil & NIBL

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Inv in Govt. Securities	Nabil	3588.77	3672.63	2413.94	2301.46	4808.35
	NIBL	2522.300	35.25	545.40	7399.81	7399.81
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	20.88	16.45	8.86	7.67	15.98
	NIBL	11.61	0.29	2.06	16.91	12.51

Annual Report of Nabil Bank & NIBL Bank

Annex- 10**Investment on Share & Debentures & Total Working Fund of NABIL & NIBL**

(Rs .in Million)

Etails	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Inv on Share & Debentures	Nabil	27.36	21.25	109.98	286.86	323.24
	NIBL	1415.44	17.74	35.25	545.4	4061.37
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	0.16	0.10	0.40	0.96	1.07
	NIBL	6.51	0.15	0.13	0.12	6.86

*Annual Report of Nabil Bank & NIBL Bank***Annex- 11****Return on Total Working Fund of Nabil & NIBL**

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Net Profit	Nabil	145.86	193.47	233.42	609.69	891.90
	NIBL	232.150	350. 53	501.398	696.73	900.62
Total Deposit	Nabil	14586.60	19347.40	23342.28	23342.30	31955.70
	NIBL	18927.31	24415.13	40249.40	79180.0	50138.122
Ratio(%)	Nabil	0.85	0.87	0.86	2.03	2.96
	NIBL	1.07	2.93	1.89	1.59	1.52

*Annual Report of Nabil Bank & NIBL Bank***Annex- 12****Return on Investment of Nabil & NIBL**

(Rs .in million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Net Profit	Nabil	145.86	193.47	233.42	609.69	891.90
	NIBL	232.150	350.53	501.398	696.73	900.62
Total Investment	Nabil	4275.52	6178.53	8945.31	12140.24	10275.23
	NIBL	5672.860	6540.93	6928.57	7399.81	7423.11
Ratio(%)	Nabil	2.41	3.13	2.61	5.022	8.68
	NIBL	4.09	5.36	7.24	9.42	12.13

Annual Report of Nabil Bank & NIBL Bank

Annex- 13**Return on Loan and Advances of Nabil & NIBL**

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Net Profit	Nabil	145.86	193.47	233.42	609.69	891.90
	NIBL	232.150	350.53	501.398	696.73	900.62
Loan & Advances	Nabil	10586.17	12922.54	15545.78	14400.87	18453.09
	NIBL	13178.15	17769.09	27529.31	36827.16	41887.69
Ratio(%)	Nabil	1.38	1.40	1.50	4.23	4.83
	NIBL	1.76	1.97	1.82	1.89	2.15

*Annual Report of Nabil Bank & NIBL Bank***Annex- 14****Earning Per Share of Nabil & NIBL**

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Net Profit	Nabil	145.86	193.47	233.42	609.69	891.90
	NIBL	232.150	350.53	501.398	696.73	900.62
No. of outstanding share	Nabil	1314	1481.68	1657.63	1875.00	2057.05
	NIBL	638.54	729.05	1180.17	1415.45	1878.12
Ratio(%)	Nabil	11.10	13.06	14.08	32.52	43.35
	NIBL	36.36	48.08	42.48	49.22	47.95

*Annual Report of Nabil Bank & NIBL Bank***Annex- 15****Total Interest earned to Total Working Fund of Nabil & NIBL**

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
T. interest earned	Nabil	1068.90	1310.78	1588.87	165.955	2133.87
	NIBL	681.79	2194.275	2194.275	3267.941	5803.44
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	6.22	5.87	5.83	5.53	7.09
	NIBL	3.14	18.35	8.29	7.47	9.81

Annual Report of Nabil Bank & NIBL Bank

Annex- 16

Total Interest Paid to Total Working Fund of Nabil & NIBL

(Rs .in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
T. interest paid	Nabil	244.04	375.28	555.97	445.07	529.722
	NIBL	490.995	992.158	992.158	1686.97	3620.34
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	1.42	1.60	2.04	1.48	1.76
	NIBL	2.26	8.29	3.75	3.85	6.12

Annual Report of Nabil Bank & NIBL Bank

Annex- 17

Credit Risk Ratio of Nabil & NIBL

(Rs. in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Loan & Advances	Nabil	10586.17	12922.54	15545.78	14400.87	18453.09
	NIBL	13178.15	17769.09	27529.31	36827.16	41887.69
Total W. Fund	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	61.60	57.87	57.04	47.98	61.34
	NIBL	60.64	103.98	148.57	61.31	70.82

Annual Report of Nabil Bank & NIBL Bank

Annex- 18

Table 18; Credit Risk Ratio of Nabil & NIBL

(Rs. in Million)

Details	Bank	2062/63	2063/64	2064/65	2065/66	2066/67
Capital	Nabil	491.65	491.65	491.65	491.65	491.65
	NIBL	406.14	406.14	406.14	406.14	406.14
Weighted Assets(T.A)	Nabil	17186.33	22329.97	27253.39	30013.12	30083.68
	NIBL	21732.08	11959.85	26474.29	43757.92	59149.01
Ratio(%)	Nabil	2.86	2.20	1.80	1.64	1.63
	NIBL	1.87	3.40	1.53	0.93	0.69

Annual Report of Nabil Bank & NIBL Bank

Annex - 19

Sample Calculation of Growth Rate of Investment

(Rs. in Million)

Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth Ratio%
Nabil	4275.52	6178.53	8945.31	12140.24	10275.23	24.51%
NIBL	5672.860	6540.93	6928.57	7399.81	7423.11	6.95%

NABIL

Here,

$$D^{67}=10275.23$$

$$D^{63}=4275.52$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 10275.23 = 4275.52(1+g)^{5-1}$$

$$\text{Or } 10275.23 = 4275.52(1+g)^4$$

$$\text{Or } (2.4033)^{1/4} = (1+g)$$

$$\text{Or } 1.2451 = (1+g)$$

$$\text{Or } g = 24.51 \%$$

NIBL

Here,

$$D^{67}=7423.107$$

$$D^{63}= 5672.860$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 7423.107 = 5672.860(1+g)^{5-1}$$

$$\text{Or } (1.3085)^{1/4} = (1+g)$$

$$\text{Or } 1.06953 = (1+g)$$

$$\text{Or } g = 6.95 \%$$

Annex - 20

Sample Calculation of Growth Rate of Total Deposit

(Rs. in Million)

Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth Ratio%
Nabil	14586.60	19347.40	23342.28	23342.30	31955.70	21.66%
NIBL	18927.31	24415.13	40249.40	79180.0	50138.122	27.57%

NABIL

Here,

$$D^{67}=31955.70$$

$$D^{63}=145860.60$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 31955.70=145860.60 (1+g)^{5-1}$$

$$\text{Or } 10275.23 =4275.52(1+g)^4$$

$$\text{Or } (2.19075)^{1/4} = (1+g)$$

$$\text{Or } 1.2166 = (1+g)$$

$$\text{Or } g = 21.66 \%$$

NIBL

Here,

$$D^{67}=50138.12$$

$$D^{63}=18927.31$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 50138.12 =18927.31 (1+g)^{5-1}$$

$$\text{Or } (2.6489)^{1/4} = (1+g)$$

$$\text{Or } 1.2757 = (1+g)$$

$$\text{Or } g = 27.57 \%$$

Annex - 21

Sample Calculation of Growth Rate of Loan & Advances

(Rs. in Million)

Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth Ratio%
Nabil	10586.17	12922.54	15545.78	14400.87	18453.09	14.95%
NIBL	13178.15	17769.09	27529.31	36827.16	41887.69	33.52%

NABIL

Here,

$$D^{67}=18453.09$$

$$D^{63}=10568.17$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 18453.09 = 10568.17(1+g)^{5-1}$$

$$\text{Or } (1.7461)^{1/4} = (1+g)$$

$$\text{Or } 1.1495 = (1+g)$$

$$\text{Or } g = 14.95 \%$$

NIBL

Here,

$$D^{67}=41887.69$$

$$D^{63}=13178.15$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 41887.69 = 13178.15(1+g)^{5-1}$$

$$\text{Or } (3.1785)^{1/4} = (1+g)$$

$$\text{Or } 1.3352 = (1+g)$$

$$\text{Or } g = 33.52 \%$$

Annex - 22

Sample Calculation of Growth Rate of Net Profit

(Rs. in Million)

Year	2062/63	2063/64	2064/65	2065/66	2066/67	Growth Ratio%
Nabil	145.86	193.47	233.42	609.69	891.90	57.25%
NIBL	232.15	350.53	501.39	696.73	900.62	40.34%

NABIL

Here,

$$D^{67}=900.62$$

$$D^{63}=232.150$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 900.62 = 232.15(1+g)^{5-1}$$

$$\text{Or } (3.8795)^{1/4} = (1+g)$$

$$\text{Or } 1.4034 = (1+g)$$

$$\text{Or } g = 40.34 \%$$

NIBL

Here,

$$D^{67}=891.90$$

$$D^{63}=145.86$$

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

$$D^{67} = D^{63}(1+g)^{n-1}$$

$$\text{Or } 891.90 = 145.86(1+g)^{5-1}$$

$$\text{Or } (6.3170)^{1/4} = (1+g)$$

$$\text{Or } 1.5725 = (1+g)$$

$$\text{Or } g = 57.25 \%$$

Annex - 23

Coefficient of Correlation between Deposits and Total Investment of NABIL

(Rs. in Million)

Year	Deposit(x)	Investment (y)	$X=x-\bar{x}$	$y-\bar{y}$	xy	X^2	y^2
2062/63	14586.60	4275.62	-7948.25	-8362.97	487279.64	63174678.06	16706430.02
2063/64	19347.40	6178.53	-3187.45	-2184.44	6962793.28	10159837.5	4771778.14
2064/65	23342.28	8945.31	807.43	582.34	470198.78	651943.20	339119.87
2065/66	339119.87	12140.24	807.45	3777.27	3049956.66	651975.50	14267768.65
2066/67	31955.70	10275.23	9420.85	1912.26	18015114.62	88752414.752	3656738.31
Total	112674.28	41814.83			60985342.98	163390849.00	39741834.99

$$\sum x = 112674.28$$

$$\sum y = 41814.83$$

$$\sum xy = 60985342.98$$

$$\sum x^2 = 163390849.00$$

$$\sum y^2 = 39741834.99$$

$$X = \frac{\sum x}{n} = \frac{112674.28}{5} = 22534.85$$

$$Y = \frac{\sum y}{n} = \frac{41814.83}{5} = 8362.97$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{60985342.98}{\sqrt{12782.44 \cdot 6304.11}} = 0.7568$$

$$r^2 = 0.5727$$

$$P.Er. = 0.6745 \times \frac{1-r^2}{\sqrt{N}} = \frac{0.4273}{\sqrt{5}} = 0.1289$$

$$= 6P.Er = 6 \times 0.1289 = 0.7733$$

Coefficient of Correlation Between Deposits and Total Investment of NIBL

(Rs. in Million)

Year	Deposit(x)	Investment (y)	X=x- \bar{x}	y- \bar{y}	Xy	X ²	y ²
2062/63	19827.31	5672.86	-23654.68	-1120.2	6497972.54	559543885.9	1254848.04
2063/64	24415.13	6540.93	-8166.86	-252.13	4580410.41	330034802.3	63569.54
2064/65	40249.40	6928.57	2339.59	135.51	-317037.84	5473681.38	18362.96
2065/66	79180.03	7399.81	36598.04	606.75	22205860.77	13394165.32	368/145.56
2066/67	50138.12	7423.11	7556.13	630.05	4760739.71	57095100.58	396963.00
Total	212909.99	33965.28			57727945.59	2291564002	2101889.10

$$\sum x = 212909.99$$

$$\sum y = 33965.28$$

$$\sum xy = 57727945.59$$

$$\sum x^2 = 2291564002$$

$$\sum y^2 = 2101889.10$$

$$X = \frac{\sum x}{n} = \frac{212909.99}{5} = 42581.99$$

$$Y = \frac{\sum y}{n} = \frac{33965.28}{5} = 6793.06$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{57727945.59}{\sqrt{2291564002 \cdot 2101889.10}} = 0.8318$$

$$r^2 = 0.6919$$

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

$$\text{or, } r = 0.6745 \times \frac{1-0.6919}{\sqrt{5}} = 0.09818 = 6P.Er = 6 * 0.09818 = 0.5891$$

Annex - 24

Coefficient of Correlation between Deposits and Loan & Advance of NABIL

(Rs. in Million)

Year	Deposit(x)	Loan & adv. (y)	$X=x-\bar{x}$	$y-\bar{y}$	xy	X^2	y^2
2062/63	14586.60	10568.17	-7948.25	-3809.92	30282196.64	63174678.06	14515490.41
2063/64	19347.40	12922.54	-3187.45	-1455.55	4639492.85	10159837.5	21186025.80
2064/65	23342.28	15545.78	807.43	1167.69	942827.94	651943.20	1363499.93
2065/66	339119.87	14400.87	807.45	22.78	18393.71	651975.50	518.92
2066/67	31955.70	18453.09	9420.85	4075.78	38395681.7	88752414.752	16611982.61
Total	11123674.28	71890.45			74278592.84	163390849.00	34610117.67

$$\sum x = 112674.28$$

$$\sum y = 71890.45$$

$$\sum xy = 74278592.84$$

$$\sum x^2 = 163390849.00$$

$$\sum y^2 = 34610117.67$$

$$X = \frac{\sum x}{n} = \frac{112674.28}{5} = 22534.85$$

$$Y = \frac{\sum y}{n} = \frac{71890.45}{5} = 14378.09$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{74278592.84}{\sqrt{163390849 \cdot 34610117.67}} = 0.9877$$

$$r^2 = 0.9756$$

$$\text{or, } r = 0.6745 \times \frac{1-0.9756}{\sqrt{5}} = 0.0074 = 6P.Er = 6 * 0.0074 = 0.0444$$

Coefficient of Correlation Between Deposits and Loan & Advance of NIBL

(Rs. in Million)

Year	Deposit (x)	Loan & adv. (y)	X=x- \bar{x}	y- \bar{y}	Xy	X ²	y ²
2062/63	18927.31	13178.15	-23654.68	-11060.13	261623835.9	559543885.9	203351307.6
2063/64	24415.13	17769.09	-8166.86	-6469.19	117524869	330034802.	93493235.26
2064/65	40249.40	27529.30	2339.59	3291.02	-7699637.48	5473681.38	8286.46
2065/66	79180.03	36827.16	36598.04	12588.88	460728333.8	13394165.32	8815067.65
2066/67	50138.12	41887.69	7556.13	17649.41	13361236.4	57095100.58	208785449.3
Total	212909.99	137191.39			965560886.2	2291564002	593789346.3

$$\sum x = 212909.99$$

$$\sum y = 137191.39$$

$$\sum xy = 965560886.2$$

$$\sum x^2 = 2291564002$$

$$\sum y^2 = 593789346.3$$

$$X = \frac{\sum x}{n} = \frac{212909.99}{5} = 42581.99$$

$$Y = \frac{\sum y}{n} = \frac{137191.39}{5} = 27438.28$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{965560886.2}{\sqrt{2291564002 \cdot 593789346.3}} = 0.8277$$

$$r^2 = 0.6852$$

$$\text{or, } r = 0.6745 \times \frac{1-0.6307}{\sqrt{5}} = 0.0949 = 6P.Er = 6 * 0.0949 = 0.5697$$

Annex - 25

Coefficient of Correlation between Total Investment and Net Profit of NABIL

(Rs. in Million)

Year	Investment (x)	(y)	$X=x-\bar{x}$	$y-\bar{y}$	xy	X^2	y^2
2062/63	4275.62	145.86	-8362.97	-304.13	1099538.02	16706430.02	72366.38
2063/64	6178.53	193.47	-2184.44	-185.75	483635.02	4771778.14	49017.96
2064/65	8945.31	233.42	582.34	-34.89	-105665.9	339119.87	32924.10
2065/66	12140.24	609.69	3777.27	160.45	7358874.74	14267768.65	37954.83
2066/67	10275.23	891.90	1912.26	364.34	913716.07	3656738.31	227557.62
Total	41814.83	2074.34			3127111.26	39741834.99	419820.89

$$\sum x = 41814.83$$

$$\sum y = 2074.34$$

$$\sum xy = 3127111.26$$

$$\sum x^2 = 39741834.99$$

$$\sum y^2 = 419820.89$$

$$X = \frac{\sum x}{n} = \frac{41814.83}{5} = 8362.97$$

$$Y = \frac{\sum y}{n} = \frac{2074.34}{5} = 414.87$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{3127111.26}{\sqrt{39741834.99 \cdot 419820.89}} = 0.7655$$

$$r^2 = 0.5861$$

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

$$\text{or, } r = 0.6745 \times \frac{1-0.5861}{\sqrt{5}} = 0.4139 = 6P.Er = 6 * 0.4139 = 0.7491$$

Coefficient of Correlation Between Total Investment and Net Profit of NIBL

(Rs. in Million)

Year	Investment (x)	Net profit (y)	X=x- \bar{x}	y- \bar{y}	Xy	X ²	y ²
2062/63	5672.86	232.15	-1120.2	-304.13	340686.43	1254848.04	92495.05
2063/64	6540.93	350.53	-252.13	-185.75	46833.15	63569.54	34503.06
2064/65	6928.57	501.39	135.51	-34.89	-4727.94	18362.96	1217.31
2065/66	7399.81	696.73	606.75	160.45	97353.04	368145.56	25744.20
2066/67	7423.11	900.62	630.05	364.34	229552.42	396963.00	132743.64
Total	33965.28	2681.42			709697.10	2101889.10	286703.26

$$\sum x = 33965.28$$

$$\sum y = 2681.42$$

$$\sum xy = 709697.10$$

$$\sum x^2 = 2101889.10$$

$$\sum y^2 = 286703.26$$

$$X = \frac{\sum x}{n} = \frac{33965.28}{5} = 6793.06$$

$$Y = \frac{\sum y}{n} = \frac{2681.42}{5} = 536.28$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{709697.10}{\sqrt{2101889.10 \cdot 286703.26}} = 0.9142$$

$$r^2 = 0.8358$$

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

$$\text{or, } r = 0.6745 \times \frac{1-0.8358}{\sqrt{5}} = 0.0495 = 6P.Er = 6 \times 0.0495 = 0.2972$$

Annex - 26

Coefficient of Correlation between Loan & Advance and Net Profit of Nabil

(Rs. in Million)

Year	Loan & adv.(x)	Net profit (y)	$X=x-\bar{x}$	$y-\bar{y}$	xy	X^2	y^2
2062/63	10568.17	145.86	-3809.92	-269.01	1024906.58	14515490.41	72366.38
2063/64	12922.54	193.47	-1455.55	-221.4	322258.78	21186025.80	49017.96
2064/65	15545.78	233.42	1167.69	-181.45	-211877.35	1363499.93	32924.10
2065/66	14400.87	609.69	22.78	194.82	4437.99	518.92	37954.83
2066/67	18453.09	891.90	4075.78	477.03	1944269.33	16611982.61	227557.62
Total	71890.45	2074.34			3083995.33	34610117.67	419820.89

$$\sum x = 71890.45$$

$$\sum y = 2074.34$$

$$\sum xy = 3083995.33$$

$$\sum x^2 = 34610117.67$$

$$\sum y^2 = 419820.89$$

$$X = \frac{\sum x}{n} = \frac{71890.45}{5} = 14378.09$$

$$Y = \frac{\sum y}{n} = \frac{2074.34}{5} = 414.87$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{3083995.33}{\sqrt{34610117.67 \cdot 419820.89}} = 0.8091$$

$$r^2 = 0.6546$$

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

$$\text{or, } r = 0.6745 \times \frac{1-0.6546}{\sqrt{5}} = 0.1042 = 6P.Er = 6 \cdot 0.1042 = 0.6252$$

Coefficient of Correlation between Loan & Adv. and Net Profit of NIBL

(Rs. in Million)

Year	Loan & adv. (x)	Net profit (y)	X=x- \bar{x}	y- \bar{y}	Xy	X ²	y ²
2062/63	13178.15	232.15	-14260.13	-304.13	4336933.34	203351307.6	92495.05
2063/64	17769.09	350.53	-9669.19	-185.75	1796052.04	93493235.26	34503.06
2064/65	27529.30	501.39	91.03	-34.89	-3176.04	8286.46	1217.31
2065/66	36827.16	696.73	9388.88	160.45	14605.76	8815067.65	25744.20
2066/67	41887.69	900.62	14449.41	364.34	5264498.04	208785449.3	132743.64
Total	137191.39	2681.42			11408913.15	593789346.3	286703.26

$$\sum x = 137191.39$$

$$\sum y = 2681.42$$

$$\sum xy = 11408913.15$$

$$\sum x^2 = 593789346.3$$

$$\sum y^2 = 286703.26$$

$$X = \frac{\sum x}{n} = \frac{137191.39}{5} = 27438.28$$

$$Y = \frac{\sum y}{n} = \frac{2681.42}{5} = 536.28$$

$$\text{Coefficient of correlation}(r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{11408913.15}{\sqrt{644989280.5 * 286703.26}} = 0.8044$$

$$r^2 = 0.7646$$

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

$$\text{or, } r = 0.6745 \times \frac{1-0.7646}{\sqrt{5}} = 0.0710 \quad = 6P.Er = 6 * 0.0710 = 0.4260$$

Annex - 27

Trend Analysis of Total Deposit of NABIL Bank

(Rs. in Million)

Year (t)	T. deposit(y)	X=t-2065	X²	Xy	y_c=a+bx
2062/63	14586.60	-2	4	-29173.20	14788.24
2063/64	19347.40	-1	1	-19347.40	18661.55
2064/65	23342.28	0	0	0	22534.86
2065/66	339119.87	1	1	23342.30	26408.17
2066/67	31955.70	2	4	63991.40	30281.48
Total	11123674.28		10	38733.10	

$$a = \frac{\sum y}{n} = \frac{11123674.28}{5} = 22534.86$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{38733.10}{10} = 3873.31$$

Trend Value in NABIL Bank Ltd. in 2068/69 to 20671/72

Year (t)	X=t-2065	y_c=a+bx
2062/63	3	34154.79
2063/64	4	38028.10
2064/65	5	41901.41
2065/66	6	45774.72
2066/67	7	49648.03
Total		

The eqⁿ Straight line trend is $y_c = a + bx$

$$y_c = 22534.86 + 3873.31x$$

Trend Analysis of Total Deposit of NIBL

(Rs. in Million)

Year (t)	T.deposit(y)	X=t-2065	X ²	XY	y _c =a+bx
2062/63	18927.31	-2	4	-37854.62	19144.69
2063/64	24415.13	-1	1	-24415.13	30863.34
2064/65	40249.40	0	0	0	42581.99
2065/66	79180.03	1	1	79180.03	54300.64
2066/67	50138.12	2	4	100276.24	66019.29
Total	212909.99		10	117186.52	

$$a = \frac{\sum y}{n} = \frac{212909.99}{5} = 42581.99$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{117186.52}{10} = 11718.65$$

Trend value in NIBL in 2068/69 to 20671/72

Year (t)	X=t-2065	y _c =a+bx
2062/63	3	77737.94
2063/64	4	89456.59
2064/65	5	101175.24
2065/66	6	112893.89
2066/67	7	124612.54
Total		

The eqⁿ Straight line trend is y_c=a+bx

$$y_c = 42581.99 + 11718.65x$$

Annex - 28

Trend Analysis of Loan& Advance of NABIL Bank

(Rs. in Million)

Year (t)	Loan & adv. (y)	X=t-2065	X²	xy	y_c=a+bx
2062/63	10568.17	-2	4	-21136.34	10928.45
2063/64	12922.54	-1	1	-12922.54	15653.27
2064/65	15545.78	0	0	0	14378.09
2065/66	14400.87	1	1	14400.87	16102.91
2066/67	18453.09	2	4	36906.18	17827.73
Total	71890.45		10	17248.17	

$$a = \frac{\sum y}{n} = \frac{71890.45}{5} = 14378.09$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{17248.17}{10} = 1724.817$$

Trend Value in NABIL Bank Ltd. in 2068/69 to 20671/72

Year (t)	X=t-2065	y_c=a+bx
2062/63	3	19552.55
2063/64	4	21277.37
2064/65	5	23002.19
2065/66	6	24727.01
2066/67	7	26451.83
Total		

The eqⁿ Straight line trend is $y_c = a + bx$

$y_c = +x$

Trend Analysis of Loan& Advance of NIBL

(Rs. in Million)

Year (t)	Loan & adv. (y)	X=t-2065	X ²	xy	y _c =a+bx
2062/63	13178.15	-2	4	-26356.30	8942.86
2063/64	17769.09	-1	1	-17769.09	16590.57
2064/65	27529.30	0	0	0	24238.28
2065/66	36827.16	1	1	36827.16	31558.99
2066/67	41887.69	2	4	83775.38	39533.7
Total	137191.39		10	76477.15	

$$a = \frac{\sum y}{n} = \frac{137191.39}{5} = 24238.28$$

$$b = \frac{\sum xy}{X^2} = \frac{76477.15}{10} = 7647.715$$

Trend value in NIBL in 2068/69 to 20671/72

Year (t)	X=t-2065	y _c =a+bx
2062/63	3	77737.94
2063/64	4	89456.59
2064/65	5	101175.24
2065/66	6	112893.89
2066/67	7	124612.54
Total		

The eqⁿ Straight line trend is y_c=a+bx

$$y_c = 24238.28 + 7647.715x$$

Annex - 29

Trend Analysis of Total Investment of NABIL Bank

(Rs. in Million)

Year (t)	T.Inv.(y)	X=t-2065	X²	Xy	y_c=a+bx
2062/63	4275.62	-2	4	-8557.04	4411.934
2063/64	6178.53	-1	1	-6178.53	6567.45
2064/65	8945.31	0	0	0	8362.96
2065/66	12140.24	1	1	12140.24	10158.47
2066/67	10275.23	2	4	2550.46	11953.98
Total	41814.83		10	17955.13	

$$a = \frac{\sum y}{n} = \frac{41814.83}{5} = 8362.96$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{17955.13}{10} = 1795.513$$

Trend value in Nabil Bank Ltd. in 2068/69 to 20671/72

Year (t)	X=t-2065	y_c=a+bx
2062/63	3	13749.49
2063/64	4	15545.00
2064/65	5	17340.51
2065/66	6	19136.02
2066/67	7	20931.53
Total		

The eqⁿ Straight line trend is $y_c = a + bx$

$$y_c = 8362.96 + 1795.513x$$

Trend Analysis of Total Investment of NIBL

(Rs. in Million)

Year (t)	T.Inv.(y)	X=t-2065	X ²	xy	y _c =a+bx
2062/63	5672.86	-2	4	-11345.72	5921.18
2063/64	6540.93	-1	1	-6540.93	6357.12
2064/65	6928.57	0	0	0	6793.056
2065/66	7399.81	1	1	7399.81	7229
2066/67	7423.11	2	4	14846.22	7664.94
Total	33965.28		10	4359.38	

$$a = \frac{\sum y}{n} = \frac{33965.28}{5} = 6793.056$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{4359.38}{10} = 435.94$$

Trend value in NIBL in 2068/69 to 20671/72

Year (t)	X=t-2065	y _c =a+bx
2062/63	3	8100.88
2063/64	4	8536.82
2064/65	5	8972.86
2065/66	6	9408.7
2066/67	7	9844.64
Total		

The eqⁿ Straight line trend is y_c=a+bx

$$y_c = 6793.056 + 435.94x$$

Annex - 30

Trend Analysis of Net Profit of Nabil Bank

(Rs. in Million)

Year (t)	Net profit (y)	X=t-2065	X ²	xy	y _c =a+bx
2062/63	145.86	-2	4	-291.72	33.21
2063/64	193.47	-1	1	-193.47	224.04
2064/65	233.42	0	0	0	414.87
2065/66	609.69	1	1	609.69	605.70
2066/67	891.90	2	4	1783.8	796.3
Total	2074.34		10	1908.3	

$$a = \frac{\sum y}{n} = \frac{2074.34}{5} = 414.87$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{1908.3}{10} = 190.83$$

Trend value in NABIL Bank Ltd. in 2068/69 to 20671/72

Year (t)	X=t-2065	y _c =a+bx
2062/63	3	987.36
2063/64	4	1178.19
2064/65	5	1369.02
2065/66	6	1559.85
2066/67	7	1750.68
Total		

The eqⁿ Straight line trend is y_c=a+bx

$$y^c = 414.87 + 190.83x$$

Trend Analysis of Net Profit of NIBL

(Rs. in Million)

Year (t)	Net profit (y)	X=t-2065	X ²	xy	y _c =a+bx
2062/63	232.15	-2	4	-464.3	199.66
2063/64	350.53	-1	1	-350.53	367.97
2064/65	501.39	0	0	0	536.28
2065/66	696.73	1	1	696.73	704.59
2066/67	900.62	2	4	1801.24	872.9
Total	2681.42		10	1683.14	

$$a = \frac{\sum y}{n} = \frac{2681.42}{5} = 536.28$$

$$b = \frac{\sum xy}{\sum X^2} = \frac{1683.14}{10} = 168.31$$

Trend value in NIBL in 2068/69 to 20671/72

Year (t)	X=t-2065	y _c =a+bx
2062/63	3	1041.21
2063/64	4	1209.52
2064/65	5	1377.83
2065/66	6	1546.14
2066/67	7	1714.45

The eqⁿ Straight line trend is y_c=a+bx

$$y_c = 536.28 + 168.31x$$