CHAPTER –I

INTRODUCTION

1.1 Background of the study

Investment in financial sense is placing of money in the other for their use expecting a return or the participation in expected profits. But for manufacturing and trading firms the terms investment will be long term expenditures that aim at increasing return of efficiency or at building up goodwill thereby producing and increasing return over as period. Investment also seek to manage their wealth effectively obtaining the most from it, while protecting it from inflation, taxes and other risks.

Investment by individuals, business and government involves a present sacrifice of income to get on expected on future benefit as a result investment raises an economy of nations.

Investment usually involves putting money into a bet, which is not necessarily marketable in order to enjoy a series of return the investment is expected to yield. On the other hand speculation is usually a shorter run phenomenon. Speculators tend to buy assets with the expecting of a profit than can be earned from subsequent price charge and sale. Investment are usually made expecting a certain stream of income, which has existed, will not change in the future.

According William F. Shape. Gordon J. Alexander and Jeffery V. Baily "Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and its magnitude generally is certain" (Shape Alexander and Baily, 1998)

In the study of the financial institutions the investment and investment problems will revolve around the concept of managing the surplus financial assets in such a way, which will lead to the wealth maximization and providing a significant further source of income. Thus the investment is the management of the surplus

recourses in such a way as to make it work for providing benefits to the supplier of the funds by letting it to third party. However, the investment needs to be a procedural task. It must follow a definite investment process, which definitely being the formulation of proper investment policy.

"Investment in its broadest sense means sacrifice of current rupees for future rupees" it is defined by William J Sharpe and Alexander j Gordon for the term 'Investment'. Therefore, every investment entails some degree of risk.

Investment policy is the proper management of any fund or wealth to maximize value or to obtain this high or favorable return with law risk considering the protection of Invest forms the inflation and other possible harms. Banks are disbursing their money as investment in trade business and industry. Due to the grown on banking sector in Nepal and huge competition, investment are comparatively losses. Therefore, Banks should be follow the principle of investment for profit. An investment policy should ensure maximum profit and minimum Risk. Investment policy determines the investor's objective and the amount of its investable wealth because there is possible relation between risk and return for sensible investment strategies.

Banking sector specially commercial bank play a vital role in the Process of canalizing the available resources in the needed Sectors. Financial system contacts two component i.e. depositary financial institution and non-depository financial institution. Commercial banks are depositary financial institution whereas employed providence fund, development bank insurance companies etc are non depositary financial institutions all the economic activities are directly or indirectly channeled through banks. Banks accept money as a deposit from public and invest it in form of loan and advances. Financial institutions act as an intermediary role between the persons who lend and who borrow. Bank pools the scattered fund and mobilizes them in productive sector .bank came into existence mainly with the objective of collecting the idle Fund, mobiles them into productive sector and causing an overall economic development. The

bankers have the responsibility of safeguarding the interest and deposited amount of depositor. The word CAMELS can be used to judge the soundness of bank. It stands for

C : Capital Adequacy
A : Asset Quality
M : Management Quality
E : Earning
L : Liquidity
S : Sensitivity for Risk

NRB Directives for Investment Policy

1. Investment on priority sector:-

NRB has pointed priority sector as agriculture sector, cottage and small industry sector, service oriented sector, corporative sector etc. In which the commercial bank must invest 10% of their total deposits. The provision totally based on the objectives for uplifting life style of people in remote and village area.

2. Investment on Co-operative sector (Deprived sector)

Co-operative institutions, rural development banks etc which are licensed by NRB are also to be compulsory invest by commercial bank. In certain ratio determined to joint-venture Banks as per such regulation. JVB's has invested 3% of total outstanding credit of for co-operative sector.

1.1.1 Evolution of Bank

As a public enterprise banking made its first beginning around the middle of 12th century in Italy and the bank of Venice. Founded in 1157 was the first public banking institution.

Following if were established Bank of Barcelona and Bank of Genoa in 1401 and 1407 respectively. The bank of Venice and the bank of Genoa continued to operate until the eighteenth century. With the expansion of commercial

activities in northern Europe, there sprung up a number of private banking houses in Europe and slowly it spread throughout the world. In Nepal, modern banking starts form the establishment of Nepal Bank ltd.

In Nepal development of banking is relatively recent. The record of banking system in Nepal gives detail account of mixture of slow and steady evolution in the financial and global economy of Nepalese life. In involvement of landlord, rich merchants shopkeepers and other individual money holder has acted as fence to institutional credit in presence of unorganized money market. In Nepalese chronicle it was recorded that the new era known as Nepal sambat was introduced by shankhadhar, a sudra merchant of Kantipur in 879 or 880 A.D after having paid all the outstanding debts in the country. This shows the basic of money lending practice in ancient Nepal. Towards the end of 8^{th} century, Gunkamdev had borrowed money to rebuild the Kathmandu valley. Mall regime was an evidence of banking activities. It is beloved that financing for foreign trade with Tibet became quite popular during the regime of malla. However the absence of regulatory measures money lenders were known to have charged High rate of interest and extra on loans.

When "Tejarath adda "established during the year 1877 A.D. it played vital role in baking system as regulatory and promotional organ. It helped the general public to provide credit facilities at a very low rate of 5% specially on the collateral of gold and silver. Hence the establishment of Tejarath adda could be regard As pioneer foundation of banking in Nepal. The man defect of this institution soughed as there was no other financial institution set up and no effort to expand the services. Above all of defects the 'adda' didn't accept Any deposit form public. After that again for a long time, several unorganized bankers continued to flourish as the sole provide of credit and services to the general public.

At the same time, the government started trade with India and Tibet and various bankers handled even the trade because transfer of money made only safe

through these banker in the absence of modern banking institution. Hence, the need of banking institution realized. This was strongly supported by the situation caused during 1934 A.D. earth Quake where there was need of finance for reconstruction of KTM. During the year 1934 AD, first commercial bank of Nepal. Nepal bank ltd established with the imperial Bank of India into existence under Nepal Bank act 1937 inaugurated by king Tribhuwan November 1937. Nepal Rastra Bank, the central Bank of Nepal came into existence in 1956 under the Nepal Rastra Bank act 1955.

Rastriya Banijya Bank the second commercial bank was established in1965, RBB being a largest commercial bank plays a major role in the economy, and the financial shapes of two old banks have a tremendous impact on the economy. That is reason why these banks still exist in spite of there bad position.

On the long run commercial bank act was felt. According it was established in 1974 AD. According to sectional 2 (a) of commercial bank act 1974 A.D. with opening of Nabil Bank in 1985 the door of opening commercial bank was opened to the private sector as the commercial bank grew up they stopped entertaining small project. Thus, scope of finance company emerged. Though in 2042BS finance company act passed but private sector remained stonely silent in 2049 B.S. Nepal Housing and development finance company broke up the silence on shrawan 2049 B.S. The second came in poush of same year. Nepal finance and saving company. Altogether there are 31 commercial bank, 87 development bank 79 financial institute 16 cooperative (limited bank transaction only) 29 micro financial dev. Bank 46 NGO(micro credit trans. only) as at ashad 2068.

Profile of Sample Banks

Nepal Investment bank ltd (NIBL)

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 Agricole induosuez to divest a group of company's comprising of bankers, professionals industrialists and businessmen has acquired on April 2002 the 50% shareholding of credit agricole Indosuez in Nepal Indosuez bank ltd. The name of the bank has been changed to Nepal investment Bank ltd. Upon approval of bank's annual General meeting, Nepal Rastra Bank and company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of capital.
- Rastra Banijya bank holding 15% of capital.
- Rastriya Bima sansthan holding 15% of capital.
- Remaining 20% being held by General public.

NIBL managed by a team of experienced bankers, professional and businessmen. Can offer people what they are looking for. NIBL sures that customer's choice be guided among other things by its reliability and professionalism. NIBL's vision is to be the most preferred provider of financial services in Nepal.

A banker, a premier financial journal published by financial times of London has announced NIBL as the whiner of "Bank of the year" 2003, 2005 , 2008 and 2010.Not only it ,NIBL also awarded by ICAN" Best presented accounts awards "2006.

The share capital of NIBL as at July 2011 is mentioned below;

Share Capital of Nepal Investment Bank

(as at July 2011)

Table 1

Share Capital	**Amount (NRs)**
Authorized Capital 40000000@100	4000000000.00
Issued Capital 24090977@100	2409097700.00
Paid up Capital 24090977@100	2409097700.00

Nabil Bank Limited

Nabil Bank limited is the first joint venture bank of Nepal. It started operations in July 1984, Nabil was incorporated with the objective of extending international standard modern banking services to various sector of the society pursuing its objective, Nabil provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil is come as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking In story of Nepal. It started an era of modern banking with customer satisfaction, measured as a focal objective while doing business. Operation of the bank including day to day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped by modern technology which includes ATMs, credit Card, state of art, and world renowned software from Infosys technologies system. Bangalore, India, Inter banking system and tele-banking system. Financial times of London have announced Nabil Bank Ltd as the whiner of the "Bank of The Year" 2004.

Share capital of Nabil Bank ltd (as at July 2011)

Table 2

Share Capital	**Amount (NRs)**
Authorized Capital 21000000@100	2100000000.00
Issued Capital 20297694@100	2029769400.00
Paid up Capital 20297694@100	2029769400.00

1.2 Statement of problem

After 2046 B.S., privatization and liberalization adopted by The government of Nepal. Due to that policy, in these days commercial bank, developments bank and financial company are operating with Highly competition. The fast growth of such organizations has made pro-rata increment in collecting deposit and their investment. They collected the huge amount from public but couldn't allocate in new investment sectors. The increasing rate of liquidity has pulled in a downward trend in investment. It has ensured bad impact on interest to the depositors, lower market value of shares.

Though several commercial banks have been established in short period, but sufficient return has not been earned. Strong, stable and appropriate investment policy has not been followed. A huge collection and investment policy plays vital role for the economic development of whole country.

A very unhealthy activity is happening in the banking business. After the loan is provided by the bank, regular inspection and monitoring are not made to know whether the debtor has used the loan in productive or not. Due to This reasons, there is great amount of unrecovered bank loan. Banks only depend upon the

direction and guidelines of Nepal Rastra Bank but they don't have clear view and have not formulated their own organized investment policy.

The main focus of this study will be towards the investment practices of the banks. They are Nabil Bank Ltd and Nepal Investment Bank Ltd. This study basically deals with the following issues of joint venture banks.

a. Are the available fund properly utilized or not?
b. What is the relationship between investment on loan and advance and deposit, net profit and net loss?
c. What is the investment portfolio behavior of the banks?

1.3 Objectives of the study

The main objective of the study is to assess the investment policy and strategy followed by the bank with reference to Nabil Bank ltd and NIBL. The main objectives of this study mentioned below:

a. To analyze the deposit utilization for five years of NABIL & NIBL.
b. To find out relationship between total investment, deposit, loan & advance and net profit.
c. To evaluate the liquidity, efficiency, risk position and profitability of the selected banks.
d. To suggest and recommend on the investment policy of sample banks.

1.4 Significance of the study

Suitable strategy plays vital role in a bank for their sustain existence. The study will be helpful to aware the shareholder regarding investment policies of their banks. The study suggests to the management how they can improve their managing power and recommends what is the clue to raise the profit. Though, this is only study but it gives feedback to policy makers, will useful them who formulate the policy for regulation. All stakeholders can identify which bank is the best and to whom have to invest.

1.5 Limitation of the study

1) This study is mainly concerned to only two banks i.e. Nabil Bank ltd and Nepal investment bank ltd.
2) The whole study is based on secondary data from the respective banks and websites on net, article, newspapers.
3) The study will base only on the latest five year data.
4) Lack of sufficient time and resources.
5) In this study only selected tools and technique are used.
6) This study is conducted only for suggestion not for directing.

1.6 organization of the study

The study will be organized into five chapters:

Chapter 1

Introduction

This chapter deals with the subjects matters of the study consistillg background of the study, statement of the problem, objective of the study, significance of the study and limitation of the study.

Chapter 2

Review of literature

This chapter deals with review of the different literature of the study field. Therefore, it includes conceptual framework along with the review of major books, journal, research work and thesis etc.

Chapter 3

Research methodology

This chapter deals with research methodology and it includes research design, population and sample, source and technique of data collection, data analysis tools and limitation of the methodology

Chapter 4

Data presentation and analysis

This chapter deals with analysis and interpretation of the data using financial and statistical tools describe in chapter three. Similarly This chapter also includes the major findings of the study.

Chapter 5

Summary, Findings, Conclusion and Recommendations

This chapter deals with summary of the study held, the conclusion made ultimately and the possible suggestion.

CHAPTER II

REVIEW OF LITERATURE

2 Introduction

The past on historical knowledge parody the base: therefore the literature is based on the previous knowledge. The effort has been to cover as much literature, articles, thesis & research paper as possible to make the study in informative & broad. This chapter has been divided into two main sections: The four sector of the chapter implores with the capital frame work of study. Second sectored implores the implores the review of previous studies.

2.1 Conceptual Frame Work

2.1.1 Commercial Bank

"A commercial bank is one which exchange money deposits accepts deposits, grant loans & performs commercial banking function & Co-operatives, agriculture & industries for such specific purpose" Commercial bank act 1975 A.D.

Commercial bank is a corporation which accepts demand deposits subject to check & makes short term loans to business enterprises, regardless of the scope of its other service (banking USA 172).

"A bank is one who in the ordinary covers of this bus mess recovers money which he repays by honoring chives of persons from which of one whose account it receives it" (Bardford, 453-454)

Commercial bank has main role in the economic development. For economic development, commercial bank should mobilize then collection towards the profitable, secured & marketable sectors.

The income & profit of the bank depend upon the lending procedure applied by the bank as well as lending policy & investment in different securities also affect the income & profit in the investment procedures & policies it is always

taken in MMD that "the greater the credit created by the bank-Higher will be the profitability." Sound policies help commercial banks to maximize quality & quantity of investment and thereby: achieve the own objective of profit maximization & social welfare.

2.1.2 Investment

Investment can be defined as sacrifice of present consumption with expectation of return in future. Investment takes place at present but return can be expected in future but return in uncertain too. Uncertainty is measured by risk that why there is always involvement of risk in investment.

Investment usually involves putting money into a bet, which is not necessarily marketable in order to enjoy a series of return the investment is expected to yield. On the other tend speculation is usually a shorter than phenomena. Speculators tend to buy assets with expecting of a profit that can be earned from subsequent price change & sale. Investments are usually made expecting a certain stream of income, which has existed, will not change in the future.

"Investment is made in assets. Assets in all are of two types real assets (land, building, furnitures etc.) and financial assets (stock, bond, t-bills etc.). These two investments are not competitive but complementary. Highly developed institutions for financial greatly facilitate real investment."
(Bhattarai, 2004: 142)

Investment is nothing but developing our saving in manner that ensures safety of our money & provides a sustained return to supplement our regular income (Delhi Stock exchange 2002). The term investment covers a possible where there are a devour saving. If all the income & saving are consumed to solve the problems of hand to month and to other basis needs then there is non existence of in investment are interrelated.

2.1.3 **Features of sound investment policy**

The commercial banks are inspired with the goal of earning profit. There are many reasons after the goals of gaining profit. In order to reach their desired goals, they profit must invest the resources. It is not better to keep the available

resources idle. The bank should be able to clear the policy of its investment by making a deep study on the subjects that which sector would be the trust worthier & dependable to invest the funds collected in the bank, they should have the ability to use the policy of banking investment in its goal. The income and profit of the bank depends upon its investment policy & term Landry procedure of its funds in different securities. The greater the credit created by the bank the Higher will be the profitability. A sound bending & investment policy is not only prerequisite for the bank's profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal. Therefore, the following principles or features of investment policy must be abided by the commercial banks in order to achieve the goals.

A. Safety and Security

Commercial banks must pay a special attention to the principle safety and security. There will be a loss whether it is small or big, if the bank has not invested in secure and safe sectors, Investment in unsafe and insecure sectors with the hope of getting more return is to accept the security of law quality. The condition of unsafe arise when a bank invest in large loan against less securities by receiving commission, invests in new places without careful observation, landing to long-term borrowers etc. All these unsafe conditions should be avoided as much as possible. A bank should be very much conscious in investing procedures and profitable sectors. It should never invest its fund on those securities, which are subjected to too much for volatility (Depreciation are fluctuation) because a little alternation may cause a great loss. It must not invest its fund into speculative businessman, who may be bankrupt at once and who may earn millions in minute also. Only Commercial durable, marketable and high market valued securities should be accepted. For This purpose "MAST" should be followed, where MAST stands for:

M - Marketable

A - Ascertainable

S - Stability

T - Transferability

B. Profitability

The profit of commercial bank mainly depends on the interest rate, volume of loan and its time period and nature of investment in different securities. It is a fact that a commercial bank can maximize its volume of wealth through maximization of return on their investment and lending so, they must invest their funds where they gain maximum profit. Ambition of profit to commercial bank seem reasonable as the bank has to corer all the expenses and make payment in the forms dividend to the shareholder who contribute to build up to bank's capital and interest to the depositors. For This the bank calculates the cost of fund and likely return, if the spread is enough irrespective of risk involved and absorbs its liquidity. Obligation, it will go a head for investment good bank is one who invest more of its fund in different earning assets standing. Safety from the problem of liquidity, i.e. keeping cash reserve to meet day to day requirements of the depositors.

C. Liquidity

It is the position of the firm to meet current or short-term obligations. General public or customers deposit their saving at the banks in different accounts having full confidence of repayment by the banks whenever they require. To show a good current position and maintain the confidence of the customers, every firm must keep proper cash balance with then while investing in difference securities and granting loan from excess fund.

D. Purpose of Loan

This is very important question for any banker is that, why a customer is in need for loan. If borrower misused the loan granted by the bank, he can never repay. Therefore, in order to avoid This situation each and every bank should demand

all the essential detailed information about the scheme of the project or activities would be examined before lending.

E. Diversification

"A bank should not lay all its eggs on the same baskets." This saying is very important to the bank and it should be always careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the low of average, if a security of a company is divided of there may be an appreciation in the securities of other companies. In This way, the loss can be recovered.

F. Tangibility

A commercial bank should proper tangible security to an intangible one. Thought it may be considered that tangible property does not yield an income apart from intangible securities, which have lost their value due to price level inflation.

G. Legality

A commercial bank must follow the rules and regulation as well as different directions issued by Nepal Rastra Bank, Ministry of Finance, Ministry of law and other while mobilizing its funds. Higher sectors will bring out any problems to investors.

2.2 Some Important Terms

The various sections in this study comprise some important banking terms. The efforts have been made to clarify the meaning, which are frequently used in this study are given below.

A. Loan and Advances

Loan, advances and overdraft are the main source of income for a bank. Bank deposit can cross beyond a desired level but the level of loans, advances and overdraft will never cross it.

B. Investment on Government Securities, Shares and Debentures

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

Some of them are given as:

It may want to spare, its maturity so that the inflow of cash coincide, with expected withdrawals by depositors or large loan demands of it customers.

- It may also be forced to invest because the demand for loans of it decreased or is not sufficient to absorb its excess reserves.
- It may wish to have grade marketable securities to liquidate if its primary reserve becomes inadequate.

However, investment portfolio of commercial bank is established and maintained primarily with a view of nature of bank liabilities that since depositors, may demands fund in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in value.

C. Deposits

Financial institution collect deposits from the customers in various accounts, like: current account, saving account and fixed account. Therefore, the sums of money collected by the financial institutions from the depositors in various

accounts are called deposits. Deposit is the main source of fund of the financial institutions.

D. Investment on Other Company's Share and Debenture

Due to excess funds and least opportunity to invest these funds in much more profitable sector and to meet the requirement of Nepal Rastra bank's directives many commercial banks have to utilize their funds to purchase shares and debentures of other financial and non-financial companies. Now-a- days most of the commercial banks purchase shares and debentures of regional development bank, NIDS and other development bank's Shares.

E. Other Use of Fund

A commercial bank must maintain the minimum bank balance with NRB i.e. 6% for fixed deposits and 8% for each of current and saving deposit account in local currency. Similarly 3% cash balance and local case balance, in local currency accounts must be maintained in the vault of the bank. Again a part of the fund should be sued for bank balance in foreign bank and to purchase fixed assets like land, building, furniture, computers and stationary etc.

F. Off-balance Sheet Activities

Off-balance sheet activities involve contracts for future purchase sale of assets and all these activities are contingent obligations. These are not recognized, as assets are liabilities on balance sheet. Some good examples of these items are letter of credit (L/C), letter of guarantee, bins of collection etc. Now days, some economist and finance specialists to expand the modern, transaction of a bank stressfully Highlight sub activities.

2.2.1 As overview of on NRB Rules regulation investment of Commercial Banks

NRB established in 2013 BS is the central banks of Nepal. Its determine role in economic plans and implementation in the country is major. The main objective of NRB are to manage the economic and financial transaction over the country.

Systematically allocation and management and implementation economic factor over the sate is governed by NRB as a central; bank. All economic plans progress. Policy, strategies, implementation, evaluation made by government are performed under the direction of NRB. So, NRB is the bank of government works for the welfare of nation. Similarly NRB direct the bank and other financial institution too Plans, policies, direction, rules, regulations from NRB as a representative of government. To allocate and mobilized the deposits collected by commercial bank in different sectors' of different policies etc. In fact NRB controls the over the overall activities made by the commercial bank as well as establishment or operation or dissolution of banks. For so NRB has formulated commercial bank act 25031 for the establishment and operation of commercial bank. Here the directions, rules, regulation, directed by NRB in terms of investment made by commercial bank are briefly mentioned below. (NRB Rules 2061)

1. Establishment of New Commercial Banks:

NRB has enhanced liberal policy for establishment of new commercial bank in Nepal. For such objectives of NRB has regulated the following direction.

- A minimum of Rs. 200 million of paid up capital is required for opening a new bank inside the Kathmandu Valley.
- Similarly, as per directions by NRB Rs. 120 million necessary for starting banking business out of Kathmandu.
- Rs. 50 million paid up capital are necessary for opening central office of bank out of Kathmandu.
- Commonly for establishing the commercial bank in rural areas NRB has directed Rs. 30 million as compulsory paid up capital.
- The investor can invest Ins/her its can be invested maximum up to 70% of total paid up to capital if the bank is promoted by domestic investor and 30% of paid up to capital should be as liquidity margin for repayment for certain deposits.

- For joint venture bank, foreign investor can invest minimum 40% of paid up capital and 50% as maximum. Such bank should manage 30% of paid up capital as floatation for general public.
- Individually, firm or company or groups of company can incest up to 110% of paid up capital.
- Application for the establishment of new banks are to be adopted with in the stipulated times fixed by NRB.

1. Direction for Raising Fund

Commercial banks are directed to raise the capital fund at minimum level of Rs. 500 million. For This , Commercial bank can include paid up capital and dedication made loss for meeting such requirement.

2. Directives for Single Borrower Limit

NRB has beard the single borrower limit as 35% in the case of fund based credit and 50% in the case of non fund based such letter of credit, acceptance latter etc.

3. Regulation for Expansion of Commercial Bank

- For opening of a branch with the area of Kathmandu, Latipur, Pokhara, Birjung, Biratnagar, Narayanghat Joint venture banks need to open firstly at least two branch in adjoining semi-urban area and secondary at least one branch in rural area not adjoin to any municipalities.
- Banks are not required to open their new branch in semi-urban or rural area it they open new branch outside the seven municipalities.
- For the permission of establishment of new branch commercial banks ha to specify the whole details about the new branch, they must open a branch in a rural or semi-urban area before opening in urban area.

4. Direction for Extension Counters of Joint Venture Banks

- Commercial banks can't open extension in metropolitan area except during trade fairs, festive, ceremonies, celebrations etc. as a directed by NRB such extension must be converted and a branch within two years otherwise must be closed.
- The extension opened can accept deposit and made payment as well as exchange of foreign currencies after the permission for NRB.
- If the extension is open in the area of royal palace, hospitals, foreign diplomatic offices, those extension are not allowed to operate as a branch as mentioned in (II).

5. Credit for Shareholders

The individual or group who holds more than 1% of shares of the commercial banks can't borrow from same bank under the directions from NRB 2061 B.S.

6. Fluctuation in Interest

The agreement can be made between bank and customer for making change in bank loan interest rate up to 0.5% is now cancelled by NRB to be effective from 2061/062 B.S.

2.3 Review of Books

“Investment analysis and management” that investment in its broadest since, means that sacrifices of current dollars for future dollars. Two different arbutus are generally involved: Time & Risk. The sacrifice takes place in the present & is certain. The reward comes later of at all and the magnitude is generally uncertain. William F. Sharp, J. Alexander and Jeffery Bailey Jack Clark Froncishare.

1. Real Investment: Generally, if involves some kind of tangible assets such as: land, machinery & factories.

2. Financially Investment: Involves contract has written on prece of paper such as: common stocks & bonds.

"Investment has many Factors. It may involve money into bonds. T-bills or notes or common stocks or real state or mortgage or oil venture or cattle or the theater. It may involve specially in bull market or selling short in bear markets. It may involve options, straddles, silver mutual funds, money market fund, index funds & result in accumulation of wealth or dissipation of resources. Diversity and challenge characterized the field. For the able or lackey the uninformed result can be disastrous." Jerome B. Chome, Edword D. Zinbang & Arthur Zeiked

"Commercial banks bring into being the most important ingredient of the money supply demand deposits through the creation of credit in the form of loans & investment. Banks are the custodians of the community's money as well as the suppliers of its liquidity, since the study is concerted with the investment activities of commercial in Nepal, we take in to consideration exclusively the sector that are required for & relented to the same." Cross & Hempal 1980.

"It is important that the investor set the appropriate investment objectives & the accompanying investment horizon. In addition, in developing investment strategies to achieve the objectives, the investor must understand the tax conservancies and expected risk & return associated with the various investment alternatives per haves most importantly the investor should recognize that achieving & investment objective involves the creation of a portfolio of assets and not a collection of individual assets. They further states that, individual assets may be very risk. Combining these assets into a portfolio of other assets may actually reduce the risk of the overall risk."Chancy, John M. & Moses, Edulard A.

"Investment analysis management & portfolio management" has defined the term investment, "Investment is the current commitment of funds for a period of

time to obtain a future flow of funds that will compensate the investment unit for the time the funds are committed for the expected rate of inflation & also for the uncertainly involved in the future flow of fund" (Investment, Japan: the oryden Press, CBS Publisher Ltd.) Frank K. Rainy .

"Portfolio behavior of commercial banks sector of the economy including agriculture, industry, commercial & social service sectors. The lending policy of commercial is based on the profit maximizing of the institution as well as the economic enhancement of the country." Shrestha, Dr. Sunity (1995)

From above definition, it is clear that an investment means to trade a know rupee amount for some expected future steam of payment or benefits that will exceed currently outlay by an amount that will compensate the investor for the time of uncertainly involved in expected future cash flows. This investment is the most important function of commercial banks. It is very challenging task for commercial banks. So, a bank has to be very cautions while investing their funds in various sectors. The success of a bank heavily depends upon the proper management of its investable funds.

2.4 Review of Article

Shrestha (1999), in this article, "A study on deposit & credit of commercial bank in Nepal" concluded that the credit deposit ratio would be 51.30% other things remaining same in 2004 A.D. which was the lowest under the period of review. So, it is strongly recommended that the commercial banks should try to give more credit earning field as far as possible. Otherwise, they might not be able to absorb even its total expenses.

Sharma, M.P. & Bhatt, M.P. (2002), in their article "Priority receiver sector" has present "The commercial banks should take care of board national interest & they showed not confine their lending activities only to commercial area providing quick interest if some proportion could be directed to the area

conclusive to build economic infrastructures of the country it would create atmosphere conductive to their investment in future. In our society where ignorance & literacy is in wild scale, it is necessary that the banks search entrepreneurs instead of entrepreneurs searching book. So, they have opinioned that the priority sector program is a timely & opportunities there by increasing production & the general living standard or rural poor. But the success of the largely depends upon the interpreted operation with other program design for rural development. Further they agree that various programmers: Rural development land reform, back to the village national, champion audit literacy etc. couldn't materials their objectives despite their some theoretically philosophy & food objectives."

Pradhan (2003), in his research paper "Role of saving, Investment & capital formation in economic development a case of Nepal" has studied about the strong role & impact of saving, investment & capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role & impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equation used in This study have been estimated at current prices as well as in real term with the entire study period divided into different sub-period.

Donohue & Hender Shott (2004) in their research "Fund flows and commercial real state investment: evidence from the commercial mortgage market" have stated that the Federal reserve's cash flow of funds account is a marvelous closed loop system with incredible detail on financial flow. For each sector ,total sources and uses of funds are equal (up to discrepancy items), and for each market issues and purchases of security are equal. This study has analyzed commercial mortgage sector, oral issues & purchase to determine if there were

periods. Where unusual sectoral purchase seemed to generate unusual sectoral issues.

The results presented in This paper suggest that in all cases, GOP is significantly associated with saving. Investment and capital formation both at current prices and in real terms. The result of the empirical analysis led to three important conclusions: first, saving, investment & capital formation have positive impact on economic development. Second, the current values & past values of saving, investment & capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving & capital formation on economic development while weak role-played by investment.

2.5 Review of Master's Degree Thesis

On the topic "Investment Policy" have published by many researchers in their research article. The mentioned theses were reviewed as they are relevant to the present research.

Mr. Prasanna Shrestha(2004) in her study "*A comparative study on investment policy of joint venture banks*" has studied primarily of four commercial banks i.e. Himalayan Bank Ltd., Nepal SBI Bank Ltd., Everest Bank Ltd. & Bank of Kathmandu Ltd. The main objectives of her studies are as follows:

- To compare, analysis & evaluate the investment policy of these four commercial banks.
- To evaluate, liquidity, activity & portfolio ratios of these banks.
- To find out the deposit collection & the effectiveness of fund mobilization.

The Conclusion of the research study is as follows:

- HBL is more successful in mobilizing the fund in proper way in comparison to other three commercial banks.

- All these banks should have to increase the deposit collection, investment in securities shares & debentures.
- All banks should be in rural areas & have to take effectives marketing strategy for their promotion.
- New technology have to be introduce so to develop new banking system.

Shrestha (2004) conducted a study on "*Nepal Rastra Bank Guidelines on Investment policy of commercial banks in Nepal (A case study of Nepal Investment Bank)*". The main findings of the study are:

- Bank is in good position to meet the daily cash requirement as bank has maintained the average cash & bank balance in respect to total deposit.
- The performance of NIBL regarding deposit collection granting loan & advance & investment is quite satisfactory but doesn't seem to follow definite policy.
- NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
- Interest earned to total operating income of NIBL is High. However bank failed to maintain net profit on the study.
- From the analysis of coefficient of correlation. There is positive & significant relation between total deposit & loan and advances and current assets and current liabilities and loan and advances but there is negative and no significant relationship between outside assets & her profit.

Joshi (2005) conducted a study on "*Investment policy of commercial banks in Nepal"* A comparative study of Everest Bank Limited, Nabil Bank Limited & Bank of Kathmandu" has presented research finding of the study are:

- The liquidity position of the EBL is comparatively better than NABIL & BOK. EBL has the Highest cash & bank balance to total deposit, cash &

bank balance to current assets ratio. Nabil has lowest liquidity position than that of other two banks. EBL has good deposit collection & has made enough investment on government securities but it is maintained moderate investment policy on loan & advances.

- From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is comparatively average or in between successful in compared to Nabil & BOK. The total investment of EBL is in between in compared to other two banks.
- In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios. EBL is average profitability ratios. EBL is average profitable in comparison to other compared banks i.e. Nabil & BOK. From the view point of risk ratio, EBL has Higher capital risk but average of credit risk ratio in compared to Nabil & BOK.

Mr. Arya Amatya (2005), in this research study entitled, "*A comparative study on investment policy of commercial bank & finance companies of Nepal*" has pointed out the following objectives:

- To find out the relationship between profitability & assets structure of the banks & finance i.e., Standard Charted Bank Ltd. & BOK Ltd. & finance companies i.e. international leasing & finance company, standard finance company & universal finance company.
- To project the deposit utilization & investment of the banks in companion to finance companies.
- To commend the polices to be adopted by sample banks & finance based by sample banks & finance based on financial analysis for its future development.

The Conclusion of the research study is as follows:

The sampled firms haven't properly analyzed the causes & effects of the variables so they are recommended to prepare future investment policies & plan after detail analysis of causes & effect of the variables.

- Evaluate the investment opportunities & alternatives using statistical, capital budgeting & other financial tools to avoid the large amount of doubtful & risks as they have main trends a large amount of loan loss provision.
- Commercial banks & finance companies need to add extra amount or investment on government securities as they are less risk investment & are considered as liquid assets.

Mr.Dhakal (2008),in this research study entitled, "*Investment policy of commercial banks in Nepal*"To find out the relationship between total investment , loan & advances , deposit, net profit & outside assets. Following objectives has been pointed out.

- To find out the investment priority sectors of sampled commercial banks.
- To assess the impact of investment on profitability.
- To analyze and forecast the trend and structure of deposit utilization and its projection for five years of commercial banks.
- To provide suggestion and possible guidance to improve investment policy and its problems.

  The Conclusion of the research study is as follows:
- The liquidity position of Everest Bank Ltd. Was comparatively better than that of Nabil Bank ltd. & bank Of Kathmandu.
- All the three banks had met the normal standard current assets ratio to meet the short term obligation of their customer.
- Bank of Kathmandu has mobilized a huge sum of its funds to earn the profit.
- From the analysis of Assets managements ratio , Everest banks ltd. was in better position than Nabil bank ltd. & Bank of Kathmandu.

- The trend of total investment, total deposit, loan & advances & net profit of Everest banks ltd. was in better position than Nabil bank ltd. & Bank of Kathmandu.

Thapa (2010), in this research study entitled, "*Investment policy of commercial banks in Nepal*" has pointed out the following objectives:

- To evaluate liquidity , activity and profitability ratio of RBB in comparision with NBL and industry average.
- To analyze the relationship of loan and total investment with total deposit and net profit of RBB and compare it with that of NBL and industry average.
- To use trend analysis to compare loan & advance , total investment , total deposit & net profit of RBB & compare the same with other two.
- To examine the loan loss provision of RBB & NBL.
- To provide suggestion & recommendation on the basis findings.

The Conclusion of the research study is as follows:

- RBB has good deposit collecting, enough loan & advance & investment on government securities.
- It has comparatively better liquidity position than NBL.
- There is significant relationship between deposit & loan & advances. There is insignificant relationship between deposit & investment & outside assets & net profit.

2.6 Research Gap

The purpose of the research work is quite different from the studies made by the above persons (related to commercial bank). This study focuses in effectiveness in investment. Policy analysis of Nabil Bank & NIBL Bank Ltd. banking comprehensive manner considering the major items. Different financial & statistical tools have been used in This study. Among them, ratio analysis, regression analysis are the strong financial tools. This study is a little bit different than previous studies. It may be one of them research study of investment policy in few research work with reference to Nabil & NIBL Bank. This study tires to indicate the effectiveness of investment policy of concerned banks.

CHAPTER -III

Research Methodology

3.1 Introduction

Having stated about introduction & reviewing of literature in chapter I & II, now the task has come to make decisive choice of research methods to support the in realistic term with sound empirical analysis. The study with try to come at conclusion regarding with what position Nabil & NIBL has got in the Commercial banking sectors in Nepal. Then these chapters will deals the research methodology used in the study for analysis of the two sampled Commercial Bank.

3.2 Research Methodology

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. (C.R. Kothari, 1989) in other words, research methodology describes the method & process applied in the entire aspect of the study. It is a way to solve the research problem systematically & scientifically. A fact research methodology is much vague than research methods i.e. research method is just a part of research methodology. It considers the logic behind the use of the methods in the context of research study & explains why a particular method or techniques is used. Thus research methodology is concerned not only about the different types of methods used but also about various other facts like what data have been collected, what are the purpose & problem of research etc. so, to up the research methodology that has been adopted for the study is mentioned in This chapter, which deals with the research design, sources of data, data collection, population & sample, processing & tabulating procedures.

3.3 Research design

Research design means an overall framework for the activities to be taken during the course of a research study. It enables the way of research providing the tools & techniques for the data collection & analysis & sampling plan to be followed. Generally research design describes the general plan for collecting analyzing & evaluating data after identifying. It is an integrated system that guides the researcher in formulating, implementing & controlling the study conceived so as to obtain answers to research questions & to control variance. Both analytical & descriptive methods have been used to attain the overall objectives. Firstly, it specifies the sources & type of information relevant to research question, secondly it specifies; the data. Thus, a research design specifies various methods & procedures for acquiring the information including from which sources & by what procedure it is obtained.

3.4 Sources of data

After defining the research design, how the work comes to define the sources of relevant data for the research study. Generally, Secondary data are sources of this study.

On the other hand secondary data are those data that are collected by someone else or used already & made available to other in the form of published statistics such as annual reports, periodicals, newspapers, magazines etc. once a primary data is used, it losses its originality & becomes secondary. This study is mainly depends on the use of secondary data that consists of annual reports of the concerned bank. However besides the annual reports various other sources of data have also been used for the purpose of the study plan documents, newspaper, magazine, economic journals, NRB reports etc. similarly, a structured interview questionnaire also has been

3.5 Population & Sample

Population or universe refers to the industries of the same-nature of its service & product. It is the collection or the aggregate of objects or the set of results of an operation. On the other hand sample means the representative parts of population selected from it with the objectives of investigating its properties. Thus, a sample is just a portion of the population selected with a view to draw conclusions about the population under study.

In context of Nepal, 31 commercial banks are in operation In data. These thirty one banks are regarded as population. But, it is not possible to study all data related with these twenty five banks. Hence two banks have been taken as sample from the whole population i.e. thirty one banks. The sample banks are as follows:-

- Nabil Bank Ltd.
- Nepal Investment Bank Ltd.

3.6 Sampling Procedure

The selection procedure of the sample is purposive it is not random. The key assumptions for the section are as follows:

1. Two banks were established in around the same date. So, it is would be interested to know which banks performed well as compared to another on their equal operation period.
2. Share capital structure of these two banks are same. This factor also helps to select theses banks as sample bank to know how the performance of the banks affects by foreign investment.

3.7 Data Analysis Procedure

To achieve the objectives of the study, the collected data are categorized, tabulated, processed & analyzed using different financial tools like liquidity, assets management, risk ratio, profitability along with statistical tools like mean, standard deviation, coefficient of variation, Karl Pearson's coefficient of correlation are adopted in the study. Calculated results were tabulated under different headings the objectives to compare with each other & their significance carried out to interpret the result.

3.8 Data Analysis Tools

Data analysis refers to the analyzing the data in order to determine the inherent facts or meanings from the tabulated data, presentation & analysis of data is the care of the research work. Data that has been collected are first presented in systematic manner in tabular forms & then analyzed by applying different financial & statistical tools to achieve the objectives of the study. The tools applied are as follows:

3.8.1 Descriptive Analysis

In This analysis the relationship between accounting figure is analyzed. To compare a firm's financial performance & status to that of other firm's, or itself over time of period & to trace out the strength & weaknesses. Following financial ratios are calculated & analyzed.

3.8.1.1Liquidity Ratio

Liquidity Ratios are ratios that come off the the Balance Sheet and hence measure the liquidity of the company as on a particular day i.e the day that the Balance Sheet was prepared. These ratios are important in measuring the ability of a company to meet both its short term and long term obligations. Under this ratio the following ratios are calculated.

a. Total Current Assets to Total Liabilities

This ratio is obtained by dividing the 'Total Current Assets' of a company by its 'Total Current Liabilities'. The ratio is regarded as a test of liquidity for a company. It expresses the 'working capital' relationship of current assets available to meet the company's current obligations.

Current Ratios= Total Current Assets/Total Current liabilities

b. Total liquid fund to total deposit:

Total liquid fund to total deposit ratio is the indication of the short term obligation capacity of the demand of the depositor money. higher ratio shows the higher capacity of payment on demand of the money and vice versa. we have,

Total liquid fluid to total deposit = total liquid fund / total deposit

3.8.1.2 Activity Ratio (Assets Management Ratio)

Activity ratio measures the efficiency of the bank to manage its asset in profitable and satisfactory manner. A commercial Bank must manage its asset properly to earn high profit. Under in this research study, deposit collection and investment procedure of the selected bank is also explained with the help of activity ratio. Under in this chapter following ratios are analyzed.

a. Loan & advances to total deposit:

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances. Loan and advances are outside asset which yield profit to the bank. Increment of loan and advances is the main target of all Commercial Banks. So higher the ratio better is the mobilization of the funds.

We have,

Credit to total deposit = loan and advances / total deposit

b. Total Investment to total deposit:

A Commercial Bank mobilizes its deposits by investing its funds in different securities issued by government and other financial institution. in this ratio is calculated to know how the banks are mobilizing their deposit in the investment of the various securities. A high ratio indicates the success in mobilizing the funds in securities.

We have,

Total investment to total deposit = total investment / total deposit

c. Investment on deprived sector to **total deposit ratio:**

NRB has directed all the commercial banks to extend minimum *3%* of total loan and advances (including bills purchased and discounted) to the deprived sector in order to contribute to the national economy.

We have,

Investment in deprived sector to total deposit ratio=Investment in deprived sector/ total deposit

d. Investment on priority sector to total deposit ratio:

Effective from 2007/08, investment in priority sector shall not be compulsory for the commercial banks. But the CBs should continue investing in those sectors for providing banking service to poor communities and backward areas for overall economic development by channeling credit to more productive and employment oriented areas.

We have,

Investment in priority sector to total deposit ratio= Investment in priority

Sector/ total deposit

e. Investment on financial institution to total deposit ratio:

Commercial Banks have various options to mobilize their funds. Credit to financial institution is one of them. But from the view point of profit

commercial banks avoid to extent loan on this area. However it has to invest certain portion of their total credit outstanding to this sector.

We have,

Inv. on financial institution to total deposit ratio= Inv. on financial institution/total deposit

f. Investment on shares, debentures and bonds to total deposit

Ratio: Commercial banks use their fund by making investment in different sector. They make investment in government securities, debentures and bonds. It is the total amount that the bank mobilizes. This is the asset that the commercial bank mobilizes in order to get the profit.

We have,

Investment on shares, debentures and bonds to total deposit ratio = Inv. on shares, debentures & bonds/ total deposit

g. Loan loss ratio:

Loss of loan is occurred when the debtor's fail to pay their loan. Loss of loan is not only the default of debtor's but it is because of the failure of recovery of loan by the bank. Negligence in its part makes a negative impact on the earnings and capital of a bank very badly. Greater loan loss provision is made high income statement if high loss is expected. But this will lead to low profit and possible losses that produce low increase or decrease in capital. The loan loss ratio shows how efficiently the bank manages its loan and advances and, makes effort for timely recovery of loan. We have,

Loan loss ratio = loan loss provision / loan and advance.

3.8.1.3 Risk Ratio

Risk ratio measures the risk associated with the banking variables. A bank raise capital accepts deposit and filially grant loan. These entire things come along with the risk. A bank must consider the risk associated with it. Higher the ratio

higher will be the profit and vice versa. Under this ratio following ratios are analyzed:

a. Credit risk ratio:

This ratio measures the possibilities that loan will not be repaid or that investment will deteriorate in quality of going into default with consequently loss to the bank. According to definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances. We have,

Credit risk ratio = total loan and advances / total assets

b. Interest risk ratio:

The possibility of loss due to change in interest rate is known interest rate risk. There is higher degree of risk related with interest rate.

We have, Interest rate risk ratio = interest sensitive asset / interest sensitive liabilities

c. Capital risk ratio:

Capital risk ratio measures banks[1] ability to attract deposits and inter bank funds. It also determines the level of profit a bank can earn if banks choose to take high capital risk and its ROE will be higher and vice versa.

We have,

Capital risk ratio = share capital / risk weighted assets

3.8.1.4 Profitability Ratio

Profitability ratio measures the overall banking operation of the company in regards to the profit. Profitability ratio is determined by the financial institution to find out their profit earning capacity on various kinds of funds they employed. Profit indicates the efficiency of the bank. A bank can make the profit through the sound lending policy and the quality of service it provides. Higher is the profit ratio higher will be the efficiency of the bank. Following are the some profitability ratio studied in this report.

a. Return on loan and advances:

Return on loan and advance ratio indicates how efficiently the bank has utilized its resources in form of loan and advances. This ratio is calculated as:

Return on loan and advances = Net profit / Loan and advances

b. Return on total working fund ratio:

This ratio shows the overall profitability of all working fund i.e. total assets, it is also known as Return on Assets (ROA). A firm has to earn satisfactory return on assets of working fund in order to provide long-term service. This ratio is calculated as:

Return on total working funds ratio = Net profit / total working fund

c. Total Interest earned to total outside assets:

This ratio measures the capacity of the firm for earning interest through proper utilization of outside assets. Higher ratio shows die efficiency of using outside assets to earn interest. This ratio can be calculated as:

Total Interest earned to total outside assets = total interest earned / Total Outside assets

Chapter IV

Data Presentation and Analysis

This chapter "Data presentation and Analysis" is an important part of the study. Here, the calculated data are interpreted and analyzed to fulfill the objectives of this research.

Under This chapter various financial ratios are used which are related to analyze the investment policy of the selected banks. The financial indicators of selected banks are compared with the help of statistical tools i.e. mean, S.D, C.V etc.

4.1 Liquidity ratio

Liquidity ratio measures the ability of banks to meet the investment purposes. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the customer also. Banks have to maintain enough liquidity because they have to meet the demand of deposits, withdrawals, pay maturity etc.

4.1.1 NRB balance to total deposit ratio

NRB has directed all the commercial banks to deposit certain percentage of total deposit In NRB balance. The ratio is calculated as NRB balance to total deposit = NRB deposit/ total deposit

Table 3

NRB balance to total deposit ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	6.639	4.159	2.760	1.645	4.770	3.995	1.915	47.93
Investment Bank	5.686	4.734	5.474	8.063	5.641	5.919	1.258	21.25

(Source: annexure Al)

In the above table the ratio of two commercial banks are obtained from annexure Al. Through This table it is analyzed the short term obligation capacity of two banks. NRB has directed all the commercial banks to deposit certain percentage of total deposit in the NRB balance. Due to the changes in directives from time to time it seems fluctuating to maintain the liquidity position of the selected banks.

From the above table it has found that Nabil Bank has maintained average 3.995% as NRB balance out of its total deposit. It has fluctuating trend of liquidity position. It has maintained highest ratio of 6.639% In the year 2007 and lowest ratio of 1.645% in the year 2010. The S.D of Nabil Bank is 1.915 and C.V is 47.93%.

Investment bank has maintained an average ratio of 5.919% as NRB balance. It also has fluctuating trend of liquidity position. It has maintained Highest ratio of 8.063% in the year 2010 and lowest ratio of 4.734% in the year 2008. The S.D of NIBL is 1.258 and C.V is 21.25%.

It is clear from the above table that the selected banks have followed the NRB requirement. The mean ratio of NIBL is higher than that of Nabil Bank. It indicates that NIBL has maintained more liquidity in NRB balance than that of Nabil Bank. NIBL has more consistency and uniformity to maintain liquidity position as it has lower ratio of C.V. i.e. 21.25%.

4.1.2 Total liquid fund to total deposit ratio

The capacity of short term obligation of the bank is measured by the ratio of total liquid fund to total deposit. Higher ratio shows the higher capacity of payment on demand of money and vice versa. The ratio is calculated as; Total liquid fund to total deposit = total liquid fund / total deposit

Table 4

Total liquid fund to Total deposit

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	14.049	8.541	10.113	12.225	8.411	10.668	2.438	22.86
Investment Bank	12.199	13.336	10.386	12.715	11.452	12.018	1.144	9.52

(Source: annexure A2)

Liquid fund is the amount kept by bank which is equivalent to the cash. Liquid funds are required to meet the short Term obligation and to gain the image and satisfaction of the customers. NRB has directed all the commercial banks to maintain minimum 5% CRR which is changing from time to time. NRB has decreased its minimum requirement from 7% to 5%. Hence, the selected banks have decreased the liquidity ratio so as to increase the amount of loan and advances.

From the above table it has found that Nabil Bank has maintained average 10.668% as liquid fund of its total deposit. It has fluctuating trend of liquidity position. It has maintained highest ratio of 14.049% in the year 2007 and lowest ratio of 8.411% in the year 2011. The S.D of Nabil Bank is 2.438 and C.V is 22.86%.

Investment bank has maintained an average ratio of 12.018% as liquid fund. It also has fluctuating trend of liquidity position. It has maintained highest ratio of 12.199% in the year 2004 and lowest ratio of 10.386% in the year 2009. The S.D of NTBL is 1.144 and C.V is 9.52%.

It is clear from the above table that the selected banks have maintained the minimum requirement set by the NRB. The mean ratio of Nabil Bank is 10.668% and that of NIBL is 12.018%. That mean NIBL has maintained higher level of liquidity position than that of Nabil Bank. C.V of NIBL is lower than That of Nabil Bank which represents more consistency and uniformity in liquidity purposes than that of Nabil Bank.

4.2 Activity ratio (Assets Management Ratio)

A commercial bank must be able to manage its assets very well to earn High profit, to satisfy its customers and for its own existence. Assets management ratio measures how efficiently the bank manages the resources it mobilizes. Under This research study deposit collection and investment procedure of the selected bank is also explained with the help of activity ratio. The following ratios measured the assets management ability of the NIBL and Nabil Bank in comparisons.

4.2.1 Loan & advances to total deposit ratio

This ratio measures the ability of the bank to mobilize their' total deposit on loan and advances. Increase in loan and advances results increase in profit of the banks. Hence, commercial banks target to increase the loan and advances to yield higher profit. Higher ratio indicates better utilization of fund. The ratio is calculated as;

Loan & advances to total deposit =loan advances/ total deposit

Table 5

Total Loan & advances to total deposit

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	58.063	56.965	76.660	67.364	67.088	65.228	8.036	12.32
Investment bank	74.744	63.677	73.332	69.625	72.560	70.788	4.393	6.21

(Source: annexure A3)

The table shows that Nabil Bank has an average mean ratio of 65.228%. During 5 years of period the highest investment of Nabil Bank in loan and advances is 76.660% in FY 2006 and lowest ratio is 56.965% in the year 2008. S.D of This bank is 8.036 and C.V is 12.32%.

NTBL has an average mean ratio of 70.788%. It has highest ratio of Loan and advances is 74.744% in the year 2007 and lowest ratio of 63.677% in the year 2008. S.D of the concern bank is 4.393 and C.V is 6.21%

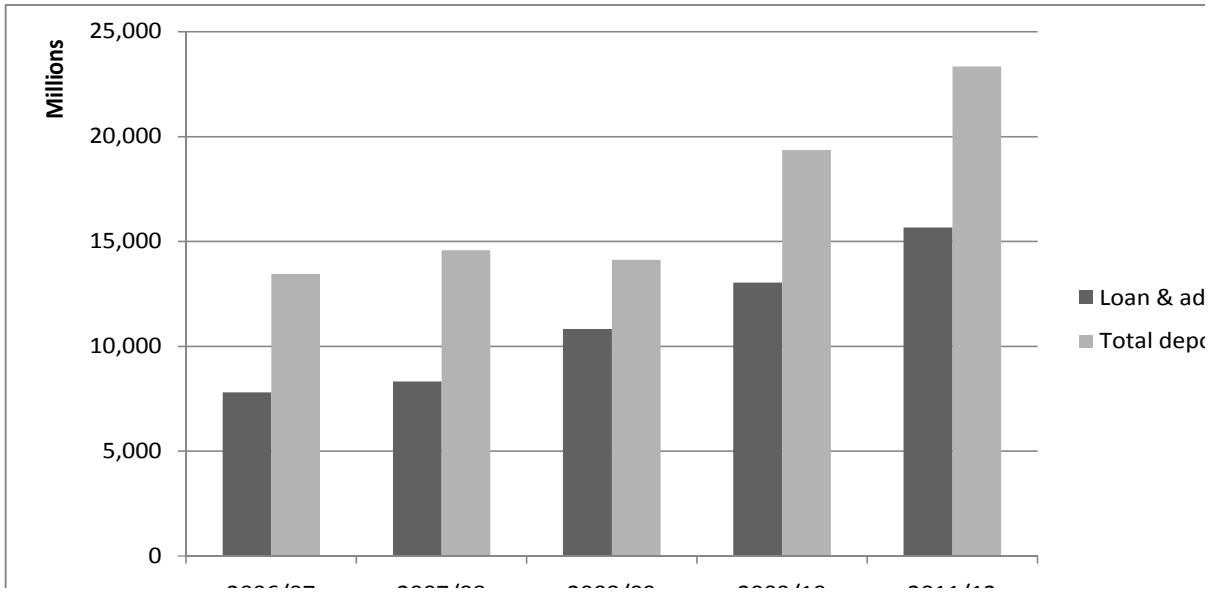
It is clear from the table that NIBL has invested more deposits in loan and advances than that of Nabil Bank. It shows that C.V of Nabil Bank is 12.32% and that of NIBL is 6.21%. Since NIBL has lower ratio of C.V it indicates more consistency in This regard. NIBL seems stronger than Nabil Bank to advance loan to the market. From this we can conclude that NIBL has accepted Higher risk to survive in the market.

By the end of mid-July 2011, loan and advances to total deposit ratio of overall commercial banks increased to 67.84% from 59.53% in the last year. Higher growth rate of loans and advances compared to deposit mobilization contribution to increase in this ratio.

Investment to total deposit of Nabil Bank & NIBL Bank

Loan and Advances to Total Deposits of Nabil Bank

Figure 1



4.2.2 Total investment to total deposit ratio

The main objective of the commercial banks is to make more profit. They make investments in different securities issued by government and other financial institutions. The ratio is calculated to know the efficiency of the commercial banks in utilizing the available deposits in different investment alternatives.

The ratio is calculated as;

Total investment to total deposit = total investment / total deposit

Table 6

Total investment to total deposit

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V %
Nabil Bank	44.849	40.010	30.240	31.946	38.369	37.083	5.995	16.17
Investment Bank	21.523	33.515	27.599	29.602	26.566	27.761	4.383	15.79

(Source: annexure A4)

The above table shows that the ratio of Nabil Bank is in decreasing trend from 2004 to 2010 but it has increased during FY 2011. The mean ratio of Nabil Bank is 37.083%. The S.D is 5.995 and C.V is 16.17%. It has the Highest ratio of investment of 44.849% In the year 2007 and lowest ratio of investment of 30.240% in the year 2009.

The mean ratio of NIBL is only 27.761% and ratios are also in fluctuating trend during 5 years of period. It has the highest ratio of investment of 33.515% in the year 2008 and lowest ratio of investment of 21.5230% in the year 2007. It is clear from the above table that Nabil Bank has Higher mean ratio than that of NIBL. C.V of NIBL is lower than that of Nabil Bank This represents more consistency of investment procedure of NIBL. It seems that NIBL is more uniform in investment procedure but on the other hand Nabil Bank has more investment alternative that that of NIBL as it has higher mean ratio.

4.2.3 Investment on deprived sector to total deposit ratio

The banks are operated not only for profit motive but also for social welfare. An effoit is made to find out how much of amount the selected banks have invested in the deprived sector. The Higher ratio shows the higher social concern of the selected banks. The ratio is calculated as,

Investment in deprived sector to total deposit ratio= Investment in deprived sector/total deposit

Table 7

Investment on deprived sector to total deposit ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	c.v %
Nabil Bank	1.980	1.862	2.203	1.871	1.843	1.952	0.150	7.71
NIBL	1.872	1.566	1.985	1.931	2.101	1.891	0.200	10.59

(Source: annexure A5)

With regards to direct lending to the deprived sector NRB has been changing the directives from time to time by issuing various circulars. As per the NRB directives, commercial banks were required to direct 7 percent of total loan portfolio in the deprived sector for the year 2007/08, 6% for the year 2008/09, 4% for the year 2009/10, 3% for the year 2010/11, 3% for the year 2010/11. from the year 2011/12 onwards commercial banks are required to extend minimum 3% of total loan and advances (including bills purchased and discounted) to the deprived sector.

Due to the changes in NRB directives, the above comparative table reveals that the selected banks have fluctuating trend of investment in deprived sector. Nabil Bank has the Highest ratio of 2.203 in FA' 2009 and the lowest ratio of 1.843 In F/Y 2009. Similarly, the ratio is not found consistent in any year of study period. NIBL has highest ratio of 2.101 in F/Y 2011 and the lowest ratio of 1.566 in F/Y 2008.

Comparing the mean ratio of investment on deprived sector of total deposit Nabil Bank has mobilized higher ratio of deposits in deprived sector than that of NIBL. Nabil Bank has mean ratio of 1.952 and that of NIBL has 1.891. C.V of Nabil Bank is 7.71% which is less than that of NIBL i.e. 10.59%. The lower percentage of C.V of Nabil Bank shows consistency and uniformity in investment purposes than that of NIBL.

Higher mean ratio of Nabil Bank shows that it has accepted the risk and ignored the profit and also given priority to social welfare.

The deprived sector credit of overall commercial banks increased by 30.20% and reached to Rs. 6842.0 million in mid July 2008 as compared to Rs. 5255.13 million in mid-July 2011. The ratio of deprived sector credit to total credit recorded at 3.24% in the current fiscal year. Last year it was 2.97%.

4.2.4 Investment on priority sector to total deposit ratio

Commercial banks have various options to mobilize their fluids. Credit to priority sector is one of them. But from view point of profit commercial banks avoids to extent loan on this sector. However, they make certain portion of their investment in this sector. The ratio is calculated as.

Inv. in priority sector to total deposit ratio= Inv. in priority sector / total deposit

Table 8

Investment on priority sector to total deposit ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	2.716	6.025	5.689	3.952	3.838	4.444	1.383	31.11
NIBL	6.234	4.869	4.955	3.661	1.983	4.340	1.601	36.90

(Source: annexure A6)

As per the NRB directives, commercial banks were required to direct 7 percent of total loan portfolio in the priority sector for the year 2006/07, 6% for the year 2007/08, 4% for the year 2008/09, 2% for the year 2009/10, 2% for the year- 20010/11. Effective from 20011/12, investment in priority sector shall not be compulsory for the commercial banks.

Due to the decreasing trend of minimum percentage requirement set by the NRB in investment policy of priority sector lending, the selected banks have decreasing trend of investment in such areas. The above comparative table reveals that Nabil Bank has the highest ratio of 6.205 In F/Y 2008 and the lowest ratio of 2.716 in F/Y 2007. NIBL has highest ratio of 6.234 in F/Y 2007 arid the lowest ratio of 1.983 in F/Y 2011.

Comparing the mean ratio of investment on priority sector of total deposit, Nabil Bank has mobilized higher ratio of deposits in priority sector than that of NIBL. Nabil Bank has mean ratio of 4.444 and that of NIBL has 4.340. C.V of Nabil Bank is 31.11% which is less than that of NIBL i.e. 36.90%. The lower percentage of C.V of Nabil Bank shows higher consistency and uniformity in investment purposes than that of NIBL.

It is clear from the above table that Nabil Bank is socially concerned as it has ignored the profit and accepted risk by lending higher amount to the priority sector than that of NIBL.

Subsequent decision of NRB to phase out priority sector lending, it will not be compulsory to provide such loan from fiscal year 2011/12. By the end of mid July 2011, total priority sector credit of overall commercial banks reached to Rs. 2695.40 million. The inclusion of financial figures of ADB/N in commercial bank resulted to increase significant proportion of priority sector credit to total credit in the current fiscal year. Consequently, it is recorded a 12.75% of total outstanding loan.

4.2.5 Investment on financial institution to total deposit ratio

The ratio reveals that the banks are successful in mobilizing their total deposits on different types of financial institutions to maximize the income. High ratio indicates the better mobilization of fund as investment on financial institution. The ratio is calculated as:

Inv. on financial institution to total deposit ratio= Inv. on financial institution/total deposit.

Table 9

Investment on financial institution to total deposit ratio

Year(mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	2.677	59.073	0.000	1.861	0.000	12.722	25.937	203.88
NIBL	10.602	63.677	0.000	0.444	0.343	15.013	27.571	183.64

(Source: annexure A7)

The central bank has not made any strict rules to the CBs to make investment in financial institutions. Hence, loans to private sector always dominated on the overall outstanding figure of loans & advances. Of the total outstanding loan & advances of Rs. 210331.6 M, claim on private sector registered 94.71% followed by 2.61% to financial institutions and 2.60% to government organizations. The selected banks are free to make decision whether to make investment in financial institutions or not. That is why the investment pattern of the selected banks seem fluctuating.

The above comparative table reveals that Nabil Bank has fluctuating trend of investment in financial institution. It has not made investment in these sectors during F/Y 2009 and F/Y 20011. The Highest portion it has invested in these sectors is 59.073 in F/Y 2008. Similarly NIBL has not made investment in F/Y 2009 and the highest portion it has invested in these sectors is 63.677 In F/Y 2008.

The average mean ratio of Nabil Bank is 12.722 and that of NIBL is 15.013. It shows that in an average NIBL has made higher investments in financial institutions than that of Nabil Bank. C.V of Nabil Bank is 203.88% and that of NIBL is 183.64%. The lower C.V of NIBL indicates that NIBL is more consistent in investment policy than that of Nabil Bank.

4.2.6 Investment on shares, debentures and bonds to total deposit ratio

Investment on shares, debentures and bonds to total deposit reflects the extent to which the selected banks are successful to mobilize their total deposit on purchase of shares and debentures of other companies to generate income and to utilize the excess fund. Higher ratio indicates more portion of investment on shares and debentures out of total deposit. The ratio is calculated as,

Investment on shares, debentures and bonds to total deposit ratio=Inv. on shares, debentures & bonds/ total deposit.

Table 10

Investment on shares, debentures and bonds to total deposit

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	1.652	1.523	3.118	0.539	1.229	1.612	0.946	58.65
NIBL	0.175	0.121	0.124	0.186	0.072	0.136	0.046	33.92

(Source: annexure A8)

The above comparative table shows fluctuating trend of ratios of selected banks. Nabil Bank has highest ratio of 3.118 in F/Y 2009 and the lowest ratio of 0.539 in F/Y 2010. The average mean ratio of Nabil Bank is 1.613. S.D of the same bank is 0.946 and C.V is 58.65%.

NTBL has the highest ratio of 0.186 in F/Y 2010 and the lowest ratio of 0.072 in F/Y 2011. The average mean ratio of the bank is 0.136. S.D of NIBL is 0.046 and C.V is 33.92%.

The above comparative table shows that the mean ratio of Nabil Bank is higher than that of NIBL. It has higher ratio of C.V of 58.65% than that of NIBL. The

Lower C.V of NIBL shows more consistency of investment procedure of the bank than that of Nabil Bank.

The selected banks have made more investment only on government securities during the 5 years of study period. They have zero investment of government bond, government non-financial institution and other non-financial institutions. The major portion of investment of selected banks includes the risk free assets like government securities, treasury bills and some investments in foreign banks, local banks and mutual fluids. Investment on shares, debentures and bond of other companies is not satisfactory due to High risk factor and some regulations of NRB. Like NRB has prohibited banks from investing in shares and securities not listed in stock exchange. Further, banks are prohibited from investing in shares and securities of other banks and financial institutions licensed by NRB.

4.2.7 Loan loss ratio

When the debtors are unable to pay the loan the loss of loan occurred. It occurs not only because of debtors[1] failure but also because of failure of recovery of loan by bank. If higher loss is expected then greater loan loss provision is made. Higher ratio leads to low profit and indicates low efficiency of the bank.

The ratio is calculated as;
Loan loss ratio = loan loss provision / loan and advances

Table 11

Loan loss ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	4.532	4.278	3.311	2.733	2.261	3.423	0.975	28.47
Investment bank	2.506	2.840	3.129	3.050	2.716	2.848	0.252	8.85

(Source: annexure A9)

NRB has directed all the commercial bank to classify loan into four different categories on the basis of loan overdue period and as per the present norms of NRB C.Bs need to maintain loan loss provision of 1% for pass loan. 25% for

sub-standard, 50% for doubtful and 100% for loss on the basis classification of loan. The table shows that Nabil Bank has an average mean ratio of 3.423%. The ratios are in decreasing trend through out the years. The Highest loan loss ratio of the bank is 4.532% in the year- 2009. S.D of the bank is 0.975 and C.V is 28.47%.

NTBL has an average mean ratio of 2.848%. The ratios are in increasing trend from FY 2007 to FY 2010 and it decreased in the year 2011. It has highest loan loss ratio of 3.129% in the year 2009. S.D of the bank is 0.252 and C.V is 8.85%.

It is clear from the above comparative table that Nabil Bank has higher mean ratio man mat of NIBL. It means Nabil Bank can earn more profit than NIBL. Nabil Bank has higher percentage of C.V.

4.3 Profitability ratio

Profitability ratio measures the overall banking operation of the company in regards to the profit. Profitability ratio is determined by the financial institution to find out their profit earning capacity on various kinds of funds they employed. A bank can make the profit through the sound lending policy and the quality of service it provides. Higher is the profit ratio Higher will be the efficiency of the bank.

4.3.1 Return on total working fund

Return on total working fund measures the relationship between the working fund and the profit of the bank. Working fund includes the total deposit of the banks and other borrowings which are taken by banks to give loan to the customer. The ratio is calculated as;

Return on total working fund = net profit / working fund

Table 12

Return on total working funds

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	2.889	9.959	10.345	3.254	2.782	5.846	3.937	67.35
Investment bank	1.473	1.284	1.590	1.852	2.084	1.657	0.315	19.03

(Source: annexure A12)

The above table shows that Nabil Bank has higher profit earning capacity than that of NIBL. The mean ratio of Nabil Bank is 5.846% and the same of NTBL is only 1.657%. It indicates that Nabil Bank has strong reputation in the market than that of NIBL. The trend of ratio of both banks is in fluctuating trend. Nabil Bank has the highest ratio of 10.345% in the year 2006 and mean of NIBL is only 2.084% in the year 2011. It is clear that Nabil Bank has strong earning capacity than NIBL.

4.3.2 Return on total loan and advances

Net profit of commercial banks depends on loan and advances. So, calculation of r Return on total loan and advances is very important to find out the financial condition of the banks. The ratio is calculated as;

Return on total loan and advances = net profit / loan and advances

Table 13

Return on total loan and advances

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	5.331	17.198	13.957	4.874	4.304	9.133	6.005	65.75
Investment bank	1.973	2.080	2.221	2.660	2.872	2.361	0.387	16.40

(Source: annexure A13)

The above table shows that Nabil Bank is in good condition than that of NIBL as it has higher level of mean ratio. The mean ratio of Nabil Bank is

9.133% and that of NIBL is only 2.361%. Although, amount of loan and advances granted and mean ratio of loan and advances to total deposit of NIBL is higher return on total loan and advances of Nabil Bank is higher.

4.3.3 Return on equity ratio

The bank can earn more profit if they mobilize the equity capital properly. The return on equity capital measures the extent to which a bank is successful to mobilize its capital. The ratio is calculated as; Return on equity ratio = net profit / total equity capital

Table 14

Return on equity ratio

Year (mid July)	2004	2005	2006	2007	2008	mean	S.D	C.V%
Nabil Bank	84.660	290.662	307.265	129.209	137.080	189.775	101.829	53.66
Investment bank	39.560	51.702	39.498	59.354	63.692	50.761	11.116	21.90

(Source: annexure A14)

The above table shows that Nabil Bank has an average mean ratio of 189.775% and the same of NIBL is only 50.761%. It indicates that Nabil Bank is more successful in mobilizing its capital than that of NIBL. It is clear that Nabil Bank has more earning power than that of NIBL. Nabil Bank has maximum return on earning which is pleasing to the shareholders and in the case of NIBL it is just acceptable.

4.3.4 Total interest earned to total outside assets ratio

Total interest earned to total outside assets ratio is calculated to know the extent to which the bank is successful to earn interest income on total outside assets. Higher ratio is favorable as higher ratio indicates Higher earning power of total outside assets of the banks. The ratio is calculated as;

Total interest earned to total outside assets ratio = total interest earned / total outside assets

Table 15

Total interest earned to total outside assets ratio

Year (mid July)	2007	2008	2009	20010	2011	mean	S.D	C.V%
Nabil Bank	0.130	7.141	7.191	6.858	6.483	5.561	3.049	54.83
Investment bank	6.145	6.654	6.307	6.381	6.662	6.430	0.225	3.50

(Source: annexure A15)

The above table shows that the mean ratio of Nabil Bank is 5.561% and of NTBL is 6.430%. In an average NIBL has Higher earning power than that of Nabil Bank. Both banks have fluctuating trend of ratios but NIBL has remained at the same level of 6% during 5 years of period and Nabil Bank has up and down ratios. The Highest ratio of Nabil Bank is 7.191% in the 2009 and that of NIBL is 6.662% in the year 2011.

4.4 Risk ratio

Risk ratio measures the level of risk. Risk always sticks with return. Higher the risk, Higher will be the return. Bank has to take High risk if it expects High return on its investment. Hence, bank has to accept and manage High risk so as to achieve High return.

4.4.1 Interest rate risk ratio

The possibility of loss due to change in interest rate is known as interest rate risk. There exists higher degree of risk related with interest rate. This ratio is calculated as; Interest rate risk ratio = interest sensitive assets/Interest sensitive liabilities

Table 16

Interest rate risk ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	100.0	100.66	103.14	58.216	57.882	83.980	23.701	28.22
Investment bank	83.04	68.770	77.764	74.187	77.470	76.247	5.248	6.88

(Source: annexure A10)

The bank has removed the provision of maintaining average interest rate spread below *5* percent since 2006/07. In the context of the beginning of institutional reform programme of the government owned commercial banks, the provision of interest rate spread was phased out in order to let the market forces determine it competitively. However, the spread rate has not come down as expected despite the competition among the commercial banks.

The above table shows that the mean ratio of Nabil Bank is 83.980% .It has fluctuating trend of interest risk ratio. S.D and C.V of the bank is 23.701 and 28.22% respectively.

The average mean ratio of NIBL is 76.247%. The trend of ratio of the banks is fluctuating trend. NIBL has S.D of 5.248 and C.V of 6.88%.

The average ratio of Nabil Bank is higher than that of NIBL. Nabil has 100% interest rate risk in the FY 2007 and more than 100 percent in the year 2008 and 2009. This indicates that Nabil Bank has higher degree of interest rate risk and NIBL has moderate level of interest rate risk.

4.4.2 Credit risk ratio

The risk behind making investment or granting loan is measured by credit risk ratio. Actually credit risk ratio shows the proportion of non performing assets in total loan and advances of a bank. But due to unavailability of related data, the ratio is calculated with the help of loan and advances and total assets. The ratio is calculated as; Credit risk ratio = total loan and advances / total assets

Table 17

Credit risk ratio

Year (mid July)	2007	2008	2009	2010	2011	mean	S.D	C.V%
Nabil Bank	47.143	49.621	63.429	58.367	57.461	55.204	6.688	12.11
Investment bank	65.694	55.362	64.232	61.782	64.402	62.294	4.125	6.62

(Source: annexure A11)

The above table shows the mean ratio of Nabil is 55.204% and the same of NIBL is 62.294%. Comparatively, NABIL BANK has lower risk ratio than that of NIBL In each year during 5 years of period. It indicates that NABIL BANK has low possibility of loss than that of NIBL.

Table 18

4.5 Comparison of Investment policy of the selected bank

(Rs. in million)

Bank	Nabil					NIBL				
Sector/Year	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Deprived	266.2	271.6	311.1	361.9	430.2	148.3	180.5	282.9	365.4	514.6
Priority	365.2	878.9	803.2	764.7	895.8	493.9	561.1	706.3	693.0	485.7
Financial institution	360.0	8616. 7	0.0	360.0	0.0	840.0	7338.6	0.0	84.0	83.9
Shares, debentures and bonds	222.2	222.2	440.3	104.2	286.9	13.98	13.98	17.74	35.25	17.74
Profit	416.2	1429	1510.7	635.3	674	116.8	152.7	232.1	350.5	510.4

Deprived sector: NRB has decreased minimum percentage requirement of deprived sector lending to 3%. But, it is seen that there is increasing trend of investment of the selected banks. Investment policy of Nabil Bank has given more priority to invest in deprived sector as it has invested higher amount in This sector than NIBL during 5 years of the study period

Priority sector: Although NRB has phased out priority sector lending the selected banks have continued investing in this sector. But the ratio of investment in this field of Nabil Bank is higher than that of NIBL. It shows that Nabil Bank's investment policy is highly concerned toward social and economic development of the country.

Financial Institution: Investment in financial institution of the selected bank is in fluctuating trend. They have not made investment during 2009. It shows that investment policy of the selected bank has not given emphasis to make investment in this sector.

Shares, Debentures & Bonds: Nabil Bank has given more emphasis on investing in This sector than NIBL.

Profit impact: Investment in each sector of Nabil Bank during 5 years of the study period is higher than NIBL. Hence, Profit of the Nabil Bank is comparatively higher in each year during 5 years of the study period than that of NIBL. From this we can conclude that investment policy adopted by Nabil Bank is more efficient and favorable from profit point of view.

4.6 Statistical Analysis

Under This topic following statistical tools are calculated

1. Correlation coefficient between different ratios
2. Trend analysis of deposit, loan & advances, investments and net profit

4.6.1 Correlation coefficient

Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and loan & advances, deposit and total investment, outside assets and net profit. The coefficient of correlation is directly calculated in the "Microsoft Excel" and Probable Error (P.Er) is calculated using Standard Error (S.E). The probable error is used to measure the reliability and test of significance of correlation coefficient. It is calculated as under

$$S.E = \frac{1 - r^2}{\sqrt{2}}$$

P.Er = 0.6745xS.E. (r)

6P.Er =6x P. Er

4.6.1.1 Coefficient of correlation between deposit and loan & advances

Deposits and loan and advances are the life blood of any commercial banks. The existence of die commercial banks depends upon the total deposit collected and the total amount granted as loan and advances. The relationship between deposit and loan and advances should be optimum to gain profit. Correlation coefficient measures the degree of relationship between to variables i.e. deposit and loan and advances. In This analysis deposit is independent variable (X) and loan and advances is dependent variable (Y). The main reason of finding out of correlation (r) between these two variables is to justify whether deposits are significantly used as loan and advances or not. The table below shows the value of 'r', 'r ^{2}', Probable Error (P.Er) and 6 P.Er between deposit and loan and advances of Nabil Bank and NIBL.

Table 19

Bank	R	r^2	P.Er	6 P.Er
Nabil Bank	0.941	0.886	0.0343	0.206
NIBL	0.994	0.988	0.003	0.0213

The above table shows that the correlation coefficient of NIBL is 0.994093923 and it shows positive relationship between deposit and loan and advances.

There is significant relationship between these two variables. The coefficient of determination (r^2) is 0.988223 which depicts that the dependent variable (loan and advances) is explained by the independent variable (deposits) about 98.82%. Similarly, the probable error (P.Er) of NIBL is 0.003553. Since, the obtained value of r > P.Er the value of 'r' is significant and the value of r > 6 P.Er shows that it is definitely significant.

In the case of Nabil Bank the correlation coefficient is 0.941323282 and it shows positive relationship between deposit and loan and advances. There is significant relationship between these two variables. The coefficient of determination (r^2) is 0.886089522 which depicts that the dependent variable (loan and advances) is explained by the independent variable (deposits) about 88.41%. Similarly, the probable error (P.Er) of Nabil Bank is 0.034361. Since, the obtained value of r > P.Er the value of V is significant and the value of r > 6 P.Er shows it is definitely significant.

In conclusion, we can say that there is positive relationship between deposit and loan and advances of two banks. This means if deposit increases then loan & advances definitely increases.

4.6.1.2 Coefficient of correlation between deposit and investments

Coefficient of correlation between deposit and investment measures the degree of relationship between these two variables. In This analysis deposit is independent variable (X) and investment is dependent variable (Y). The main reason of finding out of correlation (r) between these two variables is to justify' whether deposits are significantly invested or not. The table below shows the value of 'r', 'r^2', Probable Error (P.Er) and 6 P.Er between deposit and investments of Nabil Bank and NIBL.

Table 20

Bank	R	r^2	P.Er	6 P.Er
Nabil Bank	0.849	0.721	0.084	0.504
NIBL	0.967	0.935	0.019	0.117

The above table shows that the correlation coefficient of NIBL is 0.967038441 and it shows positive relationship between deposit and investment. There is significant relationship between these two variables. The coefficient of determination (r^2) is 0.935163 which depicts that the dependent variable (investment) is explained by the independent variable (deposits) about 93.51%. Similarly, the probable error (P.Er) of NIBL is 0.019558. Since, the obtained value of r > P.Er the value of 'r' is significant and the value of r > 6 P.Er shows that it is definitely significant.

In the case of Nabil Bank the correlation coefficient is 0.849202643 and it shows positive relationship between deposit and investment. There is significant relationship between these two variables. The coefficient of determination (r^2) is 0.721145 which depicts mat the dependent variable (investment) is explained by the independent variable (deposits) about 72.11%. Similarly, the probable error (P.Er) of Nabil Bank is 0.084115. Since, the obtained value of r > P.Er the value of V is significant and the value of r > 6 P.Er shows it is definitely significant.

In conclusion, we can say that there is positive relationship between deposit and investment of two banks. This means if deposit increases then investment of the bank also increases. It is clear from the table that correlation of coefficient and coefficient of determinant of NIBL is higher than that of Nabil Bank. This shows that NIBL has made greater investment out of deposit than that of Nabil Bank.

4.6.1.3 Coefficient of correlation between outside assets and net profit

Coefficient of correlation between outside assets and net profit measures the degree of relationship between these two variables. In this analysis outside assets is independent variable (X) and net profit is dependent variable (Y). The main reason of finding out of correlation (r) between these two variables is to justify whether net profit is significantly correlated with respect to outside assets or not. The table below shows the value of 'r', 'r^2' Probable Error (P.Er) and 6 P.Er between other side assets and net profit of Nabil Bank and NIBL.

Table 21

Bank	R	r^2	P.Er	6 P.Er
Nabil Bank	-0.394	0.155	0.254	1.528
NIBL	0.989	0.979	0.006	0.0365

The above table shows that the correlation coefficient of NIBL is 0.989864059 and it shows positive relationship between outside assets and net profit. There is significant relationship between these two variables. The coefficient of determination (r^2) is 0.979831 which depicts that the dependent variable (net profit) is explained by the independent variable (outside assets) about 97.98%. Similarly, the probable error (P.Er) of NIBL is 0.006084. Since, the obtained value of r > P.Er the value of 'r' is significant and the value of r > 6 P.Er shows that it is definitely significant.

In the case of Nabil Bank the correlation coefficient is -0.394201952 and it shows negative relationship between outside assets and net profit. There is low degree of relationship between these two variables. The coefficient of determination (r ~) is 0.155395which depicts that the dependent variable (net profit) is explained by the independent variable (other side assets) about 15.53%. Similarly, the probable error (P.Er) of Nabil Bank is 0.006084.

Since, the obtained value of r > P.Er and r > 6 P.Er the value of 'r' is significant but it is negatively correlated.

In conclusion, we can say that NIBL has positive relationship between outside assets and net profit but Nabil Bank has negative relationship between these two variables.

4.6.2 Trend analysis

4.6.2.1 Trend analysis of total deposit

The trend value of total deposit of Nabil Bank and NIBL is calculated under this section. An effort has been made to forecast for next five years from mid-July 2012 to mid-July 2016 on the basis past data of total deposit of Nabil Bank and NIBL from mid-July2007tomid-July2011.

Table 22

Estimation of the deposit for the year 2012 to 2016

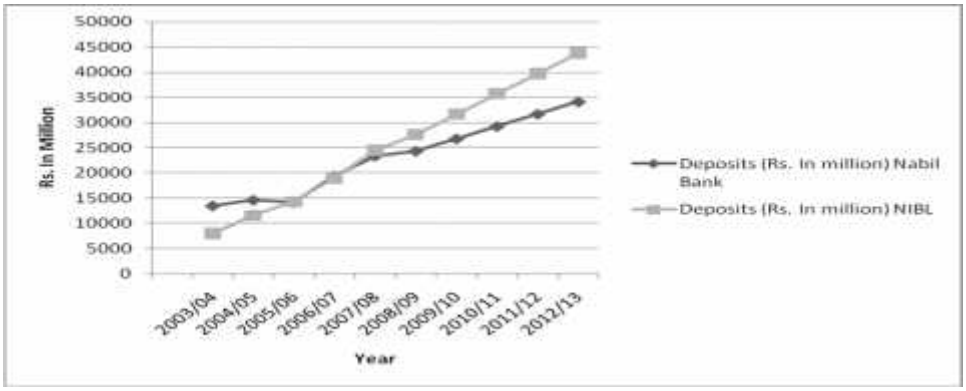
years	Deposits (Rs. In million)	
	Nabil Bank	NIBL
2007	13,448	7,923
2008	14,587	11,525
2009	14,119	14,255
2010	19,347	18,927
2011	23,342	24,489
2012	24333.6	27584.1
2013	26788.6	31637.6
2014	29243.6	35691.1
2015	31698.6	39744.6
2016	34153.6	43798.1

(Source: Annual reports) (Source: annexure B1 and B1.1)

The above table shows the total deposit of the banks is in increasing trend. If other things remain constant the total deposit of Nabil Bank will be RS. 34153.6 million in the FY 2013 and that of NIBL will be Rs. 43798.1 million. It is forecasted that NIBL will be more successful to collect more deposit from die market.

Estimation of the deposit for the year 2012 to 2016

Figure 2



4.7.2.2 Trend analysis of Loan and advances

An effort has been made to forecast the amount of loan & advances of Nabil Bank and NIBL for the next 5 years from mid-July 2012 to mid-July 2016.

Table 23

Estimation of the loan and advances for the year 2012 to 2016

Years	Loan and advances (Rs. In million)	
	Nabil Bank	NIBL
2007	7,808	5.922
2008	8,309	7,339
2009	10,824	10,453
2010	13,033	13,178

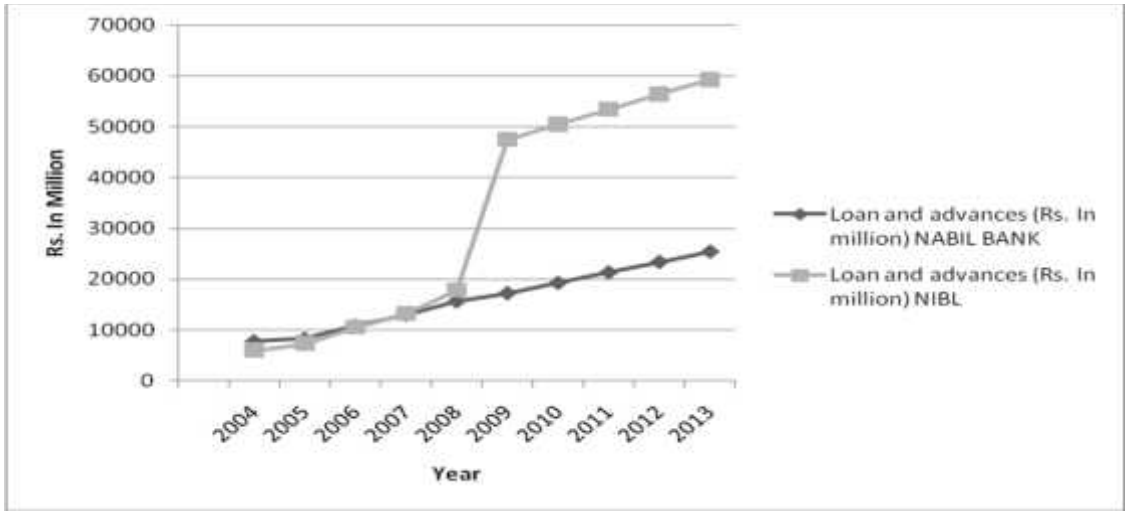
2011	15660	17,769
2012	17257.9	47563.9
2013	19300.7	50517.4
2014	21343.5	53470.9
2015	23386.3	56424.4
2016	25429.1	59377.9

(Source: annexure B2 and B2.1) (Source: Annual reports)

The above table shows that Nabil Bank has increasing trend of loan and advances and same of NIBL is in fluctuating trend. It is forecasted that both of banks will have increasing trend of loan and advances. The possible capacity of granting loan and advances of NIBL seems higher than that of Nabil Bank. NIBL seems to be more successful in the future to earn more profit than that of Nabil Bank because the expected future value of loan & advances of NIBL in the year 2016 is Rs. 59377.9 million and the same of Nabil Bank is only Rs. 2542.9 million.

Estimation of the total loan and advances for the year 2012 to 2016

Figure 3



4.6.2.3 Trend analysis of total investment

Table 24

Estimation of investment for the year 2012 to 2016

years	Investments (Rs. In million)	
	Nabil Bank	NIBL
2007	6,031	1,705
2008	5,836	3,862
2009	42,697	3,934
2010	6,181	5,603
2011	8,956	6,506
2012	15798.7	7724.6
2013	16418.2	8858.8
2014	17037.7	9993
2015	17657.2	11127.2
2016	18276.7	12261.4

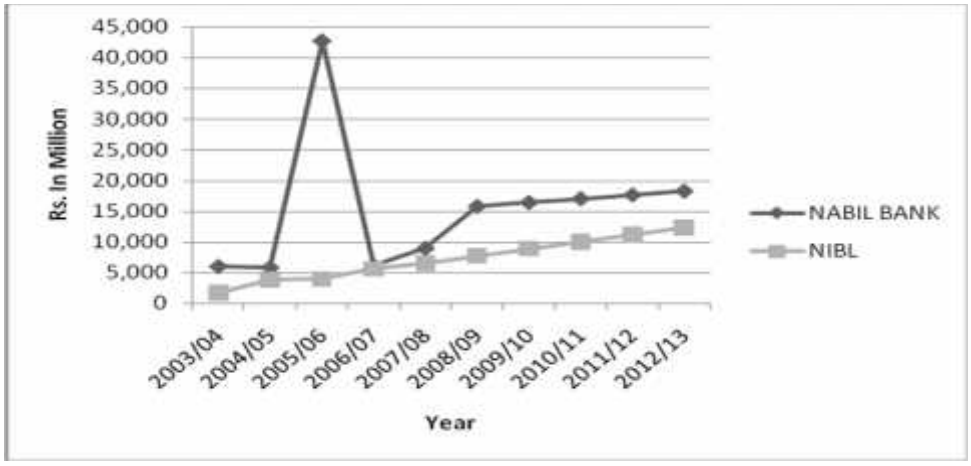
(Source: Annual reports) (Source: annexure B3 and B3.1)

Under This topic, the trend values of total investment for 5 years from mid—July 2007 to mid-July 2011 is calculated and forecasted for next five years from mid-July 2012 to mid-July 2016.

The above table shows that investment capacity of Nabil Bank is in fluctuating trend. In the year- 2007 it has investment of Rs.6031 million and it has decreased to Rs.5836 million in the year 2008. But in the year 2009 it has again increased its investment upto Rs. 42,697 million which is the highest amount Nabil Bank has invested during *5* year' of period. But in the case of NIBL it has increasing trend of investments. It is also clear from the table that of bank will have increasing trend of investment in the future.

Estimation of the total Investments for the year 2012 to 2016

Figure 4



4.6.2.4 Trend analysis of net profit

Table 25

Estimation of net profit for the year 2012 to 2016

years	Net profit (Rs. In million)	
	Nabil Bank	NIBL
2007	416	117
2008	1,429	153
2009	1511	232
2010	635	351
2011	674	510
2012	849.6	1160
2013	821.8	1258.6
2014	794	1357.2
2015	766.2	1455.8
2016	738.4	1554.4

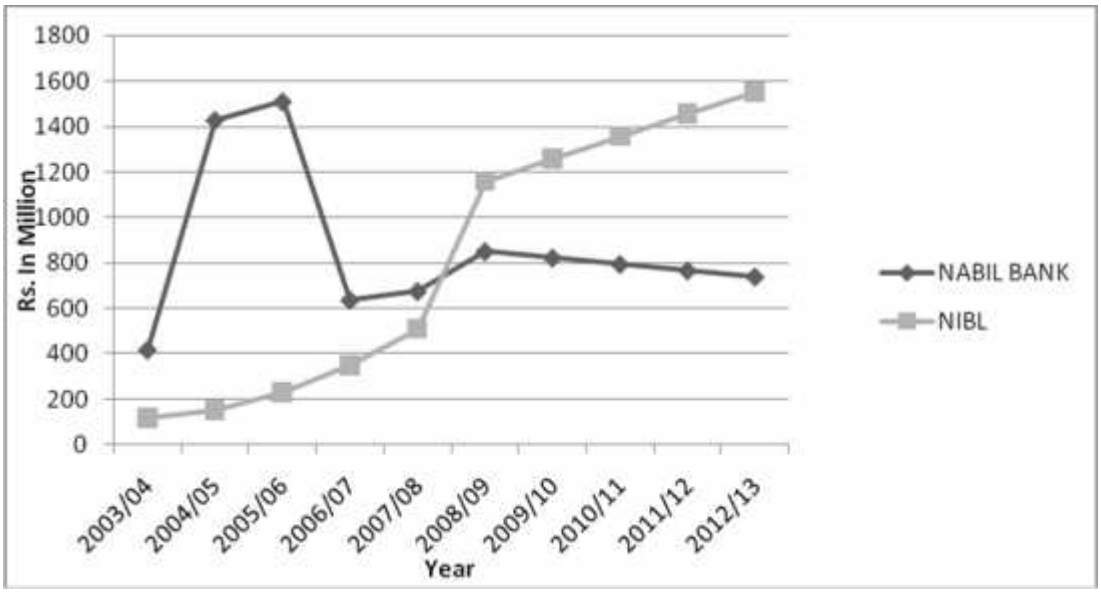
(Source: Annual reports) (Source: annexureB4 andB4.1)

Under This topic, the trend values of net profit for 5 years from mid-July 2007 to mid-July 2011 is calculated and forecasted for next five years from mid-July 2012 to mid - July 2016.

It is clear from the above table that NIBL has increasing trend of net profit. But in the case of Nabil Bank it has fluctuating trend of net profit. It has earned Rs. 416 million in the year 2007, Rs. 1429 Million in the year 2008, Rs. 1511 million in the year 2009 and decreased to Rs. 635 million in the year 2010. The two year's 2008 and 2009 seem financially strong period for Nabil Bank as it has earned maximum profit. But it is forecasted that Nabil Bank will have decreasing trend of net profit and NIBL will have still increasing trend of net profit.

Estimation of Net Profit for the year 2009 to 2016

Figure 5



4.7 Major findings of the study

1. It is found from the study that the amount of total deposit collected by Nabil Bank in each year during 5 years of the study period is higher than that of NIBL. Similarly, investment to total deposit ratio and the amount of total Investment made by Nabil Bank for the same period is also higher. Beside

total deposit collected and total investment made, total loan and advances of Nabil Bank is also Higher during first three years but afterward it is lower than that of NIBL. It is clear that Investment policy adopted by Nabil Bank is sound from profit point of view.

2. Nabil Bank has given more priority on investment and loan and advances. Hence it has maintained lower liquidity than NIBL. Nabil Bank has accepted higher level of interest rate risk rather than credit risk. Overall profitability ratio of Nabil Bank shows that it has earned Higher profit than NIBL. It is clear that Nabil Bank has given more emphasis on profit but NIBL has given priority both on liquidity and profit as well.
3. The study has found that total deposit and loan and advances and investment of the selected bank will be in increasing trend if other things remain constant. But it is also found that Net profit of the Nabil Bank will be in decreasing trend from 2016 onward.
4. There is positive relationship between deposit and loan & advances and deposit and investment of the selected bank. The study also found that increase in net profit of Nabil Bank is not caused by the increase in outside assets as it has negative relationship between outside assets and net profit but in the case of NIBL increase in net profit depends upon increase in outside assets.
5. Comparison of financial performance of Nabil bank and NIBL:

1. Liquidity ratio	Nabil Bank	NIBL
	Nabil bank has given more priority oil Investment than to maintain higher liquidity. It has lower average mean ratio of liquidity.	NIBL has maintained Higher liquidity than Nabil Bank. It has given priority to both liquidity maintenance

		and Investment procedure.
2. Activity ratio	It is seen that Nabil Bank has lower average mean ratio of loan and advances to total deposit and Higher mean ratio of Investment to total deposit, from This we can conclude that Nabil Bank has given more emphasis on Investment than to grant loan and advances.	NIBL seems more successful in granting loan and advances. It has not grabbed more investment pportunities as it has lower average mean ratio of investment to total deposit.
3. Risk ratio	Interest rate risk of Nabil bank is Higher but it has lower credit risk ratio.	Loan and advances of NIBL is Higher hence it has Higher credit risk ratio. But it has lower Interest risk ratio.
4. Profitability ratio	Return on loan and advances of Nabil Bank is Higher although it has lower ratio of L&A. It is clear" that Nabil Bank has adpoted sound investment policy.	Despite of Higher ratio of L&A NTBL has lower ratio of return on L &A.

In overall, NIBL seems strong in financial performance than Nabil Bank. But profit earning capacity of Nabil Bank is higher. It shows that investment policy of Nabil Bank is more efficient than that of NIBL.

6.Sector wise Loan and advances of Nabil Bank and NIBL:

From the above table it is clear that Nabil Bank has decreasing trend of granting loan and advances to the agriculture sector but on the contrary NIBL has increasing trend of granting loan. This concludes that NIBL has adopted liberal lending policy to develop the agricultural sector so as to contribute to develop national economy.

NRB has phased out priority sector lending requirement but Nabil Bank has still continued to grant loan and advances to mining but on the contrary NIBL has not shown interest to lend to This sector. It shows that Nabil Bank is socially concerned to develop priority sector and enhancing national economic development.

It is seen from the above table that both banks have given more priority to production and service industries as they have granted Highest amount as loan and advance to these sectors during five years of study period. From This we can conclude that the selected banks have given emphasis to earn more profit by lending more amounts on less risky sectors. Their motive is to earn profit than to develop backward communities and to push priority sector.

The investment policy of the selected bank gives more emphasis to make more investment on productive sector and to earn more profit from their investment including public welfare.

4.8 Minor findings of the study

Liquidity ratio

- NRB has directed all the commercial banks to keep minimum 5% of total deposit in the NRB balance so as to maintain the liquidity position.

Nabil Bank has an average mean ratio of 3.995% and the same of NIBL is 5.919%.

- The mean ratio of liquid fund to total deposit ratio of both banks suggests that they are sound in This regard.

  The overall analysis of liquidity ratio has found that Investment bank is more consistent to maintain liquidity position than that of Nabil Bank. Nabil Bank and NIBL both have given more priority to increase investment than to maintain liquidity.

Activity ratio

- Loan & advances to total deposit ratio of NIBL is higher than that of Nabil Bank. An average mean ratio of NIBL is 70.788% and that of Nabil Bank is 65.228%. It shows that NIBL is more successful in advancing loans.
- Investment to total deposit ratio of both banks is in increasing trend. An average mean ratio of Nabil Bank is Higher than that of NIBL.
- Investment on deprived sector to total deposit ratio of the selected bank is in fluctuating trend. The average mean ratio of Nabil Bank is link bit Higher than NIBL and Nabil Bank seem more consistent to make investment in deprived sector than that of NIBL.
- Investment on priority sector to total deposit ratio of NIBL is in fluctuating trend. But that of Nabil Bank increased to 6.025 from 2.716 during the year 2007 and after 2007 onwards it is also in decreasing trend.
- Investment on financial institution to total deposit ratio of the selected bank is fluctuating drastically. An average mean ratio of NIBL is higher than that of Nabil Bank.
- The loan loss ratio shows that NIBL has managed loan & advances soundly as it has lower ratio than that of Nabil Bank.

  The overall study of this ratio reveals that NIBL is in better position to grant loan and advances but in terms of investment purposed Nabil Bank is

more capable to make investment out of total deposit. It shows that NIBL is ready to bear more risk than that of Nabil Bank.

Risk ratio

- Nabil Bank has higher interest rate risk than that of NIBL and also has higher variability ratio.
- Credit risk ratio measures the risk making investment or granting loan. NIBL seems risk seeker since its credit risk ratio is higher than that of Nabil Bank.

Profitability ratio

- Return on total working fluid of NIBL is less than Nabil Bank although it has accepted higher level of risk. C.V of Nabil Bank is higher than that of NIBL. It is clear that Nabil Bank is in better position to earn higher profit out of its working fund.
- Return on Loan & advance of Nabil Bank is higher than that of NHJL. That means Nabil Bank has achieved the net profit from loan & advances four times more than that of NIBL.
- Return on equity of Nabil Bank is more than mat of NIBL. Hence, Nabil bank is earning more profit from the equity capital.

  In overall, we can conclude that Nabil Bank has Higher earning capacity than that of NIBL. Hence, Nabil Bank is performing well to achieve the higher percentage of profit.

Correlation coefficient

The calculation of correlation reveals that

- Correlation of coefficient between deposit and loan & advances found that there is positive relationship between deposit and the loan & advances of the bank. It indicates that the increase in deposit tends to increase in loan and advances. The study also suggests that the dependent variable i.e. loan & advances of both bank is highly dependent upon the total deposit.

- Correlation of coefficient of deposit and investment of both banks is positive. It is found from the study that the dependent variable (i.e. investment) of NIBL is Highly dependent upon independent variable (i.e. deposit) where as in the case of Nabil Bank it is dependent not only on deposit but also on other variables as well.
- Correlation coefficient between outside assets and net profit of Nabil bank is negative whereas that of NIBL is positive. It indicates that increase in net profit of Nabil Bank is not caused by the increase in outside assets of the bank. But in the case of NIBL it shows that increase in net profit depends upon increase in outside assets and vice versa.

Trend analysis

- The trend analysis of total deposit of both banks show that the deposit of Nabil Bank in next 5 year will be Rs. 34153.6 M and that of NIBL will be Rs. 43798. IM. Deposit collection on NTBL will be Higher than that of Nabil Bank.
- It is forecasted that both of banks will have increasing trend of loan and advances. The possible capacity of granting loan and advances of NTBL seems higher than that of Nabil Bank. Total loan and advances of Nabil bank in next 5 year is forecasted to be Rs. 25429.1 M and that of NIBL is Rs. 59377.9 M.

The total investment of Nabil Bank In FY 2016 is forecasted to be Rs. 18276.7 M and that of NIBL is Rs.12261.4 M. Nabil Bank will be more capable to increase investment in the future than that of NIBL. It is forecasted that net profit of Nabil Bank will be decreased but same of NIBL will be increased. The trend of net profit of Nabil Bank is in decreasing trend and the same of NIBL is in increasing trend. The net profit of Nabil Bank in FY 2016 is expected to be Rs. 738.4 M and that of NIBL is expected to be Rs. 1554.4 M.

CHAPTER V

Summary, Conclusion and Recommendations

5.1. Summary

Investment simply means an assets or item that is purchased with the hope that it will generate income or appreciate in the future. In general sense, investment means to pay out money to get more. It involves the commitment of resources that have been saved or put away from current consumption to the future. Investment policy comprises the set of guidelines and procedures that direct the long-term management of the investor's assets. This research study has been conducted to find out the impact of NRB directives in Investment policy of CB. NRB being central bank of Nepal directs, supervise, controls and guides CB to move. Although the investments policies are formulated by the concerned banks how far the rules and regulations of investment policy of CB are affected by NRB directives is the main focus of This research work. All the CBs need to comply with the NRB directives and the violation or non compliance of directives may lead to fine or penalty to the bank. In F/Y 2009/10 NIBL has been penalized Rs. 22132.50M for non compliance of direct lending to the priority sector. Hence, NRB guidelines are obligatory to all the banking and financial institutions operating in the country.

A CB need to keep optimum relation between deposit collection procedure and loan policy. The idle money collected by the commercial banks as deposits should be properly utilized either by granting loan to the needy parties or by making investment in the productive sector to earn more profit. CB should have sound investment policy for mobilization of the available fund. A deposit is that liabilities of CB which is returnable in demand at any time. So, sound investment policy has appeared to be very necessary to CB. A CB mainly focuses on its two functions i.e. collection of deposit through various scheme

and granting those amount as loan to the customers by providing various facilities.

Different new clause and acts are added in directives and some old regulations are also amended in different phase of time to uplift banking system in Nepal and to cope with the international standard. To reduce the cost of fund and enhance investment and credit exposure NRB has decreased the CRR to 5%. In order to safeguard the bank from being bankruptcy NRB has directed CBs to make provision of single borrower credit limit of 25% on fund based and 50% on non fund based.

Now a day, there is strong competition among the CB. To attract more customers depends upon the facilities and services provided by the banks. In this research NIBL seems performing well enough to attract its customer. It has collected Rs. 24488.9 as total deposit and extended Rs.17769.lM as loan and advances. It has invested Rs. 6505.7M and earn total profit of Rs. 510.4M during the year 2011. In the case of Nabil Bank, it has collected total deposit Rs. 23342.29M, extended loan and advances Rs. 15659.9M, out of total deposit it has invested Rs. 8956.3M and made total profit of Rs. 673.95M in the year 2011. It is clear- that Investment bank has higher amount of deposit collection and loan and advances than that of Nabil Bank. But Nabil Bank is more capable to grab the investment opportunities and it has invested Higher amount that that of NIBL. Although the amount of deposit and loan and advances of NIBL is higher than that of Nabil Bank the profit of Nabil Bank is more. Hence, investment policy of the concerned bank plays vital role to survive in the market with dignity and image.

5.2 Conclusion

Under This research study, different financial and statistical tools are used to measure the Investment policy of the selected banks. It is found that both selected banks have strong financial performance but comparatively Nabil

Bank is in better position. Despite of social contribution Nabil Bank has higher profit earnings. It is concluded that Nabil Bank has adopted better investment policy than that of NIBL.

In conclusion, it can be said that central banks are required to direct the commercial banks. C.B. should move as per the direction given by the central bank. Banks should have optimum policy to collect the deposit in various accounts. Deposit is the major organ of commercial bank to live in the industry. Higher the deposit Higher will be the chance of mobilization of working fund and profit thereto. Banks should not invest their' fund haphazardly. It should be careful while advancing loan because loan is the blood of the C.B. for survival. If C.B. does not apply sound investment policy it will be in great trouble in future to collect it in time, hence the possibility of bankruptcy thereto. Banks should invest their fund in various portfolios after the deep study of the project to be safe from being bankruptcy. If banks concentrate the investment in few organizations there is a high chance of default risk. Diversification is needed to all the business houses but it has seen immense importance to C.B. Hence, the C.B. should implement the investment policy considering the directives issued by NRB. CBs should not cross the boundary level set by central bank to make investment policy. In overall, it can be concluded that the role of NRB in investment policy of commercial bank has both positive and negative impacts.

5.3. Recommendation to Nabil Bank Ltd. and NIBL

- Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. Both of the banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk Higher will be the profit. Hence, Nabil Bank and NIBL are recommended to diversify their investment in NRB bond, govt. non financial institution, other non-financial institution etc.

- To be a successful banker a bank must utilize depositors' money as loan and advances. Loan and advances is the largest item of the bank in the asset side of balance sheet which is risky and more profitable too. Loan and advances of Nabil Bank is lower man NIBL. It has given more priority on the private sector lending. Loan and advances to the government sector and other financial institutions is too low. Hence, Nabil Bank and NIBL are recommended to follow the liberal lending policy to increase their total loan and advances in order to earn more profit.
- Total investment made by the selected bank is in fluctuating trend. So both bank must seek new places or sectors for investment, with potentiality of high return and low risk and should make rational investment.
- There is slight growth in priority and deprived sector investment of both banks during the study period of 5 years. Although NRB has lessened the criteria to 2% for priority and deprived sector credit, both bank should continue to extend priority and deprived sector lending to access banking service to the poor and backward communities.
- The Highest portion of bank's earning is contributed by interest income gained from loan and advances. So, for better income, the bank must properly utilize depositor's money in the form of loan and advances. From the study it has been found that Nabil Bank has utilized an average of 65% of total deposit on loan and advances in five years of period while NIBL has used almost 70% of total deposit for lending. But an average mean ratio of return on loan and advances of Nabil Bank is higher than that of NIBL (i.e 5.86> 1.657). Hence, Investment bank is highly recommended to follow the liberal lending policy so as to enjoy the more interest income.
- Profit is the life blood of any organization. Profit maximization is the main objectives of any banking industries. The growth ratio of net profit of Nabil Bank is too low in comparison to NIBL. So, Nabil Bank is

recommended to diversify its investment on more profitable sector and adopt sound investment policy.

- Liquidity and profitability are like two wheels of the same cart and both are very inter-related and have converse relation; one can be achieved only at the cost of the others. Highly liquid bank may have less profitability as it has to hold more assets in the form of cash. However, the bank has to maintain sufficient fund in the form of cash and liquid assets to meet various commitments like depositors claim, personnel expenses, interest payments, to exploit unforeseen opportunities etc. Since, NIBL has held more liquidity its profitability ratios are lower than Nabil Bank. So. NIBL is highly recommended to maintain reasonable liquidity so as to increase profitability of the bank.

BIBLIOGRAPHY

Books

American Institute of Banking. (1972). *Principal of Bank Operation.* USA:AIB.

Bexley, J.B.(1987). *Banking Management.* New Delhi: Sujeet publication.

Crosse, H.D. (1963). *Management policies of commercial Banks.* New Jersey: Englewood cliffs, prentice hall Inc.

Kothari, C.R. (1994).*Quantitative Techniques.* New Delhi: Vikash publishing Pvt. Ltd.

Radhaswamy, M. and Vasudevan, S.V. (1979). *A text book of Banking.* New Delhi: S. Chand & Company Ltd.

Reilly, F.K. (1986). *Investment.* Japan: CBS College Publishing, The Dryden Press.

Singh, P. (1986). *Investment Management.* Bombay: Himalaya Publishing, House.

Singh, S.P. and Singh, S. (1983). *Financial Analysis for Credit Management in Banks.* New Delhi: Vikas Publishing House Ltd.

Sharpe, W.F., Alexender, G.J. and Bailey, J.V. (1998). *Investments.* New Delhi: Pentice Hall of India Pvt. Ltd.

Wolff, K.H. & Pant, P.R. (2002). *A Hand Book For Social Science Research and Thesis Writing.* Kathmandu: Buddha Academic Enterprises.

Bhattarai, R(2010) "*Fundamental of Investment*" Kathmandu: Buddha Publication.

Godon, Mj(1962), "The *Investment financing and valuation of corporation*".

Dhakal (2008) "Investment Policy of commercial banks in Nepal", Kathmandu Central library TU

Frak K. Reily(1999), "*Investment*", Tokyo: the pryden press, GBS publishing Japan Ltd.

Sharma, B (2001) "*Corporate Financial Management*", Kathmandu, Taleju Publication

Thesis

Laudhari, S. (2001). *A study on Investment Policy of Nepal Indosuez Bank Ltd. In Comparison To Nepal SBI Bank Ltd.*, T.U. Kathmandu.

Bajracharya, R. (2000). *Investment of Commercial banks in Priority Sector.*, T.U. Kathmandu.

Bhattarai, R. (1978). *Lending Policy of Commercial Bank in Nepal.,* T.U. Kathmandu.

Lamichhane, M. (2000). *Investment Policy of Joint Venture Banks in Nepal.***,** T.U. Kathmandu.

Pandit, K. (2003). *A Study on Investment Policy Analysis of S.C Bank Nepal Limited (In Comparison to Other Commercial Banks of Nepal).*, T.U. Kathmandu.

Poudel, K. (2002). *Liquidity and Investment Position of Joint Venture Commercial Banks in Nepal.,* T.U. Kathmandu.

Shrestha, S. (1993). *Investment Planning of commercial Banks in Nepal.,* T.U. Kathmandu.

Thapa, S. (1999). *A comparative study on Investment Policy of Nepal Bangladesh Bank Ltd. and joint Venture Commercial Banks in Nepal.***,** T.U. Kathmandu.

Publications and Journal

Annual Report (2006). Banking Supervision.

Annual Report of Nabil Bank (2007-2011). Kathmandu: Nabil Bank.

Annual Report of NIBL (2007-2011). Kathmandu: Nepal Investment Bank.

Banking and Financial Statistics (NRB 2007-2011). Kathmandu: Nepal Rastra Bank.

Banking Prabardhan (Volume: 22, Dec. 07/Jan. 08)

Dhaugana, Bhishma Raj, "Bank and Financial Institution" (2007)

Monetary Policy (2010/11). Kathmandu: Nepal Rastra Bank.

NRB Economic Bullitin (Volume: 41, Mid-April 2007). Kathmandu: Nepal Rastra Bank.

Pradhan, Shekhar Bahadur, "Baisakha Masanta" (2053)

Shrestha, Dr. Manohar Krishna, *"Commercial Banks and Comparative Performance Evaluation"*, Karmachari Kosh, (2047)

Shrestha, Shiba Raj, *"Portfolio Management In Commercial Banks, Theory and Practice*" Nepal Bank Patrika, (31st Baisakh, 2055).

Websites

www.nrb.org.np

www.nibl.com.np

www.nabilbank.com

www.nepalnews.com

ANNEXURE A

Annexure A1

Nabil Bank Ltd.

NRB balance to total deposit ratio (in million)

Year (mid- July)	NRB deposit	Total deposit	Ratio
2007	892,746,559	13,447,661,064	6.639
2008	606,694,594	14,586,608,707	4.159
2009	389,705,047	14,119,032,115	2.760
2010	318,358,771	19,347,399,440	1.645
2011	1,113,415,436	23,342,285,327	4.770

(Sources: Annual Report on Website)

Investment Bank Ltd (in million)

NRB balance to total deposit ratio			
Year (mid-July)	NRB deposit	Total deposit	Ratio
2007	450,477,659	7,922,766,420	5.686
2008	545,620,108	11,524,679,645	4.734
2009	780,243,636	14,254,573,663	5.474
2010	1,526,066,660	18,927,305,974	8.063
2011	1,381,351,556	24,488,855,696	5.641

(Sources: Annual Report on Website)

Annexure A2

Nabil Bank Ltd.

Total liquid fund to total deposit ratio (in million)

Year(mid-July)	Liquid fund	Total deposit	Ratio
2007	1,889,219,943	13,447,661,064	14.049
2008	1,245,808,921	14,586,608,707	8.541
2009	1,427,808,921	14,119,032,115	10.113
2010	2,365,140,531	19,347,399,440	12.225
2011	1,963,358,483	23,342,285,327	8.411

(Sources: Annual Report on Website)

Investment Bank Ltd

Total liquid fund to total deposit ratio (in million)

Year (mid-July)	Liquid fund	Total deposit	Ratio
2007	966,535,695	7,922,766,420	12.199
2008	1,536,922,910	11,524,679,645	13.336
2009	1,480,480,845	14,254,573,663	10.386
2010	2,406,521,396	18,927,305,974	12.715
2011	2,804,484,200	24,488,855,696	11.452

(Sources: Annual Report on Website)

Annexure A3

Nabil Bank Ltd.

Loan and advances to total deposit ratio (in million)

Year (mid-July)	Loan & advances	Total deposit	Ratio
2007	7,808,116,237	13,447,661,064	58.063
2008	8,309,200,842	14,586,608,707	56.965
2009	10,823,649,893	14,119,032,115	76.660
2010	13,033,252,903	19,347,399,440	67.364
2011	15,659,956,860	23,342,285,327	67.088

(Sources: Annual Report on Website)

Investment Bank Ltd

Loan and advances to total deposit ratio (in million)

Year (mid-July)	Loan & advances	Total deposit	Ratio
2007	5,921,788,103	7,922,766,420	74.744
2008	7,338,566,487	11,524,679,645	63.677
2009	10,453,163,997	14,254,573,663	73.332
2010	13,178,151,824	18,927,305,974	69.625
2011	17,769,099,903	24,488,855,696	72.560

(Sources: Annual Report on Website)

Annexure A4

Nabil Bank Ltd.

Investment to total deposit ratio (in million)

Year(mid-July)	Investment	Total deposit	Ratio
2007	6,031,175,547	13,447,661,064	44.849
2008	5,836,068,498	14,586,608,707	40.010
2009	4,269,658,178	14,119,032,115	30.240
2010	6,180,658,108	19,347,399,440	31.946
2011	8,956,308,672	23,342,285,327	38.369

(Sources: Annual Report on Website)

Investment Bank Ltd

Investment to total deposit ratio (in million)

Year (mid-July)	Investment	Total deposit	Ratio
2007	1,705,240,698	7,922,766,420	21.523
2008	3,862,483,330	11,524,679,645	33.515
2009	3,934,188,708	14,254,573,663	27.599
2010	5,602,868,649	18,927,305,974	29.602
2011	6,505,679,987	24,488,855,696	26.566

(Sources: Annual Report on Website)

Annexure A5

Nabil bank Ltd.

Investment in deprived sector to total deposit ratio (in million)

Yeai (mid- July)	Inv. In deprived sector	total deposit	Ratio
2007	266,200,000	13,447,661,064	1.980
2008	271,600,000	14,586,608,707	1.862
2009	311,100,000	14,119,032,115	2.203
2010	361903,000	19,347,399,440	1.871
2011	430,200,000	23,342,285,327	1.843

(Sources: Annual Report on Website)

Investment Bank Ltd

Investment in deprived sector to total deposit ratio (in million)

Year(mid-July)	Inv. in deprived sector	total deposit	Ratio
2007	148,300,000	7,922,766,420	1.872
2008	180,500,000	11,524,679,645	1.566
2009	282,960,000	14,254,573,663	1.985
2010	365,400,000	18,927,305,974	1.931
2011	514,600,000	24,488,855,696	2.101

(Sources: Annual Report on Website)

Annexure A6

Nabil Bank Ltd.

Investment in priority sector to total deposit ratio (in million)

Year (mid-July)	Inv. in priority sector	total deposit	Ratio
2007	365,240,000	13,447,661,064	2.716
2008	878,900,000	14,586,608,707	6.025
2009	803,200,000	14,119,032,115	5.689
2010	764,660,000	19,347,399,440	3.952
2011	895,800,000	23,342,285,327	3.838

(Sources: Annual Report on Website)

Investment Bank Ltd.

Investment in priority sector to total deposit ratio (in million)

Year(mid-July)	Inv. In priority sector	total deposit	Ratio
2007	493,900,000	7,922,766,420	6.234
2008	561,100,000	11,524,679,645	4.869
2009	706,300,000	14,254,573,663	4.955
2010	693,000,000	18,927,305,974	3.661
2011	485,700,000	24,488,855,696	1.983

(Sources: Annual Report on Website)

Annexure A7

Nabil Bank Ltd.

Investment in Financial institution to total deposit ratio (in million)

Year (mid-July)	Inv. In firm. Ins	total deposit	Ratio
2007	360,000,000	13,447,661,064	2.677
2008	8,616,700,000	14,586,608,707	59.073
2009	0	14,119,032,115	0.000
2010	360,000,000	19,347,399,440	1.861
2011	0	23,342,285,327	0.000

(Sources: Annual Report on Website)

Investment Bank Ltd

Investment in financial institution to total deposit ratio (in million)

Year (mid-July)	Inv. In film. Ins	total deposit	Ratio
2007	840,000,000	7,922,766,420	10.602
2008	7,338,600,000	11,524,679,645	63.677
2009	0	14,254,573,663	0.000
2010	84,000,000	18,927,305,974	0.444
2011	83,900,000	24,488,855,696	0.343

(Sources: Annual Report on Website)

Annxure A8

Nabil Bank Ltd.

Investment in shares, bond and debentures to total deposit ratio (in million)

Year(mid-July)	Inv. in bonds	total deposit	Ratio
2007	222,200,000	13,447,661,064	1.652
2008	222,200,000	14,586,608,707	1.523
2009	440,282,325	14,119,032,115	3.118
2010	104,192,082	19,347,399,440	0.539
2011	286,957,542	23,342,285,327	1.229

(Sources: Annual Report on Website)

Investment Bank Ltd
Investment in shares, bond and debentures to total deposit ratio (in million)

Year (mid-July)	Inv. In bonds	total deposit	Ratio
2004	13,895,000	7,922,766,420	0.175
2005	13,895,000	11,524,679,645	0.121
2006	17,738,000	14,254,573,663	0.124
2007	35,253,000	18,927,305,974	0.186
2008	17,738,000	24,488,855,696	0.072

(Sources: Annual Report on Website)

Annexure A9

Nabil Bank Ltd.

Loan loss ratio (in million)

Year (mid-July)	Loan loss provision	Loan & advances	Ratio
2007	353,853,335	7,808,116,237	4.532
2008	355,440,965	8,309,200,842	4.278
2009	358,383,511	10,823,649,893	3.311
2010	356,239,106	13,033,252,903	2.733
2011	354,047,031	15,659,956,860	2.261

(Sources: Annual Report on Website)

Investment Bank Ltd

Loan loss ratio (in million)

Year (mid -July)	Loan loss provision	Loan & advances	Ratio
2007	148,394,238	5,921,788,103	2.506
2008	208,440,985	7,338,566,487	2.840
2009	327,108,374	10,453,163,997	3.129
2010	401,943,787	13,178,151,824	3.050
2011	482,672,514	17,769,099,903	2.716

(Sources: Annual Report on Website)

Annexure A10

Nabil Bank Ltd.

Interest rate risk ratio (in million)

Year (mid-July)	Int. sensitive assets	Int.sensitive liabilities	Ratio
2007	16,562,624,992	16,562,624,992	100.000
2008	16,856,711,638	16,745,486,638	100.664
2009	17,599,250051	17,064,082,093	103.136
2010	12,999,543,153	22,329,971,078	58.216
2011	15,774,883,272	27,253,393,008	57.882

(Sources: Annual Report on Website)

Investment Bank Ltd

Interest rate risk ratio (in million)

Year(mid-July)	Int. sensitive assets	Int. sensitive liabilities	Ratio
2007	5,772,140,251	6,950,585,268	83.045
2008	7,130,125,502	10,368,074,571	68.770
2009	10,126,055,623	13,021,542,346	77.764
2010	12,776,208,037	17,221,642,479	74.187
2011	17,286,427,389	22,313,826,039	77.470

(Sources: Annual Report on Website)

Annexure A11

Nabil Bank Ltd.

Credit risk ratio (in million)

Year(mid-July)	Loan & advances	Total assets	Ratio
2007	7,808,116,237	16,562,624,992	47.143
2008	8,309,200,842	16,745,486,638	49.621
2009	10,823,649,893	17,064,082,093	63.429
2010	13,033,252,903	22,329,971,078	58.367
2011	15,659,956,860	27,253,393,008	57.461

(Sources: Annual Report on Website)

Investment Bank Ltd

Credit risk ratio (in million)

Year(mid-July)	Loan & advances	Total assets	Ratio
2007	5,921,788,103	9,014,249,584	65.694
2008	7,338,566,487	13,255,496,016	55.362
2009	10,453,163,997	16,274,063,706	64.232
2010	13,178,151,824	21,330,137,542	61.782
2011	17,769,099,903	27,590,844,761	64.402

(Sources: Annual Report on Website)

Annexure A12

Nabil bank Ltd.

Return on total working fund ratio (in million)

Year (mid-July)	Net profit	Working fund	Ratio
2007	416,235,811	14,409,122,217	2.889
2008	1,429,051,172	14,348,692,115	9.959
2009	1,510,684,230	14,603,671,387	10.345
2010	635,262,349	19,520,601,150	3.254
2011	673,959,689	24,224,857,827	2.782

(Sources: Annual Report on Website)

Investment Bank Ltd.

Return on total working fund ratio (in million)

Year (mid-July)	Net profit	Working find	Ratio
2007	116817,659	7,929,595,420	1.473
2008	152,670,976	11,886,179,645	1.284
2009	232,147,098	14,604,573,663	1.590
2010	350,536,413	18,927,305,974	1.852
2011	510,398,853	24,488,855,696	2.084

(Sources: Annual Report on Website)

Annexure A13

Nabil Bank Ltd.

Return on total loan & advances (in million)

Year (mid-July)	Net profit	Loan & advances	Ratio
2007	416,235,811	7,808,116,237	5.331
2008	1,429,051,172	8,309,200,842	17.198
2009	1,510,684,230	10,823,649,893	13.957
2010	635,262,349	13,033,252,903	4.874
2011	673,959,689	15,659,956,860	4.304

(Sources: Annual Report on Website)

Investment Bank Ltd.

Return on total loan & advances (in million)

Year (mid-July)	Net profit	Loan & advances	Ratio
2007	116,817,659	5,921,788,103	1.973
2008	152,670,976	7,338,566,487	2.080
2009	232,147,098	10,453,163,997	2.221
2010	350,536,413	13,178,151,824	2.660
2011	510,398,853	17,769,099,903	2.872

(Sources: Annual Report on Website)

Annexure A14

Nabil Bank Ltd.

Return on equity ratio (in million)

Year (mid- July)	Net profit	Total equity capital	Ratio
2007	416,235,811	491,654,400	84.660
2008	1,429,051,172	491,654,400	290.662
2009	1,510,684,230	491,654,400	307.265
2010	635,262,349	491,654,400	129.209
2011	673,959,689	491,654,400	137.080

(Sources: Annual Report on Website)

Investment Bank Ltd

Return on equity ratio (in million)

Year(mid-July)	Net profit	Total equity capital	Ratio
2007	116,817,659	59,058,500	39.560
2008	152,670,976	59,058,500	51.702
2009	232,147,098	115,269,500	39.498
2010	350,536,413	118,117,000	59.354
2011	510,398,853	160,268,800	63.692

(Sources: Annual Report on Website)

Annexure A15

Nabil Bank Ltd.

Interest earned to total outside assets ratio (in million)

Year (mid-July)	Interest earned	Total outside assets	Ratio
2007	17,872,280	13,787,127,532	0.130
2008	1,001,616,901	14,025,941,349	7.141
2009	1,068,746,769	14,861,689,210	7.191
2010	1,309,998,500	19,101,676,261	6.858
2011	1,587,758,714	24,491,089,297	6.483

(Sources: Annual Report on Website)

Investment Bank Ltd

Interest earned to total outside assets ratio (in million)

Year (mid-July)	Interest earned	Total outside assets	Ratio
2007	459,509,886	7,477,380,949	6.145
2008	731,402,930	10,992,608,832	6.654
2009	886,799,959	14,060,244.331	6.307
2010	1,172,742,193	18,379,076,686	6.381
2011	1,584,987,354	23,792,107,376	6.662

(Sources: Annual Report on Website)

Trend Analysis of Total deposit

Annexure B1

Estimation of deposit of Nabil Bank for the year 2012 to 2016. (Rs. in million)

Year	Deposit(Y)	Year (X)	XY	X^2
2012	13,448	1	13448	1
2013	14,587	2	29173	4
2014	14.119	3	42357	9
2015	19,347	4	77390	16
2016	23,342	5	116711	25
sum	84,843	15	279079	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

84843= 5a+15b ..... (I)

279079= 15a + 55 ..... (II)

to solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

279079= 15a + 55b
254,529= 15a + 45b
- - -
24550 =10b b

b=24550/10

b=2455

Substituting the value of 'b' in equation (I), we get

84843 =5a +15x2455

5a =84843-36825

a = 48018/5

a = 9603.6

Thus, the required trend is

Y = 9603.6 +2455 X

Forecasting the deposit for the upcoming next 5 years

Y2012 = 9603.6+ 2455x 6 = 24333.6

Y2013 =9603.6 + 2455x 7 =26788.6

Y2014 = 9603.6 + 2455x 8 =29243.6

Y2015 = 9603.6 + 2455 x 9=31698.6

Y2016 = 9603.6 + 2455x 10=34153.6

Annexure B 1.1

Estimation of deposit of NIBL for the year 2012 to 2016 (Rs. In Million)

Year	Deposit(Y)	Year- (X)	XY	x-
2012	7,923	1	7923	1
2013	11,525	2	23049	4
2014	14,255	3	42764	9
2015	18,927	4	75709	16
2016	24,489	5	122444	25
sum	77,118	15	271889	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

77,118= 5a+15b...(I)

271889= 15a +55...(II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

279079= 15a + 55b

231354= 15a + 45b

\- - -

40535 = 10b

b =40535/10

b=4053.5

Substituting the value of 'b' in equation (I), we get

77118=5a+15x4053.5

5a=77118-60802.5

a= 16315.5/5

a = 3263.1

Thus, the required trend is

Y= 3263.1+ 4053.5 X

Forecasting the deposit for the upcoming next 5 years

Y2012 = 3263.1+4053.5 x 6 = 27584.1

Y2013 = 3263.1+4053.5 x 7 =31637.6

Y2014 = 3263.1 + 4053.5 x 8 =35691.1

Y2015 = 3263.1 + 4053.5 x 9=39744.6

Y2016 = 3263.1+4053.5 x 10=43798.1

Trend analysis of loan and advances

Annexure B2

Estimation of *Loan &* advances of NABIL BANK for the year 2012 to 2016 (Rs. In Million)

years	loan and advances(Y)	year(X)	XY	x2
2012	7,808	1	7808	1
2013	8,309	2	16618	4
2014	10,824	3	32471	9
2015	13,033	4	52133	16
2016	15,660	5	78300	25
sum	55,634	15	187330	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

55643= 5a+15b…….(I)

187330=15a + 55……(II).

To solve the above equation we multiply equation (I) by three and subtracting (I) from (H) we get,

187330= 15a + 55b

166902= 15a + 45b

\- - -

20428 = l0b

b =20428/10

b = 2042.8

Substituting the value of 'b' in equation (I), we get

55643 = 5a + 15 x 2042.5

5a =55643 -30637.5

a = 25005.5/5

a = 5001.1

Thus, the required trend is Y=5001.1+2042.8X

Forecasting the loan & advances for the upcoming next 5 years

Y2012 = 5001.1+2042.8x6= 17257.9

Y2013= 5001.1+ 2042.8 x 7 =19300.7

Y2014=5001.1+2042.8x8=21343.5

Y2015 =5001.1+2042.8x9=23386.3

Y2016 = 5001.1+ 2042.8 x 10 =25429.1

Annexure B2.1

Estimation of Loan & advance of NIBL for the year 2012 to 2016 (Rs. In million)

years	Loan & advances(Y)	year(X)	XY	x2
2012	5,922	1	5922	1
2013	7,339	2	14677	4
2014	10,453	3	31359	9
2015	13,178	4	52713	16
2016	17,769	5	88845	25
sum	54,661	15	193517	55

Here, the actual equation of lineal trend is Y = a + bx

Two normal equations are

$\sum Y=na+b \sum x$

$\sum XY=a \sum X+b \sum X^2$

Putting the values on normal equations from the above table,

54,661= 5a+15 b (I)

193517=15a + 55 (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (IT) we get,

193517= 15a + 55b

163982= 15a + 45b

- - -

29535 = l0b

b =29535/10

b=2953.5

Substituting the value of 'b' in equation (I), we get

193517=5a+15x2953.5

5a=193517-44302.5

a=149214.5/5

a=29842.9

Thus, the required trend is

Y = 29842.9+2953.5X

Forecasting the deposit for the upcoming next 5 years

Y2009 = 29842.9+ 2953.5x6 = 47563.9

Y2010= 29842.9+2953.5x7=50517.4

Y2011 = 29842.9+2953.5x8=53470.9

Y2012 = 29842.9+ 2953.5x 9 =56424.4

Y2013 = 29842.9+ 2953.5x 10 =59377.9

Trend analysis of investments

Annexure B3

Estimation of Total Investments of NABIL BANK for the year 2012 to 2016 (Rs. In Million)

Years	Investment	Years (x)	XY	X^2
2012	6,031	1	6031	1
2013	5,836	2	11672	4
2014	42,697	3	128090	9
2015	6,181	4	24723	16
2016	8,956	5	44782	25
sum	69,701	15	215297	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

69,701= 5a+15b… (I)

215297= 15a +55… (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

215297= 15a + 55b

209102= 15a + 45b

\- - -

6195 = l0b

b=6195/10

b=619.5

Substituting the value of 'b' in equation (I), we get

69,701=53+15x619.5

5a = 69,701-9292.5

a = 60408.5/5

a = 12081.7

Thus, the required trend is Y= 12081.7+2953.5X

Forecasting the deposit for the upcoming next 5 years

Y2012 =12081.7+ 619.5 x 6 = 15798.7

Y2013 = 12081.7+ 619.5x 7 =16418.2

Y2014 = 12081.7+ 619.5X 8 =17037.7

Y2015= 12081.7+ 619.5X 9 =17657.2

Y2016= 12081.7+ 619.5x 10=18276.7

Annexure B 3.1

Estimation of Investments of NIBL for the year 2012 to 2016 (Rs. In Million)

years	Investments (Y)	year(X)	XY	x2
2012	1,705	1	1705	1
2013	3,862	2	7725	4
2014	3,934	3	11803	9
2015	5,603	4	22411	16
2016	6,506	5	32528	25
sum	21,610	15	76173	55

Here, the actual equation of linear trend is Y = a + bx Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

21,610= 5a+15b… (I)

76173=15a+55… (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

76173= 15a + 55b

64831= 15a + 45b

\- - -

11342 = 10b

b =11342/10

b = l134.2

Substituting the value of 'b' in equation (I), we get

21,610= 5a+15x1134.2

5a =21.610-17013

a= 4597/5

a = 919.4

Thus, the required trend is

Y= 12081.7+2953.5X

Forecasting the deposit for the upcoming next 5 years

Y2012= 919.4 + 1134.2x 6 = 7724.6

Y2013 = 919.4+ 1134.2x 7 = 8858.8

Y2014 = 919.4 + 1134.2x 8 = 9993

Y2015 = 919.4 + 1134.2X 9 = 11127.2

Y2016 = 919.4 + 1134.2X 10 = 12261.4

Trend analysis of net profit

Annexure B4

Estimation of Net profit of NABIL BANK for the year 2012 to 2016 (Rs. In Million)

years	Net profit (Y)	year(X)	XY	x2
2012	416	1	416	1
2013	1,429	*2*	2858	4
2014	1,511	3	4532	9
2015	635	4	2541	16
2016	674	5	3370	25
sum	4,665	15	13717	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

4,665= 5a+15b……. (I)

13717=153 + 55…… (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (II) we get,

13717= 15a + 55b

13995= 15a + 45b

\- - -

- 278 =l0b

b = -278/10

b = -27.8

Substituting the value of 'b' in equation (I), we get

4,665= 5a+15 x (-27.8)

5a =4,665+417

a =5082/5

a = 1016.4

Thus, the required trend is Y= 1016.4 1016.4X

Forecasting the deposit for the upcoming next 5 years

Y2012 = 1016.4 - 27.8 x 6 = 849.6

Y2013= 1016.4 -27.8 x 7 = 821.8

Y2014 = 1016.4 -27.8 x 8 = 794

Y2015 = 1016.4 -27.8 x 9 = 766.2

Y2016 = 1016.4 -27.8 x 10 = 738.4

Annexure B 4.1

Estimation of Net profit of NIBL for the year- 2012 to 2016 (Rs. in Million)

years	Net profit (Y)	year(X)	XY	x2
2012	117	1	117	1
2013	153	9	305	4
2014	232	3	696	9
2015	351	4	1402	16
2016	510	5	2552	25
sum	1363	15	5073	55

Here, the actual equation of linear trend is Y = a + bx

Two normal equations are

$\sum Y = na + b \sum x$

$\sum XY = a \sum X + b \sum X^2$

Putting the values on normal equations from the above table

1,363= 5a+15b . (I)

5073=15a + 55b (II)

To solve the above equation we multiply equation (I) by three and subtracting (I) from (IT) we get.

5073= 15a + 55b

4087=15a + 45b

986=10b

b = 986/10

b = 98.6

Substituting the value of 'b' in equation (I), we get

1,363=5a+15x98.6

5a=l,363 + 1479 3

a =2842/5

a =568.4

Thus, the required trend is

Y = 568.4 +98.6 X

Forecasting the deposit for the upcoming next 5 years

Y2012 = 568.4 + 98.6 x 6 = 1160

Y2013 = 568.4 + 98.6 x 7 = 1258.6

Y2014 = 568.4 + 98.6 x 8 = 1357.2

Y2015 = 568.4 + 98.6 x 9 = 1455.8

Y2016 = 568.4 + 98.6 x 10 = 1554.4