CHAPTER -1

INTRODUCTION

1.1 Background of the Study

Investment is the present commitment of fund in an anticipation of achieving additional income in future. Such commitment takes place at present and is certain.However, reward comes later and the amount of reward is generally uncertain.Therefore, every investment entails some degree of risk and investment is a risky endeavor.In finance, the purchase of a financial product or other item of value with an expectation of favorable future returns. In general terms, investment means the use money in the hope of making more money.In business, the purchase by a producer of a physical good, such as durable equipment or inventory, in the hope of improving future business. Ads by Google Learn Investment Banking Build Financial Models in Excel Step-by-Step Self Study & Classescom Portfolio Valuation Valuations of Restricted Securities PIPE www.Pluris.comDeutsche Bank 2020, 2030, 2040 Target Date ETFs

NABIL Bank Ltd established in 12th July 1984 by first private sector bank in Nepal. This became possible when Nepal government adopted the policy of liberalization. And private banks were being established. Nepal Industrial and Commercial Bank (NIC) were established on 21st July 1998. Currently; there are around 31 commercial banks in Nepalese contest. Banking sector has been highly growing and it is one of the most important parts of the economy in Nepal. All banking sectors are collecting scattered fund then investing on productive area. It is playing a vital role as the mediator of economic and social development. This function of commercial banks is related to monetary transaction. One of the important functions is investing funds.

Nepal Rastra Bank (NRB) is only the controller of commercial banks. NRB has been monitoring, supervision, observation and advising to the activities of commercial banks. This is the God of banks. G means generator. O means operator and D means destroyer. Thus Nepal Rastra Bank provides authority to establish a new bank for open. It mobilizes the banks through its monetary policy. The monetary policy determines the investment policies of other banks. This is the mechanism and tool of controlling the activities of commercial banks and other banks.

1.2 Present Status of Banking Industry.

The number of banks and financial institutions licensed by NRB has increased in 2010/11. As of mid-April 2011, the total number of class "A" to class "D" banks and financial institutions reached 219 comprising 31 commercial banks, 87 development banks, 80 finance companies and 21 micro-finance development banks compared to 203 in mid-July 2010. The number of commercial banks' branches reached 1,085 in mid-April 2011 from 990 in mid-July 2010. Of the total bank branches, 35.7 percent are located in Kathmandu valley, 25.3 percent in mountain and 39 percent in terai. The increasing presence and transactions of this type of institutions scattered around the country is believed to have contributed in financial outreach and competition in financial intermediation services. Despite a slowdown in real estate and stock market transactions, the non-Performing loan (NPL) ratio has increased marginally. Though the increase in the number of banks and financial institutions has created competition in limited geographical areas and business sectors, some geographical regions are still beyond the outreach of financial services as of mid-April 2011. There is only one bank or financial institution each in 9 backward districts, 2 each in 5 districts, 3 each in 8 districts, while some districts even outside the Kathmandu valley has up to 121 banks and financial institutions. Though gradual improvement in expansion of financial services in backward areas has been observed after NRB began to provide interest free working capital for branch expansion, the outreach of financial services is still not adequate in the geographical areas that require special attention for socio-economic development.

Other banks are waiting for the approval to be open. Among these banks some banks are joint venture banks, some of them are public commercial banks, some of them are developmental banks and some of them are others (financial company, cooperative, NGOs etc. So there are so many numbers of bank are available in our country. The

quantity of banks has created issues and threats to banks. Now a day banking sector has facing from crisis (like liquidity crisis).

So government has carried merger policy and other policies to conduct them bitterly. Where the foreign banks which are going to established in Nepal has created threats to Nepalese home banks. And other sides because of bad investment policies of our banks are creating issues for themselves. Among them some banks are going into liquidation process. Our banks are increasing their branches instead of maintaining there quality (Financial institutions Shrestha, 2005:125).

1.3 Banks under Study

1.3.1 NABIL Bank Ltd.

NABIL Bank commenced operation 26 years ago, on the 12th of July 1984 through a joint-venture with Dubai Bank Ltd marking a turning point in the banking history of Nepal. Banking has been redefined and service remolded since then. Banking thitherto suffered setbacks and the commencement of NABIL Bank introduced new philosophies and best practices to the industry. This in essence opened up a plethora of opportunities for all: entrepreneurs, industries, individuals for better future. Commencing with a team of about 50 staff and Rs28 millions as capital professional bank evolved thru NABIL in Nepal.

NABIL bank is the first foreign joint venture bank established on 12th July 1984.At the initial stage it had a technical service agreement with Dubai bank limited which was later merge with Emirates Bank Limited. NABIL is the first and major joint venture bank in the country and it is managed by a team of qualified and highly experienced professionals. Their core objective was to support the nation with introduction of modern banking services.

The bank provides a complete range of consumer, retails, SME and corporate banking services through its offices spread across the country. It is the largest private bank in the country in terms of branch and ATM network. The bank has also adopted modern technologies and has provided an array of card products and Internet /Tele banking facilities besides ATMs and Any Branch banking service (Corporate banking 1990:404 Rose Peter).

1.3.2 Nepal Industrial and commercial Bank Ltd

Nepal Industrial and commercial Bank Limited (NIC Bank) commenced its operation on 21 July 1998.The bank was promoted by some of the prominent business houses of the country. Promoters hold 51% of the share while 49% is held by the general public. NIC Bank has over 34000 shareholders. The shares of the bank are actively traded in Nepal Stock Exchange with current market capitalization of about NPR 8210 million. The bank has grown rapidly with 26 branches throughout the country while several branches are planned to be opened this year. All Branches are interconnected through optical fiber as well a V-Sat and are capable of providing real time on line transactions. NIC Bank was the first commercial bank in Nepal to have received ISO 9001:2000 certification for its Quality Management System in the year 2006. This Bank has recently been certified under the upgraded ISO 9001:2000 standards for the Bank's Quality system on commercial Banking Activities for the first time in Nepal. Furthermore, NIC Bank became the first Bank in Nepal to be provided with a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade finance Program, enabling the Bank's letters of Credit and Guarantees to be accepted/confirmed by banks worldwide.

The bank believes in continuously offering new and value added services to its customers, with commitment to quality and value to its clients at the same time. Accordingly, the bank has been in the forefront in launching innovative products having unique customer friendly features with immense success (Sharp, Alexander Quality Management System2005:120).

Organizational Structure

NIC Banks' organizational structure is designed to support its business goals. However it is flexible enough in seeking to ensure effective control and supervision and consistency in standards across all businesses at the same time. NIC Bank has successfully embarked on a multi-pronged strategy of consolidation administrative streamlining, human resource up skilling, strategic cost management, focused non-performing assets management, Balance sheet and treasury management and controlled asset growth in tandem with strengthening the credit culture as well as strategic marketing and sales. The Corporate Center comprises all shared services and corporate functions including finance, company affairs, risk management, legal, human resources, branding and corporate communications.

Vision

To become one of the most respectable banks in Nepal based on honorable conduct and long term financial performance

Mission

To become a leading bank in Nepal by providing complete financial solutions to our customers, superior value to our shareholders and promising growth opportunities to our employees.

1.4 Investment pattern or trend of sampled banks.

After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors are having greater network and access to national and international markets. They have to go with their portfolio management very efficiently and seriously for coping with various challenge in order to increase their regular basis of income as well as to enrich the quality base of service for the attraction of good clients. In this competitive and market oriented open economy, each and every commercial bank and financial institution has to play a determining role by widening various opportunities for the sake of expanding provisions of best service to their customers and by making themselves as a strong and potential financial intermediaries as per country's need of present scenario to obtain the desired level of economic development. (Economic development, Hudgins Sylvia 2007:601).

Joint venture banks are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors, financial and non financial institutions as well as private investors and their parent banks each supplying 50 percent of total investment. The parent banks, which have experiences in highly mechanized and efficient modern banking services in many parts of the world have come to Nepal with higher technology, advance management skills. Joint venture banks are established by joining different forces and with ability to achieve a common goal of each of the partners. They are more efficient and effective monetary institution in modern banking fields than other old type of banks in Nepalese context (Thapa Samiksha, 2001: 6).

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

1.5 Investment and Investment policies.

1.5.1 Investment

Investment is essential for economic development. It is necessary to collect the scatted funds to invest in productive Area. An Investment is the current commitment of money or other resources in the expectation of future benefits. Investment is closely related with time value of money and inflation. The main objective of investment is to get profit in future. Thus, money or funds are invested in current time for the future return. But it is not confirm that we invest in current time and will get return in future. The future return depends on the nature and types of assets (i.e. risky asset and risk free asset). There may happen lose in future. In this way the term investment is closely related to risk. Thus there are so many approaches that investor s use to minimize the risk. The portfolio investment is necessary weapon to minimize risk or future uncertainty.

According to Donald E. Fischer and Ronald j. Jordon, "An investment as a commitment of funds made in expectation of some positive rate of return. If the investment is properly under taken, the return will be commensurate with the risk the investor assumes."

In economics term, National Income = consumption + saving / investment. National income, consumption and saving / investment are closely related. Consumption, saving and investment is positively affected by increase in national income. National income is positively affected by increase in consumption, saving and investment.

1.5.2 Commercial banks and Investment policy

Commercial Bank is an entity which accepts deposits and makes short term loans to business enterprises, regardless of the scope of its other services. (American Institution of Banking, 1972; 345-346)

Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy. Commercial banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus, commercial banks have become the heart of financial system.

Commercial bank deals with people’s money. They have to find ways of keeping their assets liquid so that they could meet the demand of their customers. In their anxiety to make profit, the banks can’t afford to lock up their funds in assets that are not easily realizable. The depositor’s confidence could be secured only if the bank is able to meet the demand for cash promptly and fully. The banker has to keep adequate cash for this purpose. Cash is an idle asset and hence the banker cannot afford to keep a large portion of his assets in the bank. Therefore the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity.

Investment policy involves a determining the investment objectives and the investment objectives and the amount of one's investable wealth. Investment is always related with risks and returns. Making money alone cannot be an appropriate objective. It is appropriate to state that the objective is to make a lot of money by recognizing the possible losses. Therefore, investment objectives should be stated in terms of both risks and returns.

Setting a clear investment policy also involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio. The identification of assets depends upon many things, such as investment objectives, investable wealth, tax considerations.

Commercial banks must mobilize its deposits and other funds to profitable, secured, stable and marketable sector. Then only it can earn more profit as well as it should be secured and can be converted into cash whenever needed. But, commercial banks have to pay due consideration while formulating investment policy regarding loan and investment. Investment policy is one facet of the overall spectrum of policies that guide bank's investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Commercial bank should be careful while performing the credit creation function. The banks should never invest its funds in those securities, which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute. Emphasizing upon this, H.D. Crosse stated, "The investment policy should be carefully analyzed."(Crosse H.D., 963) So they must invest their funds where they gain maximum profit. Commercial banks must follow the rules and regulations as well as different directions issued by the central bank, ministry of finance, ministry of law and other regulatory bodies while mobilizing its funds. So, the bank should invest its funds in legal securities only. Diana Mc Naughton in her research paper 'Banking Institutions in Developing Markets' states that investment policy should incorporate several elements such as regulatory environment, the availability of funds, the selection of risk, loan portfolio balance and term structure of the liabilities (McNaughton, Diana, 1994). Thus, commercial banks should incorporate several elements while making investment policy. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial bank's investment are fully considered while making investment decisions.

Some features of lending investment policies;

- **Safety and Security**

Banks should not invest their funds in fluctuated and volatile assets because of their risky nature. If safety and security is considered, investment will provide profitability and security in future. High market priced securities, profitable and durable securities are desirable for safety and security.

- **Profitability**

Profitability is the net result of a number of policies and decisions. It is closely related with the efficiency of any institution. The maximum return on investment and lending position is most preferable. Interest rate affects return, time period affects loan and nature of securities affect investment. Higher profitability ratio is preferable because it indicates better performance of financial institution.

- **Purpose of loan**

Customers may have so many intention of borrowing. Banks should provide productive loans lonely because if a customer misuses the taken loan, he or she may be failure to repay the taken loan. This may add in bad debt account. Bank may be failure to return the deposits in demanded time.

- **Legality**

The commercial banks should adopt the rules and regulations of Central Bank and ministry of finance of a country while issuing securities, mobilizing funds etc.

- **Liquidity**

Commercial banks or any investors should consider liquidity position for being safe from liquidity crass. Liquidity means the position of a firm to meet short term obligation (i.e. deposits). Customers deposit their saving at banks having full confident of repayment by that banks whenever the customer desire. Every commercial bank must put potential cash balance to show the good position, to meet the cash obligation of an organization.

1.6 Statement of the Problem

In the contest of Nepal, There are so many problems to collect scattered funds and to invest into productive area. Nepal is poor country. There are most of the people are under the poverty line. They have the problem to join mouth and hands per day. So Government and Private sectors are unable to give employment to all educated people. Because of the Globalization and liberalization, people’s needs are growing. But Nepalese industries are unable to provide Nepalese products.

Then our capital is going out of the country. So our saving is going outside the county. There are so many prospects of saving and investment. We have got peace process. Banks are growing faster and faster and they are utilizing their best facilities and techniques. The most of remote areas are out of reach in banking system. Now a day there is lack of liquidity in the market. Strikes are being done by Industrial Labors and political parties. These activities are affecting economic sectors. The government has been unable to use 100 % of development fund each year. The large number of the banks has existing economy. Government has been unable to provide security in power houses. We feel lack of stable Government and its policies toward the investment in our country. Inflation is growing day to day. These above issues are creating problems in Investment practice of banks.

- How investment is possible in our country?
- How they can collect money and deposit into banks?
- We should find out the issues of saving and investment to gain prospects of saving and investment.
- Thus our government and concerned sector should concentrate their mind to remove the issues of investment for stable investment policies.

1.7 Objectives of the study

Every study has it own objectives .The objectives of this study are given below:

- To study NRB (Nepal Rastra Bank) regulatory policies and acts for commercial banks and other banks.
- To find out the relative strength and weakness of sampled banks through financial ratios and statistical tools.
- To forecast the deposit, investment, net profit, loan and advances of relative sampled banks.

1.8 Significance of the Study

Investment is the most important means of economic development. If savings are invested in unproductive area, economic growth will be broke out. So any firm or company should take right policies of investment. The issues of investment should be found out and solved. Investment will be means of economic development of a country.

This study is useful for the students, sampled joint venture banks, Investors, policy making bodies, policy implementer bodies and me also.

1.9 Limitations of the Study

This study has same limitations like: limitation of time, limitation of resources, same variables are not ignored. Most of the data is taken from secondary source etc

- Data are taken from banks primary and secondary sources (like financial reports, journals, websites etc).
- It contains past 5 years data only.
- This study has taken two commercial banks among registered commercial banks. So, strong result may not come out.
- Some of the financial and statistical tools are taken under this study.
- The mathematical terms are taken in round figure and two digits are taken after decimal.

1.10 Organization of Study

Chapter one contains the introductory part of the study. As already mentions, this chapter described the major issues to be investigated along with the general background and objectives of the study.

Chapter two includes a discussion on the theoretical framework and review of the major empirical works. The theoretical analysis and review of related literature conducted in this chapter provide a framework with the help of which this study had been accomplished.

Chapter three describes the research methodology employees in the study. This chapter deals with research design, nature and sources of data selection of sampled banks, method of analysis, limitations of the study and definition of key terms.

Chapter four includes data presentation and analysis, financial tools, statistical tools and major findings of the study.

Chapter five indicated summary and conclusions of the study. This chapter presents the major findings and compares them with theory and other empirical evidences to the extent possible. It also offers several directions for future research.

CHAPTER-II

REVIEW OF LITERATURE

This is the second phase. After selecting the topic of the research, researcher should study different journals, periodicals, newspaper, published bibliographies, books etc. to collect or gathering the information about the selected topic of the research. This process of studying different educational materials is known as review of literature. The literature means to collect information about the selected topic of the research through the different sources. Review of literature means stock taking of available literature in one's field of research. It is a comprehensive review of previous works on the general and specific topics considered in the report. It may also serve as a kind of bibliographic index and guide for the readers. It also demonstrates where the current study fits into the scheme of things. The objective of reviewing the literature is to develop certain expertise and knowledge in one area.
According to P.V. Young-" Review of literature is useful in research because it provides the insight and general knowledge about the subject matter of the research."

2.1 Review of Concerned Studies

Fact and tact research result play vital role for next researches and it helps to solve the current and future problems. Review of Concerned Studies gives us the way for next research and it clarifies confusion though we can find the fact and tact result. The believable result depends on numbers of Review of Concerned studies. Thus we need it. It provides us the new diffusion by gathering the past research result. And this also provides the strong feedback about the subject .The stakeholders will make correct decision in the related field.

Major Functions of Commercial Banks

- **Accepting Deposits.**

The most important function of commercial banks is accepting deposits from the public of different society. They deposit their savings in banks on the basis of their needs and economic condition. For example, fixed and low income group people deposit their savings in small amount from the point of view of security, income and saving promotion. On the other hand, traders and businessmen deposit their savings in the banks for the convenience of payment. Keeping the needs and interests of various sections of society, banks formulate various deposit schemes. Generally, there are there types of deposits, current deposits, saving deposits and fixed deposits.

- **To provide loans into different productive areas.**

The second important function of commercial banks is to advance loans to its customers. Banks charge interest from the borrowers and this is the main source of their income.

Banks loans and advance not only on the basis of the deposits of the public amount rather also provide loans and advance on the basis of depositing the money in the accounts borrower and goodwill. In other word, they create loans out of deposits and deposits out of loans .This is called as credit creation by commercial banks.

Modern banks give mostly secured loans for productive purpose .In other words at the time of advancing loans; they demand proper securities or collateral. Generally, the value of security or collateral is equal to the amount of loan. This is done mainly with a view to recover the loan money by selling the security in the event of non-refund of the loan.

At times, banks give loan on the basis of personal security also. It is called as unsecured loan. Banks generally give cash credit, demand loans and short term loan.

- **Over-Draft**

Banks also give to customers up to a certain amount through over-drafts if there are no deposits in the current account. Banks demand a security from the customers and charge very high rate of interest for the process.

- **Discounting of Bills of Exchange**

This is the most prevalent and important method of loans and advance to the traders for short-term purpose. Under this system, banks provide loans and advance to the traders by discounting their bills. Businessmen get loan on the basis of their bills of exchange before the time of maturity.

- **Investment of Funds**.

The banks invest their surplus funds in securities i.e. Government securities, approved securities and other. Government securities include central and state government, such as Treasury bill, national saving certificate etc. Other securities include securities of state associated bodies like electricity boards, housing boards, shares of regional rural banks etc.

- **Functions related to agency**.

To collect cheques, drafts, bills of exchanges and dividends of the shares for their customers, to make payment for their clients and at time accept the bills of exchange of their customers for which payment is made at the fixed time. To pay insurance premium of their customers, purchase and sell securities, shares and debentures on behalf of their customer. It provides money from one place to another by the convenience of their customers.

- **General utility function.**

Exchange of foreign currencies; provide travel cheques, loan information facilities, provide the information related to trade

2.1.1 Review of Books

Banks are such type of institution, which deal in money and substitute for money. They deal with credit and credit instrument. The important thing for the bank is good circulation of credit. Fluctuate flow of credit and weak decision harms the whole economy and the bank as well good management of credit or credit instrument is very important for banks.

"An investment as a commitment of funds made in expectation of some positive rate of return. If the investment is properly under taken, the return will be commensurate with the risk the investor assumes" (Fischer and Jordon, 2001:1)

" Bank is an institution ,which accepts deposits from the public and intern, advance loan to business and personal customers, it is the financial institution, which provides wide range of banking services such as saving ,credit payment, remittance etc. Hence, a bank may be called the financial market providing all kinds of monitory service, which is necessary of a country."(Singh, 2005:15)

" 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 is certain. The reward comes later, If all and the magnitude is generally uncertain" (Sharp, Alexander and Bailey, 2008: 1)

“Investment is an activity that is engaged in by people who have savings. Put simply, investment is the outcome of savings. However, all severs are not investors investment is different from saving"(Thapa and Rana, 2nd edition 2011:4)

" An investment is the current commitment of dollars for a period of time order to derive future payments that will compensate the investors for (1) the time the funds are committed, (2) the expected rate of inflation, and (3) the uncertainty of the future payments. The investor can be an individual, a government, a pension fund, or a corporation"(Reilly and Brown, 8th edition 2011:6)

" A bank can be defined in terms of (1) the economic functions it service, (2) the services it offers its customers, or (3) the legal basis for its existence. Certainly banks can be identified by the functions they perform in the economy. They are involved in transferring funds from savers to borrowers (financial intermediation) and in paying for goods and services."(Rose & Hudgins, seven editions 2010:4)

"An Investment is the current commitment of money or other resources in the expectation of reaping future benefits, for example, an individual might purchase shares of stock anticipating that the future proceeds from the shares will justify both the time that her money is tied up as well as the risk of the investment .The time you will spend studying this text (not to mention its cost) also is an investment. You are forgoing either current leisure or the income you could be earning at a job in the expectation that your further career will be sufficiently enhance to justify this commitment of time and effort.W Zvi Bodie, Alex Kane, Alan J. Marcus and Pitabas Mohanty hich these two, investments differ in many way, or all investments: You sacrifice some- thing of value now, Expecting to benefit from that sacrifice later." (Bodie, Kane, Marcus and Mohanty, eight editions 2011:1)

2.2 Meaning of Some Terms

The most used word in this study has been clarified below;

a. Deposits

Deposits are the amount collected by different means of account. Deposits are very helpful for generating profit as well as a source for liquidity. Deposit is liability for a bank because it is that specific amount borrowed from different clients. Deposits are affected by the interest rate paid to the deposits, type of customers, facilities provided by banks etc.

b. Loan and advances

Every financial institution must be very careful while providing loan because the non payment of the loan can cause a heavy loss to the bank. Still it is riskier the banks must lend their money to earn desired revenue in form of lending interest rate. More banks are interested to provide short term loans which can be collected in a short span of time. Lending through ban has cheaper rate due to excess demand .The increase in economic activity also increases the volume of loan. Loans are basically provided against collateral which are usually immovable or moveable properties.

c. Investment on other company's share and Debentures

Some part of funds is usually invested in other organizations shares. To meet the directives of NRB, probability of getting return in possible alternatives, lack of huge gains forces, the bank has to invest in other's fund.

d. Investment on Government Securities, Bonds

This activity is done to increase the investment though it provides less return and is known as less risky assets. These securities are highly liquid. Depositors may demand their funds at any time sot to maintain that liquidity position without loss in the value this investment is usually done.

e. Off-balance sheet activities

Basically they are not shown assets or liabilities. For example letter of credit, letter of guarantee etc. These activities are risky though they are also the alternative source of income.

2.3 Review of Journals/Article

Under this heading some related articles published in different books, economic journals, World Bank Bulletin, magazine, newspaper have been examined and reviewed.

Acharya Ramhari (2006) *in his article*, *"Banking the Future on Competition*" has highlighted that majority of commercial banks are being established and have operation in urban areas only. They have shown on interest to open branches in rural areas. The branches of NBL and RBB are only running in those sectors. The commercial banks are charging higher interest rate on lending, they are offered maximum tax concession, they do not property analyze the credit system.

According to him" Due to lack of investment avenues, banks are tempted to invest without proper credit approval and on personal guarantee, whose negative side effects would shows true colors only after four or five years." He has further added that banks have mushroomed only in urban areas where large volume of banking transaction and activities are possible.

Pradhan (2007) *has conducted a study on " Investment practices of commercial banks: with reference to BANK OF KATHMANDU AND NABIL BANK."* with the to study and evaluate the investment policies of concern bank.To analyze the fund utilization and mobilization. To study the growth ratio of total deposit, loan and advances, total investment and net profit of bank Ltd.and NABIL.To study risk and profitability positions of concerned banks.

- The analysis of all growth ratios BOK has higher and better ratios than NABIL.The coefficient of correlation between total deposit and total investment of BOK is maintained very high degree of positive correlation. There is significant relationship between total deposit and total investment. NABIL has also high degree of positive correlation and there is significant relationship between total deposit and total investment. The coefficient of correlation between deposit and loan and advances of BOK is high degree of positive correlation and there is significant relationship between deposit and loan and advances. NABIL also has high degree of positive correlation and there is significant relationship between deposit and loan and advances

- The coefficient of correlation between outside and net profit of BOK shows there is high degree of positive correlation and there is significant relationship between outside assets and net profit. NABIL also has high degree of positive correlation but there is insignificant relationship between outside asset and net profit.NABIL’S deposit collection position is better than BOK. The trend value of loan and advances of BOK and NABIL has increasing trend. The trend values of investment of BOK and NABIL has followed in increasing trend. NABIL’S future trend is higher than BOK. Net profit of BOK and NABIL are in increasing trend but the future trend of NABIL is higher than BOK.

- **Bista, Bhagat (2008*),*** *in his article, “Issue in banking reform*” write that “the banks are main vehicle in transferring currency form one country to another commercial bank deal heavily in foreign exchange transactions. The analysis of risk ratio shows that the credit risk ratio of BOK is higher than NABIL. It Shows BOK has provided higher portion on loan which involves high risk but it can also provide high return if it is secure loan.The capital risk of NABIL is higher than BOK. This shows there is high risk for NABIL but there is chance to increase profit too.

Bhatta (1992), in his article "***Financial policies to prevent financial crisis***" has given more emphasis on Nepalese financial market sector. He has mentioned the financial crisis occurred in China, Mexico, South Asia, Russian Federation Ecuador and Brazil & Argentina. This crisis affected all these economic by posing negative effects in their real output. He had also focused on Nepalese financial market, which is directly affected by the national and international events. The most effected events were September 11 incident in U.S.A., which had added more to the fragility in the global financial market. In present context in many part of the world, the move towards liberalization is getting its momentum on one hand and the process of economic development is being threatened due to various unanticipated incidents on the other. He has defined a financial crisis as a description to financial markets in which adverse section and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities.

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

- Prudential Supervision
- Accounting Standards & disclosure requirements
- Legal and judicial system
- Monetary policy and price stability
- Exchange rate regimes and foreign exchange reserves
- Capital controls
- Restriction on foreign denominated debt
- Reduction of the role of the state owned financial institution
- Encouraging market based discipline (Mr. Bhatta, 2001:57)

2.4 Review of Thesis

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

Poudel (2005) has conducted his study entitled, *"A study on investment policy of Nepal Indosuez Bank Ltd, in comparison of Nepal state bank of India bank ltd*." The researcher main objective;

Main Objectives

The objectives of the study was to examine the liquidity assets management and profitability position and investment policy of NIBL in comparison to NSBI to study the growth ratios of loan and advances and investment to total deposits and net profit of NIBL in comparison to NSBI.

Findings

- The both banks current assets have exceeded the current liabilities therefore the ratio consider satisfactory.
- Cash reserve ratios have fluctuated in high degree. However NIBL has maintained both current ratio and cash reserve ratio better than that of NSBI.
- The assets management ratios show that deposit utilization of NIBL is less effective than NSBI.

- NIBL has invested less amount on government securities and share and debenture than that of NABIL, NIBL has better performance in:
- Return on total assets and loan and advances.
- The growth ratio of total deposit loan and advances.
- The growth ratio of total investment and net profit of NIBL are less than SBI.

Ojha (2006) conducted a study on *"Lending Practices: A Study of NABIL Bank Ltd., Standard Chartered Bank Nepal Ltd. and Himalayan Bank Ltd."*

Main objectives

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

Findings

- Grind lays Bank Ltd. used to perform highest off-balance sheet operation than the other two joint venture banks.
- The measurement of liquidity has revealed that the mean current ratios of all the three banks are not widely varied. All of them are capable in discharging their current liability by current asset.
- The measurement of lending strength in relative terms has revealed that the total liability to total assets of SCBNL has the highest ratio. The high ratio is the result of high volume of shareholder equality in the liability mix. Himalayan Bank Ltd. has high volume of saving and fixed deposits as compared to current deposit resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.

- The mean of investment on shares and debentures to total working fund ratio of Nepal Grind lays Bank Ltd. was found less than NABIL Bank Ltd. but higher than Himalayan Bank Ltd.
- The profitability position of Nepal Grind lays Bank Ltd. is higher than NABIL Bank Ltd. and Himalayan Bank Ltd. It has provided interest to the customers for different activities consistently.

Khanal (2007) has conducted his study entitled. *"A comparative study of the finance performance between Nepal state banks of India Bank Ltd. and Nepal Bangladesh Bank Ltd."*

Main objectives

- To evaluate the trend of deposits and loan and advances of NSBI and NBBL and
- To evaluate the liquidity, Profitability capital structure turn over and capital adequacy position of NSBI and NBBL.

- The volume of growth ratio of loan and advances of Nepal Grind lays Bank Ltd. is found higher than that of NABIL Bank Ltd. But lower than Himalayan Bank Ltd.
- From the analysis of growth ratio of total investment it is found that Nepal Grind lays Bank Ltd. and NABIL Bank Ltd. have negative growth ratio i.e., they used to reduce the investment during the study period. But it is increasing in the case of Himalayan Bank Ltd.
- The growth ratio of net profit of Nepal Grind lays Bank Ltd. seemed to be more satisfactory than NABIL Bank Ltd.

Findings

- The cash and bank balance to current deposit ratios of NABIL are higher. But fixed deposit to total deposit, loan and advances to current assets of NBBL are higher than NABIL. NBBL has better turnover than NABIL in terms of loan and advances to total deposits ratios and loan and advances to fixed deposit ratios. Where as the loan and advances ratio is better than NBBL.
- NBBL has better utilization of resources in income generating activity than NSBI. Return on total assets and return on total deposit are better of NSBI than NBBL.

They are in decreasing trend.

- Interest earned to total assets and return on net worth of NBBL is better than NSBI. According to him both banks are highly leveraged.

Poudel (2008) has conducted a study on *"Investment policy analysis of commercial bank: a comparative study of NIBL with EBL and NABIL bank."*

Main objectives

- To evaluate the liquidity, profitability, risk position and assets management of the sample banks.
- To evaluate and discuss the investment policy and fund mobilization of NIBL, EBL and NABIL.
- To show the relationship between deposit and investment trends of the bank.

Findings

- Liquidity position of NIBL is comparatively better than NABIL and EBL.
- Assets management ratios of NIBL are average position in comparison with other two banks NABIL and EBL.
- NIBL is successful in utilization its overall working fund on profit generating activity than the NABIL and EBL. But return from loan and advances ratio is comparatively average. In this situation EBL has taken best position.
- From the study of capital risk ratio and credit risk ratio of all three banks comparatively NIBL is successful to attract the deposits and inter banks fund, and utilize its loan and advances form total assets in safest way by taking high risk, which helps to increase the level of profit and maximizing the value of the firm.

K.C (2009) has conducted a study on *" Investment policies of commercial banks: special reference to NABIL Bank Ltd and Bank of Kathmandu Ltd."*

Main objectives

- To analyze the investment policy of the sampled.
- To analyze the utilization of available fund of NABIL Bank and BOK.

- To evaluate the liquidity, profitability and risk position of NABIL Bank and BOK.
- To analyze the empirical relationship between deposit, loan and advances, investment, net profit and compare them between NABIL Bank and BOK.

Findings

Through his research Mr. Bohara has found;

- The liquidity position of NABIL is comparatively better than that of BOK. Both banks have met the normal standard current assets ratios to meet the short term obligation of its customers. NABIL has invested lowest fund in government securities than BOK. BOK has mobilized lots of funds in government securities in order to gain the high profit.
- From the analysis of assets management ratios it is found that NABIL is in better position as compared to BOK. The loans and advances to total deposit ratio and loan and advances to total working fund ratio of NABIL are lower than BOK. BOK has invested the higher portion of total working fund on government securities as compared to NABIL. Investment on shares and debentures to total working fund ratio is higher in BOK. The interest earned to total outside assets and return on total working fund ratio of NABIL is lower than BOK. But overall analysis of profitability ratios NABIL is profitable in comparison with BOK. To make the profit BOK is taking higher risk by providing the higher portion of its deposit as loan and advance.
- The return on loan and advances ratio and return on assets of BOK are lower than NABIL. This ratio suggests that the earning capacity of the bank's loan and advances is satisfactory. The return on assets of the bank is in average; it indicates the good earning capacity and good utilization of its assets.
- The total interest paid to working fund ratio is less than the interest earned to total working fund ratio. So, it is profitable position as it is getting higher return than interest cost.
- The degree of risk is lower of NABIL than BOK. The credit risk ratio is lower than the compared banks. However the lowest C.V. of credit ratio, highest C.V of liquidity risk ratio and capital ratio provide for the assurance of consistency of the degree of risk.

- NABIL is showing its good performance by increasing the total deposit, loan and advances, investment in profitable sectors and interest earnings by providing loan to clients.
- The trend of the total investment, total deposit, loan and advances and net profit of NABIL show better position than BOK.

Shrestha (2010) *has conducted a study on " Investment practices of Joint venture commercial banks: with special reference to standard charter bank and Nepal sbi bank Ltd."*

Main objectives;

- To evaluate the liquidity management, assets management efficiency, profitability, risk position and investment practices of Standard Charted Bank Nepal Ltd. and Nepal SBI Bank Ltd.
- The liquidity position of BOK is comparatively better than that of NABIL.
- From the analysis of asset management ratio it is found that BOK has better managed its assets.
- The analysis of profitability ratio shows that NABIL is in better position than BOK.
- To analyze the deposit and investment trends of the sample organization.
- To recommend the policies to be adopted by the sample organization based the financial analysis for its future development.

Findings

Through his research Mr. Joshi found;

- NSBIBL has higher liquidity position than that of SCBNL. The lending and investment activities of SCBNL has lower position than that of NSBIBL
- The profitability position is higher than that of other banks. The coefficient of correlation of deposit and lending and investment of SCBNL has better position and NSBIBL has not better than SCBNL.
- The risk of losses and growth position of SCBNL has better position than that of NSBIBL.
- In case of trend analysis, the trend value of loan and Advances to total deposit of SCBNL and NSBIBL are better position. Similarly, NSBIBL and SCBNL

have poor position in total investment to total deposit. Initially the major part of these banks was consisting of business and industrial loan; this is the indication of investment on productive sector.

2.5 Research Gap

NIC should utilized idle resources or funds for controlling the higher interest on idle fund from time to time. Even NABIL should improve it. The idle fund may be risky assets and shareholders' funds. The cheaper fund i.e. shareholders' funds should be used to generate more profit. It is suggested to NIC that it should improve its profitability condition to decrease the higher interest cost. But genuine conclusions have been founded by using different financial tools and Statistical tools. These Previous studies were unable to get the present facts and figures. Hence the researcher has made an attempt to fill the research gap prevailing up to this context taking reference to a joint venture bank and a commercial bank. This research will deliver the answer to the recent questions and it will also give the latest information about the current practices of concerned NABIL bank and NIC bank of Nepal. So many researchers wrote the thesis about Investment practice in Nepal in past. Research means to find the new thing in the present to fulfill the research gap. This thesis is selected to find new things about this topic. Genuine objectives have been selected. Basically more than 50% researchers have taken secondary data for the study. Profitability ratio of NABIL is better than NIC but these ratios are not satisfied level. Most of profitability ratios of NABIL are better than NIC except last two ratios. It means that the productive resources may be kept in idle. It so, the interest rate of resources become high. This thesis work also depend secondary data because of time boundary and other resources.

CHAPTER-III

RESEARCH METHODOLOGY

Research is the systematic process of collecting and analyzing information to increase our understanding of the phenomenon under study. It is the function of the researcher to contribute to the understanding of the phenomenon and to communicate that understanding to others. Research is a systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answers to the problem. Thus, the entire process by which we attempt to solve problems or search the answers to questions is called research. Research Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher, studying his research problem among with the logic behind them (Kothari, 1990:13).Research Methodology is a way to solve systematically about the research problems, which includes many tool, if it is necessary in each and every steps of this study. The main objectives of the study are to analyze, examine, highlight and interpret the investment situation of the banks. Research methodology refers to the various sequential steps to be followed and adopted by a researcher in studying a problem with certain objectives in view.

3.1 Research Design

Research design is the plan, structure and the strategy of investigation conceived so as to obtain answers to research questions and to control variance (Kerlinger: 1986, 275). The research design refers to the entire process of planning and carrying out a research study (Woeff and Pant: 2000, 53). The required data have been collected from the various sources covering a period 5 years, i.e., from **2005/06 to 2009/10**. To conduct the study, **descriptive cum analytical** research approach has been adopted. Descriptive approach has been utilized mainly for conceptualization of the problem. **Analytical approach** has been followed mainly to analyze the relationship among the investment, deposit, loan and advances, profit etc.

3.2 Nature and Sources of Data

This study is based on secondary data only. Data is collected from annual financial report; sampled banks authorized websites, journals, previous research thesis and case studies, articles etc.

3.3 Population and Sample of Study

There are around 31 commercial banks in our country which are authorized by Nepal Rasta Bank. Among them two banks (i.e. NABIL bank and NIC bank) are taken under this study. NABIL bank is the first joint venture bank which was established on 12th July 1984, when our country adopted liberalization policy. Nepal industrial and Commercial Bank (NIC) was established on 21 July 1998 which is the first commercial bank in the country to be capitalized at Rs 500 million.

3.4 Methods Of Analysis

Financial tools and statistical tools are used to find out the conclusion of this study. Basically under this study Ratio analysis is used to find out the strength and weakness. This is the most important tool of managerial finance. And Arithmetic mean, standard deviation, coefficient of Variation, correlation analysis and probable errors are used under statistical tools.

A. Financial Tools Used:

Financial tools are basically used for finding out the strength and weakness part of the organizations. Ratio analysis is the one of the most popular tool of managerial finance. This expresses the relationship among the financial variables. Gives the facilities to compare with other companies and helps to forecast for the coming future. Ratio analysis tool is used for analysis. They are as bellow.

i. Liquidity Ratios

The purpose of this ratio is to test he solvency position for the payment of short-term liabilities .Solvency position or liquidity denotes ability for payment of short-term liabilities.

- **Current Ratio**

This ratio is calculated by dividing current assets by current liabilities. The current ratio measures extend which the claims of short-term creditors are covered by short-term assets. Less or more than standard ratio is not preferable .If it is less than standard ratio, it shows the solvency position isn't better and vice versa. Generally a current ratio of 2:1 is considered satisfactory.

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

Current assets include cash, marketable securities, accounts receivable, inventories, overdrafts, bill purchased, and current liabilities involves account payable, short term notes payable, current maturities of long term debt, accrued income taxes and accrued expenses.

- **Cash and Bank Balance to Total Deposits Ratio**

These are the most liquid current assets of a firm. Cash and bank balance to total deposit ratio measures the percentage of most liquid assets to pay the depositors quickly. It also shows the ability of bank's immediate funds to cover their total deposit. This ratio is expressed below,

Cash and Bank Balance to Total Deposits Ratio = $\frac{\text{Cash \& Bank Balance}}{\text{Total Deposits}}$

Here, Total deposits includes saving account, current account, fixed account, money at call and other deposits.

- **Cash and Bank Balance to Current Assets Ratio**

This ratio declares the percentage of the cash and bank balance among the current assets of a firm. Higher ratio is defined best in this case because higher ratio means the higher capacity of firms to meet the cash demand. This ratio is presented as below,

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

Where, cash and bank balance involves cash in hand, freight cash and foreign banks.

- **Investment on Government Securities to Current Assets Ratio**

This ratio finds out the percentage of current assets invested on government's different securities like treasury bills, development bonds etc. This ratio is calculated by dividing the amount of investment on government securities by the total amount of current assets. It is shown below,

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

- **Loan and Advances to Current Assets Ratio**

Short term loan which matures with a period of one year are assumed or known as current assts. This loan is the major source of earning for a bank but the bank must be very careful about it. Bank must not allocate all funds in loan and advances. There must be certain level of loans. This specific ratio is calculated by dividing loan and advances by current assts. It shows the percentage of loan and advances and the portion of loans too. It is shown below,

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

ii. Assets Management Ratios

A set of ratios which measure how effectively a firm is managing its assets and whether or not the level of those assets is properly related to the level of operations as measured by sales is called assets management ratio. In the context of banks, managing assets is also an important function of any profit seeking organization especially commercial banks. The management of assets helps to exist institution for a long run and it also satisfies the consumer by earning high volume of profit. Asset management ratio helps to understand how the banks are using their resources and how the sample banks have arranged and invested their limited resources. Simply asset management ratios are those set of ratios that measures how effectively a firm is managing its assts. The financial tools and the related ratios to investment policy are calculated and they are as follows.

- **Loan and Advances to Total Deposit Ratio**

This ratio finds and gives the answer of the question about how the selected sample banks are utilizing their total deposit collection on loan and advances in order to earn maximum profit and satisfy customers. It is shown below,

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

Total Investment to Total Deposit Ratio

This ratio is calculated by dividing total amount of investment by total amount of deposit collection. It shows how individual or sample firms are investing their deposit for e.g. Investment on debentures and share of other companies, investment on government securities etc. It is shown below,

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

Investment must be done to earn higher return and it very essential for the sustain nobility or any financial institution.

Loan and Advances to Total working Fund Ratio

This ratio shows the ability of the sample banks in terms of earning high rate of return or maximum profit from loan and advances. Loan and advances is the main element of total working fund and the ratio is obtained by dividing total loan & Advances by total working fund. It is shown below,

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

Total working fund includes current a nets, net fixed assets, sundry assets but it doesn't includes letter of credit, letter of guarantee.

Investment on Government Securities to Total Working Fund Ratio

It is very specific ratio and it shows the portion of investment on government securities. It is calculated as follows,

$$\textbf{Investment on Government Securities to Total working Fund Ratio} = \frac{\text{Investment on Government Securities}}{\text{Total Working Fund}}$$

Investment on Shares and Debentures to Total working Fund Ratio

This ratio shows the investment of financial intuition on the shares and debentures .It is obtained by dividing investment on share and debenture by total working fund. It is shown below,

Investment on shares and Debentures to Total Working Fund Ratio =

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

iii. Profitability Ratios

Profitability ratios show the combined effects of liquidity, assets management, and debt management on operating results. It measures the earnings of the company for a certain period.

Profitability ratio is related with the term profit which shows the efficiency of the business firm. It measures the capacity of earning of any financial institution. Since profit is essential to exist in competitive market it drives or attracts the investors in that specific financial institution.

Profitability is the next result of a number of policies and decisions. Profitability ratio shows the combined effect o liquidity, asset management and debt management on operating results. Profitability ratio shows the better or worse financial performance so higher profitability ratio is desired. Profit maximization is one of the main objectives of any institution and very necessary to earn maximum returns for the success of any financial institution. The following financial ratios related to investment policy is calculated which are mentioned below

- **Return on Loan and Advances Ratio**

This Ratio shows how the banks have mobilized and used their resources to earn higher return from loan and advances. This ratio is calculated by dividing net profit or loss by the amount of loan and advances and is formulized as,

Return on Loan and Advances Ratio = $\frac{\text{Net Profit or Loss}}{\text{Total Loans and Advances}}$

- **Return on Total Assets**

The ratio of net income to total assets measures the return on total assets (ROA) after interest and taxes. This ratio shows the relationship between net profit and total assets. This ratio is calculated by dividing net income by total assets which is formulated below,

Return on Total Assets = $\frac{\text{Net Profit After Tax}}{\text{Total Assets}}$

- **Total Interest Earned to Total Outside Assets**

Total interest earned is the amount earned by a bank by spreading its investment in various firms and sectors. Total outside asset involves borrowing, short term and long term loan. This ratio is calculated by dividing total interest earned by total outside assets and is presented as,

$$\textbf{Total Interest Earned to Total outside Assets} = \frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

- **Total Interest Earned to Total Working Fund Ratio**

Earning interest is the indication of access return and it shows the better performance of the financial institutions. This ratio determines the percentage of interest earned to total assets. Higher ratio is desired in this scenario which is the better indication of the interest earned in maximum way. This ratio is calculated by dividing total interest earned from investment by working fun and is formulized as,

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

- **Total Interest Paid to Total Working Fund Ratio**

This ratio shows the percentage of total interest expenses against total working fund. This ratio is calculated by dividing total interest paid by total working fund and is formulized below,

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

iv. Risk Ratios

In every investment we seek profit but the reality is there is not only the element called profit but risk lies there. Risk simply is uncertainty of returns. The bearing of risk can be useful to get high profitability but there is no guarantee of that .So the intention must be to minimize the risk. This ratio finds out the degree of risk involved in financial operations. The analysis or measurement of credit risk ratio and capital risk ratio shows the current picture of the risk involved. The following risk ratios are calculated in this study.

- **Credit Risk Ratio**

Credit risk ratio trains us about the possibility of loan to go into default or the possibility of nonpayment of the loan given. It is calculated by

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

- **Liquidity Risk Ratio**

The cash and bank balance are the most liquid assets and they are considered as bank liquidity source. When the banks made loan, its profitability increase and also increase the risk. Higher liquidity ratio indicates less profitable return and vice versa. This ratio is calculated as bellow:

Liquidity risk ratio = $\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$

v. Growth Ratios

These ratios are used to understand the fund mobilization and investment management of a commercial bank. It shows the activities to the maintenance of economic and financial position of a financial organization .The higher growth ratio represents the high level of performance. Following growth ratios are calculated to find out the growth and expansion of the sample banks.

- Growth ratio of total deposits
- Growth ratio of loan and advances
- Growth ratio of total investment
- Growth ratio of net profit

B. Statistical Tools Used:

The term statistic is derived from Germany word Staistik and Latin word Status. Statistics means State or Government. At beginning statistics was used by Government .They used to collect data for human resources, wealth and Military. And they used to make economic policies and Military policies. But now a day it is useful for different sectors i.e. economist, socialist, scientists, entrepreneur, administrator, banks, financial companies etc.

Statistics are numeric statement of facts. The various statistical tools help us to collect and present numerical data in the proper way and to analyze them .In this study mean standard deviation, variance, co-efficient of variation least square correlation co-efficient analysis and trend analysis. This individual and collective analysis can be very useful for decision making .This study includes the following statistical analysis:-

- **Mean**

This is also known as average and it is used to get one single value which described or interest the whole data. It is used for comparison among different data's merits. the sum of all the observations divided by the number of observations is mean.

Mean can be calculated by using this formula;

$$\overline{X} = \frac{X}{N}$$

Where,

$\overline{X}$ = mean

N = Number of observations

X = the sum of observations

- **Standard Deviation**

Standard deviation determines the reliability of central tendency or mean. It measures the dispersion. Dispersion is variability of data and it finds outs how individual values fall apart on an average. The higher standard deviation has higher variability. The standard deviation is defended as the positive square roof of the arithmetic mean of the squared deviation from their arithmetic mean of a set of values. It is usually denoted by the Greek letter (Sigma). It is presented below;

Standard deviation (S.D.) = $\sqrt{\frac{(X \; Z \, \overline{X})^2}{N}}$

$\overline{X}$ = Mean of observations

Where N (n) = Number of observations

Or

$$\sqrt{\frac{x_1^{\,2}}{n} \; Z \; \frac{x_1}{n}^{2}}$$

- **Variance**

Variance is the square of standard deviation .This tool is also used to interpret data with the help of numeric facts. It is denoted by б2.It can also be formulize as,

$$\text{Variance} = \frac{(x \, \mathrm{Z} \, \bar{x})^2}{n}$$

- **Coefficient of Variation (C.V)**

The relative measure of dispersion based on standard deviation is called coefficient of standard deviation.100 times coefficient of standard deviation is called coefficient of variation. It is used to compare the variability, homogeneity of two or more distributions. High C.V. is more variable or less consistent and vice versa. It is formulized as below,

$$\text{C.V.} = \frac{\pm}{\bar{X}} \times 100$$

Where,

± = Standard deviation (S.D.)

$\bar{X}$ = Mean or average value.

- **Correlation Coefficient Analysis**

This tool interprets the relationship between two or more variables .It shows whether two or more variables are co-related positively or negatively .These following coefficient of correlation which are related to investment policies are as follows,

i. Co-efficient of correlation between deposit and total investment.
ii. Coefficient of correlation between deposit and loan and advances.
iii. Coefficient of correlation between outside assets and net profit.

It is formulized as:

$$r = \frac{N \quad dxdy \, \mathrm{Z}(\quad dx)(\quad dy)}{\sqrt{Ndx^2 \, \mathrm{Z}(\quad dx)^2}\sqrt{N \quad dy^2 \, \mathrm{Z}(\quad dy)^2}}$$

Or,

$$r = \frac{XY}{\sqrt{\quad x^2}\sqrt{\quad y^2}}$$

Where,

N = Number of Observation or no of period in series x and y.

∑XY = Sum of the product of observation in series x and y.

X^2 = Sum of the squared observation in series x.

Y^2 = Sum of the squared observation in series y.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation and analysis

This chapter includes an analytical part of the study. It deals with the presentation and analysis of data collected from various primary and secondary sources. Data analysis is a tool to find out conclusion through evaluation of collected data. Many financial as well as statistical tools have been used for analysis of collected data. After getting conclusion from the collected data, they are presented with the help of chat, table etc to easily understand. Through analytical tool those collected data are evaluated. The end of the chapter, major finding of the study have been included.

The first objective of the study is role of NRB for commercials banks. Nepal Rastra Bank (NRB) is only the controller of commercial banks. NRB has been monitoring, supervision, observation and advising to the activities of commercial banks. This is the God of banks. G means generator. O means operator and D means destroyer. Thus Nepal Rastra Bank provides authority to establish a new bank for open. It mobilizes the banks through its monetary policy. The monetary policy determines the investment policies of other banks. This is the mechanism and tool of controlling the activities of commercial banks and other banks.

Maintenance of financial stability has emerged as major challenges of monetary policy. A balanced and cautious monetary policy stance is necessary in the context of BOP deficit that has been prevailing for the last two years, high inflation and Liquidity crunch. As the current BOP deficit and inflation are structural problems, no direct impact of monetary expansion is observed on these variables.

Nevertheless, monetary policy needs to be cautious to avoid possible adverse Impact of monetary expansion on BOP and inflation.60. While determining the monetary policy stance, it is necessary to be cautious on the Overvalued real exchange rate existing for the last couple of years as well as its Negative impact on domestic savings. In the context of higher rate of inflation than expected, no improvement in productivity and weak investment climate, monetary management should be carried out so as to maintain balance in monetary and credit Aggregates and interest rate he primary objectives of monetary policy of 2011/12 are controlling inflation pressure coming from excessive expansion of money supply, maintaining favorable. BOP situation and facilitating economic growth by maintaining financial stability.

The supply side must also be strengthened to contain inflation within the target. As the monsoon of this year began on time, agricultural production is expected to be satisfactory. Similarly, government capital expenditure is also expected to be effective because of the timely announcement of the government's policy, program and budget for this fiscal year. The production of both industrial and service sector will be expected to increase if labor relations and electricity supply improved and favorable industrial climate created. On the backdrop of the above domestic economic outlook, the target of the annual average inflation rate is set at 7 percent For 2011/12. The economic policies in neighboring countries as well as at the global Level, which are directed towards controlling inflation, are also expected to help maintain inflation at the targeted level 69. Another objective of monetary policy of 2011/12 is to carry-out monetary Management so as to improve BOP situation for maintaining foreign exchange Reserves sufficient to cover at least six months of goods and service imports.

4.1.1 Regulatory Role of NRB

With a view to maintaining financial stability, a number of regulatory measures were adopted in F/Y 2005/2006. An integrated directive for CBs, development banks, finance companies & micro-credit development banks was issued on 13 July 2005. The umbrella act "Bank and Financial Institution Ordinance 2005" has been made effective by scraping all then acts governing these banks & financial institutions. This ordinance has been converted into "Bank & Financial Institution Act 2006" in 2006 with necessary amendment. Likewise, a draft of "Assets Management Company" & "Anti-money Laundering Act" has been submitted to the GON.

The umbrella directives incorporates 19 directives relating to capital adequacy, classification of loan & advances & loan loss provisioning, sectoral credit limit, accounting policy & structure of financial statement, risk minimization, investment, statistical returns to be submitted, sale of promoters shares, consortium lending, credit information & black listing arrangement, cash reserve ratio, branch office opening, interest rates & financial; resources collection.

4.1.2 Financial Tools

Financial tools are basically used for finding out the strength and weakness part of the organizations. Ratio analysis is the one of the most popular tool of managerial finance. This expresses relationship among financial variables. Gives facilities to compare with other companies and helps to forecast for coming future. Here, different financial ratios related to investment management and fund mobilization are discussed and presented to evaluate the performance of two commercial banks i.e. NABIL and NIC bank Ltd. The financial ratios which are important from the view point of the investment policy and fund mobilization are calculated and analyzed. They are bellow.

a. Liquidity ratio

b. Asset management ratio

c. Profitability ratio

d. Risk ratio

e. Growth ratio

a. Liquidity Ratio

The purpose of this ratio is test the solvency position for the payment of short-term liabilities .Solvency position or liquidity denotes ability for payment of short-term liabilities.

- **Current Ratio**

This ratio is calculated by dividing current assets to current liabilities. The current ratio measures extend to which the claims of short-term creditors are covered by short-term assets. Less or more than standard ratio is not preferable .If it is less than standard ratio, it shows the solvency position isn't better and vice versa. Generally a current ratio of 2:1 is considered satisfactory.

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

Here,

Current Assets =

Cash Balance + Balance with banks/financial institution+ Money at call and short Notice + Loan, advances and bills purchased+ other assets

Current Liabilities =

Borrowings + deposits + bills payable + proposed and undistributed dividends + income tax liabilities + other liabilities

The current ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.1

Table 4.1

Current Assets to Current Liabilities

(In Times)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	1.16	1.10	1.40	1.30	1.48	1.29	0.14	10.85
NIC	1.90	1.84	1.89	1.95	1.97	1.91	0.05	2.62

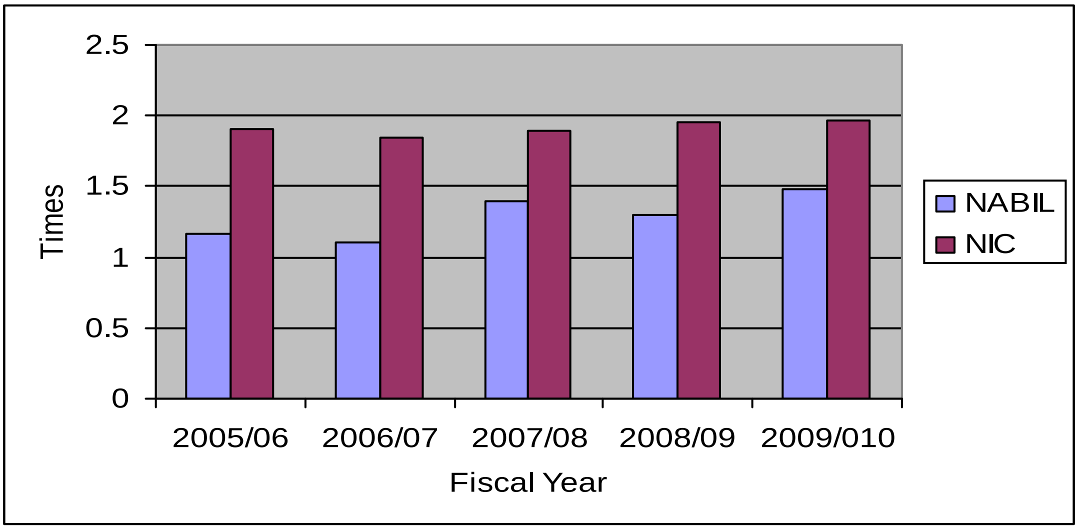
Source: Appendix 1

In the table 4.1, current ratios of exampled banks have been analyzed. The current ratio of NABIL Bank Ltd. are in fluctuating trend, where as the current ratio of NIC Bank Ltd is increasing trend in the most of years. In the context of NABIL, current ratio of 1st period 2005/06 was 1.16%. Next period current ratio is decreased by 0.06%. Then 3rd period it is increased by 0.30%, the current ratio is 1.29% in 4th year and finally it is decreased by 0.15%. In this way, we find the fluctuating trend of current ratios of NABIL. In the context of NIC Bank, current ratio in the first period 2005/06 is 1.90%. In 2nd period it is increased by 0.06%. As in 3rd period it is increased by 0.05%, it is increased to 1.95% in the fourth period and finally it is increased by 0.03%. In this way the current ratio of NIC is going to reach the optimum standard of current ratio analysis i.e. is 2:1. Both banks near to positive growing still haven't reached the standard 2:1. In aggregate, the current ratios of NIC Bank Ltd are better than NABIL Bank Ltd. CV of NABIL bank is 10.85% and CV of

NIC bank is 2.62%. In this way, current ratio of NABIL is less consistent than NIC Bank.

Figure 4.1

Current Ratio of Banks



Source: Appendix 1

In the figure 4.1; current ratio are shown of both banks. The current ratio of NABIL bank are fluctuating trend, where as the current ratio of NIC bank are increasing trend. But both are not able to reach the standard 2:1.In aggregate the current ratio of NIC Bank are better than the NABIL Bank.

- **Cash and Bank Balance to Total Deposits Ratio**

These are the liquid current assets of a firm. Cash and bank balance to total deposit ratio measures the percentage of liquid assets to pay the depositors quickly. It also shows the ability of bank's immediate funds to cover their total deposit. This ratio is expressed below,

$$\textbf{Cash and Bank Balance to Total Deposits Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits}}$$

Where, Total deposits includes saving account, current account, fixed account, money at call and other deposits.

The cash and bank balance to total deposits ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.2

Table 4.2

Cash and Bank Balance to Total Deposits Ratio

(In percentage)

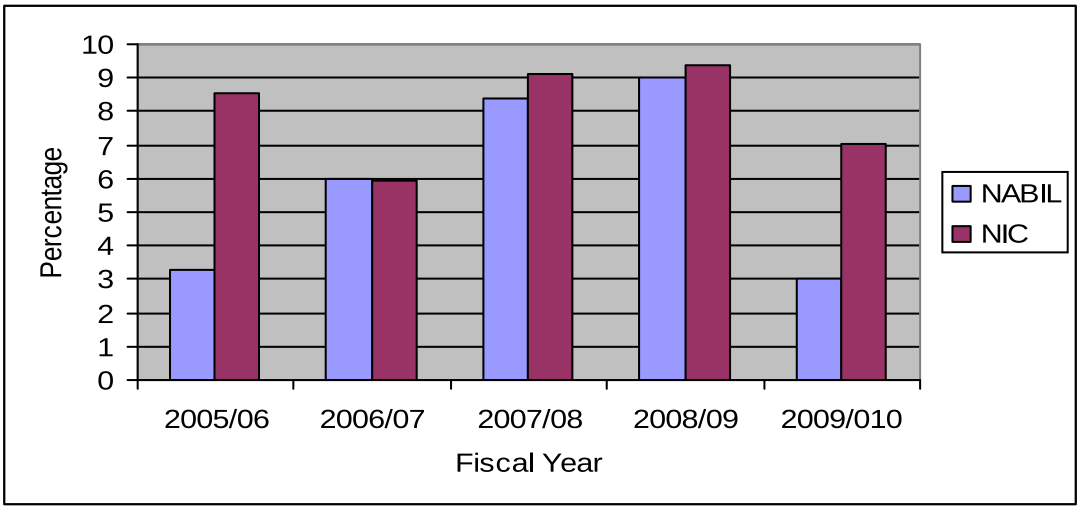
Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	2006/07	2007/08	2008/09	2009/010			
NABIL	3.26	6	8.37	9.03	3.02	5.94	2.50	42.09
NIC	8.55	5.96	9.11	9.38	7.01	8.00	1.31	16.38

Source: Appendix 2

In the table 4.2, the cash and bank balance to total deposit ratios of both banks are fluctuating trend. In the context of NABIL Bank, it is 3.26% in 2005/06 and reached 6% in 2006/07. Similarly it's reached 8.37% in 2007/08, 9.03% in 2008/09 and finally 3.02% in 2009/10. In the context of NIC bank .This ratio is 8.55% in 20005/06 as first period. And after that 5.96% in 2006/07, 9.11% in 2007/08, 9.38% in 2009/10 and finally it has declined to 7.01%. In this way both banks have fluctuating trend. CV of NABIL bank is 42.09% and of NIC bank has 16.38%. So this ratio of NABIL bank is less consistent and stable than NIC bank.

Figure 4.2

Cash and Bank Balance to Total Deposit Ratio



Source: Appendix 2

In the Figure 4.2, X axis indicates fiscal year and Y axis indicates percentage. According to the figure, the ratios of NIC bank are increasing trend till 4th period of study and finally this ratio has decreased. The ratios of NABIL are fluctuating trend.

- **Cash and Bank Balance to Current Assets Ratio**

This ratio declares the percentage of the cash and bank balance among the current assets of a firm. Higher ratio is defined best in this case because higher ratio means the higher capacity of firms to meet the cash demand. This ratio is presented as below,

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

Where, cash and bank balance involves cash in hand, foreign cash and foreign banks. The cash and bank balance to current assets ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.3

Table 4.3

Cash and Bank Balance to Current Assets Ratio

(In percentage)

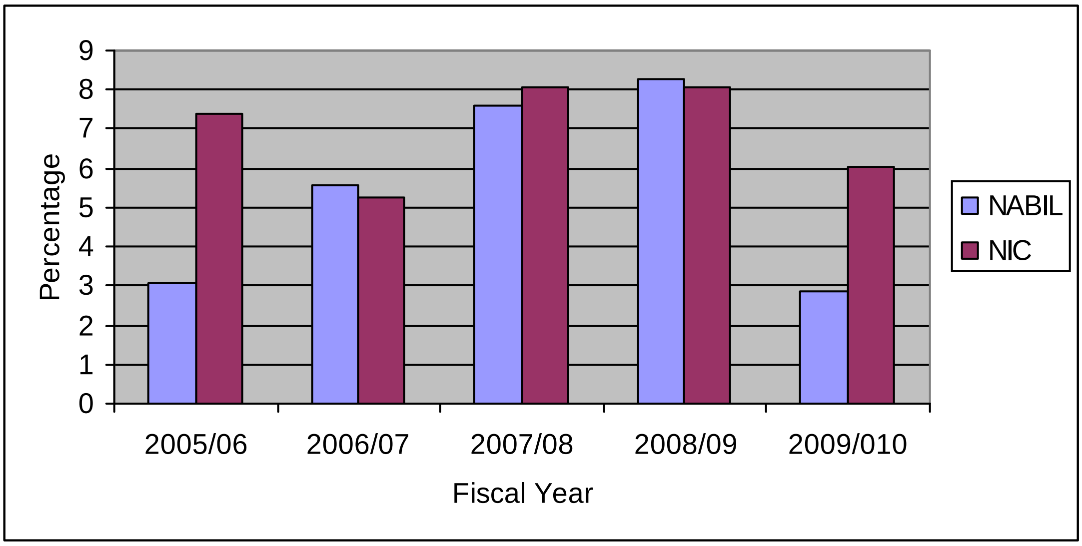
Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	2006/07	2007/08	2008/09	2009/010			
NABIL	3.05	5.58	7.57	8.25	2.87	5.46	2.23	40.84
NIC	7.39	5.24	8.05	8.08	6.04	6.96	1.13	16.24

Source: Appendix 3

In the table 4.3, cash and bank balance to current asset ratio are reflected. In the context of NABIL bank, this ratio is 3.05% in first year and 5.58% in 2nd year. After that it is increased by 1.99% in 3rd period of study, 8.25% in 2008/09 and finally it is decreased and has 2.87% in 2009/10. We find it's in fluctuation condition. In the context of NIC Bank, the ratio in 1st period is 7.39%. After that it's slightly raised 5.24% in the 2nd period, 8.05% in 3rd period 8.08% in 4th period. And in final it decreased by 2.04%.It is seem little bit consistency but in aggregate the fluctuation found. CV of NABIL bank is 40.84% and CV of NIC bank is 16.24%. According to CV, the ratios of NABIL bank are less consistency and stable than NIC Bank.

Figure 4.3

Cash and Bank Balance to Current Assets Ratio



Source: Appendix 3

In the figure 4.3, the cash and bank balance to current assets ratios of both banks are fluctuating trends. NABIL bank has maintained 3.05% in 2005/06. It has been maintained 5.58% in 2006/07, in 2007/08, 2008/09 and 2009/010 NABIL bank has maintained 7.57%, 8.25% and 2.87% respectively. NIC bank has maintained 7.39%, 5.24%, 8.05%, 8.08% and 6.04% in fiscal years for 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010 respectively. In this way both banks have fluctuating ratios.

) **Investment on Government Securities to Current Assets Ratio**

This ratio shows the percentage of current assets invested on government's different securities (i.e. risk free assets) like treasury bills, development bonds etc. Government securities are assumed risk free assets. Every investor wants to earn more profit. For more profit they invest most of portion of capital into risky assets. But they are making portfolio. When they are facing loss from risky assets, they bear those losses from risky assets as government securities. So, portion of investment in risky assets is very important this ratio is calculated by dividing the amount of investment on government securities by the total amount of current assets. It is shown below.

Investment on Government Securities to Current Assets Ratio

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

The investment on government securities to current assets ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.4

Table 4.4

Investment on Government Securities to Current Assets Ratio

(In percentage)

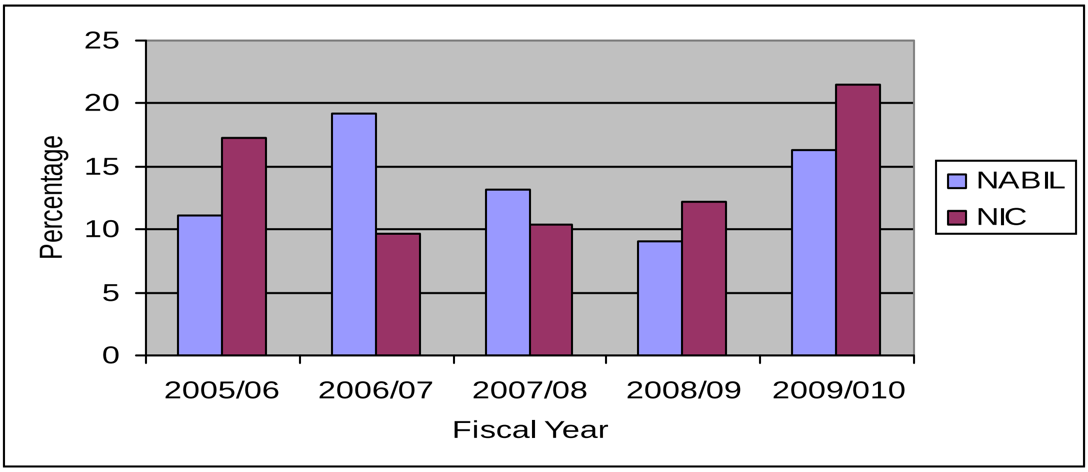
Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	11.15	19.16	13.17	9.07	16.27	13.76	3.59	26.09
NIC	17.32	9.65	10.43	12.14	21.45	14.20	4.50	31.69

Source: Appendix 4

In the table 4.4, the both Commercial banks have invested their fund into Government securities fluctuating way. NABIL bank has invested 11.15%, 19.16%, 13.17%, 9.07% and 16.27% in period 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010 respectively. NIC Bank has invested 17.32%, 9.65%, 10.43%, 12.14% and 321.45% in the study period 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010 respectively. But banks have not the consistency and stable investment. Coefficient of Variation (CV) of NABIL bank is 26.09% and coefficient of Variation of NIC bank is 31.69%. According to CV the NABIL bank has more consistency and Stable than NIC Bank.

Figure 4.4

Investment on Government Securities to Current Assets Ratio



Source: Appendix 4

According to above table, both banks have fluctuating trend of Investment on government securities to current assets ratio. In the study of first period the NABIL bank has small ratio than NIC bank. In the study of second study period, 1st first period condition is just become opposite. In third period of study we find same condition but they have smaller ratio than 2nd period. In fourth and fifth period the ratios of NIC bank are greater than NABIL bank. According to the figure, it is clear seen that the ratios of both banks are fluctuating trend.

- **Loan and Advances to Current Assets Ratio**

Short term loan which matures with a period of one year are assumed or known as current assts. This loan is the major source of earning for a bank but the bank must be very careful about it. Bank must not allocate all funds in loan and advances. There must be certain level of loans. This specific ratio is calculated by dividing loan and advances by current assts. It shows the percentage of loan and advances and the portion of loans too. It is shown below,

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

The loan and advances to current assets ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.5

Table 4.5

Loan and Advances to Current Assets Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	62.61	61.95	60.55	67.50	66.09	63.74	2.62	4.11
NIC	65.64	78.15	76.04	75.64	68.65	72.82	4.81	6.61

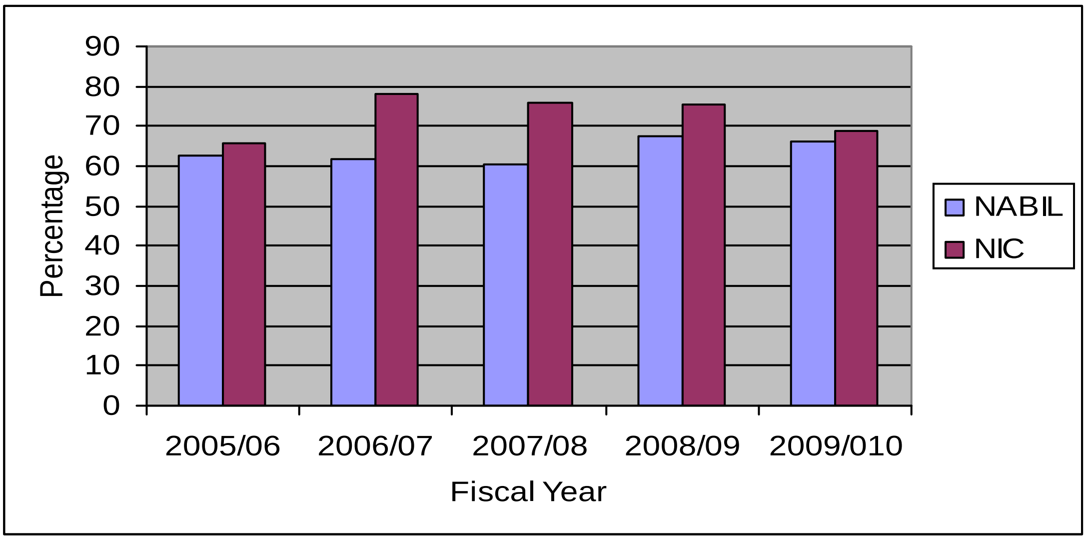
Source: Appendix 5

According to the table 4.5, The NABIL bank has invested 62.61%, 61.95%, 60.55%, 67.50% and 66.09% in study period of 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010. The NIC bank has invested 65.64%, 78.15%, 76.04%, 75.64% and 68.65%

in the study period of 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010. According to the above table the both banks have invested most of their current assets. This is the sensible signal. Every loans and Advances have the certain time of maturity. From that reason banks may have not enough cash or it could not be in most liquid position.

Figure 4.5

Loan and Advances to Current Assets Ratio



Source: Appendix 5

According to the above figure X axis represents the fiscal year. Where, Y axis represents percentage of investment of loan and advances. The NIC bank's investments are seen more investment on loan and advances of current assets than NABIL bank.

b. Assets Management Ratios

A set of ratios which measure how effectively a firm is managing its assets whether or not the level of those assets is properly related to the level of operations as measured by sales. In the context of banks, managing assets is also an important function of any profit seeking organization especially commercial banks. The management of assets helps the institution for a long run and it also satisfies the consumer by earning high volume of profit. Asset management ratio helps to understand how the banks are using their resources and how the sample banks have arranged and invested their limited resources. Simply asset management ratios are those set of ratios that measures how effectively a firm is managing its assets. The financial tools and the related ratios to investment policy are calculated and they are as follows.

⟩ **Loan and Advances to Total Deposit Ratio**

This ratio finds and gives the answer of the question about how the selected sample banks are utilizing their total deposit collection on loan and advances in order to earn maximum profit and satisfy customers. Total deposit is the main source of fund generate. Where the loan and advance is main source of interest earning .If the most of portion of deposit is invested into the loan and advances, the bank may face crash condition. Sometimes the loan and advances may go into bad debt condition then bank cannot return the collected deposit. So this ratio is sensible ratio in the other hand this ratio represents the successful investment of deposit. The banks are always trying to gather more and more deposit and they desire to invest the most of portion of deposit to invest into the loan and advances. The more or less investment is bad for the banks. Thus the optimum condition should be maintained because these conditions are sensible for the liquidity of banks. It is shown below,

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

The loan and advances to total deposit ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table

Table 4.6

Loan and Advances to Total Deposit Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	66.79	66.60	66.94	73.87	69.63	68.77	2.78	4.04
NIC	75.93	88.81	86.09	87.80	79.73	83.67	4.99	5.96

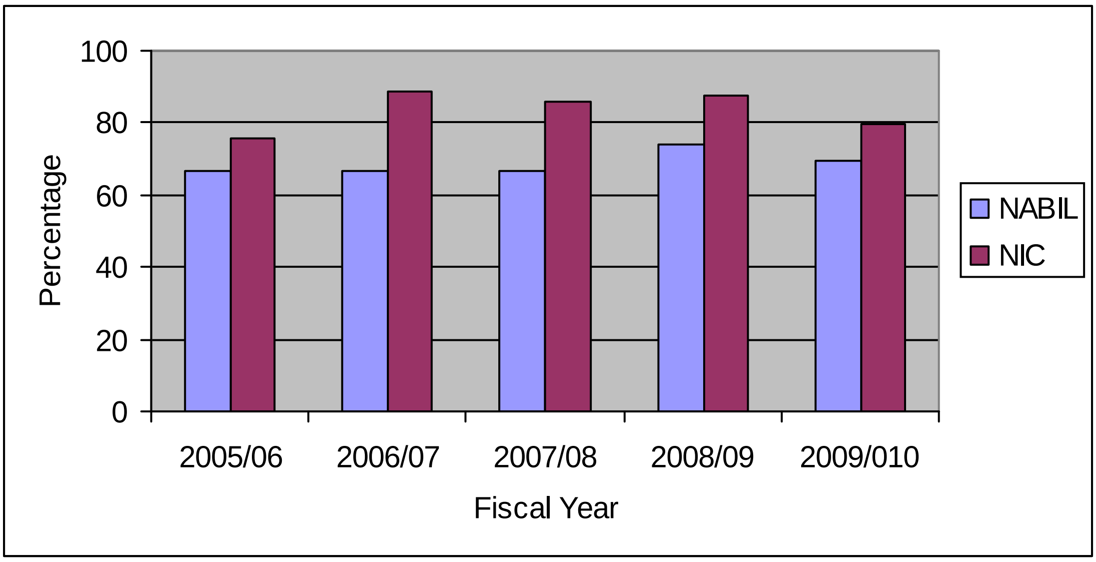
Source: Appendix 6

According to above table 4.6 The NABIL bank has 66.79%, 66.60%, 66.94%, 73.87% and 69.63% ratios in the 1st, 2nd, 3rd, 4th and fifth period of Study. Where, NIC has 75.93%, 88.81%, 86.09%, 87.80% and 79.73% ratios in the study period of 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010.NIC bank has invested it deposits into loan and advance more than the NABIL bank.

Mean of NABIL bank is 66.77% and mean of NIC is 83.67%.It mean the most portions of deposits of NIC bank has been invested in to the Loan and Advances. According to CV of both banks, the above ratios shown in table 4.6, of NIC bank are more consistent and stable than NABIL bank.

Figure 4.6

Loan and Advances to Total Deposit Ratio



Source: Appendix 6

According to the above figure 4.6, the x axis represents the fiscal year and y axis represents the percentage of investment in loan and advances. In the figure, the NABIL bank has invested less than NIC bank in every year. In the context of NABIL bank in the first period of study it has invested 66.79%, It has invested 66.60%, In the 2nd period of study the ratio raised from 66.60% to 66.94%.in the 3rd period of study the ratio reached to 73.87 % and finally it became 69.63%. In the context to NIC bank, NIC has 75.93%, 88.81%, 86.09%, 87.80% and 79.73% ratios in the study period of 2005/06, 2006/07, 2007/08, 2008/09 and 2009/010. The mean ratio of NIC bank is greater than NABIL bank. And According to CV the NABIL bank has more consistent and stable ratio than NIC.

- **Total Investment to Total Deposit Ratio**

This ratio is calculated by dividing total amount of investment by total amount of deposit collection. It shows how individual or sample firms are investing their deposit for e.g. Investment on debentures and share of other companies, investment on government securities etc. These investments are done by utilizing the part of total deposit. Investing in government securities, other financial institutions, on financial sectors are also a very promising way to achieve the profit seeking objective. It is shown below,

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

Investment must be done to earn higher return and it very essential for the sustain NABIL it of any financial institution.

The total investment to total deposit ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.7

Table 4.7

Total Investment to Total Deposit Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	31.93	38.32	31.14	28.99	29.35	31.95	3.37	10.55
NIC	28.29	15.89	17.67	19.42	30.98	22.45	6.03	26.86

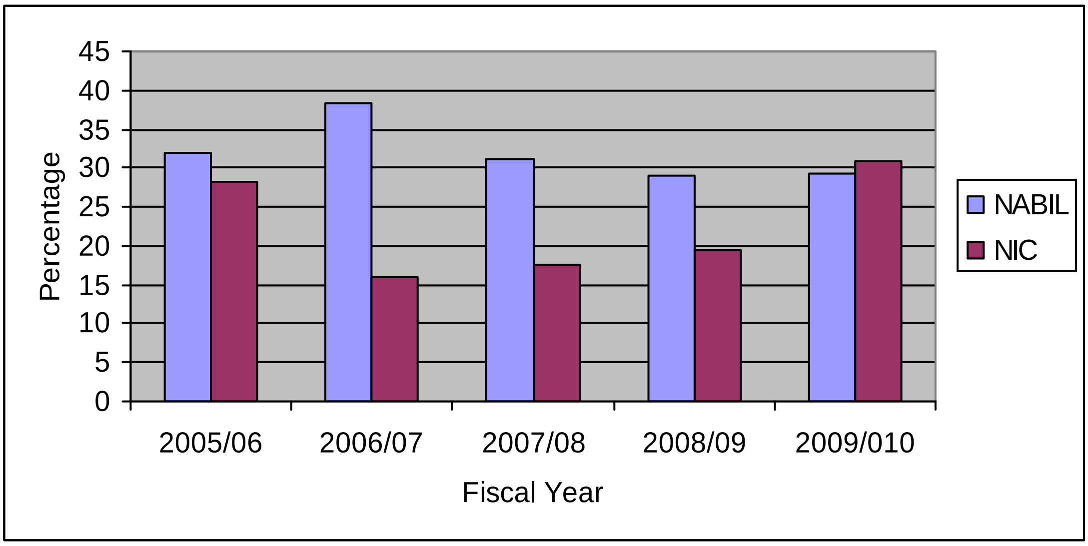
Source: Appendix-7

According to table 4.7, NABIL bank has invested 31.93%, 38.32%, 31.14%, 28.99% and 29.35 % in fiscal year 2005/06, 2006/07, 2007|08, 2008|09 and 2009|010 respectively. Where, NIC bank has 28.29%, 15.89%, 17.67%, 19.42% and 30.98 % in fiscal year 2005/06, 2006|07, 2007|08, 2008|09 and 2009|010 respectively. The both banks have fluctuating trend of the ratios.

The mean ratio of NABIL bank is 31.95% and Mean ratio of NIC bank is 22.45%. In this way the NABIL bank has higher mean ratio than NIC bank. According to the above table 4.7's CV calculation, the NABIL bank's ratios are more consistent and stable than NIC bank.

Figure 4.7

Total Investment to Total Deposit Ratio



Source: Appendix 7

According to the figure 4.7, the ratio of total investment to total deposit ratio of both banks are fluctuating trend. The NABIL bank has highest ratio in the fiscal year 2006|07 and lowest ratio in last period of study. In the other hand the NIC bank has highest ratio in last year of study and lowest ratio in the second period of study.

) **Loan and Advances to Total working Fund Ratio**

This ratio shows the ability of the sample banks in terms of earning high rate of return or maximum profit from loan and advances. Loan and advances is the main element of total working fund and the ratio is obtained by dividing total loan & Advances by total working fund. It is shown below,

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

Total working fund includes current a nets, net fixed assets, sundry assets but it doesn't includes letter of credit, letter of guarantee.

The loan and advances to total working fund ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.8

Table 4.8

Loan and Advances to Total Working fund Ratio

(In percentage)

Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	2006/07	2007/08	2008/09	2009/010			
NABIL	62.61	61.95	60.55	67.50	66.09	63.74	2.62	4.11
NIC	65.64	78.15	76.04	75.64	68.65	72.82	4.81	6.61

Source: Appendix 8

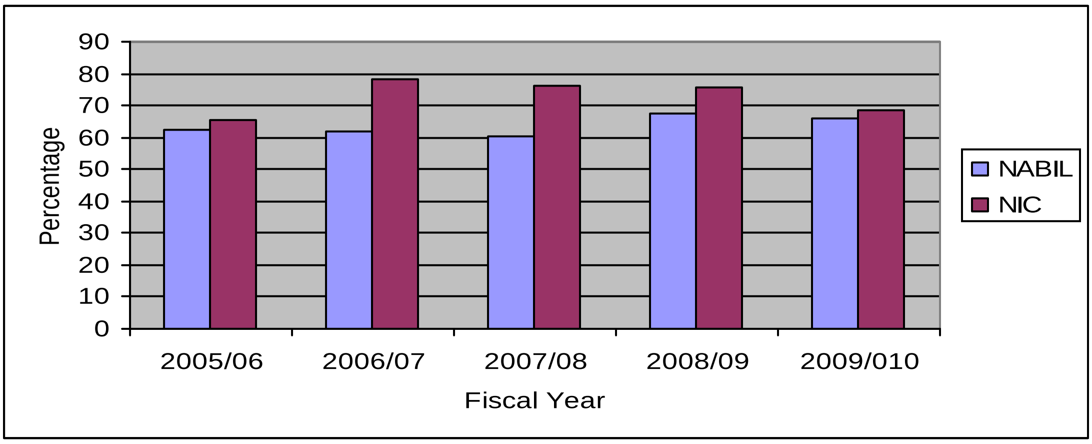
According to comparative study from table 4.8, the loan and advances to total working fund ratio a has followed a fluctuating trend .Similarly NABIL has maintained highest ratio in fiscal year 2008|09 and lowest ratio in study period of 2007|08.similarly the NIC bank has maintained highest ratio in fiscal year 2006|07 and lowest ratio in fiscal year 2005/06.

The mean ratio of NABIL bank is less than NIC bank. It means NIC bank has maintained higher ratio than NABIL bank.

The CV of NABIL bank is 4.11. Similarly the CV of NIC bank is 6.61%.Thus the loan and advances to total working fund ratio for NABIL bank are more consistent and stable than NIC bank.

Figure 4.8

Loan and Advances to Total Working fund Ratio



Source: Appendix 8

According to comparative study from figure 4.8, the loan and advances to total working fund ratio a has followed a fluctuating trend .Similarly NABIL has maintained highest ratio in fiscal year 2008|09 and lowest ratio in study period of 2007|08. Similarly the NIC bank has maintained highest ratio in fiscal year 2006|07 and lowest ratio in fiscal year 2005/06.

) **Investment on Government Securities to Total Working Fund Ratio**

It is very specific ratio and it shows the portion of investment on government securities of total working fund. It is calculated as follows,

Investment on Government Securities to Total working Fund Ratio

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

The investment on government securities to total working fun ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.9

Table 4.9

Investment on Government Securities to Total working Fund Ratio

(In percentage)

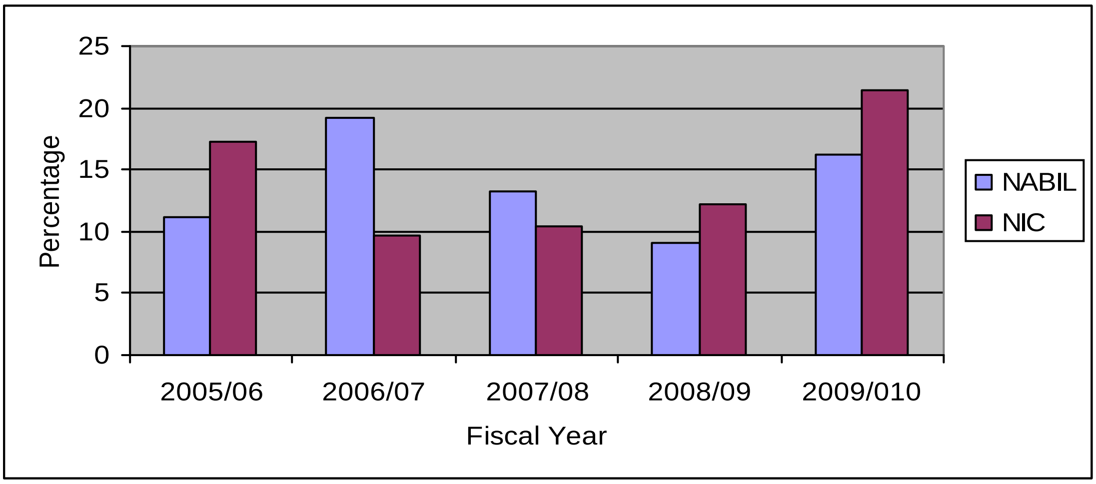
Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	11.15	19.16	13.17	9.07	16.27	13.76	3.59	26.09
NIC	17.32	9.65	10.43	12.14	21.45	14.20	4.50	31.69

Source: Appendix 9

According to above table 4.9 the investments on government securities to total working fund ratios are fluctuating trend of both banks. The NABIL bank has maintained highest ratio in period 2006|07 and lowest ratio in 2008|09. Similarly the NIC bank has maintained the highest ratio in the study period 2009|010 and lowest ratio 9.65% in the study period 2006|07. The mean average ratio of NABIL bank is less than NIC bank. According to CV is shown in table 4.9. The investment on government securities to total working fund ratio of NABIL bank are more consistent and stable than NIC bank.

Figure 4.9

Investment on Government Securities to Total working Fund Ratio



Source: Appendix 9

According to above figure 4.9 the investments on government securities to total working fund ratios are fluctuating trend of both banks. The NABIL bank has maintained highest ratio in period 2006|07 and lowest ratio in 2008|09. Similarly the NIC bank has maintained the highest ratio in the study period 2009|010 and lowest ratio 9.65% in the study period 2006|07.

) **Investment on Shares and Debentures to Total working Fund Ratio**

This ratio shows the investment of financial intuition on the shares and debentures .It is obtained by dividing investment on share and debenture by total working fund. It is shown below,

Investment on shares and Debentures to Total Working Fund Ratio= $\frac{\text{Investment on Share and Debenture}}{\text{Total Working Fund}}$

The investment on shares and debentures to total working fund ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.10

Table 4.10

Investment on shares and Debentures to Total Working Fund Ratio

(In percentage)

Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	2006/07	2007/08	2008/09	2009/010			
NABIL	0.50	1.14	0.92	0.20	0.33	0.62	0.36	58.06
NIC	0.018	0.15	0.18	0.15	0.15	0.13	0.057	43.85

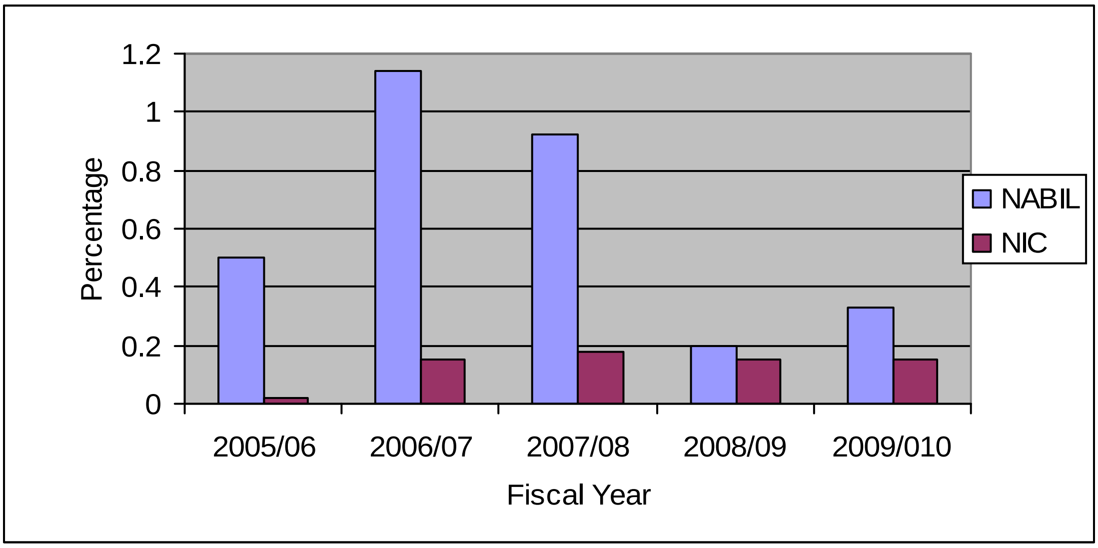
Source: Appendix 10

This comparative table shows that the ratios of investment on shares and debentures to total working fund of NABIL bank are fluctuating trend. The ratios of NIC bank are slightly consistent and stable except 1st period of study. NABIL bank has maintained the highest ratio 1.14% in first period of study and lowest ratio 0.20% in 2008/09.The NIC bank has maintained the highest ratio 0.18% in 2007|08 and 0.018% lowest has been maintained in 2005/06 fiscal years.

The mean ratio of NABIL bank is 0.62% and the mean ratio of NIC id 0.13%. According to Coefficient of Variance, the NABIL bank has maintained 58.06% and NIC bank has maintained 43.85%.Thus the investment on shares and debentures to total workings fund of NIC bank are more consistent and stable than NABIL bank, although both banks have greater CV.

Figure 4.10

Investment on shares and Debentures to Total Working Fund Ratio



Source: Appendix 10

This comparative figure 4.10 shows that the ratios of investment on shares and debentures to total working fund of NABIL bank are fluctuating trend. The ratios of NIC bank are slightly consistent and stable except 1st period of study. NABIL bank has maintained the highest ratio 1.14% in first period of study and lowest ratio0.20% in 2008/09.Similarly the NIC bank has maintained the highest ratio 0.18 in 2007|08 and 0.018 lowest has been maintained in 2005/06 fiscal years.

c. Profitability Ratios

Profitability ratios show the combined effects of liquidity, assets management, and debt management on operating results. It measures the earnings of the company for a certain period.

Profitability ratio is related with the term profit which shows the efficiency of the business firm. It measures the capacity of earning of any financial institution. Sine profit is essential tot exist in competitive market it drives or attracts the investors in that specific financial institution.

Profitability is the next result of a number of policies and decisions. Profitability ratio shows the combined effect o liquidity, asset management and debt management on operating results. Profitability ratio shows the better or worse financial performance so higher profitability ratio is desired. Profit maximization is one of the main objectives of any institution and very necessary to earn maximum returns for the success of any financial institution. The following financial ratios related to investment policy is calculated which are mentioned below

- **Return on Loan and Advances Ratio**

This Ratio shows how the banks have mobilized and used their resources to earn higher return from loan and advances. This ratio is calculated by dividing net profit or loss by the amount of loan and advances and is formulized as,

Return on Loan and Advances Ratio = $\dfrac{\text{Net profit or Loss}}{\text{Total Loans and Advances}}$

The return on loan and advances ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.11

Table 4.11

Return on Loan and Advances Ratio

(In percentage)

Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	2006/07	2007/08	2008/09	2009/010			
NABIL	4.92	4.34	3.49	3.74	3.53	4	0.55	13.75
NIC	1.45	1.77	2.16	2.32	3.53	2.25	0.71	31.56

Source: Appendix 11

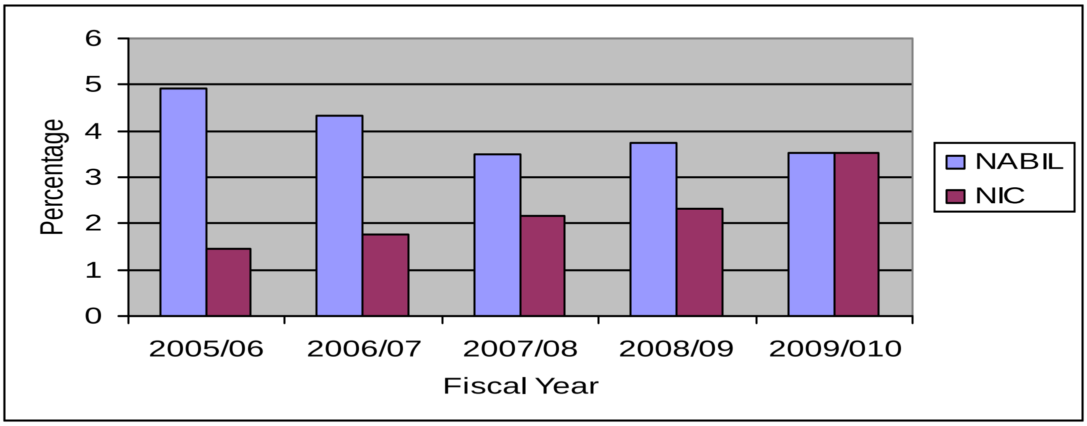
This comparative table 4.11 shows that the ratios of Return on Loan and advances have maintained a fluctuating trend. NABIL bank has maintained highest ratio 4.92% in fiscal year 2005|06 and lowest ratio 3.49% in fiscal year 2007|08.The NIC bank has maintained highest ratio 3.53% in fiscal year 2009|010 and lowest ratio 1.45% in fiscal year 2005|06.

The mean ratio of NABIL bank is 4% which is greater than NIC's 2.25%.The different between two mean is 1.75% The coefficient of Variation of NABIL bank is 13.75% and The CV of NIC is 31.56%.Thus CV of NABIL bank is smaller than CV of \NIC

.Thus the return on loan and advance ratio of NABIL bank is more consistency and stable than NIC bank.

Figure 4.11

Return on Loan and Advances Ratio



Source: Appendix 11

This comparative figure 4.11 shows that the ratios of Return on Loan and advances have maintained a fluctuating trend. Similarly the NABIL bank has maintained highest ratio 4.92% in fiscal year 2005|06 and lowest ratio 3.49% in fiscal year 2007|08.Similarly the NIC bank has maintained highest ratio 3.53% in fiscal year 2009|010 and lowest ratio 1.45 in fiscal year 2005|06.

- **Return on Total Assets**

The ratio of net income to total assets measures the return on total assets (ROA) after interest and taxes. This ratio shows the relationship between net profit and total assets. This ratio is calculated by dividing net income by total assets which is formulated below,

Return on Total Assets $= \dfrac{\text{Net Profit after Tax}}{\text{Total Assets}}$

The return on total assets ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.12

Table 4.12

Return on Total Assets

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	2.84	2.47	2.01	2.35	2.19	2.37	0.28	11.81
NIC	0.93	1.36	1.60	1.69	2.21	1.56	0.42	26.92

Source: Appendix 12

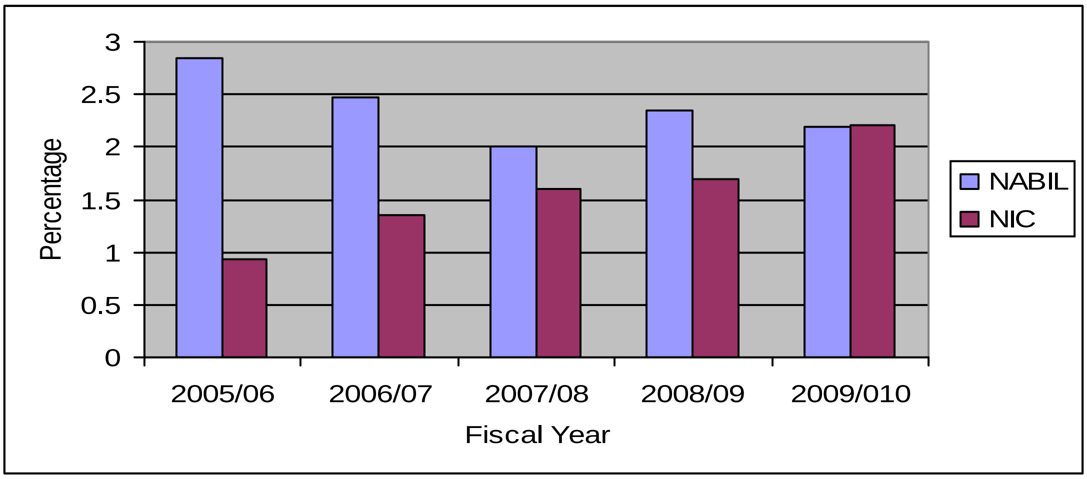
The above table 4.12 shows that the return on total assets ratio of NABIL bank is fluctuating trend but the return on total assets ratio of NIC bank is increasing trend. The NABIL bank has maintained its highest ratio of 2.84% in the fiscal year 2005|06 and lowest ratio of 2.01% in fiscal year 2007/08. NIC bank has maintained its highest ratio of 2.21% in 2009|010 and lowest ratio of 0.93% in fiscal year 2005/06.

The mean ratio of NABIL bank is 2.37% and NIC bank has maintained 1.56% mean ratio. NABIL bank has managed its profit level to its highest against NIC. The coefficient of NABIL bank is 11.81% and coefficient of NIC is 26.92%. The ratios of NABIL bank are more consistency and stable than NIC. NIC has maintained more variable and less consistency than NABIL bank

.

Figure 4.12

Return on Total Assets



Source: Appendix 12

The above figure 4.12 shows that the return on total assets ratio of NABIL bank is fluctuating trend but the return on total assets ratio of NIC bank is increasing trend. The NABIL bank has maintained its highest ratio of 2.84% in the fiscal year 2005|06 and lowest ratio of 2.01% in fiscal year 2007|08. NIC bank has maintained its highest ratio of 2.21% in 2009|010 and lowest ratio of 0.93% in fiscal year 2005/06.

- **Total Interest Earned to Total outside Assets**

Total interest earned is the amount earned by a bank by spreading its investment in various firms and sectors. Total outside asset involves borrowing, short term and long term loan. This ratio is calculated by dividing total interest earned by total outside assets and is presented as,

$$\textbf{Total Interest Earned to Total outside Assets} = \frac{\text{Total Interest Earned}}{\text{Total outside Assets}}$$

The total interest earned to total outside assets ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.13

Table 4.13

Total Interest Earned to Total outside Assets

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	6.86	6.48	6.32	7.28	12.54	7.90	2.35	29.75
NIC	3.04	6.89	6.86	7.68	10.05	6.90	2.26	32.75

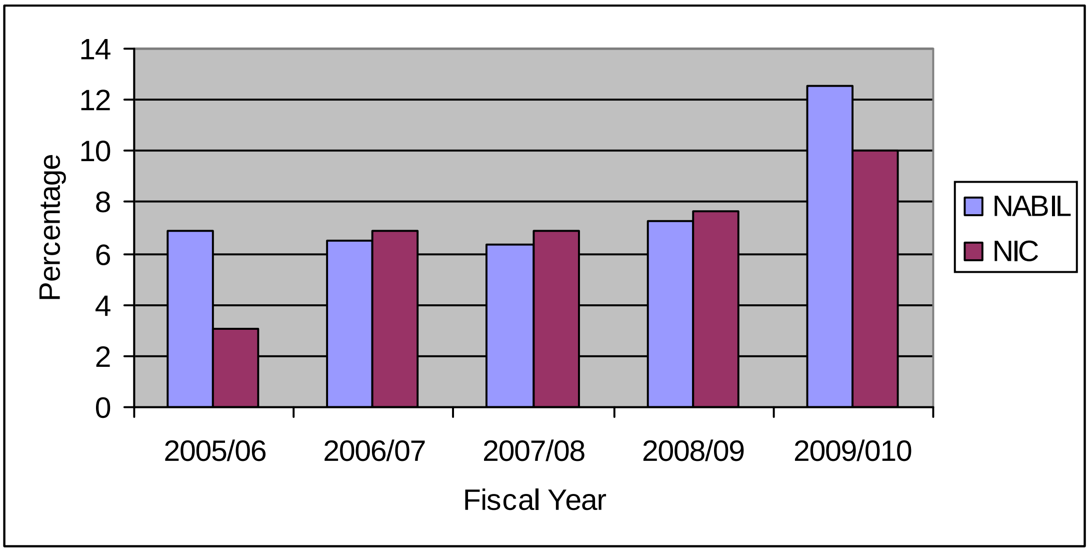
Source: Appendix 13

The above table 4.13 shows that NABIL bank's total interest earned to total outside assets has decreased in 2nd period of study and it decreased in 3rd period of study too. But the NIC bank's ratio has decreased in 3rd period of study but this ratio is increasing trend almost of years. The both banks have maintained highest ratio of 12.54% and 10.05% in the fiscal year 2009|010 respectively. And the NABIL bank has maintained lowest ratio in 2007/08 and NIC banks has maintained lowest ratio in 2005/06.

According to mean ratio calculation of both banks, The NABIL and NIC has maintained 7.90% and 6.90% respectively. Difference of mean ratio is 1%. The coefficient of variation shows the NABIL bank's ratios are more consistency, stable and less variable than NIC bank Ltd.

Figure 4.13

Total Interest Earned to Total outside Assets



Source: Appendix 13

The above comparative figure 4.13 shows that NABIL bank's total interest earned to total outside assets has decreased in 2nd period of study and it decreased in 3rd period of study too. But the NIC bank's ratio has decreased in 3rd period of study but this ratio is increasing trend almost of years. The both banks have maintained highest ratio of 12.54% and 10.05% in the fiscal year 2009|010 respectively. And the NABIL bank has maintained lowest ratio in 2007/08 and NIC banks has maintained lowest ratio in 2005/06.

) **Total Interest Earned to Total Working Fund Ratio**

Earning interest is the indication of access return and it shows the better performance of the financial institutions. This ratio determines the percentage of interest earned to total assets. Higher ratio is desired in this scenario which is the better indication of the interest earned in maximum way. This ratio is calculated by dividing total interest earned from investment by working fun and is formulized as,

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

The total interest earned to total working fund ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.14

Table 4.14

Total Interest Earned to Total Working Fund Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	6.35	6.33	5.61	6.85	8.29	6.69	0.89	13.30
NIC	5.72	6.34	6.29	7.10	9.58	7	1.36	19.43

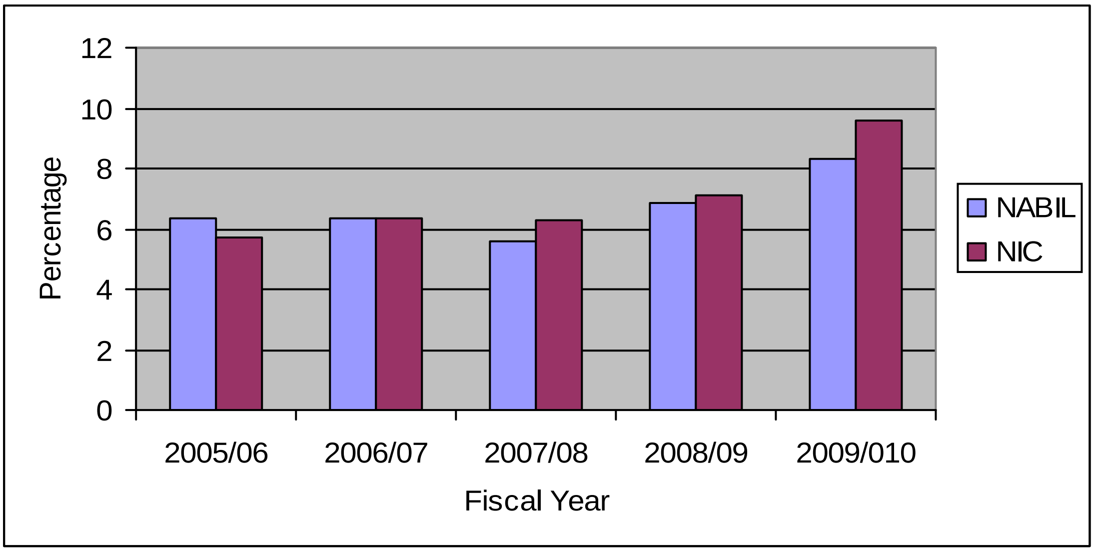
Source: Appendix 14

The above table 4.14 shows that NABIL bank's total interest earned to total working fund ratio has decreased in 2nd and third period of study. But NIC bank's ratio is increased but in 3rd period of study it decreased. Other wise total interests earned to total working fund ratios are increasing trend are from 4th period of study. The NABIL and NIC have maintained highest ratio of 8.29% and 9.58% in the fiscal year 2009|010 respectively. And the NABIL bank and NIC bank have maintained lowest ratio of 5.61% and 5.72 % in the rascal year 2007|08 and 2005/06 respectively.

According to mean ratio calculation of both banks, The NABIL and NIC has maintained 6.69% and 7% respectively. Difference of mean ratio is 0.31%.The coefficient of variation shows the NABIL banks ratios are more consistency, stable and less variable than NIC bank Ltd.

Figure 4.14

Total Interest Earned to Total Working Fund Ratio



Source: Appendix 14

The above table 4.14 shows that NABIL bank's total interest earned to total working fund ratio has decreased in 2nd and third period of study. But NIC bank's ratio is increased but in 3rd period of study it decreased. Other wise total interests earned to total working fund ratios are increasing trend are from 4th period of study. The NABIL and NIC have maintained highest ratio of 8.29% and 9.58% in the fiscal year 2009|010 respectively. And the NABIL bank and NIC bank have maintained lowest ratio of 5.61% and 5.72 % in the rascal year 2007|08 and 2005/06 respectively.

) **Total Interest Paid to Total Working Fund Ratio**

This ratio shows the percentage of total interest expenses against total working fund. This ratio is calculated by dividing total interest paid by total working fund and is formulized below,

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

The total interest paid to total working fund ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.15

Table 4.15

Total Interest Paid to Total Working Fund

(In percentage)

Banks	Fiscal Year/Unit					Mean	S.D	C.V %
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	1.73	2.21	2.15	2.82	4.01	2.58	0.79	30.62
NIC	3.35	3.68	3.42	4.24	5.56	4.05	0.82	20.25

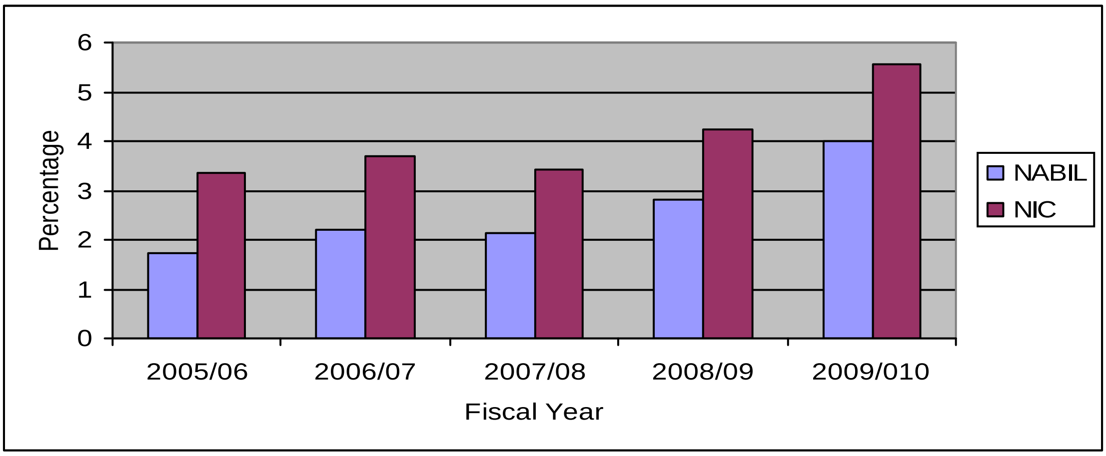
Source: Appendix 15

The above table 4.15 shows that the NABIL bank's ratio increased in 2nd period of study and it decreased in 3rd period of study. Other wise it is increasing trend from 4 period of study. The same condition is seen with NIC bank. NABIL and NIC have maintained highest ratio of 4.01% and 5.56% in the fiscal year 2009|010 respectively. And the NABIL bank and NIC bank have maintained lowest ratio of 1.73% and 3.35 % in the fiscal year 2005/06 respectively.

According to mean ratio calculation of both banks, The NABIL and NIC has maintained 2.80% and 4.23% respectively. Difference of mean ratio is 1.43%.The coefficient of variation shows the NIC banks ratios are more consistency, stable and less variable than NABIL bank Ltd.

Figure 4.15

Total Interest Paid to Total Working Fund



Source: Appendix 15

The above table 4.15 shows that the NABIL bank's ratio increased in 2nd period of study and it decreased in 3rd period of study. Other wise it is increasing trend from 4 period of study. The same condition is seen with NIC bank. NABIL and NIC have maintained highest ratio of 4.01% and 5.56% in the fiscal year 2009|010 respectively. And the NABIL bank and NIC bank have maintained lowest ratio of 1.73% and 3.35 % in the fiscal year 2005/06 respectively.

d. Risk Ratios

In every investment we seek profit but the reality is there is not only the element called profit but risk lies there. Risk simply is uncertainty of returns. The bearing of risk can be useful to get high profitability but there is no guarantee of that .So the intention must be to minimize the risk. This ratio finds out the degree of risk involved in financial operations. The analysis or measurements of credit risk ratio and capital risk ratio. It shows the current picture of the risk involved. The following risk ratios are calculated in this study.

- **Credit Risk Ratio**

Credit risk ratio trains us about the possibility of loan to go into default or the possibility of nonpayment of the loan given. It is calculated by the following formula;

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

The credit risk ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.16

Table 4.16

Credit Risk Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	57.87	57.04	57.54	62.89	61.96	59.46	2.45	4.12
NIC	64.10	76.56	73.92	72.95	62.69	70.04	5.57	7.95

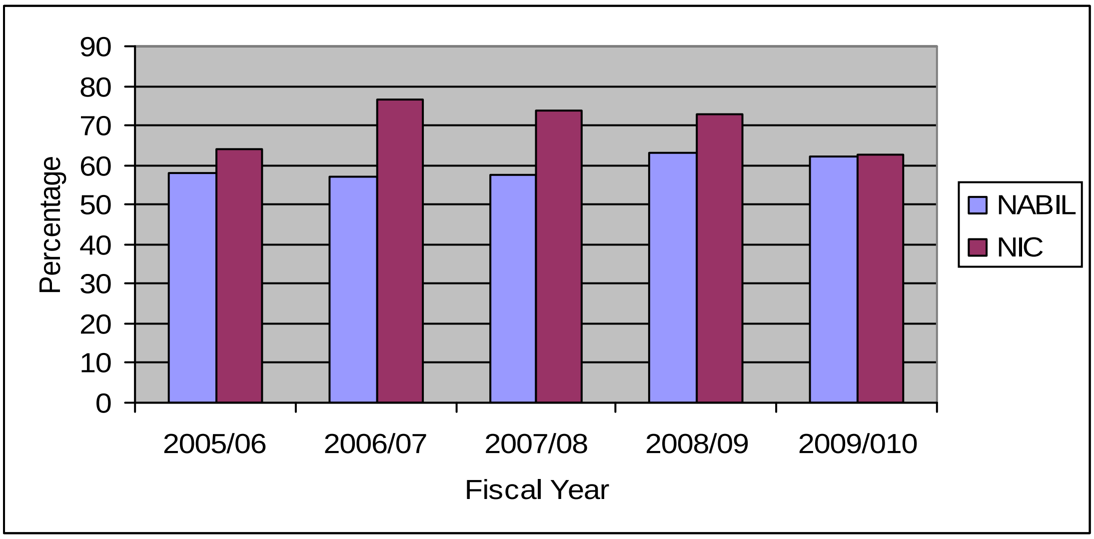
Source: Appendix 16

The above table 4.16 indicates the fluctuating trend of credit risk ratio of NABIL bank ltd. Similarly, this ratio increased in 2nd period of study. It shows the decreasing trend of credit risk ratio of NIC bank from 3rd period of study. NABIL bank has maintained the highest credit risk ratio of 62.89% in fiscal year 2008|09 and the lowest credit risk ratio of 57.04% in fiscal year 2006|07. NIC bank has maintained highest credit risk ratio of 76.56% in fiscal year 2006|07 and the lowest credit risk ratio of 62.69% in fiscal year 2009|10.

In the context of mean ratio of NABIL has 59.46% which is vastly less than 10.58% of NIC. Evaluating the Coefficient of variation of both banks, the NABIL's ratios are more consistency and stable than NIC.

Figure 4.16

Credit Risk Ratio



Source: Appendix 16

The above table 4.16 indicates the fluctuating trend of credit risk ratio of NABIL bank ltd. Similarly, this ratio increased in 2nd period of study. It shows the decreasing trend of credit risk ratio of NIC bank from 3rd period of study. NABIL bank has maintained the highest credit risk ratio of 62.89% in fiscal year 2008|09 and the lowest credit risk ratio of 57.04% in fiscal year 2006|07. NIC bank has maintained highest credit risk ratio of 76.56% in fiscal year 2006|07 and the lowest credit risk ratio of 62.69% in fiscal year 2009|10.

⁾ Liquidity Risk Ratio

The cash and bank balance are the most liquid assets and they are considered as bank liquidity source. Where banks made loan; profitability increase and be risk. Higher liquidity ratio indicates less profitable return and vice versa. This ratio is calculated as bellow:

Liquidity risk ratio = $\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$

The liquidity risk ratios of NABIL and NIC from 2005/06 to 2009/010 are shown in the table 4.17

Table 4.17

Liquidity Risk Ratio

(In percentage)

Banks	**Fiscal Year/Unit**					**Mean**	**S.D**	**C.V %**
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/010**			
NABIL	3.26	6	8.37	9.03	3.02	5.94	2.50	42.09
NIC	8.55	5.96	9.11	9.38	7.01	8.01	1.31	16.35

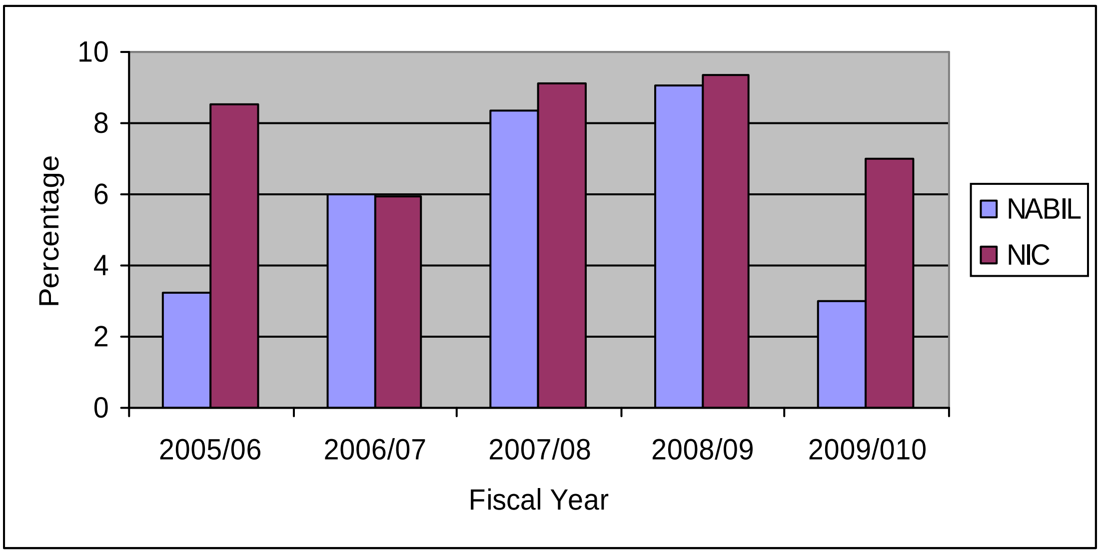
Source: Appendix 17

In the table 4.17, the Liquidity risk ratios of both banks are fluctuating trend .In the context of NABIL Bank; it is 3.26% in first period of study. It is 6% in 2006/07.It has reached 8.37% in 2007/08, 9.03% has become in period 2008/09 and finally it has reached to 3.02%. In the context of NIC bank .This ratio was 8.55% in first period of study. 5.96% in 2nd study period, then it reached to 9.11% in 3rd period. Then it reached to 9.38% in 4th study period and finally it has declined and reached to 7.01% .In this way both banks have fluctuating trend.

CV of NABIL bank is 42.09% and of NIC bank is 16.35%.So; coefficient of variation of NABIL bank is less consistent and less stable than NIC bank.

Figure 4.17

Liquidity Risk Ratio



Source: Appendix 17

In the table 4.17, the Liquidity risk ratios of both banks are fluctuating trend .In the context of NABIL bank; it is 3.26% in first period of study. It is 6% in 2006/07.It has reached 8.37% in 2007/08, 9.03% has become in period 2008/09 and finally it has reached to 3.02%. In the context of NIC bank .This ratio was 8.55% in first period of study. 5.96% in 2nd study period, then it reached to 9.11% in 3rd period. Then it reached to 9.38% in 4th study period and finally it has declined and reached to 7.01% .In this way both banks have fluctuating trend

e. Growth Ratios

These ratios are used to understand the fund mobilization and investment management of a commercial bank. It shows the activities to the maintenance of economic and financial position of a financial organization .The higher growth ratio represents the high level of performance. Following growth ratios are calculated to find out the growth and expansion of the sample banks.

) **Growth ratio of total deposits**

Table 4.18

Growth Ratio of Total Deposits

(Rs. In Million)

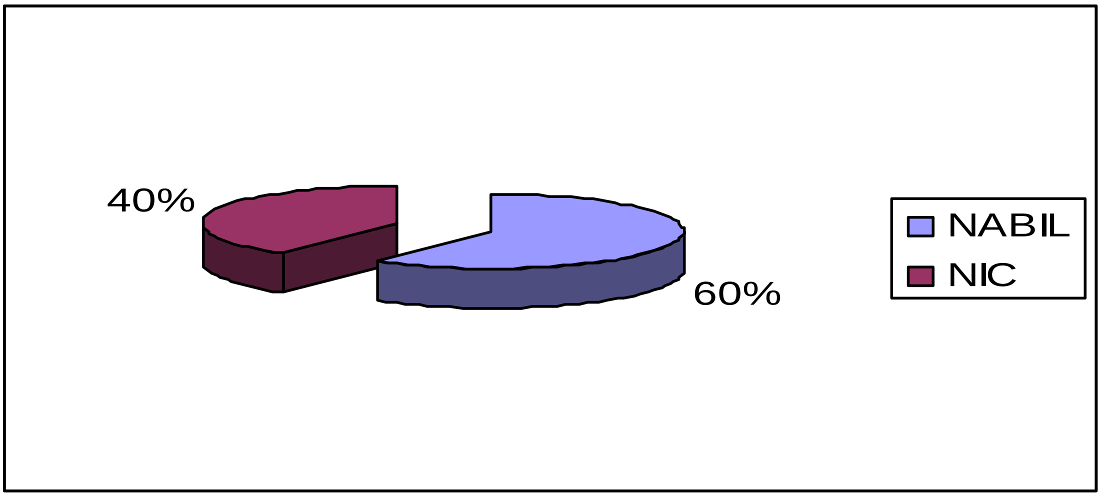
Banks	Fiscal Year/Unit					Growth Rate
	2005/06	2006/07	2007/08	2008/09	2009/010	
NABIL	19347.40	23342.29	31915.05	37348.26	46340.70	24.40
NIC	8765.95	10068.23	13084.69	15579.93	15968.92	16.18

Source: Appendix 18

The designed table 4.18 shows that the growth ratios of NABIL and NIC are 24.40% and 16.18% respectively. The deposit growth ratio of NABIL is more (different is 8.22%) than NIC bank. NIC must increase its ability and NABIL also must increase. The both bank have poor condition. Even the figure pattern shows impressive condition of NABIL. Even they should try to increase it.

Figure 4.18

Growth Ratio of Total Deposits



Source: Appendix 18

The figure 4.18 indicates the growth rate of NABIL 60% and growth ratio of NIC 40%.From the figure we can suppose the NABIL has stronger condition than NIC. But they should try to increase it for future bright condition.

) **Growth ratio of loan and advances**

Table 4.19

Growth Ratio of Loan and Advances

(Rs. In Million)

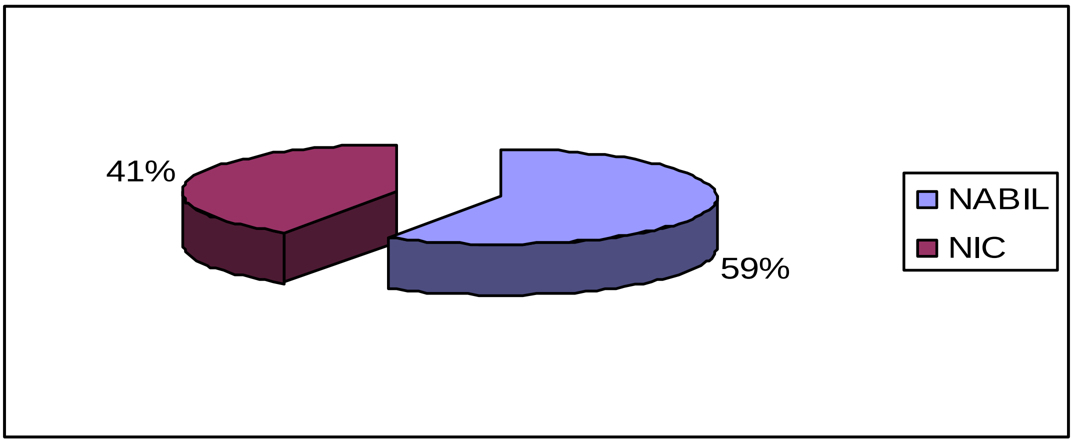
Banks	Fiscal Year/Unit					Growth Rate
	2005/06	2006/07	2007/08	2008/09	2009/010	
NABIL	12922.54	15545.78	21365.05	27589.93	32268.87	25.71
NIC	6655.96	8941.40	11264.68	13679.39	12732.01	17.60

Source: Appendix 18

The designed table 4.19 shows that the growth ratios of NABIL and NIC are 25.71% and 17.60% respectively. The loan and advance growth ratio of NABIL is more (different is 8.11 %) than NIC bank. So the NIC should increase its ability and NABIL should also increase. The both bank have poor condition. Even the figure pattern shows impressive condition of NABIL. Even they should try to increase it again and again.

Figure 4.19

Growth Ratio of Loan and Advances



Source: Appendix 18

The figure indicates growth ratio of NABIL has 59%. The growth ratio of NIC has 41%. We learn the growth ratio of NABIL is better than growth ratio of NIC bank. NIC is in poor condition than NABIL. It should empower its energy to increase its growth ratio.

) **Growth ratio of total investment**

Table 4.20

Growth Ratio of Total Investment

(Rs. in million)

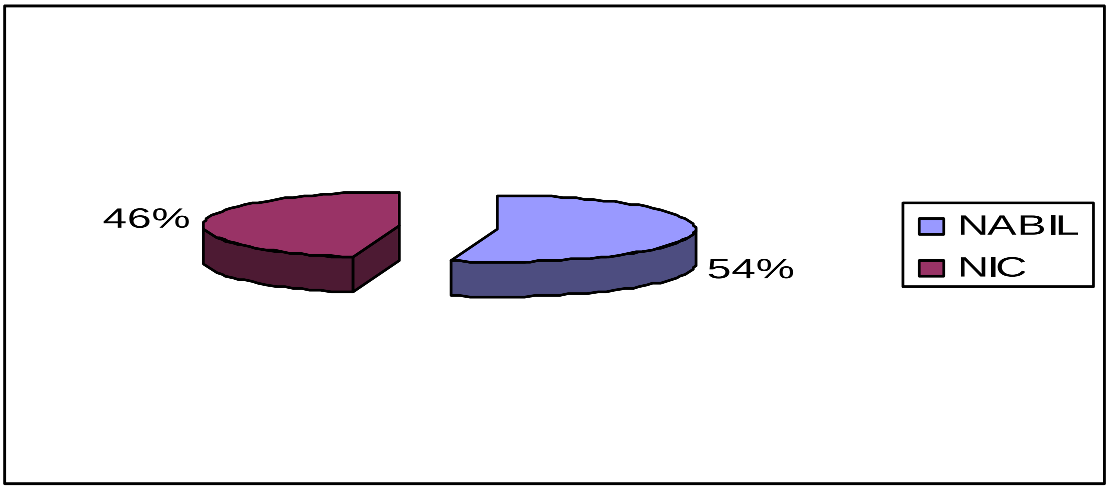
Banks	Fiscal Year/Unit					Growth Rate
	2005/06	2006/07	2007/08	2008/09	2009/010	
NABIL	6178.53	8945.31	9939.77	10826.38	13600.92	21.81
NIC	2479.91	1599.48	2311.47	3026.02	4946.78	18.84

Source: Appendix 18

From the table 4.20, we found the NABIL bank's condition is better than NIC. The NABIL has 21.81%. NIC bank has 18.84%. The growth ratio difference is 2.97%. It is found that the both banks must increase its capacity for investing.

Figure 4.20

Growth Ratio of Total Investment



Source:-Appendix 18

Figure 4.20 shows the opposite condition than figure 4.19. The NIC has 54% and NABIL has 46%. The growth pattern of NIC is less impressive than NABIL. They must try to increase their capacity of investing.

) **Growth ratio of net profit**

Table 4.21

Growth Ratio of net profit

(Rs In Million)

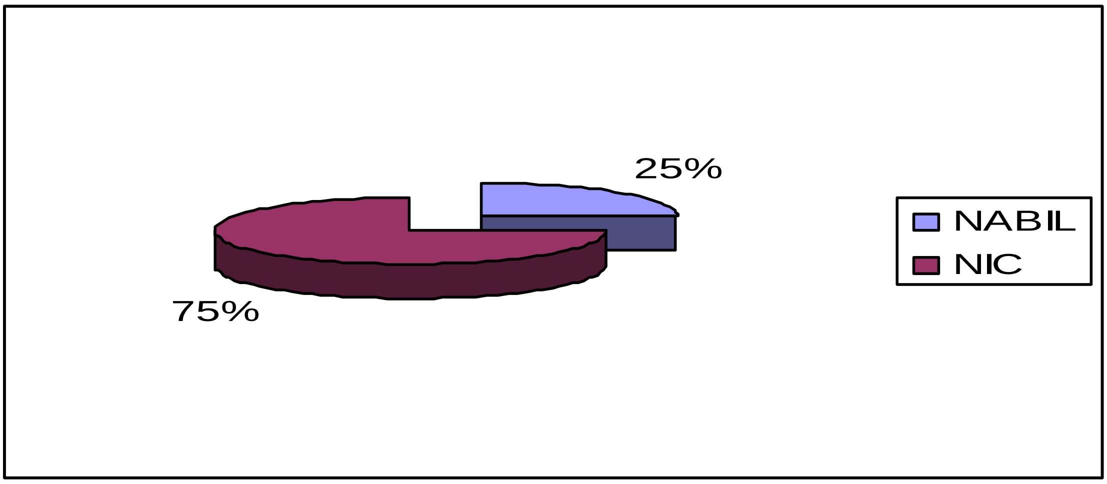
Banks	Fiscal Year/Unit					Growth Rate
	2005/06	2006/07	2007/08	2008/09	2009/010	
NABIL	635.26	673.96	746.47	1031.05	1138.58	15.71
NIC	96.59	158.48	243.06	317.43	449.84	46.90

Source: Appendix 18

In the comparative table 4.21, the growth ratio of NABIL bank has only 15.71% .similarly the NIC has 46.90%. The Net profit growth ratio of NIC is very impressive than NABIL. The NIC is going to reach 50% and NABIL bank is in poor condition. In this situation they both should maintain their capacity.

Figure 4.21

Growth Ratio of net profit



Source: Appendix 18

The above figure 4.21 indicates 25% and 75% growth pattern of NABIL and NIC respectively. NIC's growth rate percentage is 3 times greater than NABIL bank. The net profit growth pattern of NIC is much better than the growth pattern of NABIL. NABIL try to increase its capacity more than NIC in comparing.

) **Non- Performing Assets**

Table 4.22

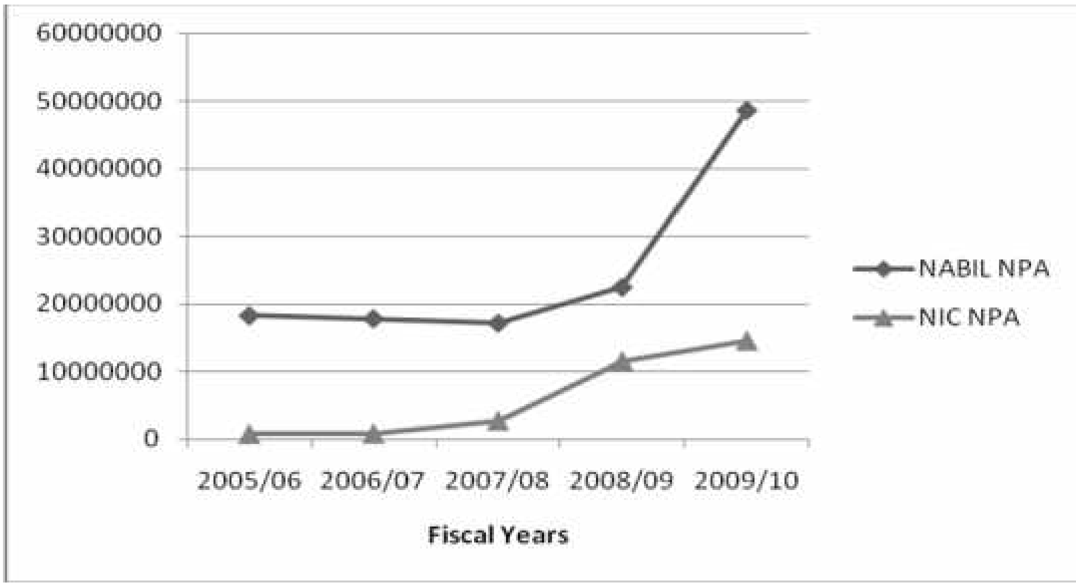
Non- Performing Assets

Years	NABIL		NIC	
	NPA	**%**	**NPA**	**%**
2005/06	182600000	14.681813	8147500	**2.676507**
2006/07	178300000	14.336075	8887500	**2.919601**
2007/08	171717303	13.806798	27725000	**9.107842**
2008/09	224817143	18.07625	114876000	**37.73751**
2009/10	486281152	39.099064	144772000	**47.55854**
Total	**1243715598**	**100**	**304408000**	**100**

Source: Annual report of related banks

Figure 4.22

Non- Performing Assets



Above the table and figure 4.22 shows that nonperforming assets of commercials banks from 2005/06 to 2009/10. It's shows that the NPA of Nabil and NIC has the highest throughout the study period and also shows the fluctuating trend of NPA. In the fiscal years 2009/10 the highest amount of Nabil and Nic bank limited ie. 486281152 and 144772000 respectively and lowest in the fiscal years 2005/06. Among all NPA is the one of the main cause, which decreases the profit and fund would allocate for provision and it cause to become bank failure. Thus, they have to pay attention towards these matters.

4.1.2 Statistical Tools

(a) Coefficient of Correlation Analysis

Correlation analysis shows the relationship between the variables. Its range is +1 to -1.positive figure shows perfect correlation and negative figure shows perfect negative correlation. The zero result is interpreted as independent variables. It is denoted by r.

Interpretation of Correlation coefficient

- it lies between +1 to -1
- when r = +1, it is perfect positive correlation
- when r = –1, it is perfect negative correlation
- When r = 0, there is no correlation
- When r lies between 0.7 to 0.99 or –0.7 to –0.99, there is high degree of positive or negative correlation.
- When r lies between 0.5 to 0.69 or –0.5 to –0.69 there is moderate degree of positive or negative correlation.
- When r is less than 0.5, there is low degree of correlation
- Probable Error
- if r < 6* P.Er, then the value of r is insignificant
- if r > 6* P.Er, then the value of r is significant

i) Correlation between Total Deposit and Total investment

It measures the relationship between total deposit and total investment. Total deposit (X) is independent variables and total investment (Y) is dependent variable. The calculation is done to find out whether there is significant relationship or not.

The table 4.22 shows the value of 'r', 'r^2', P.Er, 6 P.Er between total deposit and total investment of NABIL and NIC form the fiscal year 2005/06 to 2009/10.

Table 4.23

Correlation of Correlation between Total Deposit and Total investment

Banks	Evaluation Criterion			
	r	r^2	P.Er	6*P.Er
NABIL	0.97	0.94	0.0181	0.1086
NIC	0.73	0.53	0.1415	0.849

Source: Appendix 19

From the above mentioned table 4.22, the correlation between total deposit and total investment of NABIL(r =0.97) is high degree of positive correlation. The coefficient of determination of NABIL (r^2) is 0.94. The P.Er of NABIL is 0.0181 and 6*P.Er of NABIL is 0.1086. The coefficient of correlation is higher than 6 times probable error. This indicates the value of r is insignificant.

The coefficient of correlation between total deposit and total investment of NIC is 0.85, which indicates the high degree of positive correlation. The coefficient of determination of NIC is 0.72 i.e. 72%. P.Er is 0.0944 and 6*P.Er is 0.5664.The coefficient of Correlation is higher than 6 times probable error. This indicates that the value of r is significant.

So the both banks' have positive relationship between total deposit and total investment. It mean when the deposit increase the investment of both bank will have positive import toward the investment. According to the data mentioned in the able 4.22, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize its deposit.

ii) Coefficient of Correlation between Deposit and Loan and Advances

Deposits are independent variable (X) and loan and advances are dependent variable (Y).Calculating r shows the significance or insignificance between the deposit and loan and advances.

The table 4.23 shows the value of ‘r’, ‘r^2, P.Er and 6*P.Er of NABIL and NIC form the fiscal year 2005/06 to 2009/10.

Table 4.24

Coefficient of Correlation between deposit and loan and advance

Banks	Evaluation Criterion			
	r	r^2	P.Er	6*P.Er
NABIL	0.99	0.98	0.0060	0.036
NIC	0.98	0.96	0.0120	0.072

Source: Appendix 19

From the above mentioned table 4.23, the correlation between total deposit and loan and advance of NABIL (r = 0.99) is high degree of positive correlation. The coefficient of determination of NABIL (r^2) is 0.98.The P.Er of NABIL is 0.0060 and 6*P.Er of NABIL is 0.036.The coefficient of correlation is higher than 6 times probable error. This indicates the value of r is insignificant.

The coefficient of correlation between total deposit and loan and advance of NIC is 0.98, which indicates the high degree of positive correlation. The coefficient of determination of NIC is 0.96 i.e. 96%. The P.Er is 0.0120 and 6*P.Er is 0.072. The coefficient of Correlation is higher than 6 times probable error. This indicates that the value of r is insignificant.

So the both banks' have positive relationship between total deposit and loan & advance. It mean when the deposit increase the investment of both bank will have positive import on the loan and advance. According to the data mentioned in the able 4.23, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize its deposit.

iii) Coefficient of correlation between total assets and Net profit

Outside assets are independent variable (X) and net profits are independent variable (Y). It shows whether the net profit is significantly correlated with total assets or not.
The table 4.24 shows the value of r, r^2 P.Er, 6*P.Er between Total assets and net profit from the fiscal year 2005/06 to 2009/10.

Table 4.25

Coefficient of correlation between Total assets and net profit

Banks	Evaluation Criterion			
	r	r^2	P.Er	6*P.Er
NABIL	0.96	0.92	0.0241	0.1446
NIC	0.97	0.94	0.0181	0.1086

Source: Appendix 19

From the above mentioned table 4.24, the correlation between total asset and net profit of NABIL (r =0.96) is high degree of positive correlation. The coefficient of determination of NABIL (r^2) is 0.92 i.e. 92%.The P.Er of NABIL is 0.0241 and 6*P.Er of NABIL is 0.1446. The coefficient of correlation is higher than 6 times probable error. This indicates the value of r is insignificant.

From the above mentioned table 4.24, the correlation between total asset and net profit of NIC(r =0.97) is high degree of positive correlation. The coefficient of determination of NIC (r^2) is 0.94 i.e. 94%. The P.Er of NABIL is 0.0181 and 6*P.Er of NIC is 0.1086. The coefficient of correlation is higher than 6 times probable error. This indicates the value of r is insignificant

So the both banks' have positive relationship between total deposit and total investment. It mean when the deposit increase the total assets of both bank will have positive import on the net profit of each bank. According to the data mentioned in the able 4.24, the both banks have highly significant with higher dependency. Thus both banks are successful to mobilize its total assets.

4.2 Trend Analysis

Table 4.26

Trend Analysis of Total Deposit of NABIL and NIC

(Rs. in million)

FY (t)	**NABIL**		**NIC**	
	Total deposit (Y)	Y_C **= a + bx**	**Total deposit (Y)**	Y_C **= a + bx**
2005/06(1)	19347.40	18060.24	8765.95	8710.016
2006/07(2)	23342.29	24859.49	10068.23	10701.78
2007/08(3)	31915.05	31658.74	13084.69	12693.544
2008/09(4)	37348.26	38457.99	15579.93	14685.308
2009/10(5)	46340.70	45257.24	15968.92	16677.072
2010/011(6)		52056.49		18668.836
2011/012(7)		58855.74		20660.60
2012/013(8)		65654.99		22652.364
2013/2014(9)		72454.24		24644.128
2014/015(10)		79253.49		26635.892
(a)	31658.74		12693.544	
(b)	6799.26		1991.764	
Trend Equation(y)	31658.74+ 6799.26X		12693.54 + 1991.76X	

Source: Annex 20& 21

Above the table shows that the trend of total deposit of sample banks. The rate of change for Nabil is Rs.6799.26 million, for and for NIC is Rs.1991.76 million in the study period. The mean of Nabil is Rs.31658.74 million and NIC's Rs.12693.54 million in the study period.

If the other things remain the same, the projected amount of Nabil, and NIC for the fiscal year 2014/015 will be Rs.45257.26 million, Rs.26635.89 million. Similarly, the amount of same banks for the fiscal year 2010/01 will be Rs.18060.22 million and Rs.18668.83 million of Nabil and NIC respectively. These facts are presented in figure below to make clearer.

Figure 4.23

Trend Analysis of Total Deposit of NABIL and NIC

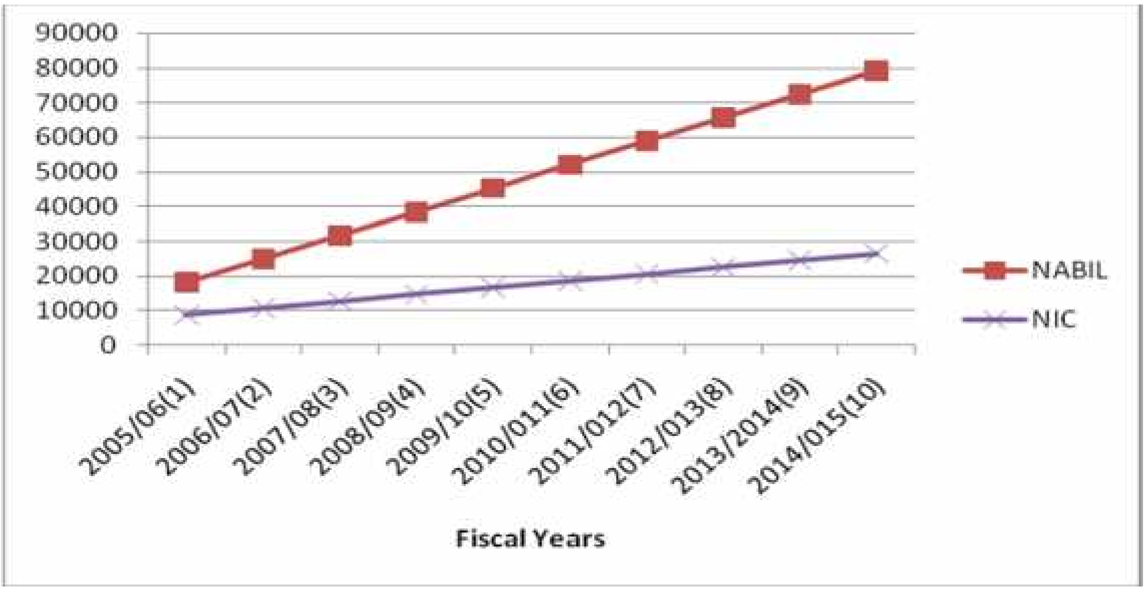


Table 4.27

Trend analysis of non- performing assets of Nabil and NIC

FY (t)	NABIL		NIC	
	NPA (y)	Y_C **= a + bx**	**NPA (y)**	Y_C **= a + bx**
2005/06(1)	182600000	117967230.1	8147500	-14965900
2006/07(2)	178300000	183355174.8	8887500	22957850
2007/08(3)	171717303	248743119.6	27725000	60881600
2008/09(4)	224817143	314131064.4	114876000	98805350
2009/10(5)	486281152	379519009.1	144772000	136729100
2010/011(6)		444906953.9		174652850
2011/012(7)		510294898.7		212576600
2012/013(8)		575682843.5		250500350
2013/2014(9)		641070788.2		288424100
2014/015(10)		706458733.0		326347850
(a)	248743119.6		60881600	
(b)	65387944.7		37923750	
Trend Equation(y)	24874119+ 65387.7X		60881600 + 60881600X	

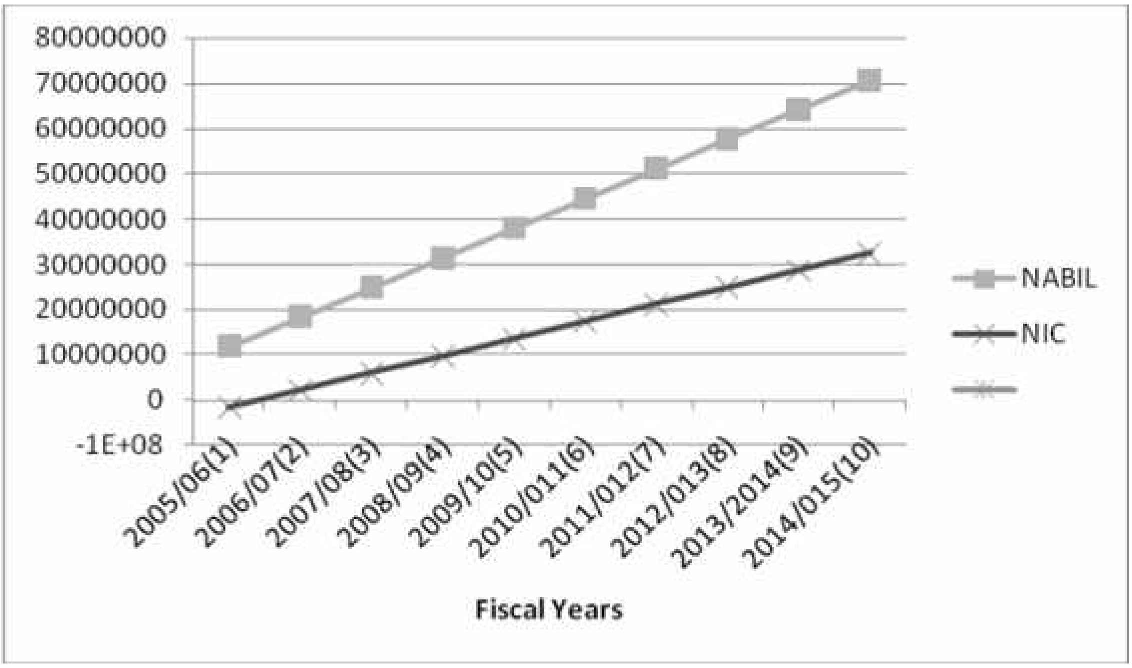
Source: Annex- 22 & 23

The table 4.27 shows that the trend of total deposit of sample banks. The rate of change for Nabil is Rs.65387944.7 for and for NIC is Rs.37923750 in the study period. The mean of Nabil is Rs.248743119.6 million and NIC's Rs.60881600 in the study period.

If the other things remain the same, the projected amount of Nabil, and NIC for the fiscal year 2014/015 will be Rs. 706458733.0 and Rs. 326347850. Similarly, the amount of same banks for the fiscal year 2010/011 will be Rs. 444906953.9 million and Rs. 174652850 million of Nabil and NIC respectively. These facts are presented in figure below to make clearer.

Figure: 4.24

Trend analysis of non- performing assets of Nabil and NIC



4.3 Major Findings

Liquidity Ratio

- The mean current ratio of NIC is higher and better than the NABIL. It means the NIC is stronger to fulfill the short term obligation than NABIL. According to the mean current ratios of both banks, NIC has better liquidity position than NABIL. In other hand, the NABIL has not enough current assets to meet its immediate cash obligation. NIC has more stable and consistence current ratio according to the coefficient of variation.

- The mean of cash and bank balance to total deposits ratio of NIC is greater than the mean ratio of cash and bank balance to total deposits ratio of NABIL.NIC is more capable than NABIL because of better liquidity position and it is capable for fulfill the customers deposit withdrawal demand. NIC's has high consistency.
- The mean ratio of cash and bank balance to current assets ratio of NIC is greater than NABIL. It means the NIC bank has better liquidity position. The NIC has more consistency and stable in this regard. NIC is capable in maintaining its cash and bank balance to meet its daily requirement to make the payment on customers deposit withdrawal in comparison with NABIL.
- The mean ratio investment on government securities to current assets of NABIL higher than the mean ratio of NIC. It reflects that NABIL has invested more of its fund in government securities. The ratios of NIC aren't stable, variable and inconsistent .The current assts of NABIL has been used in a high proportion than NIC.
- The mean ratio of loan and advances to current assets ratio of NABIL is less than NIC bank. NABIL bank has utilized its fund in recoverable loan and advances .The ratios of NABIL are more consistent and stable than the NIC.Asset Management Ratio. The mean ratio of loan and advance to total deposit ratio of NIC is greater than ratio of NABIL. The ratios of NIC are very consistency and more stable than NABIL.
- The mean ratio of total investment to total deposit ratio of NABIL is higher than NIC. Both banks have the fluctuating trend of total investment to total deposit ratio. NABIL has mobilization significant amount of fund of in its investment. The ratios of NABIL are more consistent than NIC.
- The mean ratio of NABIL bank is less than NIC bank. it mean NIC bank has maintained higher ratio than NABIL bank. Thus the loan and advances to total working fund ratio for NABIL bank are more consistent and stable than NIC bank.
- The investment on government securities to total working fund ratios are fluctuating trend of both banks. Similarly the NABIL bank has maintained less mean ratio than NIC. The NABIL bank has maintained the consistent and stable in this regard.

- The mean ratio of investment on shares and debentures to total working fund ratio of NABIL is higher than the mean ratio of investment on shares and debentures to total working fund of NIC.NIC has more consistent and less variable in this regard. Profitability ratio
- The mean ratio of return on loan and advances of NABIL is greater than NIC. The NIC has more consistent and less variable in this regard.
- The mean ratio of return on total assets of NABIL is greater than NIC.NABIL has maintained the less variable, consistent and stable in this regard.
- The mean ratio of total interest earned to total outside assets of NABIL is greater than NIC. The NIC's ratios are more consistent and stable than NABIL
- NABIL bank has less mean ratio of total interest earned to total working fund than NIC. The NABIL has consistent and stable than the NIC.
- The mean ratio of total interest paid to total working fund of NABIL is less than NIC.NIC has consistent and less variable ratios in this regard. Risk Ratio
- The mean ratio of credit risk ratio NIC is higher than NABIL the fluctuated ratios of NABIL are more consistent and stable than NIC.
- NIC has higher mean ratio of liquidity risk than NABIL. The ratios of NIC are more consistent and less variable**.** Growth Ratios
- NABIL has greater growth ratio of total deposit. NIC has weak condition due to it has growth rate of 16.18% comparing with NABIL's 24.40%.
- NIC has weak growth ratio of Loan and advances. Similarly the growth ratio of NABIL is strong. There is the difference of 8.11%.The fund of NABIL are utilized in loan and advances more than NIC.
- NIC has less ratio of total investment than NABIL's 21.81%. NABIL is investing more fund than NIC.
- The net profit growth ratio of NABIL is less than the NIC .NABIL is achieving 15.71%. Similarly the NIC is achieving 46.90%. The increment of net profit of NIC has hit a high record.

Co-efficient of correlation Analysis

- The both banks' have positive relationship between total deposit and total investment. It mean when the deposit increase the investment of both bank will have positive import toward the investment. According to the data mentioned in the able 4.22, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize its deposit.

- The both banks' have positive relationship between total deposit and loan and advance. It mean when the deposit increase the investment of both bank will have positive import on the loan and advance. According to the data mentioned in the able 4.23, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize it's deposit. The both banks' have positive relationship between total deposit and total investment. It mean when the deposit increase the total assets of both bank will have positive import on the net profit of each bank. According to the data mentioned in the able 4.24, the both banks have highly significant with higher dependency. Thus both banks are successful to mobilize it's total assets. Investment patter of both banks According to the investment patter of both banks, they are investing in Nepal government treasury bills, Nepal government other securities, local licensed institution's shares, foreign banks, organized institution's shares, organized institution's bonds and debentures and other investment. they have mainly focused in government treasury bills and foreign banks. They have neglected the organized institution's share in most of year. They have changed investment strategies and portfolio in each fiscal year.
- Nepal Rastra Bank rules and regulation NRB rules and regulation are found perfect for the control of commercial banks. It regulates the whole banks with its monetary policies. It operates open market operation to control the liquidity in the market Commercial bank and Investment policy

Commercial banks and investment policies are closely related. Banks must be careful while making investment policies. Investment policy is closely related to return and risk. Safety and security, profitability, purpose of loan, legality and liquidity are the features of perfect investment policies.

NABIL's returns are seen well than NIC. So, NABIL is better than NIC in profitability feature. NIC is better in liquidity position than NABIL. Thus NIC is better than NABIL in liquidity feature.

CHAPTER- V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter five is concern with some selected actionable conclusions and recommendations on the basis of the main findings, which are derived from the analysis of NABIL and NIC. This chapter has carried out from the primary and secondary data analysis. Basically financial and statistical tools have been used. The chapter is carried out through with data comparison and interpretation. Basically ratio analysis is focused in financial tools. Similarly mean, standard deviation, coefficient of variation, correlation, trend analysis and hypothesis have been used in statistical tools.

5.1 Summary

Banking sector is most important sector for economic development of any country. Banks are playing vital roll for collecting scattered funds and for investing those unproductive funds into productive areas. Now days banking sector has been backbone of any state. This sector is closely touched with whole economic sector development. It is not important to add branches but it is important to provide qualitative activities to develop economic sector. In Nepal there are too many opportunities for banking sectors. Similarly there is too much challenge for this sector. Lack of government proper supervision and monitoring, this sector is not performing well. Similarly this sector's activities are affecting the whole economy of a country.

Among the activities of a banking sector, the investment practice of a sector is most important for a country. In this study, to evaluate investment practice of two banks are focused. And closely analysis by collecting concern data. Here, the investment sector ways of two banks are closely seen, analyzed and presented in first chapter. The activities and acts of government sector toward controlling the investment practice of a banking sector are closely studied. It means how the banks are investing and how government is ruling this sector especially in investment activities. The terms investment covers a wide area of money transactions. Simply it has a concept of income, saving and other collected funds. These activities fall under the bank. The primary objective of any financial institution like commercial is profit maximization. The income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund utilized in different securities. The high credit created by bank results in higher profitability .In a developing country like Nepal it must play and disburse facilities all part of country.

In this study, some of financial tools and statistical tools have been used for analysis and interpretation of collected data. Data are collected through primary and secondary sources. Basically ratio analysis is focused in this thesis work.

Similarly percentage, mean, standard deviation, coefficient of variation, coefficient of correlation and trend analysis have been used in statistical tools. The main data are collected through the web sites, manual document, reports, annual reports, journals, official publication and relevant study. The financial statement of four years (from 2005|06 to 2009|010) is selected for the purpose evaluation.

5.2 Conclusion

Among 31 banks in Nepal, NABIL and NIC are selected for this study. With the help of available concerned literatures are used to complete this study. Basically the past literatures have been helpful to conduct a sound methodology for analyzing and conclude the concerned data.

The financial ratios are taken for this data analysis among the various financial tools and statistical tools (i.e. mean, standard deviation, coefficient of variation, correlation, and growth ratio and trend analysis).

It means the NIC bank has better liquidity position. NIC is capable in maintaining its cash and bank balance to meet its daily requirement to make the payment on customers deposit withdrawal in comparison with NABIL. Investment on government securities to current assets of NABIL is higher than NIC. It reflects that NABIL has invested more of its fund in government securities. The current assts of NABIL has been used in a high proportion than NIC. Loan and advances to current assets ratio of NABIL is less than NIC bank. NABIL bank has utilized its fund in recoverable loan and advances. From the view point of liquidity ratio it is found the liquidity position of NIC bank and the current ratio are comparatively better than the NABIL bank. It means the NIC is stronger to fulfill the short term obligation than NABIL. In other hand, the NABIL has not enough current assets to meet its immediate cash obligation, cash and bank balance to total deposits ratio of NIC is greater than the mean ratio of cash and bank balance to total deposits ratio of NABIL. NIC is more capable than NABIL because of better liquidity position and it is capable for fulfill the customers deposit withdrawal demand. NIC's has high consistency. Cash and bank balance to current assets ratio of NIC is greater than NABIL.From the view point of Assets management ratio it is found that Assets management ratio of NIC bank is comparatively better than NABIL bank. Loan and advance to total deposit ratio of NIC is greater than ratio of NABIL.

It means NIC has mobilized its more deposit on loan and advances. Total investment to total deposit ratio of NABIL is higher than NIC. It means NABIL has invested its more deposits. Loan and advance to total working fund ratio of NABIL bank is less than NIC bank. It means NABIL has mobilized its total working fund as loan and advances. The investment on government securities to total working fund ratios are fluctuating trend of both banks. Similarly the NABIL bank has maintained less means ratio than NIC .It means NIC has utilized its more portion of total working fund on government securities. Investment on shares and debentures to total working fund ratio of NABIL is higher than the mean ratio of investment on shares and debentures to total working fund of NIC.

From the view point of profitability ratio it is found. Return on loan and advances of NABIL are greater than NIC. It means the loans of NABIL are secured loans. Return on total assets of NABIL is greater than NIC. It means NABIL has been success to earn higher profit on its working fund. Total interest earned to total outside assets of NABIL is greater than NIC. Total interest earned to total working fund ratio of NABIL is less than NIC. Total interest paid to total working fund of NABIL is less than NIC. It shows NABIL has not paid high interests.

From the view point of risk ratio it is found that Credit risk ratio NIC is higher than NABIL It reflects NIC has provided higher portion on loan which involves high risk but it can also provide high return it is secure loan. Liquidity risk of NIC is higher than NABIL.

From the view point of growth rate it is found that NABIL has greater growth ratio of total deposit. The deposit mobilization of NIC is weaker than NABIL.NIC has weak growth ratio of Loan and advances. The growth ratio of NABIL is strong. It indicates the mobilization of funds on loan and advances of NABIL are better than NIC. NIC has less growth ratio of total investment. NABIL is investing more fund than NIC .The investment position of NABIL is better than NIC. The net profit growth ratio of NABIL is less than the NIC. NABIL is achieving 15.71%.Similarly the NIC is achieving 46.90%.The increment of net profit of NIC has hit a high record. Growth ratio of net profit of NIC is better than NABIL because it has higher growth ratios.

From the view point of Correlation analysis it is found that both banks have positive relationship between total deposit and total investment. It mean when the deposit increase the investment of both bank will have positive import toward the investment. According to the data mentioned in the able 4.22, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize its deposit. The both banks have positive relationship between total deposit and loan and advance. It means when the deposit increase the investment of both banks will have positive import on the loan and advances. According to the data mentioned in the able 4.23, the NABIL has highly significant with higher dependency. Thus NABIL is successful to mobilize its deposit. The both banks have positive relationship between total deposit and total Assets. It means when the deposit increase the total assets of both bank will have positive import on the net profit of each bank. According to the data mentioned in the table 4.24, the both banks have highly significant with higher dependency. Thus both banks are successful to mobilize its total assets

5.3 Recommendations

Recommendation is derived from the finding and conclusion of the study. Recommendations can be useful for finding weakness and inefficiency of the sampled NABIL and NIC. This mentioned recommendation can be milestone for both banks. It also suggests improving the present fund mobilization and investment activities of NABIL and NIC.

The liquidity position of NIC bank is comparatively better than NABIL. But both banks have not reached standard level of 2:1. In aggregate the both banks must try to increase current assets or both banks must try to decrease current liabilities.

- The mean of cash and bank balance to total deposits ratio of NIC is greater than the mean ratio of cash and bank balance to total deposits ratio of NABIL. Those activities can decrease the profit of NIC bank because the NIC bank is has kept ideal money with it. The mean current ratio of NIC is higher and better than the NABIL. It means the NIC is stronger to fulfill the short term obligation than NABIL. According to the mean current ratios of both banks, NIC has better liquidity position than NABIL.
- In other hand, the NABIL has not enough current assets to meet its immediate cash obligation. NIC has more stable and consistence current ratio according to the coefficient of variation. Where comparatively NABIL bank is investing its deposit as soon as possible. The activities of NABIL are better than NIC. The mean ratio investment on government securities to current assets of NABIL higher than the mean ratio of NIC. It reflects that NABIL has invested more of its fund in government securities. The ratios of NIC aren't stable, variable and inconsistent .The current assts of NABIL has been used in a high proportion than NIC. There is huge amount of cash being dept on reserve, cash and bank balance of NABIL which is needed to invest on treasury bills, development bonds which are risk free securities. These securities are highly liquid in nature, yield low interest rate and mature in fixed time. NIC is taking risk and seeking more profit from risky assets. NIC should maintain portfolio. NIC is suggested to invest more and more on government securities. However NABIL has invested more and more on government securities than NIC.
- It has to increase its investment on government securities. Competitive banking environment needs to invest deposited fund should be utilized as loan and advances. But there may be situation of liquidity crisis. Thus funds would be invested in productive area. The mean ratio of loan and advances to current assets ratio of NABIL is less than NIC bank because its large portion of fund invested as loan and advances and negligence to invest on other securities. NABIL is strongly recommended to follow liberal lending policy.

- Competitive banking environment needs to invest deposited fund must be utilize as loan and advances. But there may be situation of liquidity crisis. The funds should be invested in Productive area. From this study it is found that loan and advances to current assets ratio of NABIL is less than NIC bank because its large portion of fund invested as loan and advances and negligence to invest on other securities give lower interest rate of particular maturity period because of low risk nature. NABIL has utilized its more portion of total working fund on government securities. Thus NIC must invest its fund in government securities for risk abortion as well as portfolio management .Even the NABIL has better than NIC but NABIL should improve this ratio in future. Investment on shares and debentures to total working fund ratio of NABIL is higher than the mean ratio of investment on shares and debentures to total working fund of NIC. Out of total working fund both banks have ailed to invest satisfactory funds in share and debentures of other financial institution.
- The investment on shares and debentures of other institution makes competitive market and it also uplifts the financial and economic development of a country. The resources especially cash must be utilized in an efficient way to prosper in this competitive world. As far as the study finds that banks only utilize their excess funds in the purchase of other institutions securities so it is recommended to invest more funds securities. So it is recommended to invest more funds in share and debenture of other financial institutions.
- Profitability ratio of NABIL is better than NIC but these ratios are not satisfied level. Most of profitability ratios of NABIL are better than NIC except last two ratios. It means that the productive resources may be kept in idle. It so, the interest rate of resources become high. NIC should utilized idle resources or funds for controlling the higher interest on idle fund from time to time. Even NABIL should improve it. The idle fund may be risky assets and shareholders funds. The cheaper fund i.e. shareholders funds should be used to generate more profit. It is suggested to NIC that it should improve its profitability condition to decrease the higher interest cost.
- Credit risk ratio NIC is higher than NABIL. It reflects NIC has provided higher portion on loan which involves high risk but it can also provide high return. Some time loan and advances may cause heavy losses or it may be bad

debt in future. Thus it is recommended to NIC, The risk taken by NIC must utilize its funds in highly profitable as well as in secure areas.

- By considering the sampled growth ratios of both banks aren't satisfied from my point of view. Comparatively the growth ratio of NABIL is better than the NIC bank. But the both bank consider increasing their sampled growth ratios. At least NIC bank would maintain its sampled growth ratios near to NABIL bank. While increasing their growth ratios, they should consider the policy of central bank of Nepal.
- Two banks coefficient of correlations of mentioned items are positively correlated, highly depended and highly significant. Although this situation shows the better performance of deposits but some times it may be danger too. So, two banks should consider.Although, Investment patterns in securities depend on environment factors. But they must maintain stable investment patter because it indicates the performance of a company.
- Although NRB's acts are perfect to control the whole banking sector, the rules and regulation are seen weak in practice. NRB is unable to control growth of banks. It has not sufficient staff. Bank's Supervision and monitoring system is seen weak in practical. Except the above problems, there are so many problems in implementing of acts. Thus, it must empower its infrastructure to implement the acts and regulation.
- NABIl must enhance its liquidity position. Similarly NIC must enhance its profitability. Although investment policy is heart of every bank; it must not be published in market. But if banks publish investment policies, it will make easy to researcher for study and evaluation.

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Appendix 1
Current Ratio

(Rs in million)

Banks	**NABIL**			**NIC**		
Fiscal Year	**Current Assets**	**Current Liabilities**	**Ratio (Times)**	**Current Assets**	**Current Liabilities**	**Ratio (Times)**
2005/06	20638.97	17813.66	1.16	10140.69	5331.19	1.90
2006/07	25095.27	22829.53	1.10	11441.17	6211.06	1.84
2007/08	35285.42	25155.79	1.40	14814.36	7823.84	1.89
2008/09	40875.86	31479.49	1.30	18084.29	9262.39	1.95
2009/010	48823.32	33008.56	1.48	18546.62	9433.52	1.97

Source: Annual Report of Related Banks

Calculation of Mean, Standard Deviation and Coefficient of Variation of Current Ratio

Banks	**NABIL**			**NIC**			
FY	**Current Assets (X)**	$(X\ Z\bar{X})$	$(X\ Z\bar{X})^2$	**FY**	**Current Assets (Y)**	$(Y\ Z\bar{Y})$	$(Y\ Z\bar{Y})^2$
2005/06	1.16	-0.13	0.0169	2005/06	1.90	-0.01	0.0001
2006/07	1.10	-0.19	0.0361	2006/07	1.84	-0.07	0.0049
2007/08	1.40	0.11	0.0121	2007/08	1.89	-0.02	0.0004
2008/09	1.30	0.01	0.0001	2008/09	1.95	0.04	0.0016
2009/010	1.48	0.19	0.0361	2009/010	1.97	0.06	0.0036
	$\Sigma X = 6.44$		$\Sigma(X\ Z\bar{X})^2 = 0.1013$		$\Sigma Y = 9.55$		$\Sigma(Y\ Z\bar{Y})^2 = 0.0106$

Source: Annual Report of Related Banks

(1) Calculation of Mean , Standard Deviation and Coefficient of Variation of NABIL

$$\overline{X} = \frac{X}{N} = \frac{6.44}{5} = \mathbf{1.29}$$

$$\pm = \sqrt{\frac{(X \ \mathrm{Z} \overline{X})^2}{N}} = \sqrt{\frac{0.1013}{5}} = \mathbf{0.14}$$

$$\textbf{C.V.} = \frac{SD}{\overline{X}} \text{ X } 100\% = \frac{0.14}{1.29} \text{ X } 100 = \mathbf{10.85}$$

Thus,

$\overline{X}$ = 1.29%

± = 0.14

C.V. = 10.85 %

(2) Calculation of Mean, Standard deviation and Coefficient of Variation of NIC

$$\overline{Y} = \frac{Y}{N} = \frac{9.55}{5} = \mathbf{1.91}$$

$$\pm = \sqrt{\frac{(Y \ \mathrm{Z} \overline{Y})^2}{N}} = \sqrt{\frac{0.0106}{5}} = \mathbf{0.05}$$

$$\textbf{C.V.} = \frac{SD}{N} \text{ X } 100\% = \frac{0.05}{1.91} \textbf{ X 100 = 2.62\%}$$

Thus,

$\overline{X}$ = 1.91

± = 0.05

C.V. = 2.62 %

Where,

$\overline{X}$ **=** Mean ratio of NABIL

$\overline{Y}$ **=** Mean ratio of NIC

± = *SD=Standard deviation*

C.V. = Coefficient of Variation

Same formulas are used to calculate the Mean. Standard Deviation, Coefficient of Variation of Both Banks

Appendix 2
Cash and Bank Balance to Total Deposits Ratio

(Rs in million)

Banks	**NABIL**			**NIC**		
Fiscal Year	**Cash and Bank Balance**	**Total Deposit**	**Ratio (%)**	**Cash and Bank Balance**	**Total Deposit**	**Ratio (%)**
2005/06	630.24	19347.40	3.26	749.14	8765.95	8.55
2006/07	1399.83	23342.29	6	599.76	10068.23	5.96
2007/08	2671.14	31915.05	8.37	1192.35	13084.69	9.11
2008/09	3372.51	37348.26	9.03	1461.15	15579.93	9.38
2009/010	1400.10	46340.70	3.02	1119.93	15968.92	7.01

Source: Annual Report of Related Banks

Appendix 3
Cash and Bank Balance to Current Assets Ratio

(Rs in million)

Banks	**NABIL**			**NIC**		
Fiscal Year	**Cash and Bank Balance**	**Current Assets**	**Ratio (%)**	**Cash and Bank Balance**	**Current Assets**	**Ratio (%)**
2005/06	630.24	20638.97	3.05	749.14	10140.69	7.39
2006/07	1399.83	25095.27	5.58	599.76	11441.17	5.24
2007/08	2671.14	35285.42	7.57	1192.35	14814.36	8.05
2008/09	3372.51	40875.86	8.25	1461.15	18084.29	8.08
2009/010	1400.10	48823.32	2.87	1119.93	18546.62	6.04

Source: Annual Report of Related Banks

Appendix 4
Investment on Government Securities to Current Assets Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Investment on Government securities**	**Current Assets**	**Ratio (%)**	**Investment on Government securities**	**Current Assets**	**Ratio (%)**
2005/06	2301.46	20638.97	11.15	1756.58	10140.69	17.32
2006/07	4808.35	25095.27	19.16	1104.06	11441.17	9.65
2007/08	4646.88	35285.42	13.17	1545.38	14814.36	10.43
2008/09	3706.10	40875.86	9.07	2195.00	18084.29	12.14
2009/010	7941.56	48823.32	16.27	3978.90	18546.62	21.45

Source: Annual Report of Related Banks

Appendix 5
Loan and Advances to Current Assets Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Loan and Advances**	**Current Assets**	**Ratio (%)**	**Loan and Advances**	**Current Assets**	**Ratio (%)**
2005/06	12922.54	20638.97	62.61	6655.96	10140.69	65.64
2006/07	15545.78	25095.27	61.95	8941.40	11441.17	78.15
2007/08	21365.05	35285.42	60.55	11264.68	14814.36	76.04
2008/09	27589.93	40875.86	67.50	13679.39	18084.29	75.64
2009/010	32268.87	48823.32	66.09	12732.01	18546.62	68.65

Source: Annual Report of Related Banks

Appendix 6
Loan and Advances to Total Deposit Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Loan and Advances**	**Total Deposits**	**Ratio (%)**	**Loan and Advances**	**Total Deposits**	**Ratio (%)**
2005/06	12922.54	19347.40	66.79	6655.96	8765.95	75.93
2006/07	15545.78	23342.29	66.60	8941.40	10068.23	88.81
2007/08	21365.05	31915.05	66.94	11264.68	13084.69	86.09
2008/09	27589.93	37348.26	73.87	13679.39	15579.93	87.80
2009/010	32268.87	46340.70	69.63	12732.01	15968.92	79.73

Source: Annual Report of Related Banks

Appendix 7
Total Investment to Total Deposit Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Total Investment**	**Total Deposits**	**Ratio (%)**	**Total Investment**	**Total Deposits**	**Ratio (%)**
2005/06	6178.53	19347.40	31.93	2479.91	8765.95	28.29
2006/07	8945.31	23342.29	38.32	1599.48	10068.23	15.89
2007/08	9939.77	31915.05	31.14	2311.47	13084.69	17.67
2008/09	10826.38	37348.26	28.99	3026.02	15579.93	19.42
2009/010	13600.92	46340.70	29.35	4946.78	15968.92	30.98

Source: Annual Report of Related Banks

Appendix 8
Loan and Advances to Total Working fund Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	Loan and Advances	Total Working fund	Ratio (%)	Loan and Advances	Total Working fund	Ratio (%)
2005/06	12922.54	20638.97	62.61	6655.96	10140.69	65.64
2006/07	15545.78	25095.27	61.95	8941.40	11441.17	78.15
2007/08	21365.05	35285.42	60.55	11264.68	14814.36	76.04
2008/09	27589.93	40875.86	67.50	13679.39	18084.29	75.64
2009/010	32268.87	48823.32	66.09	12732.01	18546.62	68.65

Source: Annual Report of Related Banks

Appendix 9
Investment on Government Securities to Total working Fund Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	Investment on Government Securities	Total Working Fund	Ratio (%)	Investment on Government Securities	Total Working Fund	Ratio (%)
2005/06	2301.46	20638.97	11.15	1756.58	10140.69	17.32
2006/07	4808.35	25095.27	19.16	1104.06	11441.17	9.65
2007/08	4646.88	35285.42	13.17	1545.38	14814.36	10.43
2008/09	3706.10	40875.86	9.07	2195.00	18084.29	12.14
2009/010	7941.56	48823.32	16.27	3978.90	18546.62	21.45

Source: Annual Report of Related Banks

Appendix 10
Investment on shares and Debentures to Total Working Fund Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Investment on Shares and Debentures**	**Total Working fund**	**Ratio (%)**	**Investment on Shares and Debentures**	**Total Working fund**	**Ratio (%)**
2005/06	104.19	20638.97	0.50	1.84	10140.69	0.018
2006/07	286.95	25095.27	1.14	16.59	11441.17	0.15
2007/08	323.23	35285.42	0.92	26.47	14814.36	0.18
2008/09	82.50	40875.86	0.20	26.59	18084.29	0.15
2009/010	159.86	48823.32	0.33	27.79	18546.62	0.15

Source: Annual Report of Related Banks

Appendix 11
Return on Loan and Advances Ratio

(Rs in million)

Banks	NABIL			NIC		
Fiscal Year	**Net Profit After Tax**	**Loan and Advances**	**Ratio (%)**	**Net Profit After Tax**	**Loan and Advances**	**Ratio (%)**
2005/06	635.26	12922.54	4.92	96.59	6655.96	1.45
2006/07	673.96	15545.78	4.34	158.48	8941.40	1.77
2007/08	746.47	21365.05	3.49	243.06	11264.68	2.16
2008/09	1031.05	27589.93	3.74	317.43	13679.39	2.32
2009/010	1138.58	32268.87	3.53	449.84	12732.01	3.53

Source: Annual Report of Related Banks

Appendix 12
Return on Total Assets

(Rs in millions)

Banks	**NABIL**			**NIC**		
Fiscal Year	**Net Profit After Tax**	**Total Assets**	**Ratio (%)**	**Net Profit After Tax**	**Total Assets**	**Ratio (%)**
2005/06	635.26	22329.97	2.84	96.59	10383.60	0.93
2006/07	673.96	27253.39	2.47	158.48	11678.83	1.36
2007/08	746.47	37132.76	2.01	243.06	15238.74	1.60
2008/09	1031.05	43867.40	2.35	317.43	18750.63	1.69
2009/010	1138.58	52079.73	2.19	449.84	20309.33	2.21

Source: Annual Report of Related Banks

Appendix 13
Total Interest Earned to Total outside Assets

(Rs in millions)

Banks	**NABIL**			**NIC**		
Fiscal Year	**Total Interest Earned**	**Total Outside Assets**	**Ratio (%)**	**Total Interest Earned**	**Total Outside Assets**	**Ratio (%)**
2005/06	1310.00	19101.07	6.86	579.98	19101.07	3.04
2006/07	1587.76	24491.09	6.48	725.82	10540.88	6.89
2007/08	1978.70	31304.82	6.32	931.40	13576.15	6.86
2008/09	2798.49	38416.31	7.28	1283.52	16705.42	7.68
2009/010	4047.73	32268.87	12.54	1777.17	17678.79	10.05

Source: Annual Report of Related Banks

Appendix 14
Total Interest Earned to Total Working Fund Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Total Interest Earned**	**Total Working Fund**	**Ratio (%)**	**Total Interest Earned**	**Total Working Fund**	**Ratio (%)**
2005/06	1310.00	20638.97	6.35	579.98	10140.69	5.72
2006/07	1587.76	25095.27	6.33	725.82	11441.17	6.34
2007/08	1978.70	35285.42	5.61	931.40	14814.36	6.29
2008/09	2798.49	40875.86	6.85	1283.52	18084.29	7.10
2009/010	4047.73	48823.32	8.29	1777.17	18546.62	9.58

Source: Annual Report of Related Banks

Appendix 15
Total Interest Paid to Total Working Fund

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Total Interest Paid**	**Total Working Fund**	**Ratio (%)**	**Total Interest Paid**	**Total Working Fund**	**Ratio (%)**
2005/06	357.16	20638.97	1.73	340.22	10140.69	3.35
2006/07	555.71	25095.27	2.21	421.37	11441.17	3.68
2007/08	758.44	35285.42	2.15	506.00	14814.36	3.42
2008/09	1153.28	40875.86	2.82	767.20	18084.29	4.24
2009/010	1960.11	48823.32	4.01	1031.47	18546.62	5.56

Source: Annual Report of Related Banks

Appendix 16
Credit Risk Ratio

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Total Loan and Advances**	**Total Assets**	**Ratio (%)**	**Total Loan and Advances**	**Total Assets**	**Ratio (%)**
2005/06	12922.54	22329.97	57.87	6655.96	10383.60	64.10
2006/07	15545.78	27253.39	57.04	8941.40	11678.83	76.56
2007/08	21365.05	37132.76	57.54	11264.68	15238.74	73.92
2008/09	27589.93	43867.40	62.89	13679.39	18750.63	72.95
2009/010	32268.87	52079.73	61.96	12732.01	20309.33	62.69

Source: Annual Report of Related Banks

Appendix 17
Liquidity Risk

(Rs in millions)

Banks	NABIL			NIC		
Fiscal Year	**Cash and Bank Balance**	**Total Deposits**	**Ratio (%)**	**Cash and Bank Balance**	**Total Deposits**	**Ratio (%)**
2005/06	630.24	19347.40	3.26	749.14	8765.95	8.55
2006/07	1399.83	23342.29	6	599.76	10068.23	5.96
2007/08	2671.14	31915.05	8.37	1192.35	13084.69	9.11
2008/09	3372.51	37348.26	9.03	1461.15	15579.93	9.38
2009/010	1400.10	46340.70	3.02	1119.93	15968.92	7.01

Source: Annual Report of Related Banks

Appendix 18
Calculation of Growth Ratio

Let,

D_n = Variable in the Nth Year

D_o =Variable in the initial Year

n = No of period Study

g = Growth Rate

Total Deposit growth ratio of NABIL

$D_n = D_o (1+g)^{(n-1)}$

$46340.70 = 19347.40 (1+g)^{5-1}$

$1+g = \left(\frac{46340.70}{19347.40}\right)^{\frac{1}{4}}$

$g = \left(\frac{46340.70}{19347.40}\right)^{\frac{1}{4}} -1$

g = 1.2440 – 1

g = 0.2440 or 24.40%

Total Deposit growth ratio of NIC

$D_n = D_o (1+g)^{(n-1)}$

$15968.92 = 8765.95 (1+g)^{(5-1)}$

$g = \left(\frac{15968.92}{8765.95}\right)^{\frac{1}{4}} -1$

g = 1.1618 -1

g = 0.1618 or 16.18%

Note:

All the calculation of Growth rate ratio of others is done similarly.

Appendix 19

Coefficient of correlation between Total Deposit and Total Investment (NABIL)

(Rs in 100000000)

Fiscal Year	Total Deposit (X)	$(X-\bar{X})$	$(X-\bar{X})^2$	Total investment(Y)	$(Y-\bar{Y})$	$(Y-\bar{Y})^2$	$(X-\bar{X})(Y-\bar{Y})$
2005/06	193.47	-123.12	15158.53	61.79	-37.19	1383.10	4578.83
2006/07	233.42	-83.17	6917.25	89.45	-9.53	90.82	792.61
2007/08	319.15	2.56	6.5536	99.40	0.40	0.1764	1.024
2008/09	373.48	56.89	3236.47	108.26	9.28	86.12	527.94
2009/010	463.41	146.82	21556.11	136.01	37.03	1371.22	5436.74
	X = **1582.93**		$(X-\bar{X})^2$ **=46874.91**	Y = **494.91**		$(Y-\bar{Y})$ **= 2931.44**	$(X-\bar{X})(Y-\bar{Y})$ **= 11337.14**

Source: Annual Report of Related Banks

Calculation of Mean of Total Deposit(X) and Total Investment(Y) of NABIL Bank

Now,

Mean of Total Deposit $(\bar{X})$ **=** $\frac{X}{N}$ **=** $\frac{1582.93}{5}$ **= 316.59**

Mean of Total Investment $(\bar{Y})$ **=** $\frac{Y}{N}$ **=** $\frac{494.91}{5}$ **= 98.98**

Where, N = No of observation or no of period study.

Now,

Calculation of Coefficient of Correlation and Probable Error

Coefficient of Correlation(r):

$$\mathbf{r} = \frac{(X-\bar{X})(Y-\bar{Y})}{\sqrt{(X-\bar{X})^2}\sqrt{(Y-\bar{Y})^2}}$$

Replacing the amount into the formula

Calculation of Probable Error

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

$$= 0.6745 \text{ x } \frac{1-0.94}{\sqrt{5}}$$

$\mathbf{r} = \dfrac{11337.14}{\sqrt{46874.91}\sqrt{2931.44}}$ $\quad\quad\quad$ $= \mathbf{0.6745 \times} \dfrac{0.06}{2.24}$

r = 0.97 $\quad\quad\quad$ **= 0.0181**

Now,

Coefficient of determination $(r)^2 = (0.97)^2 = 0.94$

Note:

All the Calculation of mean, coefficient of correlation, coefficient of determination and probable error are done similarly.

Appendix: 20

Trend Analysis of Total Deposit of (NABIL)

(Rs. in millions)

FY (t)	Total deposit (Y)	X = t – 2008	X^2	XY	Y_C = a + bx
2005/06(1)	19347.40	-2	4	-38694.80	18060.24
2006/07(2)	23342.29	-1	1	-23342.29	24859.49
2007/08(3)	31915.05	0	0	0	31658.74
2008/09(4)	37348.26	1	1	37348.26	38457.99
2009/10(5)	46340.70	2	4	92681.40	45257.24
Total	158293.7	0	10	67992.57	31658.74
2010/011(6)		3	9		52056.49
2011/012(7)		4	16		58855.74
2012/013(8)		5	25		65654.99
2013/2014(9)		6	36		72454.24
2014/015(10)		7	49		79253.49

Source: Annual Report of Related Banks

The number of years is even i.e. N=5, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, ∑x = 0

$$a = \frac{Y}{n} = \frac{158293.7}{5} = 31658.74$$

Where,

n = no of taken period

$$b = \frac{XY}{X^2} = \frac{67992.57}{10} = 6799.26$$

Hence the origin is 3 and the trend line is

Yc = 31658.74 +6799.26*X (1)

Note: all the calculations value is solving by the equations first

Appendix-21

Trend Analysis of Total Deposit of (NIC)

(Rs. in millions)

FY (t)	Total deposit (Y)	X = t – 2008	ƒX Ẩ	XY	Y_C = a + bx
2005/06(1)	8765.95	-2	4	-17531.9	8710.016
2006/07(2)	10068.23	-1	1	-10068.23	10701.78
2007/08(3)	13084.69	0	0	0	12693.544
2008/09(4)	15579.93	1	1	15579.93	14685.308
2009/10(5)	15968.92	2	4	31937.84	16677.072
Total	**63467.72**	0	10	**19917.64**	
2010/011(6)		3	9		18668.836
2011/012(7)		4	16		20660.6
2012/013(8)		5	25		22652.364
2013/2014(9)		6	36		24644.128
2014/015(10)		7	49		26635.892

Source: Annual Report of Related Banks

The number of years is even i.e. N=5, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, ∑x = 0

$$a = \frac{Y}{n} = \frac{63467.72}{5} = 12693.544$$

Where,

n = no of taken period

$$b = \frac{XY}{X^2} = \frac{19917.64}{10} = 1991.764$$

Hence the origin is 3 and the trend line is

Yc = 31658.74 +6799.26*X (1)

Note: all the calculations value is solving by the equations first

Appendix- 22

Trend analysis of non- performing assets of Nabil

(in Rs.)

Year (x)	Personal Loan (y)	X=x-3(2008)	x^2	XY	Yc = a+bx
2005/06(1)	182600000	-2	4	-365200000	117967230.1
2006/07(2)	178300000	-1	1	-178300000	183355174.8
2007/08(3)	171717303	0	0	0	248743119.6
2008/09(4)	224817143	1	1	224817143	314131064.4
2009/10(5)	486281152	2	4	972562304	379519009.1
Total	**1243715598**	**0**	**10**	**653879447**	
2010/011(6)		3	9		444906953.9
2011/012(7)		4	16		510294898.7
2012/013(8)		5	25		575682843.5
2013/2014(9)		6	36		641070788.2
2014/015(10)		7	49		706458733

Source: Annual Report of Nabil bank.

The number of years is even i.e. N=5, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{Y}{N} = \frac{1243715598}{5} = 248743119.6$$

$$b = \frac{xy}{x^2} = \frac{653879447}{10} = 65387944.7$$

Hence the origin is 3 and the trend line is

Yc = 248743119.6 +65387944.7*X (1)

Note: all the calculations value is solving by the equations first

Appendix- 23

Trend analysis of non- performing assets of NIC

(in Rs.)

Year (x)	Personal Loan (y)	X=x-3(2008)	x^2	XY	Yc = a+bx
2005/06(1)	8147500	-2	4	-16295000	-14965900
2006/07(2)	8887500	-1	1	-8887500	22957850
2007/08(3)	27725000	0	0	0	60881600
2008/09(4)	114876000	1	1	114876000	98805350
2009/10(5)	144772000	2	4	289544000	136729100
Total	**304408000**	**0**	**10**	**379237500**	
2010/011(6)		3	9		174652850
2011/012(7)		4	16		212576600
2012/013(8)		5	25		250500350
2013/2014(9)		6	36		288424100
2014/015(10)		7	49		326347850

Source: Annual Report of Related Banks

The number of years is even i.e. N=5, therefore, the origin is taken at x=3

The equation of trend line is

Yc = a +bx

As, $\sum x = 0$

$$a = \frac{Y}{N} = \frac{304408000}{5} = 60881600$$

$$b = \frac{xy}{x^2} = \frac{379237500}{10} = 37923750$$

Hence the origin is 3 and the trend line is

Yc = 60881600 +37923750*X (1)

Note: all the calculations value is solving by the equations first