## CHAPTER - I Introduction

#### 1.1 Background of the study

Bank is an organization, the major function of which is to deal in money and credit. The main business of a bank is to pool the scattered idle deposit in the public and channel it for productive use. So banks play an important part for economic development of a country as the provide capital for the development of industry, trade and business. They provide various services to the customer to uplift their economic and social life. Banks can be a person, a company or a firm, with a place of business, and must be involved in credit creation. The business of a modern day bank is not confined in borrowing deposits and lending advances only, it performs a host of other financial activities which has immensely contributes to achieve industrial and commercial progress of every country.

There are different types of bank with different purpose, among them commercial bank deals in exchanging currency, accepting deposit, giving loan and doing commercial transaction. Such banks were established with the concept of supplying short-term credit and working capital needs of the industries, later they started to provide long-term loans for up to 10 years by the provision made in commercial bank Act 1974, after the enforcement to lend in priority and deprived sector, these bank initiated to provide credit to small and cottage industries, agriculture and services etc. Commercial bank is one of the major media in the framework of every economy because they collect saving as deposits and invest for development in trade, business and industry. Commercial banks formulate sound investment policies, which eventually contribute to the economic growth of the country. The banking sector needs to play a vital role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development. Commercial bank should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending.

An investment is a commitment of money for money, which is expected, has general additional money. Every investment entails some degree of risk. It requires preferring certain sacrifice for a future. Investment will provide the maximum future return at an acceptable level of risk that can select the various opportunities. It examines such marketable financial instrument as common stocks, preferred stocks and bonds, put option, call option and combine option, future contracts on tradition commodities financial futures and other investment as well as the risk associated with each. It analyzes these assets, the markets in which they are traded, the laws

of government, the trading, the valuation of the assets, the construction of a diversified portfolio and other important investment management techniques.

Investment is concerned with management of an investor's wealth, which is the sum of current income and the present value of all future income. Fund to be invested come from assets already owned borrowed money and saving or forgone consumption. By forgoing today and investing the saving, investors expect to enhance their future consumption possibilities i.e. they are invested to increase wealth. Investors also seek to manage their wealth effectively obtaining the most from it, while protecting it from inflation taxes and other factors.

Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in the saving account of a bank, the bank may invest by lending the funds to various business companies. These firms in return may invest the money in new factories and equipment to increase production. In addition to borrowing from bank most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion. Government also issues bonds to obtain funds to invest in projects like construction of roads, dams, school. All such investment by individual, business and government involve a present sacrificed income to get an expected future benefits. As a result of which investment raised a nation's standard of living.

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

#### 1.2 History of Bank

Though there is much controversy as to the origin of the word "Bank", some believes that it originated from the Latin word "Bancus" meaning a bench. Similarly, some believe that it originated from the French word "Banque" and some to Italian word "Banca" all meaning a bench. Some have stronger belief that it originated from the German word "Banck" meaning collective fund. Ancient money dealer used to deal on a bench. Sometimes when the money dealers failed to meet the depositors claim, the depositors used to break the dealers bench from which the word "Bankruptcy" seems to be derived.

The Lombards, who were originally from the plains of Lombardy of Northern Italy, introduced banking practice to England. These Lombards brought this business to the city of London and their home, the Lombard Streets, is still the center of British Banking. The Lombards, after a century or so of business in London, were eventually bankrupted because they lent money to kings who did not repay them.

After the Lombards, the goldsmiths practised banking as a sideline to their normal activities in the bullion and jewellery fields. The early goldsmiths used to have large vaults, which were soundly built and heavily guarded. The person who deposited his surplus funds with the goldsmith became as a 'Depositor' and naturally paid for the privilege of having his money defended this way. These payments were 'Bank Charges'. The depositors who needed funds to pay wages or debts, could call at the bank and collect such suns as required.

In the east, it is believed that banking was practised at the time of "Manu" as it is referred in Manusmriti. There is an opinion that it was practiced during Chanakya too, as banking has been mentioned in "Kautilya's Arthasastra", which is the book on economics. In the west, the history of banking begins in ancient Greece, Rome and Mesopo tamia. The history of modern banks begins from Bank of Venice established in 1157 AD, Bank of Barcelona established in 1401, Bank of Genoa established in 1407, Bank of Amsterdam established in 1609 and Bank of England, which was established in 1694.

The ancestors of modern day banks have been attributed to the merchants, the goldsmiths and the money-lenders

#### 1.3 History of Banking in Nepal

It is assumed that the regular history of coinage in Nepal began from the 5<sup>th</sup> century A.D. the advent of 12<sup>th</sup> century marked a new period in economics history of Nepal. Silver coinage was introduced in this period, which widened the scope for trade. The second major logical order of development was found in the innovation of interest bearing private debt such as bonds, mortgages and loans.

In the year 879/80 A.D a low cast merchant named "Sankhadar Shankwa" introduced a new era after paying all the debts that existed in the country. The term 'Tanka Dhari' meaning 'Money Dealer' was used at the end of the 14<sup>th</sup> century. 'Tanka Dhari' was one of the 64 castes classified on the basis of occupation; including money changing was adopted as a profession by a section of people in Nepal at that time. For many years, the indigenous individuals, wealthy agriculturists, landlords, merchants and traders conducted some banking activities as a side business to their normal business activities.

In 1877 A.D Prime Minister Ranoddip Singh introduced many financial and economic reforms. The 'Tejarath Adda' was established at that time. The basic purpose of establishing this 'Tejarath Adda; was to provide credit facilities to the general public at a very concessional interest rate. The Tejarath Adda disbursed credit to the people on the basis of collateral of gold

and silver. All employees of government were also eligible for these types of loan, which was settled by deducting from their salary. Under the Prime Ministership of Chandra Shamsher, Tejarath Adda extended its services outside the Kathmandu valley. Legal provision was made to prevent the practice of capitalization of interest on loans extended by private dealers. Hence, the establishment of Tejarath Adda is regarded as the foundation of modern banking in Nepal. However 'Kaushi Tosh Khana' established during the regime of king Prithvi Narayan Shah is also considered as the first step towards initiating banking development in Nepal.

Tejarath Adda extended credit only; it did not accept deposit from the public. Hence, the Adda finally faced financial crisis making it impossible to meet the credit need of the general population of the country.

Prior to the establishment of Nepal Bank Limited, people relied on borrowing from the corrupt moneylenders, who changed very high interest rates and added other dues. These money lenders extended loans on the collateral of land, house and precious metals like gold and silver. Tejarath Adda may be regarded as the father of modern banking institution in Nepal. During 1937 A.D Tejarath adda was replaced by commercial bank "Nepal Bank Ltd". Nepal Rastra bank was established in 2012 B.S to do the function of a central bank. Rastriya Banijya Bank another commercial bank established in 2022 B.S. Only after 2014 B.S His Majesty Government allows joint venture banks to operate in the country. In 2041 B.S first joint venture bank "Nepal Arab Bank Ltd" was established under the commercial bank Act 2031, with the allocation of 50% shares of general public. Nepal Indosuez Bank Ltd (now known as Nepal Investment bank Ltd) emerged in 1985 as the second joint venture commercial bank. Nepal Grindlays Bank Ltd (now known as Standard Chartered Bank Ltd) was established in 1987 as the third joint venture bank in the country.

#### 1.4 Historical Perspective of Investment practices in Nepalese Market

The history of capital market in Nepal dates back to 1936 in which year the shares of Biratnagar Jute Mills Ltd. were floated. In 1937, Tejarath was set up to facilitate loans to the government employees and was converted into Nepal Bank Ltd.

HMG Nepal introduced the Company Act in 1964 and the first issue of government bonds made in the same year through Nepal Rastra Bank to collect the developmental expenditures. It carried 6 percent rate of interest and had the maturity period of five years. HMG Nepal announced the Industrial Policy in 1974 and under this policy an institution named Securities Marketing Center (SMC) was established to deal in government securities-development bonds and national savings bonds, and corporate securities of few companies. The government has the virtual monopoly over the security market. Then, Securities Exchange Center (SEC) was established in 1976 with an objective of facilitating and promoting the growth of capital market. It was the only capital market institution in Nepal. Securities Exchange Act came into force in 1984. Since then, SEC started to operate under this act. The purpose of this act was to provide systematic and favourable market environment for securities ensuring and protecting the interest of individuals and institutional investors as well as to increase the public participation in various firms and companies.

SEC had provided facilities to trade the government securities and few of corporate securities like shares and bonds. Only the shares of 10 companies were listed in SEC and there was involvement of no broker and dealer in the securities market. So, SEC itself was undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services (NEPSE 1998). Apart from this, there was the absence of effective secondary market to ensure liquidity to the securities.

The interim government (1990/91) initiated financial reform program and two indirect investment vehicles-Citizen's Investment Fund and NIDC Capital Markets Ltd.-were established with the collective investment schemes in the corporate sector. Then, due to the world whim of privatization and economic liberalization, the operation of SEC was felt to change to make it compatible with the changing economic system. As a result, HMG Nepal brought about change in the structure of SEC by dividing it into two distinct entities-Securities Board, Nepal (SEBO/N) and Nepal Stock Exchange Ltd. (NEPSE) at the policy level in 1993. Since then they are operating as the main constituents of securities market in Nepal.

SEBO/N was established on June 7, 1993 with its mission to facilitate the orderly development of a dynamic and competitive capital market and maintain its credibility, fairness, efficiency, transparency and responsiveness under the Securities Exchange Act 1983 (SEBO, 2001). It is an apex regulator of the securities market in Nepal. It registers the securities and approves the public issues. Moreover, SEBO frames the policies and programs required to monitor the securities market, provides license to operate stock exchange business and stock brokers and supervises and monitors the stock exchange operations and securities businesspersons.

NEPSE Ltd. is a non-profit organization, operating under Securities Exchange Act, 1983. The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through market intermediaries such as brokers and market makers, etc. NEPSE opened its trading floor on January 13, 1994 through its newly appointed licensed members and has adopted an "Open Out-Cry" system for the transaction of securities. The trading floor is restricted to listed corporate securities and government bonds with the market intermediaries in buying and selling of such securities.

#### 1.5 Statement of the Problem

Investment policy is the most important factor from the shareholder, financial sector and banks management point of view. Thought several commercial banks have been established in our country within short period of time, sufficient return could not been earned and strong stable and appropriate investment policy has not been followed by commercial banks. Due to throat cut competition of financial environment, banks seem to grant much more loan, advance and other facilities against their client's insufficient deposits. Unsecured loan and investment may cause the liquidation of those commercial banks. If the funds are wrongly invested without thinking any financial risk, business risk and other related risk, bank cannot obtain profitable return as well as sometimes it will loose its principle. Investment policy may differ from one joint venture bank to another but there is no optimum utilization of shareholder return in any bank. Nepal Rastra Bank has also played important role to make commercial bank mobilize their fund in good sector for this purpose. Nepal Rastra Bank has imposed many rules and regulation so that the commercial banks can have sufficient liquidity and security.

Commercial banks are reported to be criticized by customer due to implementation of wrong investment policies. They are said to be investing less risky and highly liquid sector, they keep high liquid position and flow less funds in productive sectors. So these types of function prove less investment opportunity of the fund. The bank cannot achieve profitable return from their resources as well as they sometimes may lose their principle resulting in decreasing of national economy, if they do not analyze the financial business, management, liquidity, interest risk which directly affects profit.

The investment policies have become major problems for developing economic condition of the country. Commercial banks give much loan and advances, overdraft and many other kinds of facilities to encourage deposits in bank. But the bank has utilized insufficient deposit to their customer and spent large amount of deposit as office operation and staff welfare. They only depend upon the direction and guidelines of Nepal Rastra Bank but they do not have cleared view and have not formulated their own organized investment policy. Commercial banks have provided loan only on a short-term basis but they do not invest on long-term projects because of safety and considering the profit potential of the projects. Due to this, they may have insufficient return and most of the commercial banks have to be collapsed due to poor investment policy.

Nowadays, there is a tough competition in banking market but less opportunity to make investment. In this condition commercial banks can take initiation in search of new opportunities, so that they can survive in the competitive market and earn profit. It is found that some of the commercial banks have diversified their investment in different fields like carpet, garments, distillery, consumer goods, housing, hire purchase and institutions investments where some of them are not successful to invest their funds in different areas. In recent years, the industrial growth has not been encouraging so diversification of investment is good opportunity for the banks. However, the fact the economy of a country largely depends on economic sector should be considered and industrial sector loan and investment should also be given priority. In this ground the deals with the following issues.

- ) What are the sectors that banks are investing their funds to generate profit?
- How much is the return from different portfolio?
- ) Which portfolio is the most profitable?
- ) What is the trend of selected banks with industry trend?
- How the commercial banks are maintaining its economic position?
- Does the investment decision affect the total earnings of the banks?

#### 1.6 Objectives of the study

The general objective of the study is to evaluate the investment pattern of selected commercial banks on different portfolio. To fulfil this broad objective there are some specific objective which are as follows:

- ) To analyze the investment made on loan and advance and their return.
- ) To analyze the investment made on government securities and their return.
- ) To analyze the investment made on shares and their return.
- ) To analyze the investment made on bond and their return.
- ) To analyze the growth ratio of different portfolio and its return of commercial banks.
- ) To analyze the relation between investment and their return
- ) To analyze the trend of loan and advance and total investment with banking industry average

### 1.7 Significance of the study

Commercial banks can affect the economic condition of whole country. The effort is made to highlight the investment policy of commercial banks expecting that the study can be a bridge to gap between the deposits and investment. Successful formulation of fund investment policy and its effective implementation is the most important factor in a banking business. Good investment policy has a positive impact on economic development of the country and vice versa. Therefore this study is very essential, and would be helpful to all banking sectors in mobilization of collected funds from public. This study will be beneficial to management of the bank that would help them to take corrective action in the field of banking activities. The shareholders would also get information from this study on investment policy about how bank is mobilizing their funds in correct place so they can make decision regarding investment on shares of different banks. The study on investment of a bank would help depositors by providing concerned information and they can make decision to deposit on their money in the concerned bank. Similarly, the findings of the study will be equally important to others who are interested to know about this area. Last but not least, this studies "Investment practices of commercial banks of Nepal will provide relevant and pertinent literature for future research on the area of investment policy of banking sector.

### 1.8 Limitation of the study

For the completion of this study the following facts are the basic limitation.

- ) This study concentrates only on those factors that are related with investment
- Among many portfolio practices by selected banks only four portfolio are analyzed
- ) Only three commercial banks are taken under study.
- ) The study period covers data for five years only i.e. 2003/04 to 2007/08
- ) This study will be done for the partial fulfilment of master degree program of Tribhuvan University.

## 1.9 Organization of the study

The study has been organized into five chapters which are as follows.

#### Chapter one: Introduction

It deals with subject matter of the study consisting background of the study, profiles of the companies, statement of the problem, objectives of the study, significance on the study, research methodology and limitation of the study and organization of the study.

#### Chapter two: Review of literature

It deals with the review of literature. It includes conceptual framework along with review of major books, journals, research work and thesis.

Chapter three: Research methodology

It includes methodology used to achieve the objective of the study sources of data population and sample, method of analysis financial and statistical tools

Chapter four: Data analysis and presentation

It analysis different financial ratio and statistical analysis related to investment and fund mobilization of two banks.

#### Chapter five: Summary, conclusion and Recommendation

It deals with the conclusion and recommendation of the study. Bibliography and appendices are also included at the end of the study.

## CHAPTER II

## Review of literature

This chapter deals with the review of literature related with the investment practices of commercial banks in Nepal. This chapter has been divided into two parts. The first part deals with the review of books while the second part is related with the review of previous studies i.e. articles, dissertations etc

## 2.1 Review of Books

#### 2.1.1 Concept of Commercial Bank

Commercial Bank Act 1974 defines a commercial bank "A commercial bank means which deals in exchanging currency, accepting deposit, giving loans and doing commercial transaction".

Commercial bank deals with other people money. They have to find ways of keeping their assets liquid so that could meet the demands of their customers. In this anxiety to make profit, the bank can not afford to lockup their fund in assets, which are not easily releasable. The deposit must be made to understand that the bank is fully solvent. 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 from this purpose. Cash is an idle asset in the form of cash. Cash brings in no income to the bank. Therefore the banker has to distribute his asset in such a way that he can have adequate profit without sacrificing liquidity. (Shrestha: 2007)

#### 2.1.2 Concept of Investment

"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 present and certain. The reward later, if at all, and the magnitude is generally uncertain". (Sharpe etal: 2001)

"Real investment generally involves some kind of tangibles asset such as land, machinery or factories. Financial investment involves contracts written on pieces of paper such as common stock and bonds. In the primitive economics most investment is of the real variety, whereas in a modern economy reach investment is of the financial variety." (Sharpe etal: 2001) The investment process describes how an investor should go about making decision with regard to what marketable securities to invest in, how extensive the investment should be, and when the investment should be made. A five steps procedure for making these decision forms the basis of the investment process. (Sharpe etal: 2001)

- ) Set investment policy: It involves determining the investor's objectives and the amount of his or her investable wealth. Investment objective should be stated in terms of both risk and return.
- ) Perform security analysis: It involves examining several individual securities or groups of securities within the broad categories of financial assets previously identified.
- ) Construct a portfolio: The third step in the investment process, portfolio construction, involves identifying those specific assets in which to invest, as well as determining the proportion of the investor's wealth to put into each one. Here the issue of selectivity, timing and diversification need to be addressed by the investor.
- ) Revise the portfolio: Portfolio revision concerns the periodic repetition of the previous three steps. That is, overtime the investor may change his or her investment objectives, which in turn may cause the currently held portfolio to be less than optimal.
- ) Evaluate the performance of the portfolio: It involves determining periodically how the portfolio performed, in terms not only the return earned but also the risk experienced by the investor.

(Frank and Reilly: 1972) has define investment in such way, "An investment may be defined as the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed for the expected rate of inflation and also for the uncertainty involved in the future flow of the funds.

In the words of (Gitman and Joehnk: 1990) "Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generated positive returns".

According to (Sharpe and Gorden: 1996) has defined the terms "Investment" as the sacrifice of money today for the prospective money tomorrow. He writes "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 at all and the magnitude is uncertain. In some cases the element of time

predominates (e.g. government bond). In other cases, risk is the dominant attributes (e.g. call option on common stock). In yet both time and risk are important.

From the definition given above, it is clear that an investment means to trade a known rupee amount today for some expected future stream of payments or benefit. A commercial bank must always mobilize its funds and other deposits to profitable, secured and marketable sector so that it earns a handsome amount of profit as well as it should be secured and can be converted into cash as per the requirement

#### 2.1.3 Principles of Good Lending

One of the basic functions of commercial banks is to provide credit. Out of their total income, on an average 60-70% of income consists from lending activities. Such income, based on lending is known as exposure based income because banks are exposed to default risk. In order to mitigate default risk, it would be wise to follow the principle of good lending. (Shrestha: 2007)

#### a) Safety

When lending is made, a banker must ensure that the advance made is safe. This means the money will definitely come back. It demands that loan should be granted only to reliable borrowers. It must be ensured that the reputation of the borrower is impeccable in the business community. The integrity of the borrower must be undoubted, particularly where the security is inadequate to cover the advance. If the borrower is a dishonest person, he might divert borrower fund to some other purpose other than initially project to the bank.

#### **b)** Profitability

Profitability is a very important element, which influences the banking activities. Commercial banks are established like any other commercial institutes for the sake of making profit. A commercial bank can maximize its value of wealth only through minimization of return on their investment and lending. So, they must invest their fund where they gain maximum profit. The profit of the commercial bank mainly depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

#### c) Liquidity

When a banker demands his money back, the borrower must be in a position to repay within a reasonable time period. This is possible if the borrower has invested in short term requirements and not on the purchase of fixed assets. Liquidity means the capability of the bank to meet the demand on the customer's deposits. Banks maintain liquidity in various forms like ready cash at its disposal, certain percentage at central Bank (NRB) as a statutory requirement, makes placements in other banks and some percentage is utilized in investment on government securities. Banks pay the depositors their money when demanded, and if this is not met, it damages the bank's image. The confidence of the public will be lost and this leads the bank towards its downfall. So, banks should not invest all the money it has on exposure based assets only, as it will not be repaid when required. Therefore, banks keep a certain percentage of their fund on such assets that can be utilized as need arises, which is known as liquid assets.

#### d) Purpose

Bankers allow loan and advances to the customers only for productive purposes and not for hoarding or for speculative activities. In the security point of view, a banker should always know that why a customer is need have loan. If a borrower misuses the loan granted by the bank he can never repay therefore in order to avoid this situation each and every bank should demand all the essential detailed information about the scheme of project.

#### e) Spread

Another equally important principle of good lending is to spread the advances in various sectors, many firms and industries, and against different securities. A bank should not lay all its eggs on the same basket. This saying is very important to the bank and it should be very careful not to grant loan in only one sector. To minimize risk, a bank must diversity its investment on different sector. Diversification of loan helps to sustain loss according to the law of average because if securities of a company deprived there may be appreciation in the securities of other companies. In this way loss can be recovered.

#### f) Tangibility

Though it may be considered that tangible property does not yield on income a part from direct satisfaction of possession of property, many times intangible securities have last their value to price level inflation. Commercial banks should prefer tangible security to tangible one.

#### g) National interest, suitability

Bankers must ascertain on what types of business the customer is involved, whether it serves the National interest or not, whether the firm is acting responsibly towards the society that it is operating in, like brick industry or the cement industry and the precautions taken by it against environment pollution. Central bank issues directives, prohibiting banks to invest in various sectors such as the import of arms and ammunitions etc. also bankers remain vigilant of law and order situation where the borrower caries its business.

#### 2.1.4 Portfolio

In finance, a portfolio is an appropriate mix of collection of investments held by institutions or a private individual. Holding a portfolio is part of an investment and risk-limiting strategy called diversification. By owning several assets, certain types of risk (in particular specific risk) can be reduced. The assets in the portfolio could include stocks, bonds, options, warrants, gold certificates, real estate, futures contracts, production facilities, or any other item that is expected to retain its value. In building up an investment portfolio a financial institution will typically conduct its own investment analysis, whilst a private individual may make use of the services of a financial advisor or a financial institution which offers portfolio management services. (http://en.wikipedia.org/wiki/Portfolio\_(finance))

#### a). Portfolio management

Portfolio management involves deciding what assets to include in the portfolio, given the goals of the portfolio owner and changing economic conditions. Selection involves deciding what assets to purchase, how many to purchase, when to purchase them, and what assets to divest. These decisions always involve some sort of performance measurement, most typically expected return on the portfolio, and the risk associated with this return (i.e. the standard deviation of the return). Typically the expected returns from portfolios of different asset bundles are compared. The unique goals and circumstances of the investor must also be considered. Some investors are more risk averse than others.

(http://en.wikipedia.org/wiki/Portfolio\_(finance))

#### b). Portfolio formation

Many strategies have been developed to form a portfolio.

- 1. equally-weighted portfolio
- 2. capitalization-weighted portfolio
- 3. price-weighted portfolio
- 4. optimal portfolio (for which the Sharpe ratio is highest) (http://en.wikipedia.org/wiki/Portfolio\_(finance))

Some of the financial models used in the process of Valuation, stock selection, and management of portfolios include:

- ) Maximizing return, given an acceptable level of risk.
- *J* Modern portfolio theory a model proposed by Harry Markowitz among others.

- ) The single-index model of portfolio variance.
- ) Capital asset pricing model.
- ) Arbitrage pricing theory.
- ) The Jensen Index.
- ) The Treynor Index.
- ) The Sharpe Diagonal (or Index) model.
- / Value at risk model. (http://en.wikipedia.org/wiki/Portfolio\_(finance))

#### 2.1.5 Loan and advance

Commercial banks offer two types of credit facilities namely funded facilities and nonfunded facility. In the case of funded facilities offered, cash is involved such as in OD facility, Demand loan, Time Loan, Short Term Loan, Long Term Loan etc. and in the case of non-funded Facility, cash is not involved but only the contingent liabilities increase LC and Guarantee facility offered by banks are non-funded facilities.

Normally, commercial banks offer short-term facilities, as the major portion of deposits they maintain are of short-term in nature. Short term facilities can be on secured basis (where there is tangible security) and on unsecured basis (without any security). (Shrestha: 2007)

#### Classification based on the nature of loans

Overdraft facility Clear advances/Casual overdraft Demand loan Term loan Bridge loan Participation loans or Consortium loan Hire purchase loan Time loan Trust receipt loan Pre-shipment loan Post-shipment loan

#### Classification based on sector-wise loan distribution

Real estate loans Commercial or industrial loans Individual or consumer loan Agriculture loan Loans and leases in domestic offices

#### **Classification based on security**

Secured risk loan Sovereign risk loan Bank risk loan Unsecured or Normal Business Risk Loan

#### 2.1.6 Government Securities

Government securities are one of the safest in the market. Government securities are highly marketable. If a bank needs liquidity immediately it can convert into cash. Commercial banks can earn more interest and dividend from the investment on government securities. This is also one of the major sources of income. It is treated as a secondary source of banking business. Bank can fulfil its burden of expected withdrawals by depositors or large loan demands of its customers by selling quickly with little or no shrinkage in value.

Types of government securities (http://www.ilikeinvesting.com)

#### a) Zero coupon Bonds

The main difference of a zero coupon bond is that it doesn't make any kind of payment during the period of the bond, only at the end. They have become quite popular in the last years.

#### b) Treasury Bills

These kinds of bonds are the shortest government security available. Considered a high risk investment, they don't offer any kind of interest gain during the lifetime of the bill, only at the end. They are very similar to zero coupon bonds, but the main difference is the amount of time they endure (only a few months instead of decades).

#### c) Treasury Notes

With a maturity period that goes from one to ten years, the payments are made every six months. Used as a benchmark for setting the interest rates of mortgages, the 10 year treasury note has become the preferred financial instrument for measuring the state of the US economy.

#### d) Treasury Bond

The mature period of this security goes from ten years and onward. It's one of the preferred government securities used by pension funds or insurance companies who look for long term investments. The payments are also made every six months

#### e) Treasury Inflation-protected Securities (TIPS)

TIPS are one of two kinds of securities issued by the US Government that are protected from inflation. They are tied to the Consumer Price Index (CPI) in such a way that, if there is inflation or deflation, the initial investment increases or decreases, respectively. The payments are made every six months

#### f) National Saving Bond

Unlike other kind of government securities, these bonds can't be traded in the secondary market. They are sold to individual investors and can only be bought directly from the government.

#### 2.1.7 Shares and Bonds

A share is a document that acknowledges the ownership of a company to the limit of the amount contributed. It represents a unit of share capital reflecting the extent of interest of a shareholder.

A bond is a loan certificate issued by the company to its holder under the company seal acknowledging that it has borrowed loan from the holder with a promise to pay certain rate of interest annually and the principal sum at the time of maturity.

Most of commercial banks invest their funds to the shares and bond of the other financial and non-financial companies. Due to less opportunity to invest funds in much more profitable sector and to meet the requirement of Nepal Rastra Bank's directives banks invest on shares and bond. Now days the commercial banks have purchased shares and bond of regional development bank like NIDCs and other development bank.

#### 2.1.8 Deposit

Banks open various types of accounts having different features. Broadly speaking all accounts can be classified into interest bearing and non-interest bearing accounts. The accounts differ depending on the customer's constitution. A profit making organization was not permitted to open an interest bearing account but this policy has been revised by NRB and they can open such account but they must come under the periphery of tax on interest earned. Deposit is the most important sources of liquidity for a commercial bank. Deposits are the lifeblood of banks. It is also the main sources that a bank usually uses for the generation of profit. (Shrestha: 2007)

#### 2.1.9 Paid up Capital

It is the part of called-up capital which has been actually received from the company shareholder. Total collected fund from shareholder is known as paid-up capital. (Koirala, etal: 2006)

#### 2.1.10 Bank crisis

Banks are susceptible to many forms of risk which have triggered occasional systemic crises. These include liquidity risk (where many depositors may request withdrawals beyond available funds), credit risk (the chance that those who owe money to the bank will not repay it), and interest rate risk (the possibility that the bank will become unprofitable, if rising interest rates force it to pay relatively more on its deposits than it receives on its loans).

Banking crises have developed many times throughout history, when one or more risks have materialized for a banking sector as a whole. Prominent examples include the bank run that occurred during the Great Depression, the U.S. Savings and Loan crisis in the 1980s and early 1990s, the Japanese banking crisis during the 1990s, and the subprime mortgage crisis in the 2000s. (http://en.wikipedia.org/w/index.php?title=Bank&action=edit&section=18)

#### 2.1.11 Challenges within the Banking Industry

The changing economic environment has a significant impact on banks and thrifts as they struggle to effectively manage their interest rate spread in the face of low rates on loans, rate competition for deposits and the general market changes, industry trends and economic fluctuations. It has been a challenge for banks to effectively set their growth strategies with the recent economic market. A rising interest rate environment may seem to help financial institutions, but the effect of the changes on consumers and businesses is not predictable and the challenge remains for banks to grow and effectively manage the spread to generate a return to their shareholders.

The management of the banks' asset portfolios also remains a challenge in today's economic environment. Loans are a bank's primary asset category and when loan quality becomes suspect, the foundation of a bank is shaken to the core. While always an issue for banks, declining asset quality has become a big problem for financial institutions. There are several reasons for this, one of which is the lax attitude some banks have adopted because of the years of "good times." The potential for this is exacerbated by the reduction in the regulatory oversight of banks and in some cases depth of management. Problems are more likely to go undetected, resulting in a significant impact on the bank when they are recognized. In addition,

banks, like any business, struggle to cut costs and have consequently eliminated certain expenses, such as adequate employee training programs.

Banks also face a host of other challenges such as aging ownership groups. Across the country, many banks' management teams and board of directors are aging. Banks also face ongoing pressure by shareholders, both public and private, to achieve earnings and growth projections. Regulators place added pressure on banks to manage the various categories of risk. Banking is also an extremely competitive industry. Competing in the financial services industry has become tougher with the entrance of such players as insurance agencies, credit unions, check cashing services, credit card companies, etc.

As a reaction, banks have developed their activities in financial instruments, through financial market operations such as brokerage and trading and become big players in such activities. (http://en.wikipedia.org/w/index.php?title=Bank&action=edit&section=19)

#### 2.1.12 Review of NRB Directives

Regulations relating to Investment in shares and securities by commercial banks

## 1 Arrangement as to implementation of investment policy under approval of the Board of Directors

Banks shall prepare written policy to investments in the shares and bonds of other organized institutions. Such policies shall be implemented only under the approval of the Board of Directors.

# 2. Arrangement relating to investment in securities issued by His Majesty's Government and Nepal Rastra Bank

There shall no restriction as to investment by the banks in the securities of His Majesty's Government and securities issued by Nepal Rastra Bank.

#### Restriction put by circular No. Bai. bi. ni. ni. 94/059/60 date 2059.9.19/01.03.2003

Banks and finance companies can purchase and get endorsed (transferred) in their name only those HMG securities which were primarily issued by Nepal Rastra Bank, Public Debt Management for institution subscription only and those certificates which are issued in institution name. Information as to such purchases has to be provided to this bank's Public Debt Management Department, Thapathali.

Banks and finance companies cannot purchase and get endorsed in their name the securities, which were issued by Public Debt Department for subscription by individuals only, as well as certificates issued in individual names.

## **3.** Arrangement relating to investment in shares and securities of organized institutions.

a) Banks may invest in shares and securities of any one organized institution not exceeding 10 percent of the paid up capital of such organized institution. Any amount of investment made in excess of this limit, for the purpose of calculation of the capital fund, shall be deducted from the core capital fund.

b) The amount of investment in shares and securities of any organized institution in which banks has financial interest shall be limited to 10 percent of the paid up capital of such company and the cumulative amount of such investment in all the companies in which the bank has financial interest shall be limited to 20 percent of the paid up capital of the bank. For the purpose of calculation of capital fund, the amount of such investment in shares and securities shall be deducted from the core capital fund.

c) The total amount of investment as per sub-clause (a) and (b) shall be restricted to 30 percent of the paid up capital of the bank. Any amount of investment made in excess of 30 percent of paid up capital of the bank, for the purpose of calculation of the capital fund, shall be deducted from the core capital fund.

d) Banks shall invest in the shares and securities of organized institutions, which are already listed in the stock exchange or where arrangement exists for listing within one year.

e) Where the shares and securities are not listed within the period per clause 3(d) above, provisioning equivalent to the whole amount of such investment be provided and credited to "Investment Adjustment Reserve". The outstanding amount in such reserve shall not be utilized for any other purpose till the said shares and securities of the organized institution are listed. The outstanding amount in "Investment Adjustment Reserve" shall be included under supplementary capital.

f) Banks shall not invest in any shares, securities and hybrid capital instruments issue by any banks and financial institutions licensed by Nepal Rastra Bank. Where such investment exists prior to issuances of this directive, such investment shall be brought within the restrictive limitations imposed by this directive within 3 years i.e. by the close of Fiscal year 2060/61.

#### 4. Arrangement relating to review of Investment portfolios

Banks shall arrange for review of investment portfolios on half yearly basis. With respect to such review, a statement from the internal auditor of the bank certifying that the investments are made as per the existing investment policy and as per these directives be obtained and shall also be approved by the Board of Directors within one month. A copy of the minute of approval of the board of Directors shall be submitted within Falgun 15 (end of February) and Bhadra 15 (end of August) of each fiscal to Operation Department and Inspection and Supervision Department of Nepal Rastra bank.

(http://bfr.nrb.org.np/bfrdirectives.php?vw=15)

## 2.2 Review of Articles and Previous Studies

#### 2.2.1 Review of Articles

In the word of Bexley (1987) expresses his views as "Investment policy fixed responsibilities for the investment disposition of the banks assets in term of allocating funds for investment and loan and establishing responsibility for day to day management of those assets"

Pandey (1990) "In investment decision expenditure and benefits should be measured in cash. In investment analysis, cash flow is more important than accounting profit. It may also be pointed out of than investment decision affects the firm's value. The firm's value will increase if investments are profitable and add to the shareholders wealth.

Dr. Shrestha (1995) in her book "portfolio behaviour of commercial banks in Nepal" said, "The commercial banks fulfil the credit needs of various sector of the economy including agriculture, industry, commercial and social service sector. The lending policy of commercial banks is based on the profit maximizing of the institution as well as the economic enhancement of the country".

Baidhya (1997) on sound investment policy, "A sound investment policy of a bank is such that its funds are distributed in different types of assets with good profitability on the one hand and provide maximum safety to the depositors and banks on the other hand; moreover, risk in banking sectors tends to be connected in the loan portfolio. When a bank gets into serious financial trouble, its problem usually springs from significant amounts of loan that has become uncollectible due to mismanagement and illegal manipulation of loan, misguided leading policy or unexpected economic downturn. Therefore, the bank investment policy must be such that it ensures that it is sound and prudent in order to protect public funds. Thapa (1994) Thapa has expressed his view that the commercial banks including foreign joint venture banks seems to be doing pretty well in mobilizing deposits. Likewise, loan and advances of these banks are also increasing. But compared to the high credit needs particularly by the newly emerging industries, the banks still seems to lack adequate funds. The banks are increasing their lending to non-traditional sectors along with the traditional sectors.

Out of different commercial banks, Nepal Bank Ltd. and Rastriya Banijya Bank is operating with a nominal profit and also turning towards negative from time to time. Because of non-recovery of accrued interest, the margin between interest income and interest income is declining. These banks have not been able to increase their income from commission and discount, through traditional off-balance sheet operations. On the contrary, they have got heavy burden of personnel and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected.

On the other hand, the foreign venture banks have been functioning in an extremely efficient way. They are making huge profit year after year and have been distributing large amount of loans and dividends to its employees and shareholders. Because of their effective persuasion for loan recovery, overdue and defaulting loans have been limited resulting in high margins between interest incomes and interest expenses. Similarly, concentration of these banks to modern off-balance sheet activities and efficient personnel management has added to the maximization of their profits.

According to Mr. shrestha (2055), the portfolio management activities of Nepalese commercial banks at present are in nascent stage. However, on the other hands, most of the banks are not doing such activities so far because of following reasons

- ) Unawareness of the clients about the service available.
- ) Hesitation of taking risk by the clients to use such facility.
- ) Lack of proper techniques to run such activities in the best and successful manner.
- ) Less developed capital market and availability of few financial instruments in the financial market.

#### 2.2.2 Review of Previous Studies

Khadgi (2006) conducted a study on "Investment policy of Analysis of NABIL bank Ltd" with the objective of:

) To study the resource mobilization and investment policy of NABIL Banks.

- ) To find out the relationship between deposit and investment trends of the bank.
- ) To evaluate profitability, risk, liquidity and assets management of the bank.
- ) To find out the current and future investing strategy of NABIL Bank.
- ) To provide suggestions to improve investment policy and performance of NABIL Bank based on the findings or the study.

The findings of the study are

- ) From the analysis of the current ratio current liabilities of NABIL have exceeded current asset in average of the study period. The ratio shows the fluctuating trend during study period. The coefficient of variance (CV) between the ratios for the study period is 11.5%, which shows the inconsistent.
- ) The investment on government securities to current asset ratio has the decreasing trend. The mean ratio for the study period is 22.4%. On the basis of the CV it can conclude that the ratio is variable and less consistent.
- ) Loan and advance to current ratio is 56.43% on average, which indicates that the bank has invested more than 505 of current asset as loan and advance.
- ) The mean loan and advance to working fund ratio is 46.31% in average and ratio seems to be volatile.
- ) The mean of investment to deposit ratio is 31.37% and the ratios are more volatile.
- ) NABIL has invested 18.01% of total working capital find on government securities in average.
- ) The bank has very nominal investment on shares and debenture.
- Return on loan and advance ratio is in increasing trend with mean value of 4.34%. The interest earned to total assets ratio is in decreasing with mean of 6.47
- ) The credit risk ratio of the bank has a fluctuating trend with 46.41%
- ) The trend analysis of different variables of the NABIL bank shows increasing.

Mahat (2006) conducted a study on "Investment policy of Nepal Bangladesh bank Limited" with the objective of:

- ) To find out the Non-performing Asset position of the bank.
- ) To evaluate the portfolio management of the bank.
- ) To find out the bank's investment on priority sector.

- ) To analyze the deposit utilization and its relationship with total investment and net profit of the bank.
- J To suggest measures to improve the investment policy of the banks.The study was conducted on the basis of secondary data.

The findings of the study are

- ) The proportion of non-performing assets on loan and advances of the bank is more than the satisfactory level. It should be less than 5% to be graded as internationally A-grade commercial banks. For the Nepalese context, NPA level of the bank is higher than these standards. So, the management of the banks should given its attention in time to manage NPA level within the satisfactory level.
- ) Loan and advances portfolio of the banks is not satisfactory. The lending is not properly diversified. Half of the loan from total portfolio is given to industrial sectors. Banks is unable to explore the new and profitable sectors for the lending purpose; so, the banks has very risky portfolio of loan and advances. If industrial sector will not function properly, its impact to the bank will be huge.
- ) Bank is not fulfilling its priority sector investment requirement every year, during the study period. In the course of failure to fulfil the directive credit requirement, bank is subject to penalty, which affects the profitability of the bank. The average priority sector lending of the bank is less than required 12% landmark.
- ) The relation of total deposit is positive to total investment i.e. if total deposit increases, bank's loan and advances, investment on government securities, shares and bonds of other companies also increases. But the bank's investment, in the form of loan and advances and other investments have not positive relation to total net profit of the bank. Bank's total profit is irrespective to its total investment.

Shrestha (2006) conducted a study on "Nepal Rastra Bank Guidelines on Investment Policy of Commercial Banks in Nepal (A case study on Nepal Investment Bank Ltd.)" with objectives of

) To analyze the liquidity of Nepal Investment Bank Ltd.

) To highlight the Nepal Rastra Bank directives regarding investment policy (loan, advances and investment)

- ) To find out the relationship between total deposit and loan and advances, total deposit and total investment.
- ) To make the trend value analysis of deposit utilization and its projection for next five years.
- ) To find out whether Nepal Rastra Bank guidelines are actually being implemented.

The study was conducted on the basis on secondary data.

The main findings of the study are.

- Bank is in good position to meet the daily cash requirement as bank has maintain the average cash and bank balance in respect to total deposit.
- ) The performance of Nepal Investment Bank regarding deposit collection, granting loan and advances and investment is quite satisfactory but does not seem to follow a definite policy.
- ) Nepal Investment Bank has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
- ) Interest earned to total operating income of Nepal Investment Bank is high. However, bank failed to maintain net profit on the study.
- ) From the analysis of coefficient of correlation, there is positive and significant relation between total deposits and loan and advances and current assets and current liabilities and loan loss provision and loan and advances but there is negative and no significant relationship between outside assets and net profit.
- ) Trend analysis and projection for next five year of total deposit, loan and advances, investment and net profits are in increasing trend.

Ojha (2007) conducted a study on "lending practices on NABIL Bank Ltd., SCB Nepal Ltd. and Himalayan bank Ltd." With the objective of:

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

The study was conducted on the basis of secondary data:

The research findings of the study are:

- ) The measurement of liquidity has revealed that the mean current ratio of all the three banks is not widely varied. All of them are capable in discharging their current liabilities by current assets.
- ) The measurement of lending strength in relative terms has revealed that the total liabilities to total assets of SCBNL have the highest ratio. The high ratio is the result of high volume of shareholder equity in the liability mix. Himalayan bank Ltd has high volume of saving and fixed deposits as compared to current deposits resulting into low ratio of non-interest bearing deposits to total deposits ratio compared to the combined mean.
- ) SCBNL's tendency to invest in government securities has resulted with the lowest ratio of loan and advances to total assets whereas. NABIL Bank Ltd has the highest due to steady and high volume of loan and advances throughout the years.
- ) The ratio of investment to investment on loan and advances has measured the total portion of investment in total of investment and loan and advances. The mean ratio among the banks does not have deviated significantly.
- ) The loan and advances and investment to deposits ratio has shown that NABIL Bank Ltd. Has deployed the highest proportion of its total deposit in earning activities. This is the indicative of that in fund mobilizing activities NABIL Bank Ltd. Is significantly better.
- ) The absolute measures of lending strength have revealed that the mean volume of net assets and deposits is highest in SCBNL with moderate variation. The volume of net assets of Himalayan Bank Ltd. is the least due to the low share of capital, reserves and surplus in its capital mix. But the volume contributed by Himalayan Banks Ltd. in case of loan and advances is highly appreciable compared to its net assets. The volume of loan and advances contributed by NABIL Bank Ltd. is the greatest in five years of period. The mean investment of NABIL Bank Ltd. Is the highest but the investment on government securities of SCBNL is the highest.
- ) The portfolio analysis has revealed that the flow of loan and advances in agriculture sector is the lowest priority sector among these commercial banks. The contribution of all the banks in industrial sector is appreciable. The contribution made by Himalayan Bank Ltd. in industrial sector is the greatest that of SCBNL is the least.

- ) The lending in commercial purpose is the highest in case of NABIL Bank Ltd. and least in case of SCBNL. SCBNL has highest contribution in service sector lending. It has contributed 24.47% of its total credit in general use and social purpose.
- ) The measurement of efficiency in lending has revealed that the loan loss provision to loan and advances analysis shows that NABIL Bank Ltd. has the highest mean ratio. According to Nepal Rastra Bank directives, the loan loss provision indicates the provision made against the performing loan (pass loan and sub-standard loan) only. It indicates that the volume of sub-standard loan in the loan mix of NABIL Bank Ltd. is higher and the volume of non-performing loan in the mix of NABIL Bank Ltd. is likely to increase in coming future.
- ) The mean ratio of interest income to total income has concluded that the contribution of interest income in total income is higher in case of Himalayan Bank Ltd. and lower in case of SCBNL. The interest expenses to total deposits ratio indicates that the cost of fund in Himalayan Bank Ltd. is the highest and that of SCBNL is the least.
- ) The total income to total assets ratio measures the earning power of each rupee employed by the bank. NABIL's ratio in this case is the best. The ratio of total income to total expense reflects the earning capacity of a rupee of expenses. The productivity of expenses in SCBNL is the best.
- ) The performance of SCBNL is significantly better than two banks in case of profitability. EPS is the highest in the case of SCBNL.

Joshi (2007) conducted a study on "Investment Policy of Commercial Banks in Nepal: A comparative study of Everest bank Limited, NABIL Bank Limited and Bank of Kathmandu" with the objective of:

- ) To discuss fund mobilization and investment policy of Everest bank Limited, NABIL Bank Limited and Bank of Kathmandu Limited.
- ) To evaluates the liquidity, efficiency and profitability and risk position.
- ) To evaluate the growth ratios of loan and advances, total investments with other financial variables.
- ) To analysis the trend of deposits utilization towards total investment and loan and advances.

) To conduct hypothetical test to find whether there is significant difference between the various important ratios of Everest bank Limited, NABIL Bank Limited and Bank of Kathmandu

The study was conducted on the basis of secondary data:

The research findings of the study are:

- ) The liquidity position of Everest bank Limited is comparatively better than NABIL Bank Limited and Bank of Kathmandu Limited. Everest bank Limited has the highest cash and bank balance to total deposits, cash and bank balance to current asset ratio. NABIL has the lowest liquidity position than that of other two banks. Everest bank Limited has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loan and advances.
- From the analysis of assets management ratio or activity ratio, it can be concluded that Everest bank Limited is comparatively average or in between successful in compared to NABIL Bank Limited and Bank of Kathmandu Limited. The total investment of Everest bank Limited is in between in compared to other two banks.
- ) In the study, loan and advances to total deposit is higher Bank of Kathmandu Limited but total investment to total deposit is higher in NABIL. Investment on shares and bonds to total working fund ratio is Bank of Kathmandu Limited. But the coefficient of variation is higher in Everest bank Limited.
- ) In analysis of profitability, total interest earned to total outside assets of Everest bank Limited is lowest at all. But overall analysis of profitability ratios, Everest bank Limited is average profitable in comparison to other banks. From the viewpoint of risk ratio, Everest bank Limited has highest capital risk ratio.

Thapa (2008) on a study "A comparative study on investment policy of Nepal Bangladesh bank Ltd and other joint venture banks" on her study, the objectives were

- ) To evaluate the liquidity, asset management efficiency, profitability and risk position of Nepal Bangladesh bank Ltd in comparison to NABIL and SCBNL
- ) To analyzed the relationship between loan and advance and total investment with other financial variables of sample banks.
- ) To examine the fund mobilization and investment policy of Nepal Bangladesh bank Ltd through off-balance sheet and on-balance sheet activities in comparison to the other two banks

- ) To study the variables risk in investment and to analyze the deposit utilization trend and its projection for next five years of the sample banks.
- ) To provide the suggestion for improving the investment policy of Nepal Bangladesh bank Ltd on the basis of the findings of the analysis.

The study was conducted on the basis of secondary data:

The research findings of the study are:

- ) The liquidity position of Nepal Bangladesh bank Ltd is comparatively better than that of NABIL and SCBNL. It has the highest cash and bank balance to total deposit, cash and bank balance to current asset ratio.
- ) It has good deposit collection, it has made enough loan and advance but it has made the negligible amount of investment in government securities.
- ) The Nepal Bangladesh bank Ltd is not in better position regarding its on-balance aswell-as off-balance activities in comparison to NABIL and SCBNL.
- ) It does not deem to follow any definite policy regarding the management of its assets.
- ) The profitability position on Nepal Bangladesh bank Ltd is comparatively worse than that of NABIL and SCBNL. The bank must maintain its high profit margin for the well being in future.
- ) Nepal Bangladesh bank Ltd has maintained high growth rate in comparison to other banks though it is not successful to make enough investment. And can say that bank is successful in increasing its source of finds and its mobilization.
- ) There is significance relationship between deposit and loan and advances and outside asset and net profit of Nepal Bangladesh bank Ltd, NANIL and SCBNL. But there is no significance relationship between deposit and investment of Nepal Bangladesh bank Ltd only.
- ) Nepal Bangladesh bank Ltd has maintained high growth rate comparison to other banks.
- ) The position of Nepal Bangladesh bank Ltd in regard to utilization of the fund to earn profit is not better in compare to NABIL and SCBNL.
- ) Nepal Bangladesh bank Ltd is not in the better position regarding the proportion of feebase activities to loan and advance in compare with other banks during the study period.
- ) Nepal Bangladesh bank Ltd in terms of recovery of loan is worse in comparison to NABIL and SCBNL.

Khadka (2008) conducted a study on "A study on the investment policy of NABIL Bank Ltd. In comparison to other joint venture banks of Nepal" with the objective of:

- ) To evaluate the liquidity, asset management, efficiency and profitability positions in relation to fund mobilization of NABIL Bank Ltd. In comparison to other joint venture banks.
- ) To discuss fund mobilization and investment policy of NABIL Bank Ltd. in respect to its fee based off-balance sheet transactions and fee based on-balance sheet transaction to other JVBs.
- ) To evaluate the growth ratio of loan and advances and total investment with respective growth rate of total deposits and profit of NABIL Bank Ltd. in comparison to other JVBs.
- ) To find out the relationship between deposit and total investment, deposits and loan and advance and net profit and outside asset of NABIL bank Ltd. in comparison with other JVBs.

The study was conducted using secondary data

The research findings of the study are as follows:

- The liquidity position of NABIL Bank Ltd. is comparatively worse than that of other JVBs. NABIL Bank has more portions of current assets as loan and advances but less portion as investment on government securities.
- ) NABIL Bank Ltd. is comparatively less successful in on-balance sheet operation as well as off-balance sheet operation than that of other JVBs.
- ) Profitability position of NABIL Bank Ltd. is comparatively not better than that of other JVBs. The mean ratio of return on loan and advances of NABIL Bank Ltd. has been found slightly lower than that of other JVBs. Similarly, the mean ratio of total interest earned to total outside asset of NABIL Bank Ltd. has been found slightly lower than that of other JVBs.
- Thought NABIL Bank Ltd. seem to be more successful to increase its sources of funds as well as mobilization of it by increasing loan and advances and total investment, it seem to be failure to maintain its growth rate of profit in comparison to that of other JVBs (i.e. SCBNL. and Nepal INVESTMENT.)
- ) There is significant relationship between deposit and loan and advances as well as outside assets and net profit but not between total deposits and total investment in case of both NABIL and other JVBs.

## **Research Gap**

Since the above mention studies offer limited findings, more extensive testing and adjustment of necessary variable are needed in order to be more conclusive about the investment policy of commercial banks. Previous studies were directed to find the effect of the financial ratio of firm on different aspects of commercial banks. And research in the same topic has been carried out in the past and it is a continuous process in future. So to obtain latest updated information this same topic is selected.

This study aims to attempt about investment pattern of selected banks with their selected portfolio with using the modern tools of statistic like correlation and trend analysis.

## Chapter III

## Research Methodology

This chapter highlights the research methodology used in the study for analysis of investment policy. This chapter includes the research design, population and sample, nature and sources of data and analysis of data

Research methodology describes the methods and process applied in the entire subject of the related study. Every research should follow the systematic research methodology to solve the research problem. The research methodology considers the logical behind the methods used in the context of research study and explains why particular method or technique is used. Research methodology is a way to solve systematically about the research problems, which includes many tools, if it is necessary in each and every steps of this study.

#### 3.1 Research Design

Research design is a strategic approach; proactively maintain possible cause and effects. In the other words research design is a plan structure and strategy investigation conceived so as to obtain answer of research question and control variance. The study is based in secondary sources of data. So, descriptive and analytical research designs have been used to achieve the objective of the study. Descriptive research design is a fact finding operation searching for adequate information. It is a type of survey study which is generally conducted to assess the opinions, behaviours or characteristic of a given population and to describe the situation and events occurring at present.

### 3.2 Nature and Sources of Data

This study is based on secondary data only due to lack of sources and partial fulfilment of the requirement for degree of Master's in Business Studies primary data are ignore. This study has covered five year time span-FYs 2003/04 to 2007/08 and included investment pattern only. Selected banks are the major sources of required data. Required information and data are extracted from the annual reports of selected banks and downloaded from the official website of selected banks. In addition, some of the information and data are culled from the reports of previous studies.

#### 3.3 Population and Sample

There are altogether twenty six commercial banks functioning all over the kingdom up to May-2009. But due to lack of time and resource factor, it is not possible to include all of them in the study. Hence, judgemental random sampling method is used as sampling and three banks have been taken as sample.

#### 3.4 Analysis of Data

To achieve the objective of this study some statistical and financial tools have been used. The data extracted from annual report and other available information are processed and tabulated in various tables and charts under different heading to their nature. These data are then used for required calculation like statistical and financial to examine the investment practices of the bank. Similarly, some statistical tools like graph, percentage, coefficient of correlation, regression analysis and the method of least square liner trend are also used in this study. Statistical results help to achieve the objective of the study.

#### 3.5 Analytical Tools

Simple analytical tools like percentage, growth rate, and correlation coefficient have been used to analyze the growth trend and performance of portfolio.

#### **I Growth Ratio**

Growth ratio shows the growth rate of different financial indicator during the period. The following model has been used to work out the overall growth rate:

 $A_t = A_0 (1 + g)^n$ 

Where,

 $A_t$  = values at the end of the FY  $A_o$  = values at the beginning of the FY

n = t - 1, time period over which growth takes place

g = growth rate

Growth rate on yearly basis

 $g = ((A_t - A_0)/A_0) * 100$ 

Where,

g = yearly growth rate

 $A_t$  = values at the end of the FY  $A_o$  = values at the beginning of the FY

#### **II Coefficient of Correlation Analysis**

The correlation is statistical tool which can be defined as the degree of linear relationship existing between two or more variables. Two variables are said to correlate when the change in the value of one variable is accompanied by the change of another variable. For example, changes in the value of advertisement are associated with the change in sales; similarly, changes in price are accompanied by change in quantity demanded. The correlation coefficient can be either in positive or negative and can have the value between -1 to +1. If both variables are changing in the same direction then positive correlation exists. Where as when the variation in two variable take place in opposite direction, the correlation is said to be negative correlation. For the purpose of testing the theoretical relationship between investment and their returns, Karl Pearson's Correlation Coefficient (r) has been worked out using the following model:

$$r = \frac{n \quad XY- \quad X \quad Y}{n \quad X^{2} - (X)^{2} \quad n \quad Y^{2} - (Y)^{2}}$$

Where

X = Investment made on portfolio

Y= Return on portfolio

n = Number of year observation

#### **Properties of correlation coefficient**

- 1. Correlation coefficient is a pure number that is independent of the units of measurement.
- 2. Correlation coefficient is independent of change of origin and scale.
- 3. Correlation coefficient lies between -1 to +1 i.e. -1 r 1
- 4. Correlation coefficient is the geometric mean of two regression coefficients.

The value of r is such that  $-1 \le r \le +1$ . The + and – signs are used for positive linear correlations and negative linear correlations, respectively.

**Positive correlation:** If X and Y have a strong positive linear correlation, r is close to +1. An r value of exactly +1 indicates a perfect positive fit. Positive values indicate a relationship between X and Y variables, such that as values for X increases values for Y also increase. **Negative correlation:** If X and Y have a strong negative linear correlation, r is close to -1. An r value of exactly -1 indicates a perfect negative fit. Negative values indicate a relationship between X and Y such that as values for X increases, values for Y decreases.

**No correlated:** If there is no linear correlation or a weak linear correlation, r is close to 0. A value near zero means that there is a random, nonlinear relationship between the two variables. Note that r is a dimensionless quantity; that is, it does not depend on the units employed.

**Perfect correlation**:  $\pm 1$  occurs only when the data points all lie exactly on a straight line. If r = +1, the slope of this line is positive. If r = -1, the slope of this line is negative.

A correlation greater than 0.80 is generally described as strong, whereas a correlation less than 0.5 is generally described as weak. These values can vary based upon the type of data being examined.

Degree	Direction	
	Positive	Negative
Perfect	+1	-1
Significant (very high)	+0.75 to +1	-0.75 to -1
High	+0.50 to +0.75	-0.50 to -0.75
Low	+0.25 to +0.50	-0.25 to -0.50
Insignificant (very low)	0 to +0.25	0 to -0.25
Absent	0	0

For example, if r = 0.922, then  $r^2 = 0.850$ , which means that 85% of the total variation in Y can be explained by the linear relationship between X and Y (as described by the regression equation). The other 15% of the total variation in Y remains unexplained

The probable error (PE) is used to measure the reliability and test of significance of correlation coefficient. P.E. is used in interpretation whether the calculated value of r is significant or not. It is calculated by the following formula.

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

Where,

r = the value of correlation coefficient

n = number of pairs of observations

If r<P.E., it is said insignificant, i.e. there is no evidence of correlation.

If r>P.E., it is significant.

If P.E<r<6P.E nothing can be concluded.

#### **III Trend Analysis**

Trend analysis is a tool of financial analysis that indicates whether the financial condition of a firm is likely to improve or deteriorate. By using trend analysis, we look into pattern of particular sector whether they are increasing or decreasing over the year. Under this method, a selected portfolio investment pattern (i.e. loan and advance and total investment) of the bank is plotted against that of industry average to identify whether the movement is confirmed or contradicted to industry average.

Here industry average is average of financial indicator of whole commercial bank operating in Nepal. But in this study only three banks are taken as industry average.



#### **IV Graph**

Graph is a diagram shows the relation between variable quantities and measure along one of a pair of axes.
## CHAPTER IV

## Data Analysis and Presentation

This chapter analyse and presents the data to measure the various dimensions of the problems of the study and the major findings of the study are presented systematically. The data relating to the investment management are analyzed and evaluated in this chapter.

Analysis is done according to classification of portfolio

#### 4.1 Loan and Advance

#### a) Growth ratio

#### Loan and Advance

Below table shows the pattern of loan and advance and overall growth rate during 2003/04

to 2007/08.

						Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	8189992	10586170	12922543	15545778	21365053	27.08%
INVESTMENT	7130125	10126055	12776208	17286427	26996652	39.49%
BOK	5646698	5912579	7259082	9399327	12462637	21.88%





**Figure 4.1** Status of Loan and Advance of NABIL, INVESTMENT and BOK

Every banks loan and advance is in increasing during the study period. NABIL has highest growth rate on 2007/08 i.e.37.43% and lowest growth rate on 2006/07 i.e.20.30%.

INVESTMENT has highest growth rate on 2007/08 i.e.56.17% and lowest growth rate on 2005/06 i.e.26.17%. BOK has highest growth rate on 2007/08 i.e.32.59% and lowest growth rate on 2004/05 i.e.4.17% (appendix 1). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 27.08%, 39.49% and 21.88% respectively. NABIL loan and advance was high on 2003/04, 2004/05 and 2005/06 but after 2006/07 INVESTMENT has highest loan and advance. Where as BOK loan and advance is always less during study period.

#### **Return on Loan and Advance**

Below table shows the return on loan and advance and overall growth rate during 2003/04 to 2007/08.

						Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	761616	831829	988413	1167255	1496243	18.39%
INVESTMENT	663016	769195	964689	1302121	1907261	30.23%
BOK	469505	502945	550144	645651	887298	17.24%

 Table 4.2

 Return on Loan and Advance of NABIL, INVESTMENT and BOK



Figure 4.2 Status of Return on Loan and Advance of NABIL, INVESTMENT and BOK

Return on loan and advance is in increasing during the study period. NABIL has highest growth rate on 2007/08 i.e.28.18% and lowest growth rate on 2004/05 i.e.9.22%. INVESTMENT has highest growth rate on 2007/08 i.e.46.47% and lowest growth rate on 2004/05 i.e.16.01%. BOK has highest growth rate on 2007/08 i.e.37.43% and lowest growth rate on 2004/05 i.e.7.12% (appendix 2). However, the overall growth rate during the study period of

NABIL, INVESTMENT and BOK are 18.39%, 30.23% and 17.27% respectively. It shows INVESTMENT has high growth rate than other banks.

#### **b)** Correlation Coefficient

The coefficient of correlation between these two variables i.e. loan and advance and their return are measured and evaluated in the following table. In this analysis loan and advance is independent variable (X) and return is dependent variable (Y)

Table 4.3

Correlation Coefficient between Loan and Advance and their Return of NABIL Loan and Y<sup>2</sup> X<sup>2</sup> Fiscal Year advance (X) Return(Y) XY 2003/04 8189992 761616 6,237,628,947,072 67,075,968,960,064 580,058,931,456 2004/05 10586170 831829 8,805,883,204,930 112,066,995,268,900 691,939,485,241 2005/06 12922543 988413 12,772,809,494,259 166,992,117,586,849 976,960,258,569 2006/07 15545778 1167255 18,145,887,099,390 241,671,213,625,284 1,362,484,235,025 2007/08 21365053 1496243 31,967,310,995,879 456,465,489,692,809 2,238,743,115,049 Total 68609536 5245356 77,929,519,741,530 1,044,271,785,133,910 5,850,186,025,340

Here,

 $\mathbf{r} = \mathbf{r}$ 

X = 68609536

Y = 5245356

XY = 77929519741530

 $X^2 = 1044271785133910$ 

 $Y^2 = 5850186025340$ 

#### (5 x 77929519741530) - (68609536 x 5245356)

 $\overline{5 \times 1044271785133910 - (68609536)^2}$   $\overline{5 \times 5850186025340 - (5245356)^2}$ 

Correlation coefficient (r) = 0.9961

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.9961)^2}{5}$ 

=0.002348

The above calculation shows that the correlation coefficient (r) between loan and advance and return on loan and advance is 0.9961 which is positive. Since, r is greater than six time of PE i.e. 0.9961>6x0.002348 it's significant. It indicates that the increase (decrease) of loan and advance is highly associated with the increase (decrease) in the value of return.

Table 4.4

Correlation Coefficient between Loan and Advance and their Return of INVESTMENT

Fiscal	Loan and		201	×2	×2
Year	advance (X)	Return(Y)	XY	X-	Y-
2003/04	7130125	663016	4,727,386,957,000	50,838,682,515,625	439,590,216,256
2004/05	10126055	769195	7,788,910,875,725	102,536,989,863,025	591,660,948,025
2005/06	12776208	964689	12,325,067,319,312	163,231,490,859,264	930,624,866,721
2006/07	17286427	1302121	22,509,019,611,667	298,820,558,426,329	1,695,519,098,641
2007/08	26996652	1907261	51,489,661,490,172	728,819,219,209,104	3,637,644,522,121
Total	74315467	5606282	98,840,046,253,876	1,344,246,940,873,350	7,295,039,651,764

Here,

X = 74315467

Y = 5606282

XY = 98,840,046,253,876

X<sup>2</sup> = 1,344,246,940,873,350

Y<sup>2</sup> = 7,295,039,651,764

# (5 x 98,840,046,253,876) - (74315467 x 5606282) 5 x 1,344,246,940,873,350- (74315467)<sup>2</sup> 5 x 7,295,039,651,764 - (5606282)<sup>2</sup> r = -

Correlation coefficient (r) = 0.9976

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.9976)^2}{\overline{5}}$ 

=0.001446

The above calculation shows that the correlation coefficient (r) between investment made on loan and advance and return on loan and advance is 0.9976 which is positive. Since, r is greater than six time of PE i.e. 0.9976>6x0.001446 it's significant. It indicates that the increase (decrease) of loan and advance is highly associated with the increase (decrease) in the value of return.

Correlation Coefficient between Loan and Advance and their Return of <b>BOK</b>								
Fiscal Year	Loan and advance (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>			
2003/04	5646698	469505	2,651,152,944,490	31,885,198,303,204	220,434,945,025			
2004/05	5912579	502945	2,973,702,045,155	34,958,590,431,241	252,953,673,025			
2005/06	7259082	550144	3,993,540,407,808	52,694,271,482,724	302,658,420,736			
2006/07	9399327	645651	6,068,684,876,877	88,347,348,052,929	416,865,213,801			
2007/08	12462637	887298	11,058,072,884,826	155,317,320,993,769	787,297,740,804			
Total	40680323	3055543	26,745,153,159,156	363,202,729,263,867	1,980,209,993,391			

Table 4.5

Here,

r = \_\_\_\_

X = 40680323 Y = 3055543 XY = 26,745,153,159,156  $X^{2} = 363,202,729,263,867$  $Y^{2} = 1.980,209,993,391$ 

# (5 x 26,745,153,159,156) - (40680323 x 3055543)

 $5 \ge 363,202,729,263,867 - (40680323)^2 = 5 \ge 1,980,209,993,391 - (3055543)^2$ Correlation coefficient (r) = 0.9881 Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{\overline{n}}$$
  
P.E = 0.6745  $\frac{1 - (0.9881)^2}{\overline{5}}$   
=0.007136

The above calculation shows that the correlation coefficient (r) between investment made on loan and advance and return on loan and advance is 0.9881 which is positive (very high). Since, r is greater than six time of PE i.e. 0.9881>6x0.007136 it's significant. It indicates that the increase (decrease) of loan and advance is highly associated with the increase (decrease) in the value of return.

#### **4.2 Government Securities**

#### a) Growth ratio

#### **Government Securities**

Below table shows the pattern of investment made on government securities and overall growth rate of three banks during 2003/04 to 2007/08.

			_			Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	3672626	2413939	2301463	4808348	4646883	6.05%
INVESTMENT	2001100	1948500	2522300	3256400	3155000	12.05%
BOK	2371775	2146619	2658369	2332041	2113223	-2.84%

 Table 4.6

 Investment on Government Securities of NABIL, INVESTMENT and BOK



**Figure 4.3** Status of Investment on Government Securities of NABIL, INVESTMENT and BOK

Investment made on government securities are fluctuating during the study period. NABIL has highest growth rate on 2006/07 i.e.108.93% and lowest growth rate on 2004/05 i.e.-34.27%. INVESTMENT has highest growth rate on 2005/06 i.e.29.45% and lowest growth rate on 2007/08 i.e.-3.11%. BOK has highest growth rate on 2005/06i.e.23.84% and lowest growth rate on 2006/07 i.e.-12.28% (appendix 3). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 6.05%, 12.05% and -2.84% respectively.

#### **Return on Government Securities**

Below table shows return on government securities and overall growth rate on return of three banks during 2003/04 to 2007/08.

						Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	192761	151063	130197	132229	198442	0.72%
INVESTMENT	35868	56550	82420	78493	99991	29.21%
BOK	90873	88001	114319	138590	84961	-1.66%

 Table 4.7

 Return on Government Securities of NABIL, INVESTMENT and BOK



Status of Return on Government Securities of NABIL, INVESTMENT and BOK

Return on government securities are fluctuating during the study period. NABIL has highest growth rate on 2007/08 i.e.50.07% and lowest growth rate on 2004/05 i.e.-21.63%. INVESTMENT has highest growth rate on 2004/05 i.e.57.66% and lowest growth rate on 2006/07 i.e.-4.76%. BOK has highest growth rate on 2005/06i.e.29.91% and lowest growth rate on 2007/08 i.e.-38.70% (appendix 4). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 0.72%, 29.21% and -1.66% respectively.

#### **b)** Correlation Coefficient

The coefficient of correlation between these two variables i.e. government securities and their return are measured and evaluated in the following table. In this analysis government securities is independent variable (X) and return is dependent variable (Y)

Correlation Coefficient between Government Securities and their Return of NABIL									
Fiscal Year	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>				
2003/04	3672626	192761	707,939,060,386	13,488,181,735,876	37,156,803,121				
2004/05	2413939	151063	364,656,867,157	5,827,101,495,721	22,820,029,969				
2005/06	2301463	130197	299,643,578,211	5,296,731,940,369	16,951,258,809				
2006/07	4808348	132229	635,803,047,692	23,120,210,489,104	17,484,508,441				
2007/08	4646883	198442	922,136,756,286	21,593,521,615,689	39,379,227,364				
Total	17843259	804692	2,930,179,309,732	69,325,747,276,759	133,791,827,704				

Table 4.8

Here,

X = 17843259

Y = 804692

XY = 2,930,179,309,732

X<sup>2</sup> = 69,325,747,276,759

 $Y^2 = 133,791,827,704$ 

$$r = \frac{(5 \text{ x } 2,930,179,309,732) - (17843259 \text{ x } 804692)}{5 \text{ x } 69,325,747,276,759 - (17843259)^2 5 \text{ x } 133,791,827,704 - (804692)^2}$$

Correlation coefficient (r) = 0.3760

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.3760)^2}{\overline{5}}$ 

=0.259

The above calculation shows that the correlation coefficient (r) between investment made on government securities and its return is 0.3760 which is less positive. Here, r is less than six time of PE i.e. 0.259 < 0.3760 < 6x0.259. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

Table 4.9
Correlation Coefficient between Government Securities and their Return of INVESTMENT

Fiscal Year	Investment (X)	Return(Y)	ХҮ	X <sup>2</sup>	Y <sup>2</sup>
2003/04	2001100	35868	71,775,454,800	4,004,401,210,000	1,286,513,424
2004/05	1948500	56550	110,187,675,000	3,796,652,250,000	3,197,902,500
2005/06	2522300	82420	207,887,966,000	6,361,997,290,000	6,793,056,400
2006/07	3256400	78493	255,604,605,200	10,604,140,960,000	6,161,151,049
2007/08	3155000	99991	315,471,605,000	9,954,025,000,000	9,998,200,081
Total	12883300	353322	960,927,306,000	34,721,216,710,000	27,436,823,454

Here,

X = 12883300

Y = 353322

XY = 960,927,306,000

 $X^2 = 34,721,216,710,000$ 

 $Y^2 = 27,436,823,454$ 

$$r = \frac{(5 \text{ x } 960,927,306,000) - (12883300 \text{ x } 353322)}{5 \text{ x } 34,721,216,710,000 - (12883300)^2} \overline{5 \text{ x } 27,436,823,454 - (353322)^2}$$

Correlation coefficient (r) = 0.8234

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{\overline{n}}$$
  
P.E = 0.6745  $\frac{1 - (0.8234)^2}{\overline{5}}$ 

=0.09713

The above calculation shows that the correlation coefficient (r) between investment made on government securities and its return is 0.8234 which is positive. Here, r is greater than six time of PE i.e. 0.8234>6x0.09713 it's significant. It indicates that the increase (decrease) of government securities is highly associated with the increase (decrease) in the value of return.

Correlation Coefficient between Government Securities and their Return of BOK									
Fiscal Year	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>				
2003/04	2371775	90873	215,530,309,575	5,625,316,650,625	8,257,902,129				
2004/05	2146619	88001	188,904,618,619	4,607,973,131,161	7,744,176,001				
2005/06	2658369	114319	303,902,085,711	7,066,925,740,161	13,068,833,761				
2006/07	2332041	138590	323,197,562,190	5,438,415,225,681	19,207,188,100				
2007/08	2113223	84961	179,541,539,303	4,465,711,447,729	7,218,371,521				
Total	11622027	516744	1,211,076,115,398	27,204,342,195,357	55,496,471,512				

**Table 4.10** 

Here,

X = 11622027

Y = 516744

XY = 1,211,076,115,398

X<sup>2</sup> = 27,204,342,195,357

 $Y^2 = 55,496,471,512$ 

$$r = \frac{(5 \text{ x } 1,211,076,115,398) - (11622027 \text{ x } 516744)}{5 \text{ x } 27,204,342,195,357 - (11622027)^2} \frac{5 \text{ x } 55,496,471,512 - (516744)^2}{5 \text{ x } 55,496,471,512 - (516744)^2}$$

Correlation coefficient (r) = 0.4992

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.4992)^2}{\overline{5}}$ 

=0.2264

The above calculation shows that the correlation coefficient (r) between investment made on government securities and its return is 0.4992 which is less positive. Here, r is less than six time of PE i.e. 0.2264<0.4992<6x0.2264. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

#### 4.3 Corporate Shares

#### a) Growth ratio

#### **Corporate Shares**

Below table shows the investment made on corporate share and overall growth rate of three banks during 2003/04 to 2007/08.

						Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	22220	27363	27563	57853	80551	37.98%
INVESTMENT	13895	17738	17738	35253	59945	44.11%
BOK	22809	23162	23162	25562	28324	5.56%

 Table 4.11

 Investment on Corporate Shares of NABIL, INVESTMENT and BOK



Figure 4.5 Status of Investment on Corporate Shares of NABIL, INVESTMENT and BOK

Investments on corporate shares are increasing during the study period. NABIL has highest growth rate on 2006/07 i.e.109.89% and lowest growth rate on 2005/06 i.e0.73%. INVESTMENT has highest growth rate on 2006/07 i.e.98.74% and no growth rate on 2005/06 i.e.0%. BOK has highest growth rate on 2007/08i.e.10.81% and on growth on 2005/06 (appendix 5). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 37.98%, 44.11% and 5.56% respectively.

#### **Return on Corporate Share**

Below table shows the return on corporate shares and overall growth rate during 2003/04 to 2007/08.

			-			Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	456	476	469	9344	933	19.59%
INVESTMENT	0	191	241	213	832	63.31
BOK	1520	49	223	490	148	-44.13%

 Table 4.12

 Return on Corporate Share of NABIL, INVESTMENT and BOK



**Figure 4.6** Status of Return on Corporate Shares of NABIL, INVESTMENT and BOK

Returns on corporate shares are in fluctuation during the study period. NABIL has highest growth rate on 2006/07 i.e.1892.32% and lowest growth rate on 2007/08 i.e.90.01%. INVESTMENT has highest growth rate on 2007/08 i.e.290.61% and lowest growth rate on 2006/07 i.e.-11.62%. BOK has highest growth rate on 2005/06 i.e.355.10% and lowest growth rate on 2004/05 i.e.-96.78% (appendix 6). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 19.59%, 63.31% and -44.13% respectively.

#### **b)** Correlation Coefficient

The coefficient of correlation between these two variables i.e. corporate share and their return are measured and evaluated in the following table. In this analysis corporate share is independent variable (X) and return is dependent variable (Y)

**Table 4.13** 

U	Contraction Coefficient Setween Corporate Share and their Retain of Trability							
Fiscal Year	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>			
2003/04	22220	456	10,132,320	493,728,400	207,936			
2004/05	27363	476	13,024,788	748,733,769	226,576			
2005/06	27563	469	12,927,047	759,718,969	219,961			
2006/07	57853	9344	540,578,432	3,346,969,609	87,310,336			
2007/08	80551	933	75,154,083	6,488,463,601	870,489			
Total	215550	11678	651,816,670	11,837,614,348	88,835,298			

Correlation Coefficient between Corporate Share and their Return of NABIL

Here,

X = 215550Y = 11678 XY = 651,816,670 X<sup>2</sup> = 11,837,614,348 Y<sup>2</sup> = 88,835,298

$$r = \frac{(5 \text{ x } 651,816,670) - (215550 \text{ x } 11678)}{5 \text{ x } 11,837,614,348 - (215550)^2} \frac{5 \text{ x } 88,835,298 - (11678)^2}{5 \text{ x } 88,835,298 - (11678)^2}$$

Correlation coefficient (r) = 0.3748

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{\overline{n}}$$
  
P.E = 0.6745  $\frac{1 - (0.3748)^2}{\overline{5}}$ 

=0.2592

The above calculation shows that the correlation coefficient (r) between investment made on corporate share and its return is 0.3748 which is less positive. Here, r is less than six time of PE i.e. 0.2592<0.3748<6x0.2592. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

Correlation Coefficient between Corporate Share and their Return of INVESTMENT								
Fiscal Year	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>			
2003/04	13895	0	0	193,071,025	0			
2004/05	17738	191	3,387,958	314,636,644	36,481			
2005/06	17738	241	4,274,858	314,636,644	58,081			
2006/07	35253	213	7,508,889	1,242,774,009	45,369			
2007/08	59945	832	49,874,240	3,593,403,025	692,224			
Total	144569	1477	65,045,945	5,658,521,347	832,155			

**Table 4.14** 

Here,

$$X = 144569$$
  
 $Y = 1477$   
 $XY = 65,045,945$   
 $X^2 = 5,658,521,347$   
 $Y^2 = 832,155$ 

$$r = \frac{(5 \text{ x } 65,045,945) - (144569 \text{ x } 1477)}{5 \text{ x } 5,658,521,347 - (144569)^2} \frac{5 \text{ x } 832,155 - (1477)^2}{5 \text{ x } 832,155 - (1477)^2}$$

Correlation coefficient (r) = 0.9235

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{\overline{n}}$$
  
P.E = 0.6745  $\frac{1 - (0.9235)^2}{\overline{5}}$   
=0.04438

The above calculation shows that the correlation coefficient (r) between investment made on corporate shares and its return is 0.9235 which is positive. Here, r is greater than six time of PE i.e. 0.9235<6x0.04438 it's significant. It indicates that the increase (decrease) of corporate shares is highly associated with the increase (decrease) in the value of return.

Correlation Coefficient between Corporate Share and their Return of BOK  $Y^2$ Investment (X) Return(Y) X<sup>2</sup> **Fiscal Year** XY 2,310,400 2003/04 22809 1520 34,669,680 520,250,481 2004/05 49 536,478,244 23162 1,134,938 2,401 2005/06 23162 223 5,165,126 536,478,244 49,729 2006/07 25562 490 12,525,380 653,415,844 240,100 2007/08 28324 148 4,191,952 802,248,976 21,904 Total 123019 2430 57,687,076 3,048,871,789 2,624,534

 Table 4.15

 Coefficient between Corporate Share and their Return

Here,

X = 123019

XY = 57,687,076

 $X^2 = 3,048,871,789$ 

Y<sup>2</sup> = 2,624,534

 $r = \frac{(5 \times 57,687,076) - (123019 \times 2430)}{5 \times 3,048,871,789 - (123019)^2 - 5 \times 2,624,534 - (2430)^2}$ Correlation coefficient (r) = 0.3715 Probable Error (PE) P.E = 0.6745 <u>1 - r^2</u>

P.E = 0.6745 
$$\frac{n}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.3715)^2}{\overline{5}}$ 

=0.2600

The above calculation shows that the correlation coefficient (r) between investment made on corporate share and its return is 0.3715 which is less positive. Here, r is less than six time of PE i.e. 0.2600 < 0.3715 < 6x0.2600. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

#### 4.4 Bond and Debenture

#### a) Growth ratio

Banks has not invested on debenture during study period.

Below table shows the investment pattern of bond and overall growth rate during 2003/04 to 2007/08.

						Rs.1n thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	111225	412919	76629	229104	242684	21.53%
INVESTMENT	0	0	0	0	0	0
BOK	0	69857	76705	64606	85734	7.06%

 Table 4.16

 Investment on Bond of NABIL, INVESTMENT and BOK



Figure 4.7 Status of Investment on Bond of NABIL, INVESTMENT and BOK

Investments on bond are fluctuating during the study period. NABIL has highest growth rate on 2004/05 i.e.271.25% and lowest growth rate on 2005/06 i.e.-81.44%. INVESTMENT has not invested on bond during study period. BOK has highest growth rate on 2007/08i.e.32.70% and lowest growth on 2006/07 i.e. -15.77% (appendix 7). However, the overall growth rate during the study period of NABIL and BOK are 21.53%, and 7.06% respectively.

#### **Return on bond**

Below table shows the return on bond and overall growth rate during 2003/04 to 2007/08.

						Rs.in thousand
BANK	2003/04	2004/05	2005/06	2006/07	2007/08	Growth rate
NABIL	6180	22921	14914	10431	14801	24.40%
INVESTMENT	0	0	0	0	0	0
BOK	0	0	3777	3195	3409	-4.99%
BOIL	0	0	5111	5155	5403	7.3370

 Table 4.17

 Return on Bond of NABIL, INVESTMENT and BOK



Figure 4.8 Status of Return on Bond of NABIL, INVESTMENT and BOK

Returns on bond are fluctuating during the study period. NABIL has highest growth rate on 2004/05 i.e.270.89% and lowest growth rate on 2005/06 i.e. -34.93%. BOK has highest growth rate on 2007/08i.e.6.70% and lowest growth on 2005/06 i.e.-15.41% (appendix 8). However, the overall growth rate during the study period of NABIL and BOK are 24.40%, and -4.99% respectively.

#### **b)** Correlation Coefficient

The coefficient of correlation between these two variables i.e. investment on bond and their return are measured and evaluated in the following table. In this analysis bond is independent variable (X) and return is dependent variable (Y)

Conclation Coefficient between Bolid and then Return of NABIL							
<b>Fiscal Year</b>	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>		
2003/04	111225	6180	687,370,500	12,371,000,625	38,192,400		
2004/05	412919	22921	9,464,516,399	170,502,100,561	525,372,241		
2005/06	76629	14914	1,142,844,906	5,872,003,641	222,427,396		
2006/07	229104	10431	2,389,783,824	52,488,642,816	108,805,761		
2007/08	242684	14801	3,591,965,884	58,895,523,856	219,069,601		
Total	1072561	69247	17,276,481,513	300,129,271,499	1,113,867,399		

 Table 4.18

 Correlation Coefficient between Bond and their Return of NABII

Here,

X = 1072561

Y = 69247

XY = 17,276,481,513

 $X^2 = 300, 129, 271, 499$ 

 $Y^2 = 1,113,867,399$ 

# $r = \frac{(5 \text{ x } 17,276,481,513) - (1072561 \text{ x } 69247)}{5 \text{ x } 300,129,271,499 - (1072561)^2} \frac{5 \text{ x } 1,113,867,399 - (69247)^2}{5 \text{ x } 1,113,867,399 - (69247)^2}$

Correlation coefficient (r) = 0.7355

Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{\overline{n}}$$
  
P.E = 0.6745  $\frac{1 - (0.7355)^2}{\overline{5}}$ 

=0.1384

The above calculation shows that the correlation coefficient (r) between investment made on bond and its return is 0.7355 which is positive. Here, r is less than six time of PE i.e. 0.1384 < 0.7355 < 6x0.1384. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

Correlation Coefficient between Bond and their Return of <b>BOK</b>								
Fiscal Year	Investment (X)	Return(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>			
2003/04	0	0	0	0	0			
2004/05	69857	0	0	4,880,000,449	0			
2005/06	76705	3777	289,714,785	5,883,657,025	14,265,729			
2006/07	64606	3195	206,416,170	4,173,935,236	10,208,025			
2007/08	85734	3409	292,267,206	7,350,318,756	11,621,281			
Total	296902	10381	788,398,161	22,287,911,466	36,095,035			

 Table 4.19

 prrelation Coefficient between Bond and their Return of BOI

Here,

$$X = 296902$$
  
Y = 10381  
XY = 788,398,161  
X<sup>2</sup> = 22,287,911,466  
Y<sup>2</sup> = 36,095,035

$$r = \frac{(5 \text{ x } 788,398,161) - (296902 \text{ x } 10381)}{\overline{5 \text{ x } 22,287,911,466 - (296902)^2} \overline{5 \text{ x } 36,095,035 - (10381)^2}}$$

Correlation coefficient (r) = 0.6608 Probable Error (PE)

P.E = 0.6745 
$$\frac{1 - r^2}{n}$$
  
P.E = 0.6745  $\frac{1 - (0.6608)^2}{\overline{5}}$ 

=0.1699

The above calculation shows that the correlation coefficient (r) between investment made on bond and its return is 0.6608 which is positive. Here, r is less than six time of PE i.e. 0.1699 < 0.6608 < 6x0.1699. Nothing can be concluded. It indicates that returns may move any direction not according to investment.

#### 4.5 Trend Analysis of Loan and Advance

Below table and figure compares the performance of selected banks with industry performance in contest of loan and advance.

Loan and Advance of selected Banks and Industry								
BANK	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	8189992	10586170	12922543	15545778	21365053			
INVESTMENT	7130125	10126055	12776208	17286427	26996652			
BOK	5646698	5912579	7259082	9399327	12462637			
INDUSTRY	6988938.3	8874934.7	10985944.3	14077177.3	20274780.7			

**Table 4.20** 

Source app. 12





**Figure 4.9** Status of Loan and Advance of NABIL and Industry



Figure 4.10 Status of Loan and Advance of INVESTMENT and Industry

BOK



**Figure 4.11** Status of Loan and Advance of BOK and Industry

According to above table and figure all the line (i.e. loan and advance of industry, NABIL, INVESTMENT and BOK) are in growing trend. NABIL and INVESTMENT are above the industry line but BOK is always below the industry line during the study period.

## 4.6 Trend Analysis of Total Investment

Below table and figure compares the performance of selected banks with industry performance in contest of total investment.

Total Investment of selected Banks and Industry								
BANK	2003/04	2004/05	2005/06	2006/07	2007/08			
NABIL	5835948	4275528	6178533	8945310	9939771			
INVESTMENT	3862483	3934188	5602868	6505679	6874023			
BOK	2477409	2598253	6674711	2992433	3204067			
INDUSTRY	4058613.3	3602656.3	6152037.3	6147807.3	6672620.3			
a 10								

<b>Table 4.21</b>
otal Investment of selected Banks and Industr

Source app. 13 NABIL



**Figure 4.12** Status of Total Investment of NABIL and Industry



Figure 4.13 Status of Total Investment of INVESTMENT and Industry



Figure 4.14 Status of Total Investment of BOK and Industry

According to above table and figure all the line (i.e. total investment of industry, NABIL, INVESTMENT and BOK) are not stable. NABIL is always above the industry line. INVESTMENT was below the industry line during 2003/04 and 2005/06, whereas BOK was above the industry line during 2005/06.

## 4.7 Major Finding of the Study

The preceding chapter have discussed and explored the facts and matters for the various parts of the study. Analytical part, which is the heart of the study, makes an analysis of various aspects of the investment policy of commercial banks by using some of important financial as well as statistical tools.

Having completed the basis analysis required for the study, the final and most important task of the researcher is to enlist finding issues and gaps of the study. This would be meaningful to the top management of the bank to initiate action and achieve the desire result. The main findings of the study are listed according to portfolio:

#### I. Loan and Advance

Loan and advance is in increasing trend during the study period. NABIL has highest growth rate on 2007/08 i.e.37.43% and lowest growth rate on 2006/07 i.e.20.30%. INVESTMENT has highest growth rate on 2007/08 i.e.56.17% and lowest growth rate on 2005/06 i.e.26.17%. BOK has highest growth rate on 2007/08 i.e.32.59% and lowest

#### BOK

growth rate on 2004/05 i.e.4.17% (appendix 1). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 27.08%, 39.49% and 21.88% respectively.

- ) Return on loan and advance is in increasing during the study period. NABIL has highest growth rate on 2007/08 i.e.28.18% and lowest growth rate on 2004/05 i.e.9.22%. INVESTMENT has highest growth rate on 2007/08 i.e.46.47% and lowest growth rate on 2004/05 i.e.16.01%. BOK has highest growth rate on 2007/08 i.e.37.43% and lowest growth rate on 2004/05 i.e.7.12% (appendix 2). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 18.39%, 30.23% and 17.27% respectively. It shows INVESTMENT has high growth rate than other banks.
- ) Similarly, correlation coefficient (r) between loan and advance and their return of NABIL is r = 0.9961 which is positive and r is greater than six times of its PE so it is significant. Similarly, correlation coefficient (r) between loan and advance and their return of INVESTMENT is r = 0.9976 which is positive and r is greater than six times of its PE so it is significant. Similarly, correlation coefficient (r) between loan and advance and their return of BOK is r = 0.9881 which is positive and r is greater than six times of its PE so it is significant.

#### II. Government Securities

- ) Investment made on government securities are fluctuating during the study period. NABIL has highest growth rate on 2006/07 i.e.108.93% and lowest growth rate on 2004/05 i.e. 34.27%. INVESTMENT has highest growth rate on 2005/06 i.e.29.45% and lowest growth rate on 2007/08 i.e.-3.11%. BOK has highest growth rate on 2005/06 i.e.23.84% and lowest growth rate on 2006/07 i.e.-12.28% (appendix 3). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 6.05%, 12.05% and -2.84% respectively.
- ) Return on government securities are fluctuating during the study period. NABIL has highest growth rate on 2007/08 i.e.50.07% and lowest growth rate on 2004/05 i.e.-21.63%. INVESTMENT has highest growth rate on 2004/05 i.e.57.66% and lowest growth rate on 2006/07 i.e.-4.76%. BOK has highest growth rate on 2005/06i.e.29.91% and lowest growth rate on 2007/08 i.e.-38.70% (appendix 4). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 0.72%, 29.21% and -1.66% respectively.

) Similarly, correlation coefficient (r) between government securities and their return of NABIL is r = 0.3760 which is positive correlation but r is less than six times of its PE so nothing can be concluded. Similarly, correlation coefficient (r) between government securities and their return of INVESTMENT is r = 0.8234 which is positive and r is greater than six times of its PE so it is significant. Similarly, correlation coefficient (r) between government securities and their return of BOK is r = 0.4992 which is positive correlation but r is less than six times of its PE so nothing can be concluded.

#### **III.** Corporate Shares

- Investments on corporate shares are increasing during the study period. NABIL has highest growth rate on 2006/07 i.e.109.89% and lowest growth rate on 2005/06 i.e0.73%. INVESTMENT has highest growth rate on 2006/07 i.e.98.74% and no growth rate on 2005/06 i.e.0%. BOK has highest growth rate on 2007/08i.e.10.81% and on growth on 2005/06 (appendix 5). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 37.98%, 44.11% and 5.56% respectively.
- Returns on corporate shares are in fluctuation during the study period. NABIL has highest growth rate on 2006/07 i.e.1892.32% and lowest growth rate on 2007/08 i.e.-90.01%. INVESTMENT has highest growth rate on 2007/08 i.e.290.61% and lowest growth rate on 2006/07 i.e.-11.62%. BOK has highest growth rate on 2005/06 i.e.355.10% and lowest growth rate on 2004/05 i.e.-96.78% (appendix 6). However, the overall growth rate during the study period of NABIL, INVESTMENT and BOK are 19.59%, 63.31% and -44.13% respectively.
- Similarly, correlation coefficient (r) between corporate shares and their return of NABIL is r = 0.3748 which is positive correlation but r is less than six times of its PE so nothing can be concluded. Similarly, correlation coefficient (r) between corporate shares and their return of INVESTMENT is r = 0.9235 which is positive and r is greater than six times of its PE so it is significant. Similarly, correlation coefficient (r) between corporate shares and their return of BOK is r = 0.3715 which is positive correlation but r is less than six times of its PE so nothing can be concluded.

#### IV. Bond

Investments on bond and bond are fluctuating during the study period. NABIL has highest growth rate on 2004/05 i.e.271.25% and lowest growth rate on 2005/06 i.e.-81.44%.
 INVESTMENT has not invested on bond and bond during study period. BOK has highest

growth rate on 2007/08i.e.32.70% and lowest growth on 2006/07 i.e. -15.77% (appendix 7). However, the overall growth rate during the study period of NABIL and BOK are 21.53%, and 7.06% respectively.

- Returns on bond and bond are fluctuating during the study period. NABIL has highest growth rate on 2004/05 i.e.270.89% and lowest growth rate on 2005/06 i.e. -34.93%. BOK has highest growth rate on 2007/08i.e.6.70% and lowest growth on 2005/06 i.e.-15.41% (appendix 8). However, the overall growth rate during the study period of NABIL and BOK are 24.40%, and -4.99% respectively.
- Similarly, correlation coefficient (r) between bond and bond and their return of NABIL is r = 0.7355 which is positive correlation but r is less than six times of its PE so nothing can be concluded. Similarly, correlation coefficient (r) between bond and bond and their return of BOK is r = 0.6608 which is positive but r is less than six times of its PE so nothing can be concluded.

#### V. Findings from Trend Analysis

#### **)** Loan and Advance

All the banks are in growing trend. NABIL and INVESTMENT are above the industry line and BOK is below the industry line.

#### **)** Total Investment

Banks and industry total investment are fluctuating during the study period. NABIL is always above the industry line. INVESTMENT was below the industry line during 2003/04 and 2005/06, whereas BOK was above the industry line during 2005/06.

## CHAPTER V

## Summary, Conclusion and Recommendations

## 5.1 Summary

Investment operation of commercial banks is a very risky one. It is the most important factor from the point of view of shareholders and bank management. For this, commercial banks have to pay due consideration while formulating investment policy. A healthy development of any commercial banks depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume of quality deposits, loan and investment.

The primary objective of these joint venture banks is always to earn profit by investing and granting loan and advances to people associated with trade, business and industry etc. that means they are required to mobilize their sources properly to acquire profit. How well a bank manages its investment has a great deal to do with the economic healthy of the country because the banks loan support the growth of new business and trade empowering the economic activities of the country. The income and profit of the bank depends its lending procedure, lending policy and investment of its fund in different sectors. The greater the credit created by the bank, the higher will be the profitability

Though several banks have been established in our country within short period of time, stable, strong and appropriate investment policy has not been followed by the commercial banks to sufficient return. They have not been able to utilize their funds more effectively and productively. Thus proper utilization of the resources has become more relevant and current issue for the banks. The directions and guidance provided by Nepal Rastra Bank are the major policy statements for the Nepalese Commercial banks. However, a long term and published policy about their operation is not found even in the joint venture banks

Chapter one defines the main objective of this study i.e. to evaluate the investment practices of NABIL, INVESTMENT and BOK. The study is focused on investment made on different portfolio by selected banks only. This study has been constrained by various common limitations.

Chapter two includes review of literature as to see what new contribution can be made to receive some idea for developing a research design. Books, previous thesis have been reviewed here which are related to this field of study.

Chapter three defines methodology used. The study is based on the secondary data from 2003-2004 to 2007-2008. The data have been basically obtained from annual reports and unpublished master's degree thesis. Financial as well as statistical tools have been used in order to analyze and interpret the data and information. Under financial analysis, growth ratios have been used to analyzed and interpreted different portfolio. Under statistical analysis coefficient of correlation and trend analysis have been used. This analysis gives clear picture of the performance of the bank with regard to its investment operation.

Chapter four is concerned with analysis of different portfolio practices by selected banks. Various tools have been used while analyzing the data. Table and figure have also been used to where necessary.

## 5.2 Conclusion

#### I. Loan and Advance

- ) Looking overall growth rate on loan and advance and its return INVESTMENT has highest growth than other. INVESTMENT showed successful performance in increasing investment and earning on loan and advance.
- Similarly, correlation coefficient (r) between loan and advance and their return of NABIL is r = 0.9961 which is highly positive correlation.  $r^2 = 0.99$ , which means 99% of total variation on return is due to variation on loan and advance and other 1% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between loan and advance and their return of INVESTMENT is r = 0.9976 which is highly positive correlation.  $r^2 = 0.99$ , which means 99% of total variation on return is due to variation on loan and advance and other 1% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between loan and advance and their return of BOK is r = 0.9881 which is highly positive correlation. $r^2 = 0.97$ , which means 97% of total variation on return is due to variation on loan and advance and other 3% of total variation is due other factors.
- ) Highly positive correlation between loan and advance and its return of selected banks indicates that banks can earn more profit by increasing loan and advance.

#### **II.** Government Securities

- ) Looking overall growth rate on government securities and its return INVESTMENT has highest growth than other. INVESTMENT showed successful performance in increasing investment and earning on government securities
- ) Similarly, correlation coefficient (r) between government securities and their return of NABIL is r = 0.3760 which is positive but low correlation. ( $r^2 = 0.14$ ), which means 14% of total variation on return is due to variation on government securities and other 86% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between government securities and their return of INVESTMENT is r = 0.8234 which is positive correlation. ( $r^2 = 0.67$ ), which means 67% of total variation on return is due to variation on government securities and other 33% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between government securities and their return of BOK is r = 0.4992 which is positive but low correlation. ( $r^2 = 0.24$ ), which means 24% of total variation on return is due to variation on government securities and other 76% of total variation is due other factors.
- ) Government securities are highly liquidity in the market. Due to its liquidity banks exercise frequently when need of money. So it creates fluctuation on government securities which results less correlation.

#### **III.** Corporate Shares

- ) Looking overall growth rate on corporate shares and its return INVESTMENT has highest growth than other. INVESTMENT showed successful performance in increasing investment and earning on corporate shares.
- Similarly, correlation coefficient (r) between corporate shares and their return of NABIL is r = 0.3748 which is positive but low correlated. ( $r^2 = 0.14$ ), which means 14% of total variation on return is due to variation on corporate shares and other 86% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between corporate shares and their return of INVESTMENT is r = 0.9235 which is highly positive correlation.( $r^2 = 0.85$ ), which means 85% of total variation on return is due to variation on corporate shares and other 15% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between corporate shares and their return of BOK is r = 0.3715 which is positive but low correlation. ( $r^2 = 0.13$ ), which means 13% of total variation

on return is due to variation on corporate shares and other 87% of total variation is due other factors.

) Company which are not well established fails to declare any dividend for many years or not listed in Nepal Stock Exchange Ltd. within one year, such company do not pay dividend for long time and shares being liquidity in market results low correlation between investment on shares and its return.

#### IV. Debenture

- ) Looking overall growth rate on debenture and its return NABIL has highest growth than other. NABIL showed successful performance in increasing investment and earning on debentures.
- Similarly, correlation coefficient (r) between debenture and their return of NABIL is r = 0.7355 which is positive correlation. ( $r^2 = 0.54$ ), which means 54% of total variation on return is due to variation on debenture and other 46% of total variation is due other factors.
- ) Similarly, correlation coefficient (r) between debenture and their return of BOK is r = 0.6608 which is positive correlation.( $r^2 = 0.43$ ), which means 43% of total variation on return is due to variation on debenture and other 57% of total variation is due other factors.
- ) Banks are investing on short terms debenture and bond which creates fluctuation on investment trend and returns depends on its nature and its maturity period which results less correlation between investment and its return.

#### Trend Analysis

#### Loan and Advance

Industry loan and advance is in increasing during the study period. Selected banks are moving on same direction of industry but BOK is below the industry line

#### **Total Investment**

Banks and industry total investment are fluctuating during the study period. NABIL is always above the industry line. INVESTMENT was below the industry line during 2003/04 and 2005/06, whereas BOK was above the industry line during 2005/06. Total investment of industry and banks are not constant. So bank should prepare such combination of portfolio which gives higher profit. Proper analyze should be done before investing.

## 5.3 Recommendations

On the basis of analysis and findings of the study, following recommendation can be advanced to overcome weakness, inefficiency and to improve present investment practices of NABIL,

- ) Industry loan and advance is in increasing trend and correlation coefficient between loan and advance and their return of selected banks is also highly correlated, so in such favourable condition it is recommended to increase loan and advance to gain higher profit.
- Return on government securities depends on types, nature and its maturity period, so there is no same return among government securities. Bank just invests to utilize ideal money and being liquidity. So it is recommended to select high return government securities to invest.
- ) Some company fails to declare any dividend for many years or not listed in Nepal Stock Exchange Ltd. within one year. But also bank invest on such shares to mobilize its funds. So it is recommended to analyze before investing on such company shares.
- Portfolio condition of banks should be examined carefully form time to time and attention should be made to maintain equilibrium in the portfolio condition as far as possible. So it can be said "all eggs should not be kept in the same basket". The banks should make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize their profit.
- ) Government securities and government treasury bills are considered to be risk free and have low interest rate but highly liquidity. INVESTMENT has invested in government treasury bills but not on other government securities during five year study period. INVESTMENT has highest cash and bank balance (appendix 10), so INVESTMENT should not keep its idle funds which yields them more profit. Bank should keep in mind "something is better than nothing".
- ) INVESTMENT bank has not invested in debenture and bond during study period which provides fixed returns, so it is recommended to search such debenture and bond to invest and mobilize high cash and bank balance.

- ) Commercial banks should give priority for the profit. They should focus in increasing profit by using less resource. Though INVESTMENT has earned huge amount of profit than NABIL having somehow equal deposit (appendix 9)but also NABIL has high profitability ratio than INVESTMENT because NABIL has less paid up capital than INVESTMENT (appendix 11). So it is recommended to utilize its scarce resources in maximum level.
- ) To achieve success in competitive banking environment, deposit money must be utilized as loan and advances. Negligence in administering this asset could be the main cause of a liquidity crisis in the bank (since loan and advance is not liquidity as government securities and shares) and one of the main reasons of bank's failure. When the bank grants loan and advance, it must be collected after a certain period. Collection of loan has been the most challenging task for commercial banks these days, increasing on non-performing assets discloses the failure of commercial banks in recovery of loan. Therefore, it is recommended to follow liberal policy when sanctioning loan and advance with sufficient guarantee and implement a sound collection policy including procedure with rapid identification of bad debt, immediate contact with borrower, continual follow up and as well as legal procedure if required.
- ) In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen its marketing function, as it is an effective tool of attracting and retaining customers. For this purpose, the banks should develop an innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way.
- ) The project oriented approach has to be encouraged in lending business of the banks, in which security is not necessary, risk is high but the project is important from the view point of national economy. The project should be allowed to make them capable to generate their own funds and to repay loans timely. So, it is recommended to follow project oriented approach for their efficient performances. Because the chances of loan loss can be minimized by the project-oriented approach.

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# APPENDIX

Yearly growth rate of year 2003/04 is not calculated because our study period is 2003/04 to 2007/08. We need 2002/03 data to calculate growth of 2003/04, so it is ignored.

#### Appendix 1

Yearly growth on loan and advance

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	29.26%	22.07%	20.30%	37.43%
INVESTMENT	0	42.02%	26.17%	35.30%	56.17%
BOK	0	4.71%	22.77%	29.48%	32.59%

#### Appendix 2

Yearly growth return on loan and advance

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	9.22%	18.82%	18.09%	28.18%
INVESTMENT	0	16.01%	25.42%	34.98%	46.47%
BOK	0	7.12%	9.38%	17.36%	37.43%

#### Appendix 3

Yearly growth on government securities

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	-34.27%	-4.66%	108.93%	-3.36%
INVESTMENT	0	-2.63%	29.45%	29.10%	-3.11%
BOK	0	-9.49%	23.84%	-12.28%	-9.38%

#### Appendix 4

Yearly growth return on government securities

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	-21.63%	-13.81%	1.56%	50.07%
INVESTMENT	0	57.66%	45.75%	-4.76%	27.39%
BOK	0	-3.16%	29.91%	21.23%	-38.70%

#### Appendix 5

Yearly growth on shares

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	23.15%	0.73%	109.89%	39.23%
INVESTMENT	0	27.66%	0.00	98.74%	70.04%
BOK	0	1.55%	0.00	10.36%	10.81%

#### Appendix 6

Yearly growth return on shares

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	4.39%	-1.47%	1892.32%	-90.01%
INVESTMENT	0	0	26.18%	-11.62%	290.61%
BOK	0	-96.78%	355.10%	119.73%	-69.80%

## Appendix 7

Yearly growth on bond

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	271.25%	-81.44%	198.98%	5.93%
INVESTMENT	0	0	0	0	0
BOK	0	0	9.80%	-15.77%	32.70%

#### Appendix 8

Yearly growth return on bond

BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	0	270.89%	-34.93%	-30.06%	41.89%
INVESTMENT	0	0	0	0	0
BOK	0	0	0	-15.41%	6.70%

#### Appendix 9

Deposit is directly taken from balance sheet of individual bank

Deposit					
Bank	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	14119032115	14586608707	19347399440	23342285327	31915047467
INVESTMENT	11524679645	14254573663	18927305974	24488855696	34451726191
BOK	7741645424	8942748598	10485359239	12388927294	15833737799

#### Appendix 10

Cash and bank balance is directly taken from cash flow statement of individual bank

Cash and bank balance

Bank	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	970486543	559380614	630238588	1399825851	2671141060
INVESTMENT	1226922910	1340480845	2336521396	2441514200	3754941568
BOK	782882971	740520482	728697092	1315903941	1440466943

#### Appendix 11

Paid-up capital is directly taken from balance sheet of individual bank

Paid-up capital

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Bank	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	491654400	491654400	491654400	491654400	689216000
INVESTMENT	295293000	587738500	590586000	801352600	1203915400
BOK	463580900	463580900	463580900	603141300	603141300

## Appendix 12

Loan and advance					
BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	8189992	10586170	12922543	15545778	21365053
INVESTMENT	7130125	10126055	12776208	17286427	26996652
BOK	5646698	5912579	7259082	9399327	12462637
INDUSTRY	6988938.3	8874934.7	10985944.3	14077177.3	20274780.7
Industry loan and advance of $2003/04 = \frac{5646698 + 7130125 + 8189992}{3}$ =6988938.3					
Industry loan and adv	vance of 2004/	05 = 591257	<u>9+10126055+10</u> <u>3</u>	0586170	
$= 8874934.7$ Industry loan and advance of 2005/06 = $\frac{7259082 + 12776208 + 12922543}{3}$					
$=10985944.3$ Industry loan and advance of 2006/07 = $\frac{9399327 + 17286427 + 15545778}{3}$ $=14077177.3$					
Industry loan and adv =20274780.7	vance of 2007/0	08 =124620	<u>637+26996652+</u> 3	21365053	

Append	ix	13
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Total investment					
BANK	2003/04	2004/05	2005/06	2006/07	2007/08
NABIL	5835948	4275528	6178533	8945310	9939771
INVESTMENT	3862483	3934188	5602868	6505679	6874023
BOK	2477409	2598253	6674711	2992433	3204067
INDUSTRY	4058613.3	3602656.3	6152037.3	6147807.3	6672620.3

Industry total investment of $2003/04 =$	5835948+3862483+2477409
2	3
=4058613.3	
Industry total investment of 2004/05 =	4275528+3934188+2598253
	3
=3602656.3	

Industry total investment of $2005/06 =$	6178533+5602868+6674711	
=6152037.3	3	
Industry total investment of 2006/07 =	8945310+6505679+2992433	
=6147807.3	3	
Industry total investment of 2007/08 =	9939771+6874023+3204067	
=6672620.3	3	

## Appendix 14

# AT A GLANCE OF SAMPLE BANKS

HEADINGS	NABIL	INVESTMENT	ВОК
Establish Year	12 <sup>th</sup> ,July,1984	27 <sup>th</sup> ,February,1986	12 <sup>th</sup> ,March,1995
Authorize Capital	160000000	2,00000000	100000000
Paid-up Capital	689216000	1203915400	606173300
Partnership With	Dubai Bank Ltd. Dubai	Indosuez Bank of France	Siam Commercial Bank of Thailand
Shares hold by promoters	70%	80%	42%
Shares hold by general public	30%	20%	58%
## CURRICULUM-VITAE

Name	:	Som Bahadur Thapa
Date of Birth	:	2039/07/22
Address	:	Kalikanagar, Ward no.11, Butwal
		Rupandehi
Sex	:	Male
Religion	:	Hindu
Nationality	:	Nepali
Language	:	Nepali & English
Contact no.	:	984702100, 071437229
E-mail	:	somthapa_2@hotmail.com
		Somthapa 2@yahoo.com

## Academic Qualification

S.N	Level	Passed Year
1	S.L.C	2005
2	10+2(management)	2058
3	B.B.S	2004
4	M.B.S	2065