CHAPTER-I

INTRODUCTION

1.1   General Background of the Study

In a simple word investment means to invest money to earn interest or to bring profit. Investment in its broadest sense means scarifies of current money for future money. 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 generally uncertain.

Investors are those people who invest their money in the capital market for the future earnings. Therefore they are known as the backbone of the capital market. Generally there are three types of investors in the capital market. They are:

1. Risk averter
2. Risk seeker and
3. Risk neutral

Risk averters are that investor who does not like any risk. Risk seekers are those who prefer riskier investment and risk neutral are those who want to invest on securities but do not concern about the risk. The investors having quality of risk averter, risk seeker and risk neutral are the nature of the investors that depends upon the investor's perception. The investor's perception plays a vital role on the investment at the capital market.

Securities market plays a very important role in the developing countries economy. As well all know that Nepal is a capital deficit economy need a huge amount of invest able money in productive sector for the rapid economic development. So the financial market becomes the important sector for the fostering the different productive activities in the economy.

The financial market consists of the money market and capital market. The trading of stocks takes place in the stock market. Nepalese stock market is very small as compares to other countries. Further Nepalese capital market is highly concentrated on the financial sector. Banking, non-banking, finance and insurance company occupy 90% of total market capitalization of the market.

Stock market is an institution, area and process where stocks and other securities are bought and sold continuously. Principally stock market that is the secondary market for quoted securities where primary market refers to the market in which newly created securities are sold by open offer. The trading of shares of stocks takes place in the stock

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market on one hand it directly provides liquidity to the investors who provides fund for the establishment of the production enterprises and on the other hand it encourage the savers to save more and more enterprising economic units to starts the productive ventures.

The major function of stock market is to provide steady and continuous market for purchase and sale of securities at a competitive price by importing marketability and liquidity. It is also a medium through which scattered savings and scare resources are transferred into productive areas that ultimately help to the economic development and industrialization of the country. The basic function of the stock market are to provide the allocate capital fund to the organization with profitable investment opportunities and to offer and avenue of liquidity for individuals to invest current income or borrow against future income and there by achieve their preferred time pattern of consumption. Because of investing involves uncertainty, capital market provides a means for transferring risk among the parties to these transaction. The stock market and economic activities move into similar direction. In the Nepalese economy the demand for and supply of money for investment in productive enterprises is low due to the absence of mechanism for transferring risk which in turn may be attributed to the absence of well developed stock market.

There are many parties involved in the transaction of securities in the securities market. Investors are one of the main parties among them fro whom the corporation acquires the fund. Investors are those people who invest their savings in the securities to take the risk and return. On the investment in other properties, investors cannot get dual benefits as from the investments in stocks. The investors get capital as well as dividend from investing in the stocks. There is only one securities market to liquidate the stocks in Nepal, which is NEPSE. So investors are keys to the success of securities market for the development of the economy.

There are many factors that should be considered while taking investment decision in the securities market. Some of these are the book value of the stock, risk and return trade off, company's future prospects, government rules and regulations, the direction of Nepal Rastra Bank. But because of the poor corporate governance and lack of timely information the investors depend upon some available experts for the analysis of the stocks price. Beside the individuals investors dominate the market whose speculative behavior make the price fluctuate. This makes the potential investors depends on the

whim and rumor in stock trading. So this research study will try to evaluate the investor's consciousness and the ways to be more effectively aware regarding the stock exchange.

1.1.1 Development of Stock Market in Nepal

The Concept of stock Market in Nepal is very new. It is in infancy stage through it begun with the flotation if shares by Nepal Bank Limited and Biratnagar Jute Mill in 1937 under the company act 1936. At that time, the participation on the ownership structure of the corporate sector was restricted mostly to the Rana family. Consequently the expansion of the capital market to the desire level had been restricted. No significant attempts had been made in fourth five years plan to reform the capital market. The establishment of securities exchange center (SEC) in 1976 was the first and most important attempt made by the government to develop the stock market. Initially the SEC limited its functions for trading the government bonds and national saving certificates only. Then it acted as an issue manager for corporate securities and started to list and provided market for the corporate stocks from fiscal year 1984/85 under the securities exchange act 1983. Thus the SEC served to promote the primary as well as secondary market for the government and corporate securities from fiscal year 1984/85. Although the growth of stock market in the national economy is still very low due to the negligible size of the corporate sector.

The incorporation of the securities board Nepal (SEBON) under the securities exchange act, 1983 and conversion of the SEC into the Nepal stock exchange (NEPSE) under the government policy in capital market reforms has greatly contributed to the development of primary as well as secondary market for the corporate securities were observed immediately after the incorporation of the SEBON and NEPSE for one year only. This has positive and immediate impact on the primary market. But after a year again downward trend in the primary as well as secondary market is observed and this phenomenon has been continuing still now.

1.1.2 Milestones in Nepalese Stock Market

1937- Floatation of shares by Biratnagar Jute Mills & Nepal Bank Limited.

1964- Introduction of Company act.

1964- First issuance of Government Bond

1976- Establishment of Securities Exchange Limited

1983- Securities Exchange Act enacted for the first time

1984- Securities Exchange Act became effective

1992- First amendment to the Securities Exchange Act

1993- Publication of Securities Exchange regulation establishment of Securities Board of Nepal conversion of Securities Exchange center into Nepal Stock Exchange Limited (NEPSE)

1994- NEPSE opened its trading floor in 13th January, directives issued for allotment of Securities.

1995- First amendment in the Securities Exchange regulations guidelines for registration and issue approval of securities.

1997- Second amendment to Securities Exchange Act Securities Investment Trust Act.

1998- Second amendment to Securities Exchange Regulation Securities Board discloses strategic plan for five years.

1.2   Focus of the Study

Investors are those people who invest their saving by buying securities for future benefits. Thus the role of the investors can be understood as a backbone of capital market. Similarly stock market is an important constituent of capital market. So both the investors and stock market is the life-blood of business and dynamic part of economy as well. Without focusing their current set up, we could not justify this research. Hence this research is mainly focused on the current security trade system in NEPSE. Beside it this research is also focused on investor's awareness towards the trade and transaction system of stock in NEPSE.

1.3   Statement of the Problem

One serious weakness facing Nepal's stock market is the low participation of investors in securities transaction. Majority of the investor's participation in the exchange is from Kathmandu valley. Since there is only one stock exchange in the country and it is located in the capital, and there is no another alternatives available, participation of the investors from outside the valley is very low. In the present trading system (centralized open out cry trading system) all brokers should gather in the trading floor of the Nepal Stock Exchange (NEPSE) to affect the deal. No electronic system has been developed yet that could help the investors to participate in the transaction electronically from different parts of the nation. It is not only a problem of implementation: the existing Acts are silent on the electronic trading system. What is being followed now here is a system borrowed from Sri Lanka. But though electronic trading system and central securities depository

system have been already introduced in Sri Lanka, Nepal is still following the same old system.

The current problems of the capital market are stated as follows:

1. Due to influence from external environmental factors, investors are not investing much on the stock market.

2. The sufficient and timely information relevant to the listed companies stock has not been regularly informed to the general public. So the securities investment is not so satisfactory popular to the general public in Nepal.

3. Yet there is no any consulting firm regarding capital market from where investors get proper information.

4. Some of the companies have issued artificial and misleading information while issuing the shares in the primary market.

5. There is lack of variety of securities available in the stock market, which discourages the investors to invest.

6. There is lack of transparency in the period of stock exchange.

7. There is not available of the risk and return components and level in the Nepal stock exchange centre.

8. There is not available of inquiry section in the stock exchange centre for the new investors.

9. Inadequate and insufficient legal provisions, market awareness problems and reliable information relevant to the capital market.

10. Comprehensive as well as unwell defined roles and responsibilities for various regulating authorities.

11. Lack of provisions regarding responsibility and accountability of the concerning regulating authorities.

12. Provision in securities Exchange Act as well as Regulations are not adequate and sufficient in order to systematize and regularize the present Capital market of Nepal.

13. Unwell-defined and inadequate role and guideline to the market intermediaries as well as regularity authorities.

1.4   Objective of the Study

The main objective of the study is to find out the major factor influence the investors investment decision-making regarding security trading. Besides it also aims to find out whether the investors are aware or not in the stock market.

The main objective of the study is as follows:

1. To know the stock transaction system in Nepalese stock market at present.
2. To examine whether the investors are fully aware or not in the share trading system.
3. To analyze and evaluate the risk and return of common stock of selected companies.
4. To give suggestion and recommendation to the concern person and office.
5. To make suitable recommendation for the improvement of the legislations.
6. To conduct primary survey on the opinion of investors of Nepalese stock market.
7. To provide suggestion and recommendations on the basis of major findings of the study to interested outside parties such as investors, customers (depositor as well as loan customers), competitors, personnel of the banks, dealers and market makers.
8. To analyze yearly risk and return of the sample commercial banks.
9. To identify the correlation between return of each commercial banks.
10. To determined the optimal portfolio, portfolio return, optimal weight and portfolio risk.
11. To determined stock price of the commercial banks.

1.5   Significance of the Study

There are various economic institution ploughed in the poverty alleviation program in Nepal such as capital market, banks, financial companies and institutions in private sector; NGO, INGO and various other interested national and international institutions. Among all capital market is one of the important sources for the economic development, untimely its potential investors is the biggest asset. Hence this study targets to explore the investors awareness in the securities market in Nepal and how far it leads to growth of stock market. This study is conducted to provide some information about the present level of investor's awareness in the Nepalese securities market. It focuses on the impact of present existing situation faced by the general investors while making investment

decision. Interested outside parties such as investors, customers (depositors as well as loan customers), competitors, personnels of the banks, dealers and market makers. This study will also be helpful for other researchers to the concerned fields to some extent.

1.6 Limitation of the Study

Any types of research work have certain limitation. So this research study will also carry some of the following limitations:

1. This study concern only on common stock trading on the primary and secondary market. The research is based on the investors of listed companies in NEPSE.

2. The study is based on the published data of only different commercial banks listed under NEPSE.

3. This study is done for the partial fulfillment of the requirement for the degree of master in business studies.

4. This study will be based on the secondary data which have been obtained from annual reports of concerned joint venture commercial banks and booklets, newspapers, magazines, books, security exchange, journals and bulletins of Nepal Rastra banks etc.

5. This study period has been covered for 5 years (five) from year 2003/2004 to 2007/2008.

6. Only those factors like EPS, DPS, MPS, Cash and Dividend analysis, standard deviation, coefficient of variation, and Stock dividend will be considered in this study.

    * Data and information constraint:

    Data constraints are the common phenomenon in any study. In this study data and information are collected from questionnaire, discussion and by review of relevant literatures.   Thus it may bias to some extent.

    * Time constraints:

    This study is completed within very limited time in order to be considered in a predetermined academic period.

1.7 Organization of the Study

This study has been organized into five chapter's viz. Introduction, Literature review, Research Methodology, Data Presentation, Interpretation and Analysis and summary conclusion and recommendation. The title of each of these chapters as follows:

Chapter one   - Introduction

Chapter two   - Review of literature

Chapter three   - Research methodology

Chapter four   - Presentation and analysis of data

Chapter five   - Summary, conclusion and recommendations.

The first chapter: Introduction is the first chapter where subject matter is introduced, the problem is defined, and objectives, limitations and organization of the study have been presented.

The second chapter: Review of Literature deals with conceptual framework of the study. The related studies, books, journals and unpublished theses have been reviewed that have been supporting view and coherence with the present study.

The third chapter: Research Methodology explains all the methods of collection and analysis of data. It comprises research design, population and sample, data collection procedure and methods of analysis and presentation.

The fourth chapter: Chapter four is the main body of the study that includes data presentation, interpretation and analysis. The chapter analysis the primary data collected from individual investors to adjudge their awareness on different aspects of the stock market. The secondary data are analyzed in terms of risk and return, risk diversification and portfolio construction.

The fifth chapter: In the last chapter the statement of all four preceding chapters has been summarized and the study is concluded with major findings. The suggestion with the package of recommendation to improve efficiency of the investors and stock market has been presented.

A bibliography and appendices are enclosed at the end of the study.

CHAPTER-II
REVIEW OF LITERATURE

Review of literature is a way to discover what other research in the area of our problem has uncovered. It is also a way to avoid investing problems that have already been definitely unanswered (Panta, 2002, p-34).

The review is done on the topic INVESTORS CONSCIOUS IN NEPALESE STOCK MARKET. Review of literature is conducted separately through review of article, books, journals, dissertations, company prospectus etc.

2.1 Conceptual Review

The success of every investment decision matters more than the investment itself. "Making sound investment decision requires both knowledge and skill. Skill is needed to evaluate risk and return associated with investment decision knowledge is regarding the complex investment alternatives available in the economic environment".

Investment should be based an information lack of this result in disaster. For the knowledge, the investment process can be financially rewarding and exciting. Investor should select most suitable alternatives among various alternatives. Thus conscious investor should consider some factor in choosing among investment alternatives.

2.1.1 Introduction

Over time, stocks have proved to be good long-term investments. Bonds, while providing lower than stocks, are less risky. Often, the best investment for an individual is some combination of stocks and bonds that provides good returns at acceptable risks.

Stocks and bonds are basic financing building blocks, which help meet the financial needs of companies, governments, and investors. Business requires capital (money) to grow, and without capital from outside investors, a company's growth potential is limited.

Corporate business sells stocks and bonds to raise money.

Government agencies canal so raise money for operations and improvements by selling bonds.

Stock exchange is the heartbeat of much of the corporate, governmental and public financial activity in the world today. Stocks and bonds are bought and sold in these open markets under careful regulation, which protects companies, governmental agencies and individuals alike. Such markets are essential in raising financial capital for our economy.

Investors buy stocks and bonds with the intentions of getting back their entire investment and making a profit. This booklet presents basic information about these familiar

financing building blocks and discusses the pertinent issues about investing in stocks and bonds.

2.1.1.1 Capital Market: The capital market experienced an impressive growth in the last two years. Improvement in the peace and security situation, the central bank policy to increase the paid-up capital of banks and financial institutions, market reform, institutional and infrastructural developments related to the capital market has contributed to this growth. The activities of both the primary and secondary markets have been explained in detail as follows:

2.1.1.2 Primary Market: Primary market is the market for new securities is called primary market. The security market transfers the funds from savers to investors throughout the primary market. Hence, the transfer of the security issued for the first time take place in this market.

The main function of primary market is to make the financial capital available to make new investments in building, equipments and stock of necessary goods. The investment bankers perform the role of an expert in issuing new securities. These bankers make available advice to the business firms regarding the nature of security, mature, and interest rate and underwrite the issue of securities. The commercial banks are not directly involved in this market. Usually, the business firms make the private placement of securities. The direct sale of securities by the issue of securities to the buyer without underwriting is called private placement of securities.

In the FY 2007/08 the Security Board of Nepal (SEBON) granted permission to 71 companies for mobilization of Rs.11.56 billion while 33 companies got approval to mobilize Rs.2.75 billion in the preceding year. The number of capital mobilizing companies and amount of capital mobilization has risen by 132.25 percent and 320.36 percent respectively. Following chart shows the capital mobilization trends in the last five years in the primary market.

2.1.1.3 Secondary Market: Secondary market is the market for the existing securities. Second hand securities are bought and sold in the secondary market. Its main function is to provide liquidity to the purchases of securities. This market remains as a centre to convert stocks, bonds, and other securities into cash immediately. Since the secondary market provides liquidity to the securities, the investors are encouraged to buy securities in the primary market.

The transactions are more in secondary market than in primary market. But the markets involve in mutually closely related way. For instance, if the interest increases or the price of securities increase in secondary market, the interest and price of primary market also increase because of the investment transfer from one market to another according to price and return.

The Nepalese stock market continued to expand in the FY 2007/08 too. With the restoration of peace and a subsequent boost in investors' confidence, major indicators of the share market grew tremendously. Almost all the major indicators of the secondary market like amount of shares traded, number of listed shares, the number of transactions, annual turnover, total market capitalization of listed shares, market capitalization and GDP ratio, turnover to market capitalization and the GDP ratios all increased in the review period.

Secondary market can be divided into two parts;

a) Organized stock exchange

b) Over the counter Market (OTC)

2.1.1.3.1 Organized stock Exchange:

"The essential function of the stock exchange is to provide active market for corporate shares and other listed securities. The stock exchange plays an indispensable role in mobilizing funds in capital market. The various virtues governing stock exchange include enhanced marketability of securities, rational allocation of inventible funds, facilitate economic growth and wealth generation and proper maturity, liquidity and diversification of investment. The growth of the capital market through the vehicle of stock exchange the brought a flow of the information about various securities in the additional to the sound listing criteria that prove worthwhile to the investors" (Shrestha,1992:15)

Stock exchanged are voluntary associations of members who come together for the purpose of buying and selling for the general public, the securities of the great companies. Only listed securities traded in the exchanges and are bought and sold by auction. Since the members of the exchanges have branches throughout the country, the stock exchanges are truly a national market in which virtually any open may participate issues, and this liquidity is an essential is ingredient in the capital formation process of the economy.

2.1.1.3.2 Over the counter Market (OTC)

OTC is for those securities, not listed on the stock exchange. When company first sells its securities to the public, the securities are traded in the CTC. IT includes all transactions in securities other than that taking place on the stock exchanges. It practices however the term is usually limited to the activities of dealers and brokers specializing from very large houses doing an international business to one person firm that traded only in the local markets.

NEPSE started the over-the-counter (OTC) market from 4 June 2008 to give shareholders a chance to sell or buy the shares of companies that are de-listed and that are not listed on NEPSE for failing to meet the listing criteria. The shares of 43 companies can now be traded in the OTC market. But as per the request of Nepal Rastra Bank NEPSE has decided to restrict the shares trading of Nepal Bank Limited in the OTC, since shares trading of Nepal Bank Limited will have a negative impact on the ongoing Financial Sector Reform Project. In the OTC Market one does not have to go to brokers to trade shares; one can come to NEPSE and trade, paying a commission of two percent for transactions of up to Rs.25,000, 1. 5 per cent for transactions of above Rs.25,000 but under Rs.5,00,000, and one per cent for transactions of over Rs.5,00,000. However, no transaction has been made until the end of the fiscal year.

2.1.2 Understanding Stocks

Selling shares of stock to investors is a practical way for corporations to obtain long-term funding for projects such as financing a new factory or designing and testing a new product. Buying stock allows individual investors to participate in the growth of country and foreign corporations and to benefit by sharing in a company's profits.

Corporations sell fractions of the company's ownership to investors for which investors pay cash. The investors who purchase ownership of the company have their names and ownership record in the corporation's stock book. A company's investors, who have purchased pieces of company ownership, share in company profits from the receipt of cash dividends or by the increase in the value of stock. The investor's ownership is known as "share". The investors are called "shareholder". They may also receive stock certificates showing the number of shares owned.

Money from stock sales is known as "equity" financing. Equity differs from debt financing because money from stock sales represents long-term financing which the company does not have to repay. The company benefits by not having to repay money it

receives from the sales of stock and investors benefits by participating in the growth of the company and sharing in its profits for as long as they own the stock.

2.1.3 Stocks as an option

Corporations sell two different kinds of stocks, which provide investors with significantly different benefits. The word "common" is used to describe the more widely recognized stocks. "Preferred" stocks are not as widely known. Both raise money for the corporation, and both are considered "equity" financing. Their differences are found in the "rights" each provides to the investors.

2.1.4 Common Stock

Common stocks stand for the pieces of ownership in a company ("shares") which give the investors legal rights. Common stockholder:

1. May Receive Dividends: The corporation's board of directors may vote to share all or a portion of company profits with its shareholders in proportion to the number of shares each owns. Dividends are not paid if the company is not profitable or if the board of directors decides to pay for expansion with the profits.
   Corporations are not legally required to pay dividends on common stock.

2. May share in Growth and Increased Value: Stock is ownership of the company. Stock ownership allows investors to share in the increased value of the company if it is successful. Likewise, if the company performs poorly, the value of an investor's shares is likely to drop. Investors expect their largest rewards from appreciation in the price of their stock, but there is no guarantee that the value of the stock will always increase.

3. May Transfer Ownership: Common shareholders are able to freely sell or give their stock to others unless they own stock in "private" companies, which may resale restrictions. Ownership of investor's shares is easily transferred in the corporation's stock book.

4. Have Right to Information: Common shareholders are entitled to receive annual reports, which provide important financial and management information pertaining to the company's operations.

5. Have Right to Vote: Common shareholders have the right to vote at shareholder's meeting in person or absentee using a proxy (an instruction on how a vote is to be cast).

6. Is Junior in Rank: Dividends are paid to common shareholders after interest is first paid on all debts and dividends are paid to preferred shareholders. If the company is liquidated creditors, bondholders, and preferred shareholders all must be paid before any remaining money is distributed to common shareholders.

There are stocks in many different U.S. and foreign corporations and all common stocks generally share these six attributes. However, investors should still insure that these attributes are present before buying any stock.

2.1.5 Preferred Stock

Investors may want regular payment of dividends and better safety of principle than common stock provides. Some corporations sell "preferred stock" to give investors more predictable dividend returns and more stable prices of their shares. Preferred stock ownership rights include:

1. Priority on Dividends: Preferred shareholders receive their dividends after interest on debt, but before dividends are paid to common shareholders. In liquidation, creditors are paid first, then preferred shareholders are paid and common shareholders are paid last.

2. Fixed Dividend: Preferred stock dividends are generally paid at a fixed rate similar to interest on a bond or a certificate of deposit. Although the rate is fixed, preferred dividends may be decreased or omitted at the discretion of the company's board of directors (unlikely interest on bonds). If profits are insufficient to pay both preferred and common dividends, the dividends will be paid to prefer shareholders before common shareholders receive anything.

3. Cumulative Dividends: Should the directors not pay the full dividend, the omitted dividends are recorded and must be made up before any common stock dividend may be paid.

4. No Voting Rights: Since preferred shareholders are shown preference on dividends, most companies do not allow preferred shareholders to vote at shareholder meetings. In rare circumstances, preferred shareholders may be allowed to vote after dividends have not been paid for a period of time.

5. Participates in Growth and Increased Value: Preferred stock grows in value as the value of the company increases; however, preferred stock has a more modest price appreciation potential than common stock.

6. Ability to Transfer: Preferred shareholders may freely sell or give their stock to others. This assumes, of course, that a buyer for the stock can be found. The ownership of the shares is easily transferred in the corporation's stock book.

7. Right to information: Preferred shareholders receive annual reports providing information about the company's financial and management performance for the prior year.

2.1.6 Assets Allocation

Asset allocation is the process of determining the proportion and selection of assets held in the portfolio. It is about making decisions regarding the optimal proportion of stock bond mix. So that it helps to gain maximum return in the proportion of stock bond mix. So that it helps to gain maximum return in the long run at low level of risk. Therefore, it deals with attaining the optimal proportions of investment from different assets categories. Individual assets are not taken into consideration while solving asset allocation problems. Risk and return statistics that are supposedly representative of different asset categories are analyzed.

2.1.7 Portfolio analysis with Negative weight

If an asset has a negative weight, two economic interpretations are possible. First, a negative weight can be used to represent a short sale. Second, a negative weight may indicate that the investor created a leveraged (or borrowed, or margined) portfolio by selling (or issuing) a security that has the same risk and return statistics as the asset with the negative weight.

2.1.8 Portfolio

A portfolio is a combination of investment assets. The portfolio is the holding of securities and investment in financial assets i.e. bond, stock portfolio management is related to the efficient portfolio investment in financial assets.

2.1.9 Objectives of portfolio Analysis

The portfolio manager's task is to select the investment weights that will result in dominant investments. Hereafter, dominant assets will be called "efficient portfolio' whether they contained one or more assets. An efficient portfolio, then, is any assets or combination of assets that has (1) the maximum risk at its level of expected return.

The objective of portfolio management is to analyze different individual assets and delineate efficient portfolios. The group of all efficient portfolios will be called the efficient set of portfolios. The efficient set of portfolio comprises the 'efficient frontier.'"

The efficient frontier is the locus of points in risk – return space having the maximum return at each risk class. The efficient frontier dominates all the other investments.

The portfolio manager starts with the risk and return statistics that were estimated by securities analysts. These input data are exogenous information that forms the basis for portfolio analysis. The portfolio manager's job is to analyze the risk and return data describing each investment candidate and determined which assets to buy, what not to buy, what not to sell short. The portfolio risk formula plays an important role in developing an optimal portfolio.

2.1.10 Buyer of Stocks

Stock ownership is very widespread among a variety of investors including individuals, Corporations, institutional investors (such as banks, insurance companies), mutual funds, and securities broker dealer firms.

2.1.11 Causes of Buying Stocks

Investors buy stocks as building blocks used in creating their financial portfolio. Stock offers investors the opportunity for their money to grow at the same rate as the company. Ownership of the stock in several companies provides an investors the opportunity for their money to grow at the same rate as the economy, which is made up of many companies. Therefore, owning stocks protects investors from the loss of purchasing power due to inflation. As prices rise due to inflation, company assets and revenues appreciate and investors' stock prices rise too. Unlike stocks, savings accounts and bonds return only a fixed amount and may not provide protection from inflation.

Stock prices do not always go up. Investors must be aware that stocks can go down in price if companies are not profitable. Successful investors invest in stock as long_ term investments. Over many years, gaining in the value of the stock usually make up for short-term price declines.

Stocks may also benefit investors by paying "stock dividends". Occasionally, companies may desire to promote their stock while conserving company capital. In such cases, a company's directors may give shareholders additional shares instead of cash dividends. The new shares have value, but the company's stock price usually falls slightly to adjust for the greater number of shares that will participate in the company's profits.

Investors occasionally receive stock splits. Stock splits reflect substantial growth in a company's stock price. In a split, the outstanding shares of a company are divided into more shares. A 2 for 1 split of one hundred shares presently owned results in two hundred

shares being owned after the split. Investors hold twice as many shares, and the price of each share is "split" to half its former price. Stock splits are used in a rising market to reduce the stock price down to an amount investors perceive as reasonable. Investors hope for a stock split, which reflects strong growth by the company.

2.1.12 Causes of Fluctuation of the Stocks Price

Chiefly, stock price reflects how profitable a company is. If a company loses money over a period of several months, the stock price will likely to fall. If a company is successful and has sustained earnings, the company's stockholders share in more money so the stock price rises to reflect greater investor returns:

Earnings are influenced by a variety of factors. These may be grouped into three categories.

1. Company Related: Market share, product position and potential, management, and cost of operation influence individual company earnings. An example is Chrysler, the automobile manufacturer. Its stock price declined sharply due to poor car sales and poor earnings. Subsequently, stock prices recovered due to better management, improved products and sales and better earnings.

2. Industry Wide: Foreign competition, technology, consumer perceptions, and price of raw material can influence earnings and stock prices of all companies within an industry. A good example is airline fare wars during which lower fares on all flights mean lower earnings for all companies in the airline industry. Stock prices for all airlines may fall as profits are squeezed.

3. Market Wide: Wars, high rates of inflation, monetary exchange rate fluctuations, and the national debt may influences prices of stocks in markets around the world. An example of stock price fluctuations in the market as a whole were seen in 1994 as unprecedented increases in interest rates caused stock prices in all industries to fluctuate.

Successful investors pay very close attention to the underlying factors of a company's profitability. They buy stocks, which have strong "fundamentals" such as a large market share for well-known products, sound management and strong history of corporate earnings.

2.1.13 Place of Stock Trade

Most investors buy stocks through financial middlemen. Stock markets rely heavily on individual investors, so every efforts is made to provide an easy, safe means for investors to buy stocks.

2.1.14 Brokers-Dealers Firms

Investors generally purchase stocks from securities broker-dealer firms, which buy and sell stocks for investors. When investors place an order to buy or sell stocks, the broker-dealer accepts their money and "fills" the customer's order from stock held in inventory or the broker may go to a securities exchange to "fill" the customer's order Broker-dealer charge a fee, called a commission, for buying and selling stock for investors. Commissions usually amount to a small percentage of the stock value purchased or sold. Since commissions are charged both for buying and for selling stocks, investors are generally better off holding their stock and not selling frequently. Unless stock prices appreciate very quickly, commission may offset any profits made over a short period of time.

2.1.15 Security Exchanges

Investors rely on the ability to buy and sell stocks easily and quickly. Securities exchanges, like the Nepal Stock Exchange (NEPSE), New York Stock Exchange (NYSE), The American Stock Exchange (AMEX) etc provides places where buyers and sellers of stocks get together to make trades. There are dozens of stock exchanges located in major cities around the world.

Exchanges maintain "liquidity" in the stocks they trade. Liquidity is the ability to sell when investors desire without wide price fluctuations. Exchanges help standardize prices of stocks throughout the world. Many safeguards are imposed by exchanges to prevent fraud.

2.1.16 Nepal Stock Exchange: Nepal Stock Exchange, in short NEPSE is non- profit organization operating under, Security Exchange Act, 2040. The former Securities Exchange Center was converted into NEPSE under the program initiated to reform the capital market. The basic objectives of NEPSE is to arrange marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through market intermediaries such as brokers, market makers and others.

The shareholders of the NEPSE are Nepal Rastra Bank, the central bank, his Majesty's Government of Nepal, Nepal Industrial Development Corporation and licensed numbers.

NEPSE has its own Board of directors to direct, control and monitor. It consists of 9 directors in accordance with the securities Exchange Act, 2040. HMG/N and different institutional investors nominate six director and two from the licensed members. The general Manager of the NEPSE is the Ex-Office director of the board.

The authorized capital of the exchange is Rs.Million. The issued capital is also Rs.50 million. HMG/N, NRB, NIDC, and the members subscribe Rs.34.91 percent and the members 0.60 percent on its capital.

NEPSE presently has 24 brokers and 9 issue managers and portfolio managers i.e. dealer secondary market.

NEPSE has 148 listed companies. Of these 5 companies are de-listed in the fiscal year 2007/08. Presently, 142 companies are in existence.

2.1.17 Dividend Reinvestment Plans

Many Companies offer their shareholders the ability to reinvest their cash dividends in additional shares of stock. This is an easy way for investors to accumulate more stock. Dividend earnings are credited to shareholders, but at the shareholder's option, the money may be used to purchase more shares directly from the company. Purchasing stock through a dividend reinvestment plan does not involve a securities broker dealer. The dividend is reinvested in company stock without payment of a commission. Some dividend reinvestment plans charge a free for selling shares held in the plan.

Dividend reinvestment plans may allow an investor to purchase additional stock directly from the company. No commission is charged for purchasing additional shares; however, purchases can generally be made only during certain periods.

2.1.18 Sources of Information

Successful investors research information about stocks before buying. Once they buy stocks, they review their stocks' performance regularly. Stock guides and quotations provide timely information.

2.1.19 Stock Guides

Stock guide provides financial information about the company, information about the company's business and the industry it serves. Guides may provide dividend information, current earnings and names of officers and directors, and high and low stock prices over the preceding weeks. Some stock guides rank or classify stocks giving investors an indication of earnings and dividend growth and stability.

Stock guides are available at many libraries, from broker dealer firms, and now through on-line computer services. Investors should never purchase stock without first reading what the stock guides have to say about a company's stock.

2.1.20 Quotations

Newspapers, television cable channels and computer on-line services all provides timely information about stock prices. Unlikely stock guides which provide lots of information on a weekly or monthly basis, quotations contain essentials information on a timelier basis usually listing the highest and lowest prices over the past weeks; the dividends amount; the number of shares traded; and the high, low and closing price for the day.

2.1.21 Selection of Stock

There is no single stock that is best. Depending upon a person's needs, there are stocks, which meets those needs and others, which would be entirely inappropriate.

2.1.22 Growth Stocks

Stocks whose prices are expected to appreciate are called growth stocks. These are usually modestly capitalized companies, which do not pay dividends because they are using profits to fund expansion. Investors look closely at the profit potential and earnings performance of growth stocks since earnings determine how much and how fast the stock price may grow, if at all.

2.1.23 Income Stocks

Income stocks are stocks, which pay dividends on regular basis. These are usually well-established companies with substantial earnings. The stock prices of these "cash cows" usually move slowly over longer time periods. Investors watch company earnings closely since dividends are paid out of profits, and declining earnings may force the company to reduce its dividend.

2.1.24 Blue Chips Stocks

These are stocks in top tier companies, which are very well capitalized. Thousands of shares in blue chip companies trade every day. Their stock prices tend to be stable and do not usually present the opportunity for rapid or dramatic price appreciation. While not all blue chip stocks pay high dividends, most pay regular dividends.

2.1.25 Small-Cap Stocks

These are stocks in companies which are modestly capitalized, but which are not yet top tier companies. Investment in small-cap stocks often involves higher risk to the investor than purchasing blue chip stocks because small-cap stock prices are generally more

volatile. Not all small-cap stocks have the earnings potential for rapid or dramatic price appreciation. Most do not pay dividends.

2.1.26 Penny Stocks

This is a category of stocks having a price of less than five dollars per share often trading only on computer "bulletin boards" or in publications referred to as "pink sheets". The term is often used to describe low priced stocks, which are of dubious quality. Limited financial information, if any is available, often reflects losses instead of earnings; lack of hard assets like cash and equipment; and lack of operations all make penny stocks very risky and truly speculative rather than predictable investments.

2.1.27 General concepts of Commercial Bank:

Commercial banks collect deposit from the public and the largest portion of the deposited money is utilized in disbursing loans and advances. Hence deposit covers a major portion in the Liabilities where as Loan and advances cover a major portion in the Assets side of the balance sheet.

As per commercial bank Act, commercial banks means banks which deals in exchanging currency, accepting deposit, giving loan or doing commercial transactions. Due to complexity in operation of modern banking, it is difficult to define the functions of a commercial bank.

The following are the functions of commercial banks in Nepal.

- Accepting various types of deposits manually or using electronic device.

- Lending money in various productive sectors.

- Letter of Credit, Guarantee, Bills and Remittance.

- Collection of Cheques and Securities.

- Merchant banking underwriting of shares and debentures, handling new issues etc.

2.1.28 Joint Venture Banks (JVB)

Joint venture banks are a made of trading through partnership among nations and also a form of negotiations between various group of Industries and traders to achieve mutual exchange of goods and services for sharing comparative advantage.

A joint venture is defined as "the joining of forces between two or more enterprises for the purpose of carrying out a specific operation (industrial or commercial investment production of trade).

2.1.29 Factors to be considered before Investing in Securities

Investors who want to invest their money in the stock first go to the exchange market. They invest their money by seeing prospectus of concern company and others public notice which are published by the company. While investment policies needed to be formed the investor needs to consider many factors to be consider in the investment planning decision.

Investing is all about making money by investing in the stock market rationally. If the investors are not well informed about the share of the company which he is buying or is not prepared by analyzing the company's both current and future prospects then he will hurt himself by investing in the share of that company. "Investing without first learning all you can about an opportunity is like running through an unfamiliar room with your eyes closed." Says Dina Ohman, Wyoming's secretary of state, "You're going to hurt yourself. People do not have to see the securities as only an alternative way to invest their money in." more than anything else, no one has anything to hang their hats on." What reason do they have to buy stocks?" The following things are basis for the investment to meet the criteria of stability and strength. Let's review the typical investments considered by most. The following are the criteria investors will apply to each investment choice:

1. Security of principal
2. Liquidity
3. stability of income
4. Strength (leverage)
5. Information
6. Cash flow
7. Mobility
8. Limited management requirements

2.1.30 How to make a good investment in the stock market

Investing in securities is like investing in a business. The objective is to get a good return. This could be either to get a regular income by way of dividends or to get a profit by way of capital appreciation of the securities or both.

An investor who is interested in getting regular dividends from the company must look at the company's dividend policy carefully. Where a company has not stated their dividend policy they could make an assessment of this by analyzing the companies past dividend record and its pattern of payment.

There are several ratios that may be used in investment analysis. Most commonly used ratios are as follows:

Calculating the dividend yield on the basis of the last annual dividend can give an investors an idea of what the percentage return he could expect by way of dividend (Dividend yield = Dividend per share/ Market price of a share x 100). The dividend cover is a guide to the company's financial background indicating the total dividends covered with respect to available earnings (Dividend cover = Profit/Dividends). Dividend payout ratio is also useful to ascertain whether the company is retaining sufficient funds for future development and growth. A high ratio indicates that a shareholder is receiving a large part of the earnings that the company is not retaining much by way of reserves. This may mean that a shareholder can not expect much by way of capital appreciation.

(*Dividend payout ratio = Dividend per share/Earning per share x 100*).

The earning per share (EPS = Profit of the company/ Total number of securities issued) may be calculated for the last five years and should ideally show an upward trend (or an overall trend that is continuing to rise). An increase in earning should ideally be accompanied by an increase in dividend when analyzed over a period of five years. The price earnings ratio indicates the expectation about the future of the company. It is a measure of investor confidence. Higher the PE ratio, the more popular the share.

(PE ratio = Market price per share/ Earning per share).

2.1.31 Aware of risks

All investors must be aware of the risks attached to investing in securities. The securities of a company could fluctuate in value due to the business risks as well as financial risks.

Business risk may arise from fluctuation of profits due to changes in demand (new and better products coming into the market, competitors increasing its strength, the overall economic activities) or supply (new methods of production, varying costs of labor or raw materials).

Financial risks can be measured by the return to shareholders and the probability of the company having to go into liquidation brought about by the inefficient use of borrowed funds or by borrowing more than what the company could service. The higher the

proportion of borrowed funds, the higher the capital gearing. This gearing ratio (gearing ratio = borrowed funds / total funds) must be considered along with the current ratio (current ratio = current assets / current liability). If this is also high then the risk is greater. If the company has not made profits, the directors will not be able to declare a dividend.

An investor may minimize the risks by making a fully informed decision. He could obtain the advice of his broker or else he could make a decision himself by reading the annual reports of the company carefully and in addition considering the following factors: economic factors of the country and future trends, performance of the industry, quality of the company's management, reputation of the board of directors, company's current trading position, strengths and weaknesses of the company and the business risks involved. An investor must not be guided by rumors.

To minimize risk, he may invest in securities of several companies, preferably operating in different industries.

Investors should invest in securities only after having considered all of the above factors. By investing in securities traded on the stock market there is a possibility of getting a higher return by way of dividends and/or capital appreciation. Therefore to increase your income, trading in securities on the stock exchange may be advantageous.

2.1.32 Ten Tips for Buying Stocks

1. Buy stocks from local broker-dealer. Be very careful if you cannot find a current quotation for the stock listed in the journal.

2. Be prepared for the price of the stock to fluctuate up and down. Do not buy stock if you cannot risk loss of any money.

3. Remember the rule of thumb, which states, "when interest rates are high, stock prices die, and when interest rates are low, stock prices grow!"

4. Keep in mind that investors demand higher returns from stocks when taking on higher risks. If you are told of a stock with a high profit potential, realize the stock probably carries a higher than normal amount of risk.

5. Consider the source of "hot stock tips." What may be a promising stock for one person may be too risky for another. Once you hear of the stock tip, chances are that everyone else has heard the same information.

6. Understanding a stock's risks before buying allows the investor to say, "No, I'll pass up buying this one." Buying stocks before their risks are known is like paying for a car you have never seen.

7. Research a stock's earnings, dividend history, and price range in a stock guide to determine whether the stock meets your investment needs.

8. Make sure there is an active trading market where the stock may be easily sold.

9. Buy stock with the idea of holding it for the long term. If its price appreciates rapidly, so much the better, but most stocks benefits investors over the long term.

10. Do not take on too much risk when buying stock. Invest wisely and be able to sleep well at night.

(*http:/saswy.state.wy.us/security/investor/stock/stocks.htm*)

2.1.33 Factors to be considered in choosing among investment alternatives.

There are various factors to be considered by the investors while making investment in different investment alternatives.

Investment objectives:

The purpose of the investment must be clear before the selection from among the available alternatives. Generally, most investments are undertaken to provide an increase in wealth. The higher the level of the desired wealth, the higher the return that must be received. An investor seeking higher returns must be willing to face higher level of risk. The investment purpose may be different according to time and the age of a person.

Rate of return:

The basic principle of investment is to secure maximum return with minimum risk. The expected rate of return from an investment alternative should be accurate. Since it is a forecast, there is usually some variability in the precise amount of the return. If the expected rate of return is not accurate then the investor may divert or change his investment into other alternatives.

Risk:

Risk is the variability of possible returns around the expected return of an investment. Each investor has his/her own attitude towards risk and how much he or she can tolerate. Since investments have risks associated with them, the investor must determine which combination of alternatives matches his or her particular risk tolerances.

Taxes:

Government tax policy is also a determining factor while choosing an investment alternative. It also depends upon the perception of different investors such that some may be interested in tax-exempt assets while other may be interested in high –yield but taxable

returning assets. The investors should also consider the tax laws that provides may deductions in the consumption of taxable income.

Investment horizon:

Investment period is also a factor in determining the investment alternatives. The return on investment is affected by the investment period. It affects not only the return and risk but also frequently affects the tax consequences associated with the return.

Investment Strategies:

While selecting an investment alternative, investment strategies should also be considered by an investor. Investment strategy includes three elements:

Investment selection

Under this element two procedures should be completed:

i.   Identifying appropriate investment alternatives or categories.

ii.   Selection individual securities or assets in each category.

Investment timing

Another important element to be considered while choosing investment alternatives is timing. It refers to purchasing assets just before it is likely to increase in value and selling the asset just before it is likely to decrease in value.

Diversification

Investment risk can be reduced by maintaining a portfolio or by including more than one alternatives or category.

2.1.34 Annual Trading Report on Fiscal Year 2007/08

2.1.34.1 Listing and De-Listing of Companies: The number of listed companies in the FY 2007/08 reached 148 with the listing of 13 new companies. However, the number of listed companies at the end of the fiscal year came down to 142 with the delisting of five companies and merger of two. De-listed companies have been either already closed or have not held annual general meetings or have not audited their results for more than two years. Altogether 0.17 million unit shares amounting Rs.174.91 million have been de-listed during the year. At the end of the FY 2006/07 there were 17 companies listed under the commercial bank group. Similarly, there were 23 companies in the development bank group, 17 companies in the insurance group, 55 companies in the finance group, 18 companies in the manufacturing and processing group, 4 each in the hotel and trading group, 1 in other group and 3 in the hydropower group. During the year, a total of 7.49 million units of ordinary shares amounting Rs.749.40 million, 38.45 million units of rights shares amounting Rs.384.56 million, 18.69 million units bonus shares amounting

Rs.1869.73 million were listed for trading. With the listing of these shares the number of listed securities other than corporate and government bonds reached 321.13 million units in the FY 2007/08. This is an increase of 31.9 per cent, from 243.50 million units in the previous year. The paid-up value of listed shares reached Rs.29.46 billion during the FY 2007/08, which rose by 35.50 percent over the previous year. Likewise, for the first time 2 million units of convertible preference shares amounting Rs.200 million were listed during the review period.

2.1.34.2 Classification of Listed Companies: NEPSE has classified 71 companies under the 'A' category on 8 February 2008 while there were 66 companies under this category last year. Nine new companies comprising Nepal Insurance Company, Annpurna Finance Company, Everest Finance Company, Prudential Bittiya Snasthan, Bhajuratna Finance and Saving Company, Chimek Vikas Bank, Business Development Bank, Sanima Vikas Bank and Sahayogi Viksa Bank have been upgraded from category 'B' to 'A' and four companies namley Paschimanchal Development Bank, Prudential Insurance Company, Union Finance and Fewa Finance have been demoted to 'B' category owing to their poor performance. Companies earning profit consecutively for three years with at least 1000 shareholders and the paid-up capital of Rs.20 million are listed under category 'A'. Above chart shows an increase in the number of companies classified under 'A' category. There were 43 companies classified as category 'A' in the FY 2003/04. This number reached 71 in the FY 2007/08: 12 commercial banks, 8 development banks, 11 insurance companies, 38 finance companies and one each company from the hydropower group, and the manufacturing and processing group. Companies classified under the 'A' category occupied 55.8 percent of the total paid-up capital, 50.9 percent of the total listed shares and 79.4 percent of market capitalization.

Criteria for the classification of the listed companies per listing Bye- laws 2053.

1. The paid up capital of the company must be at least Rs.20 million.
2. The no. of common shareholders must be at least 1000.
3. The Company must have made the public flotation as per bye-laws 9(ka) sub bye laws(4) .
4. The company must be in profit since last three years.
5. The book value per share must not be less than its paid up value.
6. Submission of the financial statement within six months from the closure of the fiscal year.

2.1.34.3 Market Capitalization:

The total market capitalization of listed shares almost doubled to Rs.366.24 billion during the review year. The central bank's directive to increase the capital base of banks and financial institutions has a major impact on the market value of listed shares. Most of the companies opted to issue bonus and right shares to increase their capital base, which attracted lots of investors. With the steep increase in market capitalization, its ratio to GDP went up to 44.3 percent this year. It is a notable increment over previous year's 29.8 percent level. In terms of market capitalization, the commercial bank sector again dominated the stock market. The market capitalization of the commercial banking group touched Rs.259.55 billion in the FY 2006/07, which is 72 percent of the total market capitalization. Hydropower companies occupied 7 percent of the total market capitalization. Similarly, shares of finance companies, insurance companies, development banks, manufacturing and processing, hotels occupied 10 percent, 3 percent, 5 per cent, 2 percent and 1 percent of the total market capitalization whereas others and trading each occupied less than 1 percent.

2.1.30.4 Indices: Due to a whopping increment in the share prices of banks, financial institutions, hydropower companies and development banks, the NEPSE index increased notably over the year. The restoration of peace, an improvement in listed companies' financial performance and, most importantly, the central bank's direction, dated 26 March 2007, to double paid-up capital for banks and financial institutions contributed to a remarkable increment in share prices and subsequently the stock market indices. The stock market opened with the NEPSE index of 683.95 points at the beginning of the FY 2007/08 and ended with 963.36 points during the year. The year on year NEPSE index increased by 40.9 percent. It reached the high of 1064.09 on 17 December 2007 and the low of 677.98 on 18 July 2008. Of the NEPSE Index, banking sub-index went up by 181.39 points to 985.65 (which is also the highest point) during the year. The banking sub-index measures the transactions of companies listed under commercial bank group. It touched the lowest point of 759.67 on 31 July August 2007. The twelve-month standard deviation stood at 110.8 in mid-July 2008 compared to 87.4 a year ago, reflecting an increased volatility in the stock market. The sensitive index, unveiled from 1 January 2007, which shows the share price movement of the companies categorized under Class A

reached 253.72 point at the end of the fiscal year registering a rise of 44.9 points. It recorded the low of 172.19 on 30 July 2007 and the high of 275.21 on 19 December 2007.

2.1.34.5 NEPSE Converted to Profit Seeking Entity

The 26th annual general meeting (AGM) of NEPSE held on 23 May 2008 has decided to convert the organization into a profi t seeking entity. The Company Registrar Offi ce approved the decisions made at the AGM. The approval allowed NEPSE to turn itself into a profi t seeking company, change its board of directors and increase its capital. Accordingly, NEPSE's authorized capital increased to Rs 160 million from Rs 50 million. Likewise, the paid-up capital was raised to Rs 50 million from the present Rs 34.9 million. Similarly, the structure of NEPSE's board was made more professional and representation having confl ict of interest has been removed from the board. And there are no representatives from stock brokers and the Securities Board of Nepal on the board.

The AGM also passed the decision to name the company as "Nepal Stock Exchange Limited" both in Nepali and English.

2.2 Review from Related Studies

2.2.1 Review of Articles and Journal

The various international and national article and journals related with this topic have been reviewed in this section.

Ning Zhu in his article "The Local Bias of Individual Investors" investigates individual investors' bias towards nearby companies. "Various measurements show that individual investors exhibit significant bias towards the companies that are close to their residences. Our sample individuals exhibit a stronger home bias than the mutual fund managers in Coval and Moskowitz (1999). Investors' holding foreign securities exhibit significantly weaker local bias than those not holding foreign securities, suggesting that international home bias and domestic home bias is correlated. Unlike institutional investors' choices, individual investors' local bias is less related to advantageous information. Investors with stronger local bias do not outperform those with weaker local bias. Information such as accounting number has less impact on the individual investors' local bias than on that of institutional investors. Instead, individual investors' local bias is negatively related to the advertising intensity of companies. These findings cast doubts on the hypothesis that advantageous information drives individual investors' local bias. Instead, they support that investors tend to invest in companies with which they are familiar even though such

familiarity isn't particularly helpful to their equity investment. Behavioral theory on decision heuristics and the mechanism of advertising can explain part of puzzle.

Evidence from investors' response to earnings announcement over additional support to the behavioral hypotheses. Local investors cannot predict earning surprises better than remote investors, which contradict the advantageous information explanation. Rather, local investors are more responsive than remote investors to the same earnings surprises after earnings announcement. Investors' overreaction to information on local companies can, in part, explain their tendency to invest locally. Results in this study show that investor behavior varies significantly across investor classes, which motivates future research on the impact of investor clientele upon asset prices (Barberis, Shleifer and Wurgler, 2002). It is also important to examine whether investors respond directly to the same information under other circumstances and to incorporate such phenomena into future theoretical frameworks"(Zhu, 2002).

Tuomo Vuolteenaho, attempted to know what drives the firm level of stock return? He used a vector auto regressive model (VAR) to decompose an individual firm's stock return into two components: change in cash flow expectation (i.e. cash flow news) and change in discount rates (i.e. expected return news). From the research it was found that "The VAR yields three main results. First firm level stock returns are mainly driven by cash flow news. For a typical stock, the variance of cash flow news is more than twice than have expected return news. Second, stocks to expected returns and cash flows are positively correlated across firms, while cash flow news can largely be diversified away in aggregate portfolio" (vuolteenaho, 2002) .

In securities market, the feedback is often slow and noisy. There may even be a trade off between speed and clarity of feedback where by short term traders get quicker, but noisier, feedback, and long term traders receive a clearer feedback but must wait for it. This paper looks at what happen in financial market when people are confidence and concluded that overconfidence is costly to society. Overconfidence traders do not share risk optimally, they expand too many resources on information acquisition and they trade too much. These are dead weight losses. Overconfidence increases trading volume and market depth, but decreases the expected utility of overconfident traders. An overconfidence trader increases volatility, though overconfidence market makers may dampen it. Price taking traders, who are overconfidence about their ability to interpret when there, are many overconfident traders, market, and trend to under respect to the information of rational traders. Under- reacts to abstract, statistical and highly relevant

information and overreacts to salient, but less relevant information. Like those who populate them, markets are predictable in their biases (Odean, 1998).

Jonathan B. bark, Richard C. Green and Naik Vasant in "Optimal Investment Growth Options and Security Return" say "As a consequence of optimal investment choices, a firm's assets and growth options change in predictable ways. Using a dynamic model, we show that this imparts predictability to change in a firm's systematic risk and its expected return. Simulations show that the model simultaneously re produces (a) the time series relation book to market ratio and assets return, (b) the cross sectional relation between book-to- market, market value and return, (c) contrarians effects at short horizons, (d) momentum effects at longer horizons and (e) the inverse relation between interest and market risk premium" (Berk, Richard and Vasant, 1999).

M. Angeles de Fructos and Caroline manzano 'Risk aversion, Transparency and market performance', concluded that "using a model of market making with inventories based on Biais (1993), we find that investors obtain more favorable execution prices, and they hence invest more, when markets are fragmented. In our model, risk averse dealer use less aggressive price strategies in more transparent markets (centralized) because quote dissemination alleviates uncertainty about the prices quoted by other dealers and hence reduces the need to complete aggressively for other flow. Further, we show that the move toward greater transparency (centralization) may have determinable effects on liquidity and welfare" (Angles and Manzano, 2002).

"If a man loses his money in the stock market it is almost always because of his greed, stupidity or gullibility. It is certainly never the fault of the exchange, and it is very rarely the fault of his broker" (Palat, 1991).

"These days the interest of investors is gradually fading away. Investors have been discouraged with the shares market running at a snail's pace. There is no room for satisfaction for investors. Although the country has adopted liberal market polices to receive the economy, it has been applied into concrete actions in Nepalese context. Brokers have been reporting since long about from government. The government has been able to regulate the companies, and the corporate culture is also not being developed among companies, brokers observed" (Shaky, 1997).

A research was done by Radhe Shayam Pradhan in the topic "Stock market behavior in a small capita market: a case of Nepal". "The overall study of his research suggests that profitability, liquidity, leverage, assets turnover and interest coverage are related to dividend payouts. The study is based on pooled cross sectional data of 17 enterprises

whose stocks are listed in stock exchange center and traded in the stock market"(Pradhan,2003).

Another article written by Pradhan in the topic: The efficient market hypothesis and the behavior of shares prices in Nepal. "The current market price of share in Nepal is useful to make buy and sell decision, to predict future average return, and to predict future prices. The main factor affecting share price as perceived by the respondents are dividends are dividends, retained earnings, bonus shares and right issue. The share prices have been found more volatile then expected dividends. Similarly, publicly available information is useful in identifying over or undervalued securities. Nepalese investors are not really indifferent towards makings or non makings of information public." Management review" (Pradhan, 2004).

"The regulators should think of understanding significant measures for upgrading the quality and contents of disclosure standards that helps in promoting the capital market in the country. Efforts should be made for encouraging the listed companies to comply with legal provisions such as submitting the financial reports timely, conducting the annual general meeting timely, making access to price sensitive information in the prospectus, need for having good corporate governance and ensure compliance of the listing guidelines and securities market regulation" (Shrestha, 2005).

"Being a single stock exchange market, NEPSE must focus on how to bring in-house reform, to educate investors and regulate and supervise its own members. NEPSE should facilitate to strength the governance of the listed companies, to help enhance public awareness about opportunities and benefits from listing. To educate people on the role of capital market in the economy together with importance of long term saving and stock market for this, NEPSE can develop at least, a medium to long term plan on the concept of subsidiary/ join venture participation with educational institutes, newspaper, journals, radio, television etc. to motivate and educates people on capital market through audio and visual media can be effectively used for the success of stock market. Similarly it is the main responsibility of NEPSE to organize regular training, seminars, workshop, and interaction programs for its employee, brokers' market makers, investors and listed companies on various issues like investment principle, governance ethical guidelines, code of conduct etc" (Paudel, 2005).

 "These evidences of the study would question the efficiency of Nepal stock exchange; however they are not necessarily embarrassments. This may be also due to market imperfections. The index used for this study encompasses companies, which trade during

that particular day from the period (February 1, 1995 to January 31, 2004). Such a small sample period may mislead the findings of the study. In addition the effects of Maoist insurgency lasting for nine years that caused politically uncertainty and lack of confidence among the investors should be undertaken not only to conform the results of the present study but also to investigate microstructure and operational procedure of Nepal stock exchange. Another fruitful area of research is to investigate whether reported anomalies are valid for individual shares or not. Further whether a trading strategy based on these "seasonality's" is profitable out of transaction costs or not should also be investigated" (K.C. and Joshi, 2004).

2.2.2 Review of Previous Dissertation

Thesis entitled "Public Response to Primary Issue of Share in Nepal" submitted by Laxman Pandey was objectively conducted to analyze the pattern of public response to shares and concluded that public response is high due to lack of opportunities for investment in other fields. Despite this, public are attracted towards shares then other sectors, basically to increase their value of investment, dividend, capital gain or bonus share. Due to delay in allotment, refund of money delivery of certificate and listening of shares in the stock exchange, people are starting to lose confidence. Some companies have not been listed even after the prescribed time period. For example Oriental hotel limited has not been listed even after 8 months of having closed its issue. He also found that the dynamism of the stock market has been greatly reduced by the domination of the long term shareholders, who prefer holding the shares with hope of increasing their wealth. This can be justified by small number of shares that are traded on the stock market. Even though this reduces the dynamism of the stock market. The investors have been very few rather no alternative to holding shares (Pandey, 2001).

Thesis titled "Current Status and Problems of Stock Market in Nepal" submitted by Rekha Pant, concluded that investor's confidence in Nepal stock market relatively low because of the stock market volatility, low return on investment inadequate information, lack of financial markets instruments and investors knowing about the risk of stock market investment. Pant used only five years data starting from 1992/93 to 1996/97. She focused her study mainly on the secondary sources of data (Pant, 2000).

A thesis titled "Dividend Decision and Its Impact on Stock Valuation" submitted by Bishnu Hari Bhattrai was objectively conducted to analyze those variables such as profit, dividend, retained earnings, growth rate and other relevant variables to show the

relationship between the value and other ingredients affecting it. In his study the researcher had found out that the dividend payment is not regular in Nepalese companies. So there was negative correlation between market price of shares and stockholders required rate of return. Since most of the banking sector is managed by the foreign management companies under the technical and management contract so it may be the research subject to find out whether the investors are mainly focused on banking sectors mainly because of the dividend reason that is regular in this sector or there is more than that.

He also concluded that the market price is considerably higher then actual net worth in Nepalese companies. But Bhattrai had taken only ten companies (four banks, two insurance/finance companies and four manufacturing/ trading) sector and concluded that investors do not have adequate knowledge on how to evaluate value of shares before investing on it. Besides he found that investment policy is not disclosed to the shareholders of the organization and government is silent on inefficiency of companies and no legislation is passed regarding dividend. So he concluded by saying that investors have high perception of protection of their interest by joint venture companies established under foreign collaboration in comparison to other sectors (Bhattrai, 2001).

Another research has performed by Prasad Dangol in 2004 is entitled "A Study on Investors' Perception in Nepalese Stock Market". The main objective of his research is to "examine the impact on the stock market as per the change of investors' perception and to examine whether investors perception leads to growth of the stock market".

His study contributes to the importance of the investors' perception and shows the change of investors' perception impacts on the stock market and how the perception on investors leads to growth of the stock market. It shows that there is a negative impacted on the Nepalese stock market as per the changes of investors' perception because there has been a negative effect on the perception on investors. This is also a main cause of the negative growth of the stock market (Dangol, 2004).

CHAPTER-III
RESEACH METHODOLOGY

This chapter relates to the overall approach to the research process. Research methodology is the way to solve a research problem systematically. It describes the methods and process followed in the entire research process. Hence this chapter deals with the method and process applied for this research study. This study covers quantitative methodology in a greater extent and also uses descriptive methods based on both technical and logical aspects. On the basis of historical data, different financial and statistical tools are used for the analysis of different variables. Component of research methodology are described as follows.

3.1   Research Design

Generally research design means definite procedure and technique which gives to study and provide ways for research viability. It describes the general framework to collect and analyze the data. To achieve the objective of the study, descriptive and analytical research design has been used. Some financial and statistical tools have been adopted to evaluate awareness of investors in Nepalese security market.

This research work is done on recent available historical data from various sources covering a period of 5 years, i.e. from 03/04 to 07/08. It deals with the common stock of the companies as research on the basis of available information.

3.2   Data and Information

The data for the study is collected via scheduled questionnaire survey and discussion with respondents. Similarly, various information has been collected through desk research of various literatures.

3.3   Nature and Sources of Data

The required data for the study are collected from both primary and secondary sources. Secondary data needed for the study are collected from different publications of NEPSE and SEBO/N and selected companies. Primary data are collected by means of structured questionnaire and interview. The fifty individual investors from primary market and thirty individual investors from secondary market are asked to fill up the set of questionnaire. For the purpose of questionnaire and interview, the investors are selected randomly. The views of the official of NEPSE, SEBO/N and the selected companies and the brokers are also considered on the course of study through an unstructured interview.

3.4 Population & Sample of the study

The population for this research is infinite. For primary data, the numbers of investors within the country is the population of the study. Among all fifty from primary market and thirty from secondary market are as a sample.

Similarly for secondary data, there are 148 companies are listed in Nepal Stock Market Ltd., Which can be regarded as size of population for this study. It is not within the capacity of this study to include them all for analysis. Therefore the companies whose financial statements are available in NEPSE and whose current share price is high have been selected for this study. Population of the study is all the listed commercial banks of Nepal. According to BEBO/Nepal; there are 26 commercial banks operating in Nepal and among them only 17 are listed in NEPSE namely:

		NEPSE CODE NO
1.	NABIL Bank Ltd.	102
2.	Nepal Investment Bank Ltd.	103
3.	Standard Chartered Bank Ltd.	104
4.	Himalayan Bank Ltd.	105
5.	Nepal SBI Bank Ltd.	106
6.	Nepal Bangladesh Bank Ltd.	107
7.	Everest Bank Ltd.	108
8.	Bank of Kathmandu Ltd.	109
9.	Nepal Credit and Commerce Bank Ltd.	115
10.	Lumbini Bank Ltd.	114
11.	Nepal Industrial and Commercial Bank Ltd.	110
12.	Machhapuchhre Bank Ltd.	111
13.	Kumari Bank Ltd.	113
14.	Laxmi Bank Ltd.	112
15.	Development Credit Bank Ltd.	118
16.	NMB Bank Ltd.	117
17.	Siddhartha Bank Ltd.	116

Only five companies have been selected as a sample for this study out of total listed Companies in NEPSE. The sample is taken from banking sector which has

five years data. The name of the sample companies selected for the study is presented in table shown below.

Table No. 3.1

Sector wise selection of sample from the total listed companies

S.N.	Sector :- Type.	Name of Sample company:	Nepse code.	Nepse Code No.
1.	Commercial Bank	Nabil Bank Limited.	NABIL.	102
2.	Commercial Bank	HimalayanBank Limited.	HBL.	105
3.	CommercialBank.	Bank of Kathmandu.	BOK.	109
4.	Commercial Bank.	Standard Chartered Bank Limited.	SCBL.	104
5.	Ccmmercial Bank.	Nepal Investment Bank Limited.	NIBL.	103
6.	Stock Market Exchange.	Stock Market Exchange.	NEPSE.	101

3.5   Data Presentation and Analysis System

For the fulfillment of the objective of the study, I have gone through the primary as well as secondary data. The views of the concern officer of NEPSE are presented in descriptive manner. Similarly, the outcome came from the structured questionnaire is presented in quantitative manner. Lastly the collected historical data is presented numerically using different financial tools and techniques. In some extent, to clarify the all, I have presented different figures, graphs and tables.

3.6   Necessary Tools and Techniques for the Study

Different financial statistical tools have been used for the analysis of the collected data. They include:

3.6.1 Financial Tools:

Considering research objective, to analyze the impact of dividend on various key variables such as earning per share, dividend per share, dividend payout ratio price earning ratio, dividend yield and earning yield are considered. Following financial indicator tools related to objectives are also considered.

3.6.1.1 Market Price of Stock (P_t)

Market price of a share is the price of the stock on which, it can be traded on the market. The data provided by the NEPSE contains three types of market prices high, low, and closing. For the present study, closing market price i.e. the market price of the stock at the end of each fiscal year is taken into consideration.

3.6.1.2 Total Dividend (D_t)

Dividend is the reward for taking risk in investing in shares. The annual return will be provided in the form of dividend. Generally dividend is given in cash i.e. cash dividend (C_t). Sometimes dividend should be given in the form of stock, known as stock dividend or the Bonus share. Bonus share is given for increasing the paid up capital of the company. If the company declares cash dividend only, then the total dividend is equal to the cash dividend. But when there is the declaration of cash and stock dividend both, following formula will be used for the calculation of the total dividend.

In case of Stock Dividend:

Total Dividend for the year (D_t) = C_t + % of stock dividend x P_t

In case of "Right Share" issued at par

Total Dividend for the year (D_t) = C_t + % of right share (P_t – PV)

Total Dividend is calculated as

Total Dividend=Cash Dividend +Stock Dividend

3.6.1.3 Market Index (I_t)

NEPSE index is the market index of all the securities listed in Nepal Stock Exchange. Market indices are generally constructed to get the performance of the overall securities traded within a given time frame.

Market index is used to calculate expected return on market. For the calculation of return on market, closing NEPSE index of the particular year is considered.

3.6.1.4 Earning Per Share (EPS)

It is a type of ratio, which refers total earnings available to common shareholders or total numbers of outstanding common shares. It measures the profit available to the equity shareholders on per share basis. It reflects the earning power of a company. Higher EPS represents greater net profit.

3.6.1.5 Dividend Per Share (Cash)

Financial sound companies can distribute dividends to its shareholders. Higher DPS attracts investors to invest in shares of company and maintains goodwill in the market. It

is calculated is calculated on the basis of the par value and cash dividend is given in the percentage. The par value used in Nepal is Rs.100 and it is calculated as

Percentage of cash dividend * Rs.100

3.6.1.6 Dividend per share (Stock)

Stock dividend is always given in the percentage and which is calculated on the basis of current year market price (MPS). The current year market price of the year is used to find out Stock dividend per share in this research because the annual report of bank is used in the research. The bank declared stock dividend from current market price of the annual report of the bank.

3.6.1.7 Price Earning Ratio (PER)

This is a type of ratio, which indicates the price currently paid by the market for each rupee of currently reported earning per share. It can be calculated by using the following ratio.

P/E Ratio = Market Price per Share / Earning Per Share

3.6.1.8 Market Return (R$_m$)

Yearly return on market is the percentage increase in the NEPSE index. In other words, yearly market return is the average return of the market of the market as a whole. The yearly return on market is calculated as,

$$R_m = \frac{I_t - I_{t-1}}{I_{t-1}} \times 100\%$$

3.6.1.9 Expected Return on Market ($\overline{R_m}$)

Expected Return on market is the future return expected by the market. It is calculated here, by dividing the sum of market return of past years, divided by no.

$$R_m = \frac{\sum R_m}{N}$$

3.6.1.10 Yearly return on Stock (R$_j$)

Yearly return on stock is also known as single period rate of return. It is the rate gained by the investors after a period or year. The single period rate of return (Rj) is calculated by adding the change in the market price with total dividend and then dividing by market price of previous year as,

$$Rj = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}} \times 100\%$$

3.6.1.11 expected Return on Stock($\overline{R}_j$)

Expected return on particular stock is the future return expected by the investors of that particular stock. Expected return is obtained hereby dividing the sum of periodic it returns of past years by the number of periods or years.

$$\overline{R}_j = \frac{\sum R_j}{N}$$

3.6.1.12 Beta (ß)

It is an index of systematic risk. The systematic risk is the degree of sensitivity of stocks returns to market movements, which is also known as beta coefficient. It is a measure of variability of a securities rate of return in response to the volatility of the market rate of returns. Higher the beta, greater the sensitivity and relation to the market movement. Mathematically, beta is measured as;

$$ß_A = \frac{Cov.(r_A r_B)}{\dagger_m{}^2}$$

Where,

$ß_A$ = Beta coefficient of stock A

$Cov.(r_A r_B)$ = Covariance between the return of stock A and market.

$\dagger_m{}^2$ = Variance of market return.

Also Beta(ß)= (ρ * ß$_j$ * ß$_m$)/ ß$_m{}^2$

Where,

ρ =Correlation Coefficient

3.6.1.13 The Security market Line

The relevant risk for an individual asset is systematic risk(or market-related risk) because non-market risk can be eliminated by diversification. The relationship between an asset's return and its systematic risk can be expressed by the CAMP, which is also called the security market line (SML). The equation for the SML is

$R_i = R_f + [E(R_m) - R_f]B_i$

Where, R_i is the expected return for an asset, R_f is the risk-free rate (usually assumed to be a short-term T-bill rate), $E(R_m)$ equals the expected market return and B_i denotes the asset's beta.

3.6.1.14 Portfolio Return ($\overline{R}_j$)

Portfolio is a combination of two or more than two securities of assets and portfolio return is simply a weighted average of individual stock returns from which it formed. In case of two, it is expressed;

$$\overline{R}_p = W_A \overline{R}_A + W_B \overline{R}_B$$

Where,

$\overline{R}_p$ = Expected return on Portfolio so stock A & B.

W_A = weight of Stock A.

W_B = Weight of Stock B.

$\overline{R}_A$ = Expected Return on Stock A.

$\overline{R}_B$ = Expected Return on Stock B.

And $W_A + W_B$ are always equal to one.

3.5.1.15 Portfolio risk ($\dagger_P$):-

It is the measure of combined standard deviation of stocks held in portfolio with reference to individual stocks corresponding correlation contribution for case of two securities; it is expressed as;

$$\dagger_P = \sqrt{W_A{}^2 \dagger_A{}^2 + W_B{}^2 \dagger_B{}^2 + 2W_A W_B \dagger_A \dagger_B r_{AB}}$$

Where,

$\dagger_P$ = Portfolio risk

W_A = Proportion of stock A held in portfolio

W_B = Proportion of stock B held in portfolio

$\dagger_A$ = Standard deviation of stock A

$\dagger_B$ = Standard deviation of stock B

r_{AB} = Correlation between stock A & B.

3.6.1.16   Risk Minimizing Portfolio (W_A)

It is the proportion of stock that will minimize the possible unsystematic risk. Symbolically Risk minimizing portfolio can be expressed as;

$$W_A = \frac{\dagger_B^2 - Cov.(r_A r_B)}{\dagger_A^2 + \dagger_B^2 - 2Cov.(r_A r_B)}$$

Where,

W_A =Weight of proportion of stock A that minimize the portfolio risk of stock A & B

$\dagger_A$ = Standard deviation of stock A

$\dagger_B$ = Standard deviation of stock B

$Cov.(r_A r_B)$ = Covariance of returns of A and B

3.6.1.17   Portfolio Beta (S_P)

The beta of portfolio can be easily estimated using data of the individual assets it includes. Symbolically, portfolio beta coefficient can be expressed as follows:

$$S_P = \sum_{i=1}^{n} w_1 S_1$$

Where,

S_P = Portfolio beta coefficient.

w_1 =Proportion of the total rupees value represented by assets.

S_1 = Beta coefficient of assets.

3.6.2 Statistical Tools:

Following statistical tools used in the study are explained briefly in detail.

3.6.2.1 Simple Arithmetic Mean

Arithmetic mean or simply a mean of a set of observation is the sum of all observations divided by the number of observations. It is also known as the arithmetic average.

Arithmetic mean (Average) = $\dfrac{\sum R}{N}$

3.6.2.2 Standard Deviation ($_j$)

The measurement of the dispersion of the mass of figures in a series about an average is known as dispersion. The standard deviation is an absolute measure of dispersion. The

greater the amount of dispersion indicate greater the standard deviation. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of the series.

Standard deviation is the square root of the variance of the rate of return. The variance of stock's return equals the sum of the products of the squared deviations of each possible rate of return divided by the no. of observation decreased by one. The standard deviation measures the total risk of the particular stock.

$$\sigma_j = \sqrt{\frac{\sum (Rj - \overline{Rj})^2}{N - 1}}$$

The standard deviation of market is also calculated by using same formula, as,

$$\sigma_m = \sqrt{\frac{\sum (Rm - \overline{Rm})^2}{N - 1}}$$

3.6.2.3 Coefficient of Variation (CV)

Coefficient of variation is the relative measure of risk with return. It measures the risk per unit of return. Hence it is the ratio of standard deviation to the expected return of that particular of stock, multiplied by 100. Less the CV, higher will be the uniformity, or consistency. We use coefficient of variation as a relative measure of dispersion or as a test for consistency of the given data (ratios) as regards to the variation per unit of average ratio. It is always expressed in percentage and is calculated as follows:

$$CV_j = \frac{S.D}{Average \text{ return}} \text{ X } 100\%$$

3.6.2.4 Coefficient of Correlation (r)

Two variables are said to have "correlation", when they are so related that the change in the value of one variable make the change in the value of other. The measure of correlation called the correlation coefficient summarized in one figures, the degree and direction of movement, Correlation analysis only helps in determining the extent to which the two variables are correlated but it does not tell us about cause and effect relationship. Correlation can either be positive or it can be negative. If both the variables are changing in the same direction, than correlation is said to be positive but when two variables take place in opposite direction, the correlation is termed as negative. In this study, coefficient

of correlation is calculated between stock price and dividend, stock price and price earning ratio (*Bajracharya; 2058: 52*).

It is a kind of statistical tool used for measuring the intensity or magnitude of linear relationship between the two variables. And it is obtained by simple formula which is easier and clear i.e.

$$\dagger_{xy} = \frac{Cov.(r_x r_y)}{\dagger_x \dagger_y}$$

Where,

$\dagger_{xy}$ = Correlation coefficient for assets x and y.

$Cov.(r_x r_y)$ = Covariance between assets x and y.

And also there is another formula which is known as Pearsonian correlation coefficient between two variables (say X and Y), denoted by 'r$_{xy}$' or simply 'r' can be obtained as

$$r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{\left[\left\{n\sum X^2 - \left(\sum X\right)^2\right\} x \left\{n\sum Y^2 - \left(\sum Y\right)^2\right\}\right]}}$$

Where, n = number of observations in series X and Y

The value of correlation coefficient, 'r', always lies between '-1' to '+1'.

If r = +1, it can be stated that there is perfect positive relationship between variables X and Y.

If r = -1, it can similarly be stated that there lies perfect negative relationship between the given two variables.

If r = 0, it states that there is no correlation at all between the two study variables.

3.6.2.5

Covariance:

Covariance is a measure of the degree in which two variables"move together" over time. A covariance between the rate of return for the assets that is positive indicates that the rate of return tend to move in the same direction at the same time. If covariance is negative the rate of return of the assets tend to move in appositive direction and zero value of covariance means there is no relationship between two assets at all. The covariance between assets return can be calculated by using the following equation:

(a)If the probability is given:

$$Cov_{AB} = \sum_{j=1}^{n} [r_A - E(r_A)][r_B - E(r_B)]P_j$$

(b) If the probability is not given, (or if historical or past information is given)

$$\text{Cov}_{AB} = \frac{1}{n}\sum_{t=1}^{n}[r_A - \overline{r_A}]][r_B - \overline{r}_B]$$

Where,

Cov, = covariance between return on assets A and B

n= no of observations

p= probability

E(r)= expected rate of return

$\overline{r_A}$ =mean return

3.6.2.6   Test of Significance

(A) Test of Significance for a single mean

To test the significance of model as well as variables as we use t-test for a single mean. It is a applied for hypothesis testing first to test whether there is any significant difference between average mean for commercial bank with market portfolio on net. If the test is "test of significance for a single mean," the test statistical (t) is given by, Symbolically,

$$t = \frac{\overline{x} - \sim}{\dfrac{S}{\sqrt{n}}}$$

Where,

T= Student's t-test statistics

$\overline{x}$ = Arithmetic mean of sample Statistics

~ = Arithmetic mean of population statistics

S= Standard deviation of population parameter.

Test result; if t-calculated value $\leq$ t- tabulated value, accept the null hypothesis or vice-versa.

(B) ANOVA in one-way classification

In one way classification, the effect of anyone factor is taken into consideration. There are so many methods to compute f-test, short cut method of computing F-ratio is desirable to use and steps are as follows:

a.   Find the sum of the values of all the items of all the samples and denotes it by

T.

b.   Calculate the correlation factor i.e. T^2/N

       Where,

       N= total number of items of all the sample

c.   Find the square of all the items of all the samples and add them together.

d.   Find out the total sum of squares (SST) by subtracting T^2/N from the sum of squares of all the items of the samples.

e.   Find out the sum of squares between the samples (SSC) by subtracting T^2/N from the sum of the square of the total dividend by the number of items in in each sample.

f.   Find the sum of square within samples (SSE) by using SSE=SST-SSC

g.   Prepare ANOVA table to compute F

ANOVA-Table

Source of variable	Sum of squares	Degree of freedom	Mean sum of squares	f-ratio
Between samples	SSC	C-1	$MSC=\dfrac{SSC}{C-1}$	$F=\dfrac{MSC}{MSE}$
Within samples	SSE	N-C=(N-1)(N-C)	$MSE=\dfrac{SSE}{D.F.(N-C)}$	
Total	SST=SSC+SSE	N-1		

h.   Make decision. If the computed value of F is less than its critical value, H_0 is accepted otherwise H_1 is accepted.

3.7   Method of Analysis and Presentation

      All the methods of analysis and presentation are applied as simple as possible. Proper financial and statistical tools are used and results are presented in tables and also shown in diagram too. Interpretation is made in very simple way. Details of calculation which couldn't be shown in the main body part are presented in Appendices, at the end. Summary, conclusion and recommendation are presented finally.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

This chapter is the main part of the whole study. So the data collected from various sources are presented and analyzed in detail in this chapter. This chapter is divided in two parts. Analysis of primary data is examined in first section and analysis of secondary data is examined in second section. . Detail data of MPS and dividend of each bank and NEPSE index of each industry is presented and their interpretation and analysis is done. With reference to various readings and literature review in the preceding chapter, effort is made to analyze and diagnose the recent Nepalese Stock Market movement, with a special reference to Commercial Banks. Different tables and diagrams are used to make the result more simple and clear.

4.1 Security Transaction System in NEPSE

In order to full fill the first objective of this research, the needed data is collected from different respondent like officers of the NEPSE & SEBO/N, existing legal aspects and different views of intermediary's officers. An overview on it is presented below:

4.1.1 Current Trading System

If an investors wants to purchase or sell securities from security market than they has to go through listed Stock Brokers. Initially investors have to fill the details about the number wants to purchase or sell and price of the stock. After receiving the details from investors, stock broker issued a certificate to investors by mentioning registration number and date and then stock broker write all those things to the board of NEPSE.

NEPSE has adopted an "open out-cry" system. It means transactions of securities are conducted on the open auction principle in the trading floor. The buying broker with the highest bid will post the price and his code number on the buying column, while selling broker with the lowest offer will post the price and code number on the selling column on the quotation board. The buying price will change when any other broker increases it and the selling price will change when someone will be ready to sell at low price. When the price matches the broker declares the quantity and the selling brokers either accept it or announce the quantity.

4.1.2 Trading days and Hours

In Nepalese stock market shares has been trading in particular time by the particular day. The presented table can give us the clearer picture of it.

The trading timing of NEPSE is mentioned in the table below:

Table No: 4.1

Trading schedule and timing given by NEPSE

Types of Trading	Days	Time
Regular Time	Sunday to Thursday	12.00 AM to 3.00 PM
Odd Lot Trading	Monday to Friday	2.00 to 3.00 PM 11.00 AM to 12.00 Noon

(Sources: Annual report of SEBON)

4.1.3 Board Lot

NEPSE has fixed the board lot of 10 shares if the face value is Rs. 100 or 100 shares if the face value is Rs.10. The transactions on the regular trading should be done for at least one board lot. The transaction of less than 10 shares is permitted only on odd lot trading hours.

4.1.4 Price Regulation

The opening price of any day shall not be more or less than 5 percent of the previous trading day's closing price. Once transactions are done within this range the price can be changed within a limit of 2 percent in each consecutive transaction.

4.1.5 Settlement

NEPSE has adopted a T+3 systems which mean that settlement of transactions should be done within 3 working days following the transactions day. Settlement will be carried on the basis of paper verses payment. The ratio of brokerage on equity transactions range from 1 percent to 1.5 percent depending on the traded amount.

4.1.6 Present Situation of Stock Market

Out of 148 listed companies more than 85 percent of the transactions took place in the stock exchange related to the securities of the commercial banks and financial institution. Present government is taking more seriousness to develop the securities market in the country. Currently operation has been operating through manually. There are no custodians. The government has given higher priority to strengthen the capital market and launched corporate financial governance project for the trading automation under the assistance of Asian Development Bank.

4.2   Analysis the Level of Investor's Awareness

The primary data needed for analysis is collected through the structured questionnaire. As the objective of this analysis is to know the view and awareness of investors towards the

Nepalese stock market, the needed data are collected from the investors of NEPSE which has been chosen randomly from the queue in the stock market.

The structured questionnaires were distributed to the eighty investors. The presentation and analysis of primary data collected through the questionnaire (Apendix-1) are presentation below.

4.2.1 Investor's Objective on Stock Investment

It is found that most of the investors want to invest in shares of companies basically for price appreciation. From the rank wise responses shown in the appendix_1.a, they invest for earning dividend as their second priority objective. They give last priority for social status while making investment.

4.2.2 The sector wise Preference of Investors

From the question that which sector they give preference for investment, it is found that they are more interested to invest in banking sector. From the rank wise responses shown in the appendix_1.b, their second priority sector is found as finance and insurance. They are found less interested to make investment on manufacturing and trading and other sectors.

4.2.3 Views of Investor's on Factor Affecting MPS of Stock

The investors were asked that which factor affect the MPs of the securities. According to their responses shown in the appendix_1.c, they think net worth as a most important factor that affect MPS, by giving rank first. They think EPS as a second important factor, DPS as third one and company's goodwill as the least important factor.

4.2.4 The Views of Investors about Factor Affecting the Stock Return

The investors were asked to rank the factors that affected the return on stock most. From their response shown in the appendix_1.d, they think EPS as an important factor that affected their stock return, by giving first rank. The return of the stock is also affected by MPS as they place second rank to MPS. They think Net worth as a third important factor and company's goodwill as a last one that affected their stock return less than EPS and MPS.

4.2.5 The Investor's Preference in Different Area of Investment

The investors were asked that which area they think more attractive. From their response Shown in appendix_1.e, it is found that most of the investors prefer to invest on fixed deposit. They give second priority to invest on real estate. Securities are the third

prioritized alternative of investment and the bullion is a least prioritized alternative of investment as they give third and last rank to securities and bullion respectively.

4.2.6 Factors Given Priority for Measuring Company's Performance

The investors were asked to rank the given alternative as their preferred performance measure. From their response shown in appendix_1.f, most of the investors perceived on issue of bonus and right shares as an indicator of measuring company's performance. They give second rank on declaration of dividend, third rank on timely AGM and last rank on systematic flows of information respectively. Declaration of dividend is a second preferred indicator of measuring company's performance than that of timely AGM and systematic flows of information.

4.2.7 Driving Factors for Investment in Initial Public Offering

The investors were asked to rank the factors that drive them to the market at the time of initial public offering. From their response shown in the appendix_1.g, it is found that sector is a most important driving factor that drives them to the market at the time of initial public offering. They think founder and management of the company is second important factor, future plans of the company and capital structure are found less important factor as these factors are ranked on third and fourth rank.

4.2.8 Driving Factors for Investment in Second Market

Investors were asked to rank the given alternative that drives to the secondary market. From their response shown in the appendix_1.h, it is found that sector of investment i.e. banking; finance etc is the most important factor that drives investors to the secondary market. They give second priority to MPS to MPS with second highest rank. They give goodwill of the company third factor and DPS as a least important driving factor by giving third and fourth rank respectively. Hence it is clear that investors first look the sectors than MPS and then goodwill of the company and at last the dividend.

4.2.9 Suggestions for Protection of Public Interest

Investors were also asked to suggest ranking the ways for improvement to be done to protect public interest in stock market. From their response shown in the appendix 1.i, they think more representation of public on board of directors is quite necessary to protect the interest of public on board. They give next more weight on regular flows of information is to be managed by the company management. Investors' awareness program by the government authorities has given third priority and they feel increase shareholders' activism is less effective way to protect their interest on stock market. From

their response in the given question it can conclude that they search easy way to be secured from fluctuations of stock market rather to be more rational investors as they give less weight to the awareness program and their activism.

4.2.10 The Nature of Risk in Stock Investment

The investors' awareness about the nature of risk in the stock investment is also analyzed by asking them about the nature of risk on stock investment. From their response in the following table it is found that about 35 percent of investors think the nature of risk as a manageable factor, 31.25 percent investors think it as an unknown factor, 30 percent think it is predictable and rest 3.75 percent think the risk factor as a known factor.

Table No. 4.2

Investors Thinking About the Nature of Risk on Stock Investment

S.N.	Response	No. of Investor	Percentage
1	Predictable	24	30
2	Manageable	28	35
3	Known	3	3.75
4	Unknown	25	31.25
	Total	**80**	**100**

(Sources: field report)

4.2.11 The Risk Aversion Nature of Investors

From the question, to know if they are risk averter or risk seeker, it is found that most of the investors want to invest in moderate return. The portion of risk averter investors are 55 percentages, where as 37.5 percentage investors are found risk seeker. They want to invest on such assets of high return with high risk.

Table No. 4.3

Investors' Risk Aversion

S.N.	Response	No. of Investor	Percentage
1	High Risk with High Return	30	37.5
2	Moderate Risk with Moderate Return	44	55
3	Low Return with Low Risk	6	7.5
	Total	**80**	**100**

(Sources: field report)

7.5 percent investors rejected any level of risk. They want to invest on such asset which has low risk with low return.

4.2.12 Consultation Habit of Investors before Investing in Shares

It is also tried out to know, how far investors consult others before investing in shares. From the data collected shown in the following table it is found that most of the investors consult their friends i.e. 41.25 percent.

Table No. 4.4

Investors Consultation Habit

S.N.	Response	No. of Investor	Percentage
1	Broker	21	26.25
2	Professional	11	13.75
3	Friend	33	41.25
4	Self Decision	15	18.75
	Total	**80**	**100**

(Sources: field report)

26.25 percent investors consult with broker where as 18.75 percent investors make their decision themselves without consulting others and only 13.75 percent investor consult professionals for making investment decision. It is thus analyzed that broker's and professional service is not expanded to that extent of investors' excess.

4.2.13 Sources of Information about Stock Market

The respondents were asked from which sources they usually informed about stock market. From the data collected presented in the following table it is found that 45 percent investors are informed through newspaper. Thus newspaper is the main sources of information through which most of the investors are getting stock market related information. **Table No. 4.5**

Sources of Stock Market information

S.N.	Responses	No. of Investor	Percentage
1	Brokers	23	28.75
2	Newspaper	36	45
3	Friends	16	20
4	Electronic Media	5	6.25
	Total	**80**	**100**

(Sources: field report)

Stock brokers are the second main sources through which about 28.75 investors are getting information about stock market by making relation to them. These investors are basically from secondary market. 20 percent investors are informed through their friends where as electronic media is less effective in this regard as only 6.25 percent investors are getting information through it.

4.2.14 Investors' Reaction on Increasing Trend of Market Price per Share

Investors were asked for their response on increasing market price per share. Their response is shown in the following table.

Table No. 4.6

Investors' Reaction on Increasing Trend of MPS

S.N.	Response	No. of Investor	Percentage
1	Buy	13	16.25
2	Sell	40	50
3	Don't Trade	27	33.75
	Total	**80**	**100**

(Sources: field report)

Most of the investors want to sell their shares i.e. 50 percent while 33.75 percent investors don't trade at the time of increasing MPS. And only 16.25 percent investors are found who purchase shares at the time of increasing MPS. Thus it is quiet clear that investors are found fear on price fall and thus they want sell their shares on such a situation.

4.2.15 Investors' reaction on Decreasing Trend of Market Price per Share

Investors were also asked for their response on decreasing market price per share. Their response is shown in the following table.

Table No. 4.7

Investors Reaction on Decreasing Trend of MPS

S.N.	Response	No. of Investor	Percentage
1	Buy	25	31.25
2	Sell	36	45
3	Don't Trade	19	23.75
	Total	**80**	**100**

(Sources: field report)

 If there will be decreasing trend of market price, most of the investors i.e. 45 percent sell their stock while 31.25 percent investors buy shares from stock market and rest 23.75 percent investors do not trade on such a trend of decreasing trend of MPS. It can be

understood that investors want to sell their shares fearing from further decrease in shares price. Due to lack of adequate knowledge of trading mechanism and to get more benefit from stock trading from secondary market, most of the investors go through selling their shares so that they don't bear any additional loss from falling price.

4.2.16 Investors' participation Pattern in Annual General Meeting

From the question that how far investors participate on company's annual general meeting, the summarized from of response colleted from investors' has been shown in the following table.   **Table No. 4.8**

Investors' Participation Pattern on AGM

S.N.	Response	No. of Investor	Percentage
1	Regular	36	45
2	Sometimes	24	30
3	By Proxy	12	15
4	No participation	8	10
	Total	**80**	**100**

(Sources: field report)

From the above table it is found that most of the investors i.e. 45 percent participate in AGM each year, 30 percent investors participate sometimes on their free and favorable time. Some investors about 15 percent participate indirectly by giving proxy to other and rest 10 percent investors have no interest to participate in AGM. Investors are not found serious to use AGM as a democratic platform of investors' right protection. As only 42 percent investors are found regular participants.

4.2.17 Investors' Response Information in Prospectus

Investors were asked that how do they react on the statement published by the company before going to publish. Response from investors has been shown in the following table.

Table No. 4.9

Investors' Response on Information of Prospectus

S.N.	Response	No. of Investor	Percentage
1	True Statement	13	16.25
2	False Statement	31	38.75
3	More Optimistic	36	45
	Total	**80**	**100**

(Sources: field report)

From the data of above table it is found that major portion of investors' (i.e. 45 percent) think the given information published in the prospectus is less reliable and more optimistic. 38.75 percent investors believe the printed statement as a false statement. Only 16.25 percent investors believe the printed statement as a true one. It is thus conclude that the published statement on prospectus is failed to attract investors' attention positively. Thus this has been done to fulfill formalities while issuing shares.

4.2.18 Opinion about Existing Rules and Regulations

Investors were asked for their opinion about existing rules and regulations of stock market in Nepal. The response of investors has been shown in the following table.

Table No. 4.10

Investor's Opinion on Existing Rules and Regulation

S.N.	Response	No. of Investors	Percentage
1	Adequate	17	21.25
2	Satisfactory	26	32.50
3	Poor	37	46.25
	Total	**80**	**100**

(Sources: field report)

From their response shown in the above table, it is found that most of the investors (i.e. 46.25 percent) think that the existing rules and regulations are poor, 32.50 percent investors believe as satisfactory and only 21.25 percent investors think the current rules and regulations are adequate. From the views of investors, it can be conclude that the present rules and regulations are not satisfying investors as most of the investors think the existing rules and regulations are poor.

4.2.19 Management Attitude towards Public Shareholders

From the question that what do investors feel about management attitudes towards public shareholders, their response has been shown in the following table.

Table No. 4.11

Investors' perception on Management Attitude

S.N.	Response	No. of Investors	Percentage
1	Positive	13	16.25
2	Satisfactory	31	38.75
3	Poor	36	45
	Total	**80**	**100**

(Sources: field report)

From the investors' response shown in the above table it is found that most of the

Investors' (i.e. 45 percent) perceived the management attitude as poor. 38.75 percent investors perceived as satisfactory and only 16.25 percent investors think as positive attitude towards them. It is thus concluded that investors are not fairly treated by management.

4.2.20 Investors' Response on Current Performance of Stock Market

The last question to the investors was asked for their response on current performance of stock market. The investors' response regarding current performance has been shown in the following table.

<div align="center">

Table No. 4.12

</div>

Investors' Response on the Stock Market Performance

S.N.	Response	No. of Investors	Percentage
1	Satisfactory	33	41.25
2	Poor	43	53.75
3	Excellent	4	5
	Total	**80**	**100**

<div align="right">

(Sources: field report)

</div>

From the above table, most of investors (i.e. 53.75 percent) perceived stock market performance is poor whereas 41.25 percent investors consider as it is satisfactory and the rest 5 percent investors think the performance of stock market is excellent. From the response of investors, it can be concluded that stock market is not performing well as it would be. The reason behind poor performing of stock market may be lack of new technology and information flow mechanism. The stock market should be able to address the investors' expectation.

4.3   Position of Risk & Return of Nepalese Commercial Banks

The secondary data collected from secondary sources like publication of NEPSE, annual report of SEBO/N and other related sources are presented and their interpretation and analysis is carried out in this section. The secondary data includes MPS and Dividend paid on the selected securities for various years. Beside it NEPSE index of various years is also taken for the study. Here closing market price is taken into consideration. Appropriate diagrams and tables are presented to make this analysis more simple and understandable.

The selected securities are from different sector of Banking. All selected five banks are listed in NEPSE and their MPS, DPS, and other related data are presented in table and analysis is made accordingly using appropriate method.

4.3.1 Risk & Return of Selected Nepalese Commercial Bank

In this section the selected securities of listed commercial banks are analyzed separately in terms of risk and return. Different financial tools and techniques have been adopted during the calculation. Side by side appropriate diagram and table is also used.

4.4 Analysis of Commercial Banks

As the study has taken a special reference to listed Commercial Banks, Commercial Banks is operation in Nepal but only 17 of them are listed in NEPSE and among those 17 Commercial Banks only five Banks have been taken for study. The data coverage stocks risk and returns are analyzed in this chapter.

4.4.1 Nepal Arab Bank Limited (NABIL)

This bank was established in the year 1984 A.D. (2041 B.S.) and listed in NEPSE in the year 1986 A.D. (08/09/042 B.S.) in the year 2004 A.D., Authorized capital, Issued capital and Paid –Up capita of NABIL are Rs.500000000., Rs.491654400. and Rs.491654400.respectively. The Par value per share is Rs.100 and number of shareholders are 5076.

The data of market price, cash dividend and stock dividend per share are presented in the following table below.

Table No. 4.13

NABIL BANK LIMITED.

Closing price of stock at the end of Ashad is considered as the Market price of stock.
Market price per Share, Cash Dividend, Stock Dividend and Total Dividend of NABIL

Fiscal year	MPS	MPS	MPS	MPS	EPS	P/E	Dividend per Share			
	Max	Min	closing	Unit: (Rs)	Unit: (Rs)	ratio	Cash Dividend (Rs.)	Stock Dividend		Total Dividend (Rs.)
								Amount (Rs.)	Percent	
060/061	1005	705	1000	1000	92.61	10.8	65	0	0 %	65
061/062	1515	1000	1505	1505	105.49	14.27	70	0	0 %	70
062/063	2300	1500	2240	2240	121.21	17.34	85	0	0 %	85
063/064	5050	2025	5050	5050	137.08	36.84	100	2020	40 %	2120
064/065	6700	3410	5275	5275	108.31	48.7	60	2110	40 %	2170

(Source:- Annual Report of nabil bank Ltd.)

The closing market price is highest in the year 064/065 i.e. Rs.5275 and lowest in the beginning year i.e. Rs.1000.And the earning per share is highest in the year 063/064 i.e. Rs.100 and lowest in the beginning year 060/061 i.e. Rs.65. Because of, the MPS is greater than the EPS in the greater extent, the price earning ratio is highest in the current year. The cash dividend is given throughout year and the stock dividend is only given in the final two year. Again, the cash dividend is maximum in the year 063/064 and the stock dividend is maximum in the year 063/064 and 064/065 i.e. 40%. Due to the highest market price in the final year the total dividend is maximum in the current year of the study. And the stock dividend is calculated on the basis of closing price. From the above calculation the annual return, expected return, standard deviation and CV are calculated on the basis of above data is shown in the table below.

Diagram 4.1:- year end price movement of NABIL
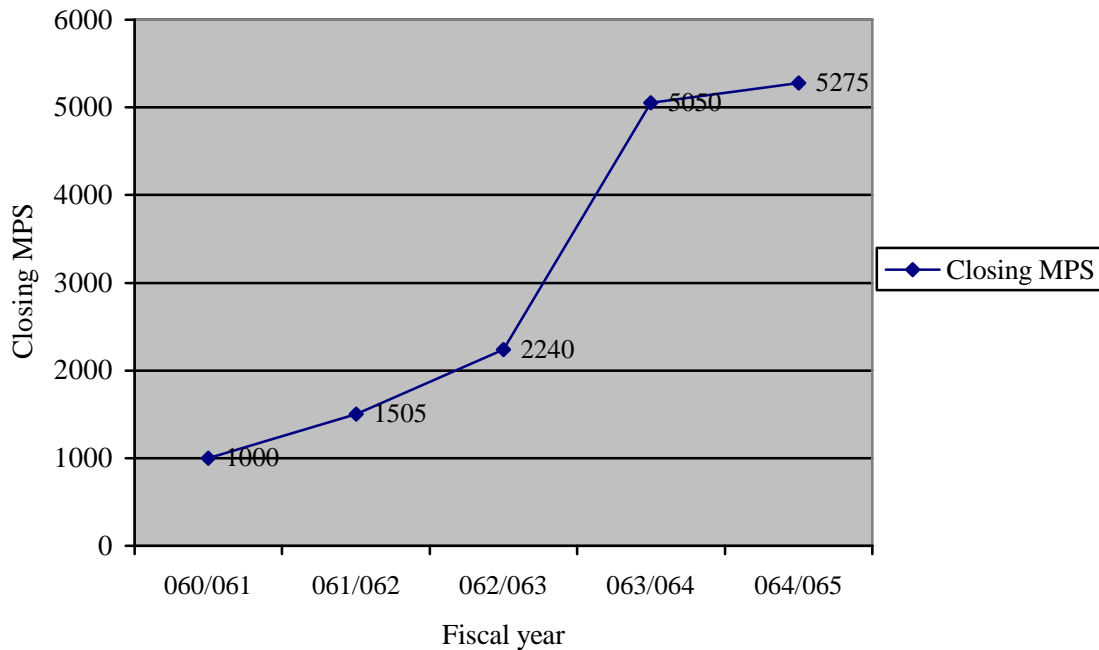
Table No. 4.14

NABIL BANK LIMITED
Yearly Return (Rj), Expected Return (Rj) and Standard Deviation (σj) of NABIL

Fiscal Year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$
059/060	735	-	-
060/061	Rs 1000	Rs 65	44.898%
061/062	Rs 1505	Rs 70	57.5%
062/063	Rs 2240	Rs 85	54.485%
063/064	Rs 5050	Rs 2120	220.134%
064/065	Rs 5275	Rs 2170	47.3267%
N=5			Rj = 424.3437%
Expected return $\overline{R_j}$ = 84.86			
Standard deviation (S.D). (σj) = 75.78%			
Coefficient of variation (C.V.j =89.30%			

(Source:-Appendix-2, Table:1)

Diagram 4.2:- Annual return of common stock of NABIL
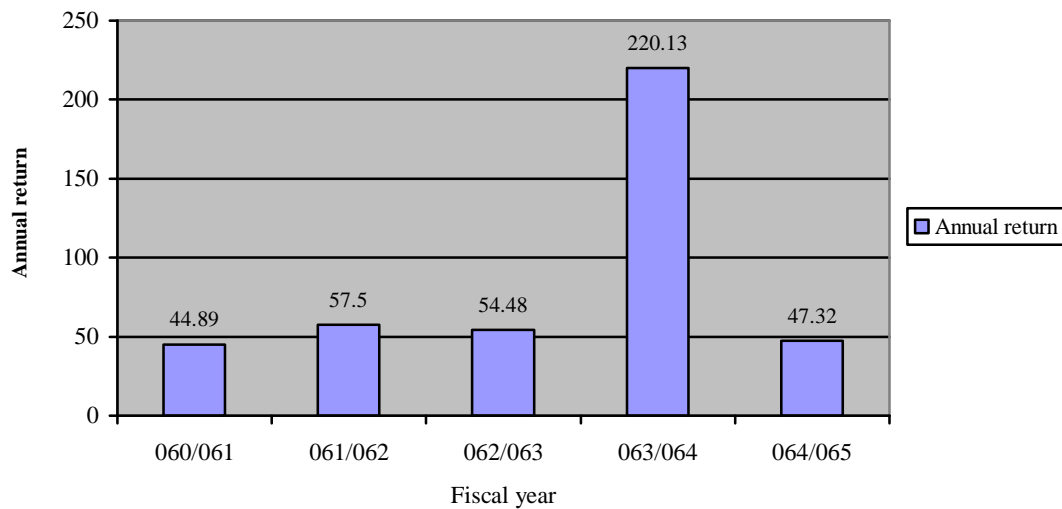
The range of yearly return on the common stock of Nabil is from 44.89 percent in the year 060/062 to 220.13 percent in the year 063/064. Here the trend of yearly return is not significantly increasing up. And it is highest in the year 063/064 by 220.13 and lowest in year 060/061 by 44.89 percent. The expected return for the stock is found to be 84.89 percent and the standard deviation on the stock is found 75.78% and the CV of the same stock is found to be 89.30% which indicates that investors has to bear 0.8930 unit of risk to earn one additional unit of return.

4.4.2. Nepal Investment Bank Limited (NIBL.)

This Bank was established in the year 1985 A.D., Authorized capital; Issued Capital and Paid- Up capital of NIBL are Rs.590000000, Rs.295293000 and Rs.295293000 respectively. The par value per share of NIBL is Rs.100 and number of shareholders are 2780.

The market price per share of NIB, the cash dividend, stock dividend and the total dividend calculated are presented in the table below.

Closing price of stock at the end of Ashad is considered as the Market price of stock.
Market price per Share, Cash Dividend, Stock Dividend and Total Dividend of NIBL

Fiscal year	MPS	MPS	MPS	MPS	EPS	P/E	Dividend per Share			
	Max	Min	closing	Unit: (Rs)	Unit: (Rs)	ratio	Cash Dividend	Stock Dividend		Total Dividend
								Amount	Percent	
060/061	942	745	940	940	51.70	18.18	15	0	0 %	15
061/062	1430	760	800	800	39.50	20.25	12.5	0	0 %	12.5
062/063	1265	762	1260	1260	59.35	21.23	20	447	35.46 %	467
063/064	1729	1000	1729	1729	62.57	27.63	5	432.2	25 %	437.2
064/065	3101	1305	2450	2450	57.87	42.33	7.5	816.6	33.33 %	824

(Source:- Annual Report of Nepal Investment bank Ltd.)

The closing Market price per share is maximum in the current year of the study and minimum in the beginning year. Also the earning per share is highest in the year 064/065. Because of, the MPS is greater than the EPS in the greater extent so, the P/E ratio is highest in year 064/065. Also the cash dividend is highest in the year 062/063 i.e. Rs20 and the stock dividend is maximum in the year 35.46%. Again, the total dividend is maximum in the current fiscal year due to the highest closing price. According to this the annual return, expected return, standard deviation and CV are calculated on the basis of above ground is shown in the table below.

Diagram 4.3:- Closing MPS movement of NIBL
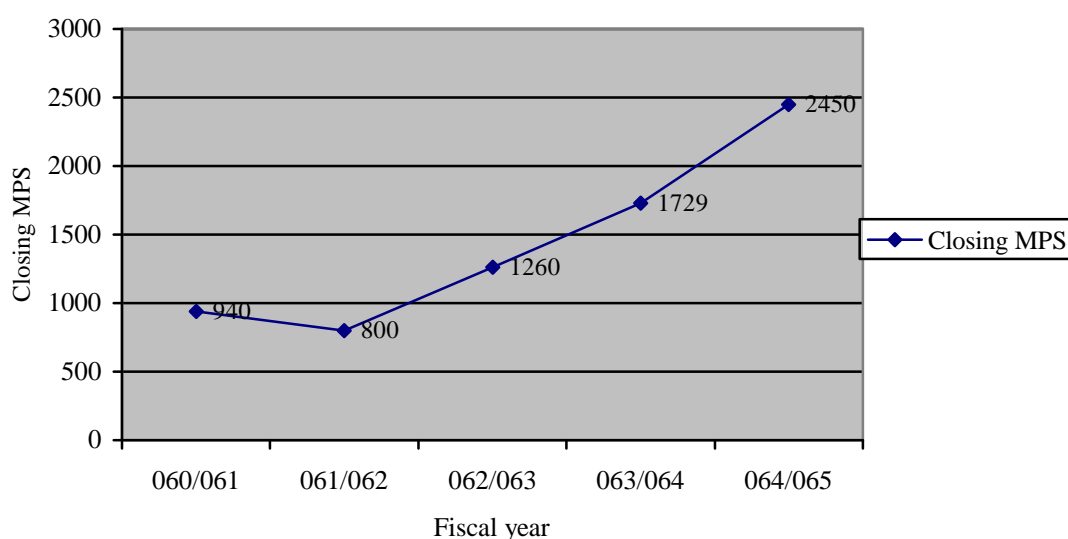
Nepal Investment Bank Limited

Yearly Return (Rj), Expected Return ($\overline{R}_m$)and Standard Deviation (j) of NIBL.

Fiscal year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $$Rj = \frac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$$
059/060	Rs.795	-	-
060/061	Rs.940	Rs.15	20.12579%
061/062	Rs.800	Rs .12.5	-13.5638%
062/063	Rs.1260	Rs.467	115.875%
063/064	Rs.1729	Rs.437.2	71.92063%
064/065	Rs.2450	Rs.824	89.35801%
N=5			Rj = 283.71563%
Expected return $\overline{R}_j$ = 56.74%			
Standard deviation (S.D.) (j) = 52.62%			
Coefficient of variation (C.V.j =92.73%			

(Source:- Appendix-2, Table:2)

Diagram 4.4:- Annual rate of return of C.S. of NIBL
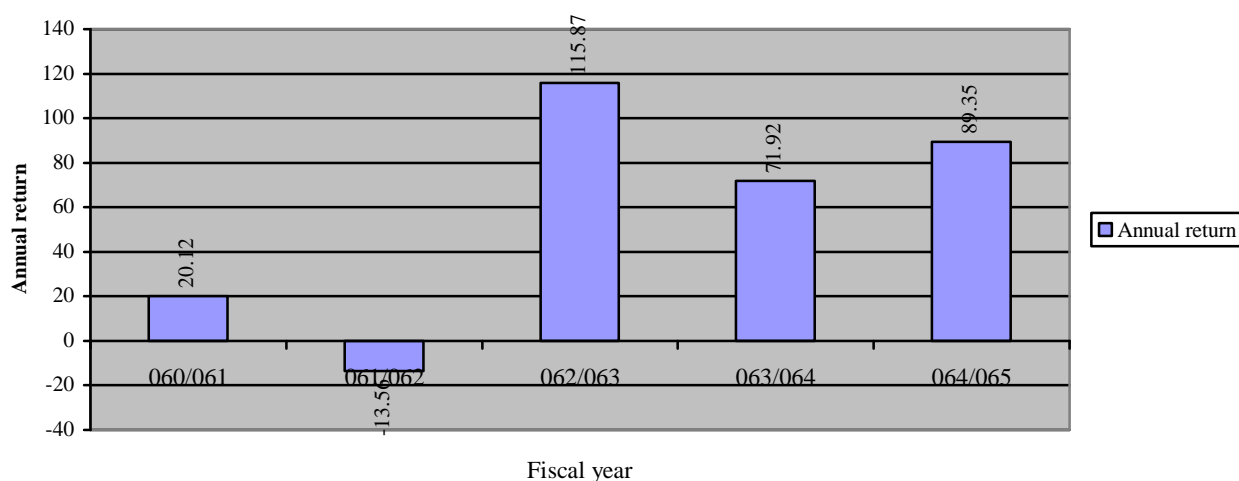
The range of annual return on the common stock is from negative return 13.56 percent lowest in the year 061/062 to highest 115.07 percent in the year 062/063. Here the annual return is highly fluctuated in the respective years. From the above data expected return is 56.74 percent. The total risk of NIB i.e. standard deviation is 52.62% and the relative measure of dispersion based on standard deviation i.e. CV is found to be 0.9273 which means for earning one unit of return the investors has to bear 0.9273 unit of risk.

4.4.3 Standard Chartered Bank Limited (SCBL)

This bank was established in year 1985 A.D. (2040 B.S.) and listed in NEPSE in the year 1988 A.D. (03/21/2045 B.S.). In the year 2004, Authorized Capital, Issued Capital and Paid up Capital of SCBL are Rs.1000000000, Rs.5000000000 and Rs.374674640400 respectively. The par value per share is Rs.100 and Number of shareholders are 5037.

The market price per share of SCB, the cash dividend, stock dividend and the total dividend calculated are presented in the table below.

Table No. 4.17

Closing price of stock at the end of Ashad is considered as the Market price of stock.
Market price per Share, Cash Dividend, Stock Dividend and Total Dividend of SCBNL.

Fiscal year	MPS	MPS	MPS	MPS	EPS	P/E	Dividend per Share			
	Max	Min	closing	Unit: (Rs)	Unit: (Rs)	ratio	Cash Dividend (Rs)	Stock Dividend		Total Dividend (Rs.)
								Amount (Rs.)	Percent	
060/061	1800	1520	1745	1745	143.55	12.16	110	0	0%	110
061/062	2350	1553	2345	2345	143.14	16.38	120	0	0%	120
062/063	1265	762	1260	3775	175.84	21.47	130	377.5	10%	507.5
063/064	5900	3058	5900	5900	167.37	35.25	80	2950	50%	3030
064/065	9025	4505	6830	6830	131.92	51.77	80	3415	50%	3495

(Source: annual report of standard chartered bank)

The closing MPS is maximum in the current year i.e. 064/065 and minimum in year 060/061. And the earning per share is maximum in the year 062/063. Due to the highest closing price in the current year in the greater extent, the price earning ratio is highest in the current of the study. And the cash dividend is paid in all the year and stock dividend is given in three respective years. Now again, the cash dividend is highest in year 062/063 and stock dividend in year 063/064 and 064/065. Also the total dividend is maximum in year 064/065 due to the highest closing price and stock dividend.

Diagram 4.5:- Closing MPS movement of SCBL
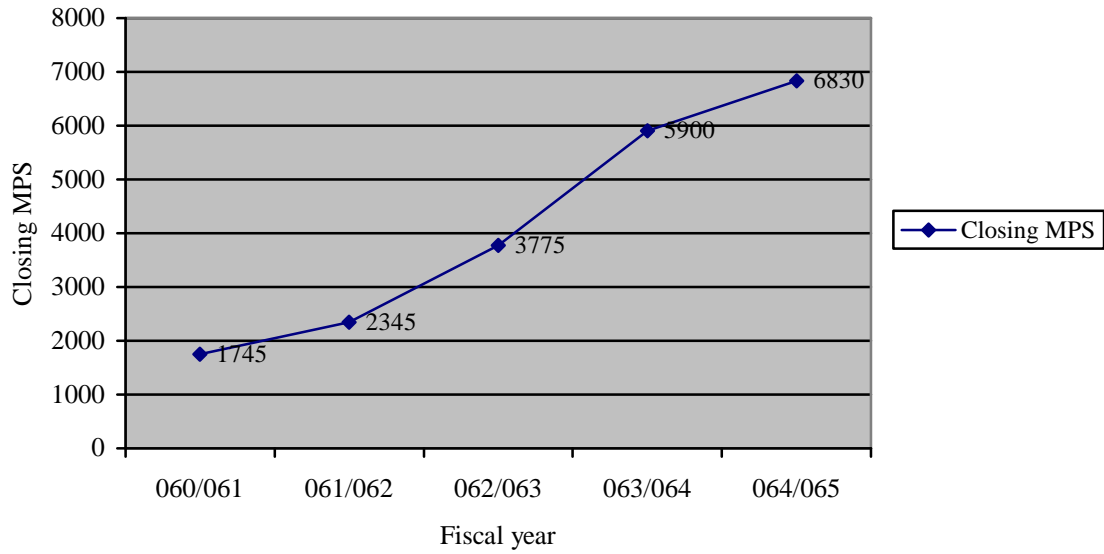
Table no: 4.18

STANDARD CHARTERED BANK LIMITED

Yearly Return (Rj), Expected Return (R̄j) and Standard Deviation (σj) of SCBL.

Fiscal year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$
059/060	Rs.1640	-	-
060/061	Rs.1745	Rs.110	13.1098
061/062	Rs.2345	Rs.120	41.2607
062/063	Rs.3775	Rs.507.5	82.6226
063/064	Rs.5900	Rs.3030	136.556
064/065	Rs.6830	Rs.3495	75
N=5			Rj = 348.5491
Expected return $\overline{R_j}$ = 69.71%			
Standard deviation(S.D.) (σj) = 46.57%			
Coefficient of variation (C.V.j =66.81%			

(Source:-Appendix-2, Table:3)

Diagram 4.6:- Annual report of C.S. of SCBL
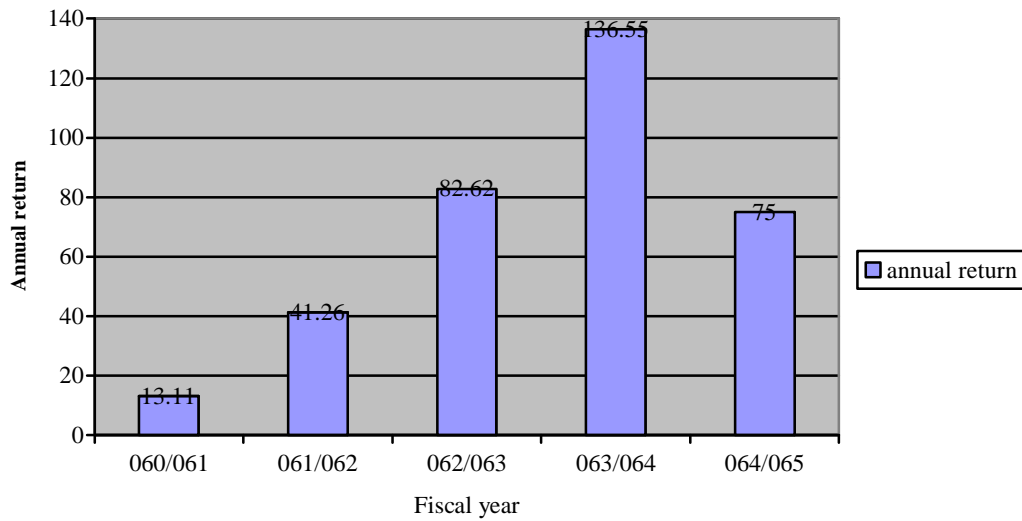
The range of annual return on the common stock of SCB is from 13.1 percent in the year 060/061 to 136.55 percent in the year 063/064. Here the trend of yearly return is gradually in increasing trend but negligible decrease in the year 064/065 comparison to year 063/064 return. From the above data expected return is 69.71 percent. Again, the total risk of SCB i.e. standard deviation is 46.57% and the relative measure of dispersion based on standard deviation i.e. CV is found to be 0.6681 which means for earning one unit of return the investors has to bear 0.6681 unit of risk.

4.4.4 Himalayan Bank Limited (HBL)

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loan and Deposits. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. The Himalayan bank limited is listed in NEPSE in year 1993. The par value per share of HBL is Rs.100.

The market price per share of HBL, the cash dividend, stock dividend and the total dividend calculated are presented in the table below.

Closing price of stock at the end of Ashad is considered as the Market price of stock.
Market price per Share, Cash Dividend, Stock Dividend and Total Dividend ofHBL

Fiscal year	MPS	MPS	MPS	MPS	EPS	P/E	Dividend per Share			
	Max	Min	closing	Unit: (Rs)	Unit: (Rs)	ratio	Cash Dividend (Rs.)	Stock Dividend		Total Dividend (Rs.)
								Amount Rs.)	Percent	
060/061	1010	600	840	840	49.05	17.12	0	168	20 %	168
061/062	1181	855	920	920	47.91	19.20	11.58	184	20 %	195.58
062/063	1200	900	1100	1100	59.24	18.57	30	55	5 %	85
063/064	1760	950	1760	1740	60.66	28.69	15	435	25 %	450
064/065	2856	1340	1980	1980	62.74	31.56	25	396	20 %	421

(Source:- Annual Report of Himalayan bank Ltd.)

The market price per share is maximum in the current year 064/065 i.e. Rs1980 and minimum in year 060/061 i.e. Rs.840. Again the earning per share is maximum in the final year of the study. Here MPS is greater than the EPS in the greater extent. So, the P/E ratio is highest in the current year. And the cash dividend is given in four year and stock dividend is given in all the year. The stock dividend is 20% in the three years and 25% in the year 063/064. And the total dividend is highest in the year 063/064 due to highest stock dividend. From the above data the annual return, expected return, standard deviation and CV are calculated on the basis of above ground is shown in the table below.

Diagram 4.7:- Year end MPS movement of HBL
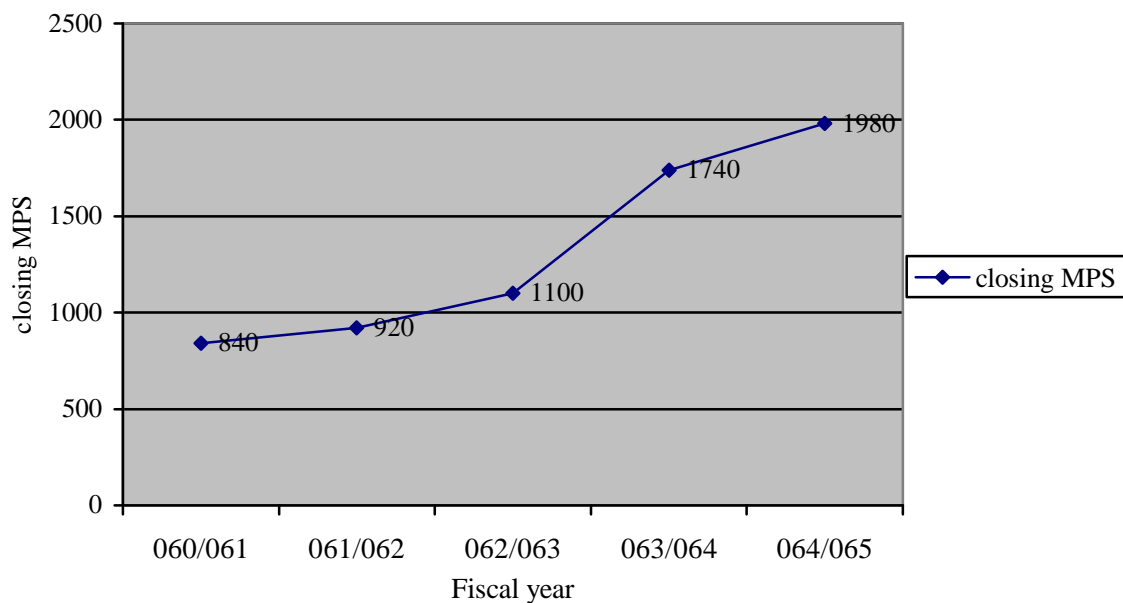
Himalayan Bank Limited

Yearly Return (Rj), Expected Return (Rj) and Standard Deviation (j) of HBL.

Fiscal year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt_{-1}) + Dt}{Pt_{-1}} \times 100\%$
059/060	836	-	-
060/061	Rs 840	Rs 168	20.2153%
061/062	Rs 920	Rs 195.58	32.8071%
062/063	Rs 1100	Rs 85	28.8043%
063/064	Rs 1740	Rs 450	99.0909%
064/065	Rs 1980	Rs 421	37.9885%
N=5			Rj = 218.9061%
Expected return $\overline{R}_j$ = 43.78%			
Standard deviation (S.D.) (j) = 31.60%			
Coefficient of variation (C.V._j =72.16%			

(Source:-Appendix-4, Table:4)

Diagram 4.8:- Annual return of C.S. of HBL
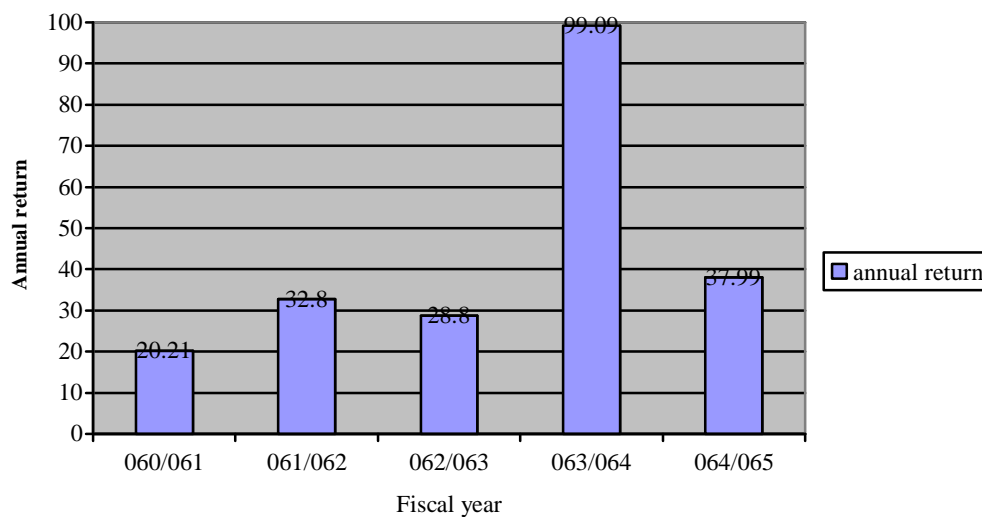
The range of yearly return on the common stock of HBL is from 20.21 percent in the year 02/03 to 99.01 percent in the year 063/064. Here the trend of yearly return is not constantly growing up. The expected return for the stock is found to be 43.78 percent and

the standard deviation is found to be 31.60% while CV of the same stock is 0.7216 units which mean that investors has to bear 0.7216 units to earn one additional unit of return.

4.4.5 Bank of Katmandu Limited (BOKL)

This Bank was established in the year a1994 A.D. (2040 B.S.) and listed in NEPSE in year 1998 A.D. (04/02/054). In this period, the Authorized Capital, Issued Capital and Paid up Capital of BOKL are Rs.1000000000, Rs.500000000 and Rs.463580900 respectively. The par value per share is Rs.100 and number of the shareholders of BOKL are 23316.

The market price per share of BOKL, the cash dividend, stock dividend and the total dividend calculated are presented in the table below.

Table No: 4.21

Closing price of stock at the end of Ashad is considered as the Market price of stock.
Market price per Share, Cash Dividend, Stock Dividend and Total Dividend of BOKL.

Fiscal year	MPS	MPS	MPS	MPS	EPS	P/E	Dividend per Share			
	Max	Min	closing	Unit: (Rs)	Unit: (Rs)	ratio	Cash Dividend (Rs)	Stock Dividend		Total Dividend (Rs.)
								Amount (Rs.)	Percent	
060/061	310	175	295	295	27.5	7.20	10	0	0 %	10
061/062	472	280	430	430	30.1	14.29	15	0	0 %	15
062/063	881	422	850	850	43.67	19.46	18	255	30 %	273
063/064	1375	691	1375	1375	43.5	31.61	20	0	0 %	20
064/065	2361	1200	2350	2350	59.94	39.21	2.11	940	40 %	942.11

(Source: annual report of Bank of Katmandu Limited)

The maximum market price per share of Bank of Katmandu Limited is Rs.2350 in year 064/065 and minimum in beginning year. Also the earning per share is highest in current year of the study. Due to the higher of MPS than the EPS in the greater extent, the price earning ratio is highest in the final year of the study. The cash dividend is providing in all of the respective years but stock dividend is providing in only two years. In the same way stock dividend and total dividend is highest in the current year.

Diagram 4.9:- Year end MPS movement of BOKL
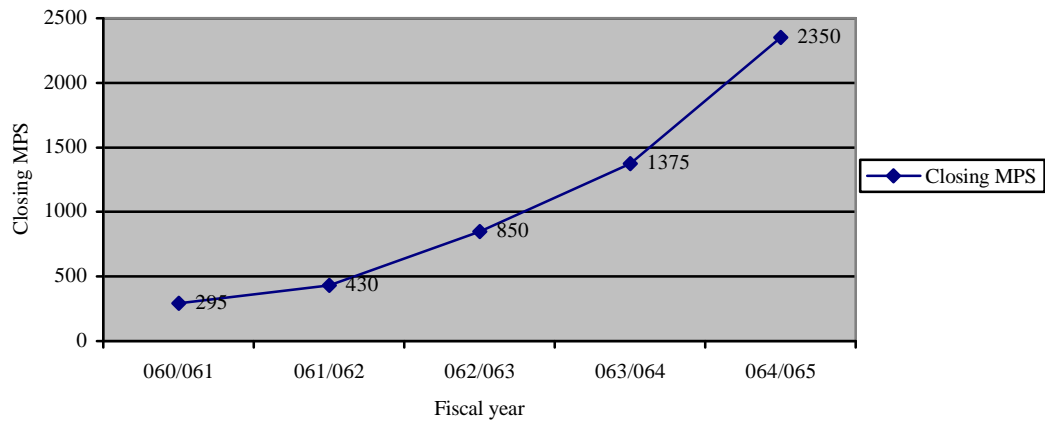
Table no: 4.22

**BANK OF KATHMANDU LIMITED**
  Yearly Return (Rj), Expected Return (Rj) and Standard Deviation (j) of BKL.

Fiscal year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$
059/060	198	-	-
060/061	Rs 295	Rs 10	54.0404%
061/062	Rs 430	Rs 15	50.8475%
062/063	Rs 850	Rs 273	161.163%
063/064	Rs 1375	Rs 20	64.1176%
064/065	Rs 2350	Rs.942.11	139.426%
N=5			Rj = 469.5945%
Expected return $\overline{R_j}$ = 93.92%			
Standard deviation S.D. (j) = 52.26%			
Coefficient of variation (C.V._j =55.64%			

(Source:-Appendix-2, Table:5)

Diagram 4.10:- Annual return of C.S. of BOKL
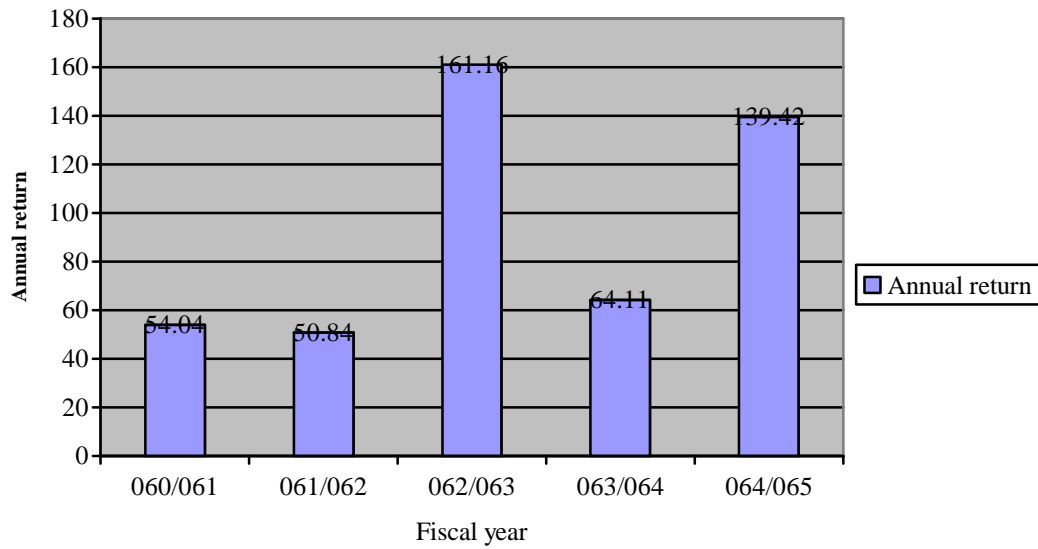
The range of yearly return on the common stock of BOKL is from 500.04 percent in the year 061/062 to 161.16 percent in the year 062/063. Here the trend of yearly return is not significantly increasing up. And it is highest in the year 062/063 by 161.16 and lowest in year 061/062 by 50.04 percent. The expected return for the stock is found to be 93.92 percent and the standard deviation on the stock is found 52.26% and the CV of the same stock is found to be 55.64% which indicates that investors has to bear 0.5564 unit of risk to earn one additional unit of return.

4.5 Inter-Bank Comparison

According to the result from Analysis part, A comparative analysis of return, total risk and risk per unit is performed here. Expected return, standard deviation and coefficient of variation of each bank for the period 2003/04 to 2007/08 are given in the Table no. 4.23.

Table 4.23: Expected Return, Standard Deviation and C.V. of selected five Commercial Banks.

S.N.	Bank	Expected return Avg(R)	Standard deviation (†)	Coefficient of variation (C.V.)	Remark		
					Return	Risk	C.V.
1	NABIL	84.86	75.78	89.30		Highest	
2	NIBL	56.74	52.62	92.73			Highest
3	SCBL	69.71	46.57	66.81			
4	HBL	43.78	31.60	72.16	Lowest	Lowest	
5	BOKL	93.92	52.26	55.64	Highest		Lowest

The table shows that the expected rate of return of BOKL is comparatively highest than other commercial banks. Coefficient of Variation of BOKL is lowest than the other banks. A ranking of lowest C.V. is said to be more consistent than others. Here the table shows that the return of HBL is lowest among all of the banks and the risk is also minimum than other banks. This shows that higher the risk, highest the return and lower the risk, lowest the return. The risk of NABIL is maximum so that return of NABIL is also somewhat highest. And the HBL have lower return because of lower risk. The C.V. of NIBL is maximum; this shows that the risk per unit is highest. The NIBL has borne maximum risk to get some return. Similarly, the C.V. of BOKL is minimum; this shows that the risk per unit is lowest. And the BOKL has borne minimum risk to get some return. From above table we see that higher CV., higher the risk and lower the C.V., lower the risk. From above description we conclude that the investment in BOKL is desirable on the basis of return because its one period return is higher than of others and by taking decision on the basis of the C.V., BOKL's is the best securities for investment because its C.V. is lowest among all. Similarly, on the basis of risk the investment on NABIL is favorable because it is risky than other securities. The securities having higher risk may be gives higher return.

Diagram 4.11:- Expected return, S.D. and C.V. of five commercial banks
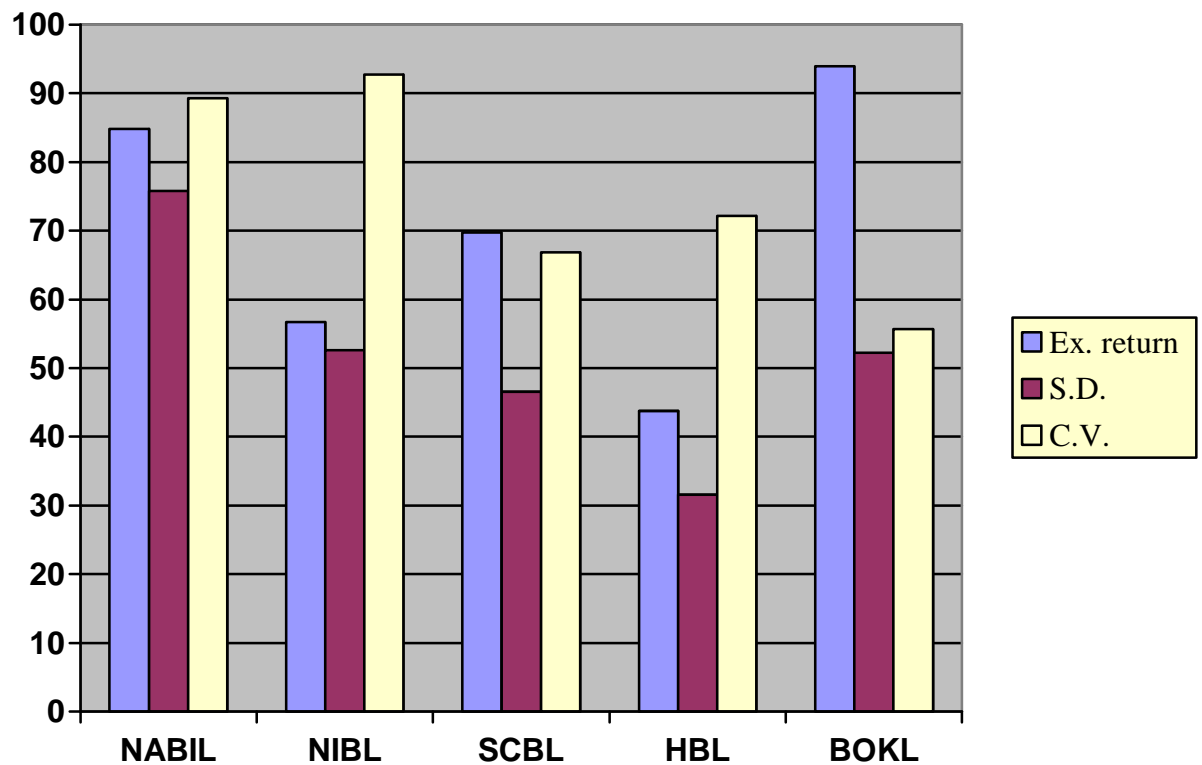
Table 4.24:- Market Capitalization of Five Commercial Banks of 15th July 2008 (Rs. in million)

Banks	Market Capitalization	Percentage (%)
NABIL	36259.98	27.1834
NIBL	24564.54	18.4155
SCBL	42337.95	31.7399
HBL	16054.04	12.0354
BOKL	14173.82	10.6258
Total	133390.33	100

Data source: NEPSE

On the basis of market capitalization, SCBL is the biggest and NBBL is the smallest company.

Diagram 4.12: Market capitalization of five listed commercial Banks of 15th July 2008
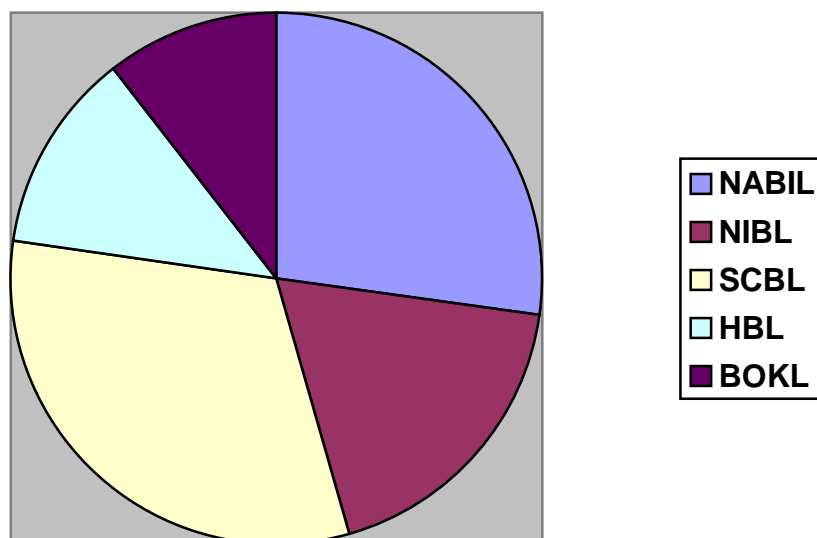
4.6 Internal Security Comparison

In this section, the comparison between different securities taken as a sample for this study is compared. The comparison is made in terms of expected return, standard deviation and the coefficient of variation.

Table: 4.25

Expected Return, Standard Deviation and Coefficient of Variance of Selected Companies

Securities	Expected Return	Standard Deviation	Coefficient of Variance
NABIL	84.86	75.78	89.30
HBL	43.78	31.60	72.16
NIBL	56.74	52.62	92.73
SCBL	69.71	46.57	66.81
BOKL	93.92	52.26	55.64

In the above table, the expected return of BOKL has maximum and minimum of HBL. From the return point of view, investors should invest their money to buy securities of BOKL. If we analyze the risk of sample companies, NABIL has highest risk whereas

HBL has lowest risk. From the risk point of view, it is better to invest in securities of HBL. In sum, if investor has a desire to invest their money by analyzing both risk and return then they should go for BOKL because BOKL has low coefficient of variation comparing to other sample companies.

4.7 Comparison with Market

4.7.1 Analysis of Market Risk and Return

In Nepal, there is only one Stock Market, namely Nepal Stock Exchange Limited (NEPSE). The overall market movement is presented by market index (i.e. NEPSE index).

The NEPSE index is continuously changing on the basis of market movement. The overall market return, its standard deviation and coefficient of variation is presented below.

Table 4.26: Calculation of Realized Rate of Return, Standard Deviation, Expected return and C.V. of overall market.

Fiscal year	NEPSE index (NI)	$R_m=(NI_1-NI_0)/NI_0$
02/03	204.86	-
03/04	222.04	8.38621%
04/05	286.67	29.1074%
05/06	386.83	34.9391%
06/07	683.95	76.8089%
07/08	963.36	40.8524%
Total		190.09%
Expected return (Avg($\overline{R}$))=38%		
Standard deviation ($\dagger$)=24.90%		
Coefficient of Variation (C.V.) =65.52%		

(Source:-Appendix-2, Table:6)

Diagram 4.16: Annual return of common stock of market index
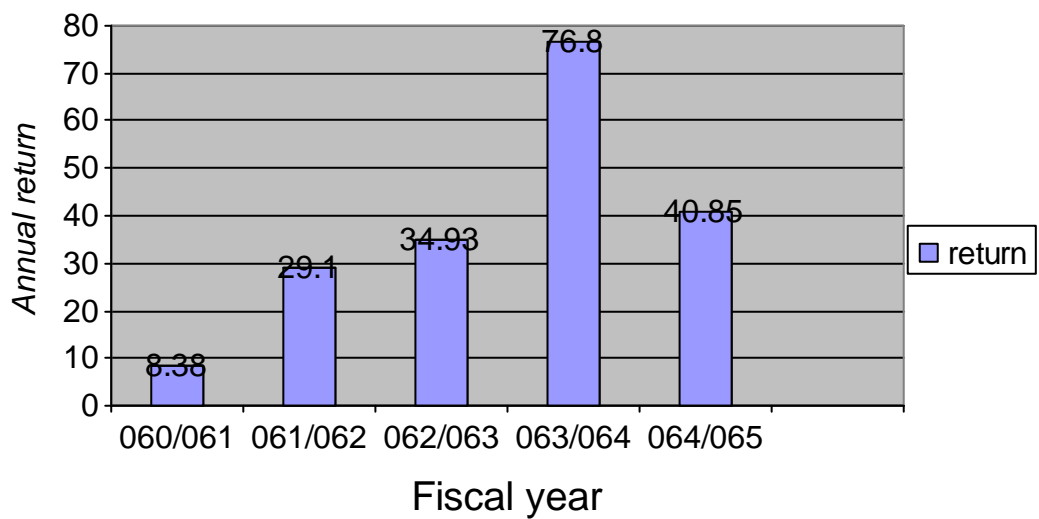
The trend of market return shows that at the first four years the overall market return is in increasing order and in the final year it is decreased. And the overall market return is minimum in beginning year and maximum in the year 063/064. The trend shows that the market return is slightly fluctuating. From the market return of five year, the expected return on market is calculated as 38 percent and the standard deviation is found as 24.90% By relating the market return with the market standard deviation, market CV i.e. risks per unit of return is calculated as 65.52%. Hence in the market as a whole, for 100 percent return, the risk shall be less than one times i.e. .6552 percent.

4.7.2 Comparison of Individual Securities Return with Market Return

In this section, the comparison of individual stock return with market return is presented. The market return, calculated on the basis of closing market index is used in this section.

Table: 4.27

Comparison of Individual Securities with Market Return

Securities	Expected Return	Standard Deviation	Coefficient of Variance
NABIL	84.86	75.78	89.30
HBL	43.78	31.60	72.16
NIBL	56.74	52.62	92.73
SCBL	69.71	46.57	66.81
BOKL	93.92	52.26	55.64
Market Return	38	24.90	65.52

In the above table, the expected return of BOKL has maximum i.e. 93.92 percent and minimum of HBL i.e. 43.78 percent with respect to other sample companies which is greater than the market return i.e. 38 percent. All the sample companies has higher return in comparison to market return..

As there is high return of BOKL among all those companies, there is moderate risk for the investors to invest their money. HBL has the low standard deviation among the all sample companies so by considering the risk factor investing in HBL is appropriate for the investors.

The coefficient of variation of the market is determined as 65.52%, which indicates that there are 0.6552 units of risk in order to get, earn 1 more unit of return. NIBL has higher CV respect to other sample companies while BOKL has the lower among all.

4.8 Market Sensitivity Analysis

Market sensitivity of stock is explained by its beta coefficient, an index of systematic risk. Beta's can be used for an ordinary ranking of the systematic risk of assets. Systematic risk is the thing that matters to investors holding a well diversified portfolio. The greater the beta, the greater the risk and the expected return.

The term B_j is called the beta coefficient which measures the slope of the characteristics line. Mathematically, the systematic risk beta is measured as the covariance of the stock return with the market returns expressed per units of market variance as follows;

$$B_j = \frac{\text{cov}(R_j, R_m)}{\dagger_m{}^2}$$

$$= \dagger_{j}\dagger_{m}\mathrm{r}_{jm} / \dagger_{m}^{2}$$

$$= \dagger_{j}\mathrm{r}_{jm} / \dagger_{m}$$

And $\mathrm{cov(R_j,R_m)} = \sum [(R_j - Avg.(R_j))(R_m - Avg.(R_m))]/(n-1)$

Where,

$\mathrm{cov(R_j,R_m)}$= the covariance of return of the $\mathrm{j^{th}}$ assets with the market.

$\dagger_{m}^{2}$ = the variance of the return of the market index.

r_{jm} = correlation between market return and stock 'j' return.

Table: 4.28 Calculation of Beta coefficient (β) of the Common Stock of NABIL

Fiscal year	R_j	R_j - Avg(R_j)	R_m	R_m - Avg(R_m)	[(R_j - Avg(R_j)) (R_m - Avg(R_m))]
03/04	44.90	-39.96	8.38	-29.62	1183.62
04/05	57.5	-27.36	29.11	-8.89	243.23
05/06	54.48	-30.38	34.94	-3.06	92.96
06/07	220.13	135.27	76.81	38.81	5249.83
07/08	47.32	-37.54	40.85	2.85	-106.99
Total	$\sum R_j =$ 424.33		$\sum R_m =$ 190.09		$\sum (R_j - \overline{R_j})(R_m - \overline{R_m})$ =6662.65

We have,

Covariance of stock'j' and 'm',

$\mathrm{cov(R_j,R_m)} = \sum [(R_j - Avg.(R_j))(R_m - Avg.(R_m))]/(n-1)$

$\quad\quad\quad =66621/4$

$\quad\quad\quad =1665$

$\mathrm{B_j} = \mathrm{cov(R_j,R_m)}/ \dagger_{m}^{2}$

$\quad\quad =1665/620.01$

$\quad\quad =2.68$

Where,

$\dagger_{m}^{2}$ =variance of market return i.e. 24.90% and

n= number of observation i.e. 5

Since the beta of NABIL is 2.68, which is greater than one (i.e. market beta), its stock is highly sensitive with market as the beta is positive and it is aggressive asset. It shows

that if the market return rises by one percent, NABIL's stock return will rise by 2.68 percent.

Table 4.29: Beta coefficient of each bank

Commercial banks	Beta(ꙅ)	Remark
NABIL	2.68	Aggressive
NIBL	0.89	Defensive
SCBL	1.83	Aggressive
HBL	1.20	Aggressive
BOKL	0.12	Defensive

(Source-Appendix-5, Table:2)

Since the beta of NABIL, SCBL, HBL are more than one, they are aggressive assets and beta of NIBL and BOKL are less than one so they are defensive stocks for investment.

Table 4.30:- the beta coefficient, expressed return, required rate of return and price evaluation of all five commercial banks.

Commercial banks	Risk free rate(R_f)	Beta(ꙅ)	Avg(R_m)	Ex.return Avg(R_j)	RRR=R_f+ (R_m- R_f) ꙅ $_j$	Price evaluation
NABIL	10	2.68	38	84.86	85.04	Over priced
NIBL	10	0.89	38	56.74	34.92	Under priced
SCBL	10	1.83	38	69.71	61.24	Under priced
HBL	10	1.20	38	43.78	43.6	Under priced
BOKL	10	0.12	38	93.92	13.36	Under priced

Note: - R_f=10%, according to assuming Treasury bill rate of 364 days on fiscal year2007/08. Source NEPSE

Where,

R_f= risk free rate of return

R_m= expected return on market

If the required rate of return is higher than expected rate of return, the stock is said to be over priced and investor sold the holding stock or may involved in short selling strategy. If the expected return is higher than required rate of return, the stock is said to be under priced security and an investor make buying strategy for this type of stock.

In the above table, all the stocks are under priced and so for the investment point of view all are safe for investment. One can easily invest their money for buying the common stock of commercial banks.

4.9 Portfolio Analysis

A portfolio is a combination of two or more than two securities or assets.

The portfolio management is related to the efficient portfolio investment in financial assets. And the portfolio analysis is performed to develop of portfolio that has the maximum return at that ever level of risk and investor think appropriate. If portfolio is being constructed, they can reduce unsystematic risk without losing considerable return. Therefore we need to extend our analysis of risk and return to portfolio context.

The expected return on a portfolio is simply the weighted average of the expected returns on the individual assets is the portfolio with the weight being the fraction of the total portfolio invested in each asset. And the weights are equal to the proportion of total funds invested in each security. The sum of weights must be 100 percent. So, the analysis is based on two asset portfolio and the tools for analysis are presented in the chapter third, research methodology. Here the

Portfolio of the C.S. of NABIL bank (say stock A) and C.S. of NIBL (say stock B) is done.

Table 4.31: Calculation of Cov(R$_A$,R$_B$) of stock of NABIL and NIBL.

Fiscal Year	R$_A$	R$_A$-Avg(R$_A$)	R$_B$	R$_B$ –Avg(R$_B$)	(R$_A$-Avg(R$_A$))(R$_B$ – Avg(R$_B$))
03/04	44.89	-39.96	20.12	-36.6142	1463.1
04/05	57.5	-27.36	-13.56	-70.3038	1923.51
05/06	54.48	-30.38	115.87	59.135	-1796.5
06/07	220.13	135.27	71.92	15.18063	2053.48
07/08	47.32	-37.54	89.35	32.61801	-1224.5
Total					=2419.1

Data is taken from table no. 4.2 and 4.4 respectively.

We have,

$$\text{cov}(R_j, R_m) = \sum [(R_j - Avg.(R_j))(R_m - Avg.(R_m))]/(n-1)$$

$$= 2419.1/4$$

$$= 604.77$$

The Optimal portfolio weight of stock A and B which minimized the risk is given below;

$$W_A = \frac{(\sigma_B^2 - Cov(R_A, R_B))}{(\sigma_A^2 + \sigma_B^2 - 2Cov(R_A, R_B))}$$

And $W_B = (1 - W_A)$

Where,

W_A = Optimal weight to invest in stock of NABIL

W_B = Optimal weight to invest in stock of NIBL

σ_A^2 = Variance of NABIL

σ_B^2 = Variance of NIBL

Here,

W_A = (2768.86-604.77)/(5742.6+2768.86-2*604.77)

$\quad$ =2164.09/7301.92

$\quad$ =0.296

W_B = 1-W_A

$\quad$ =1-.296

$\quad$ =0.704

Here, if the portfolio is constructed with the above weights the risk can be minimized and it will be the ideal proportion for portfolio.

Calculation for portfolio Returns:

It is combination of two or more securities or assets and portfolio return is simply a weighted average of the expected returns on individual stock returns.

Here,

$Avg(R_P)$ = W_A*$Avg(R_A)$+W_B*$Avg(R_B)$

$\quad$ =.296*84.86+.704*56.74

$\quad$ =65%

Where,

$Avg(R_P)$ = Expected return on portfolio of stock A and Stock B

$Avg(R_A)$ = Expected return on NABIL

$Avg(R_B)$ = Expected return on HBL

Calculation of portfolio risk:

Portfolio risk is a function of the proportion invested on common stocks, the risk ness of the components and the correlation of returns on the stocks or securities. It is measured by standard deviation and calculated by using this formula;

$$\dagger_p = \sqrt{(W_A{}^2\dagger_A{}^2 + W_B{}^2\dagger_B{}^2 + 2W_AW_BCov(R_A, R_B))}$$

$$= \sqrt{(.294^2*75.78^2+.704^2*52.62^2+2*.296*.704*604.77)}$$

=46%

Where,

$\dagger_p$ = The standard deviation of portfolio return of stock A and Stock B

By using portfolio, we can lower the risk in comparison to return.

Before diversification, the standard deviation of NABIL and NIBL were   75.78% and 52.62% respectively. But their portfolio risk is only 46% which is less than before diversification. It shows that by using portfolio we can minimized risk without changing in return in same proportion. Thus, the portfolio construction is beneficial for investment.

Table 4.32: Various Correlation between each bank.

	NABIL	NIBL	SCBL	HBL	BOKL
NABIL	1	0.15	0.81	0.98	-0.31
NIBL	0.15	1	0.61	0.21	0.86
SCBL	0.81	0.61	1	0.87	0.26
HBL	0.98	0.21	0.87	1	-0.22
BOKL	-0.31	0.86	0.26	-0.22	1

 Calculation can be obtained by using excel work sheet.

Here, almost many stocks are positively correlated, few are negatively correlated and some are perfectly positively correlated. In this condition some risk can be reduced or eliminated and some are not reduce and eliminated.

5 Hypothesis Formulation

Hypothesis I

Formulation of Hypothesis;

Null Hypothesis (Ho): Average return of common stock of listed companies is equal to the market return.

Alternative hypothesis (H$_1$): Average return of common stock of listed companies is not equal to the market return.

Computation of test statistics

t= ((Avg(X)- ~)* $\sqrt{n}$ /S

=(69.8-38)* $\sqrt{5}$ /37.48

=1.89

Tabulated value of t at 5% level of significance for 4(5-1) degree of freedom is 2.13

Decision: Since the calculated value of t is less than its tabulated value,

Null hypothesis is accepted i.e. the average return of common stocks of listed companies is equal to the market return.

Hypothesis II

Hypothesis formulation;

Null Hypothesis (Ho): $\sim_1 = \sim_2 = \sim_3 = \sim_4 = \sim_5$ i.e. There is no significance difference in average return of commons stocks of listed commercial bank and overall market portfolio return.

Alternative Hypothesis (H_1):= $\sim_1 \neq \sim_2 \neq \sim_3 \neq \sim_4 \neq \sim_5$ i.e. There is significance difference in average return of common stocks of listed commercial bank and overall market portfolio return.

Table 4.33: Computation of test statistics:

Fiscal year	Holding period return					Sum of the square				
	Nabil (X_1)	HBL (X_2)	BKL (X_3)	NIBL (X_4)	SCBNL (X_5)	X_1^2	X_2^2	X_3^2	X_4^2	X_5^2
060/061	44.90	20.21	54.04	20.12	13.11	2016.01	408.4441	2920.32	404.8144	171.87
061/062	57.5	32.81	50.85	-13.56	41.261	3306.25	1076.496	2585.72	183.8736	1702.47
062/063	54.48	28.80	161.16	115.87	82.623	2968.07	829.44	25972.5	13425.86	6826.56
036/064	220.13	99.09	64.12	71.92	136.56	48457.22	9818.83	4111.37	5172.486	18648.6
064/065	47.32	37.99	139.42	89.35	75	2239.182	1443.24	19437.9	7983.423	5625
Total	424.33	218.9	469.59	283.7	348.55	58986.73	13576.45	55027.8	27170.45	32974.5

Hence,

Total no. of observation (N)=25

Grand total (T) = $\sum X_1 + \sum X_2 + \sum X_3 + \sum X_4 + \sum X_5$

   =424.33+218.9+469.59+283.7+348.55

   =1745.074

Correction factors (C.F.)=T^2/N

$$=1745.074^2/25$$

$$=121811$$

Sum of square between return (SSC)

$$=(\sum X_1)^2/n_1+(\sum X_2)^2/n_2+(\sum X_3)^2/n_3+(\sum X_4)^2/n_4+(\sum X_5)^2/n_5\text{-C.F.}$$

$$=(58986.73+13576.45+55027.8+27170.45+32974.5)/5$$

$$=187735/5\text{-}121811$$

$$=37547\text{-}121811$$

$$=\text{-}84264$$

Total sum of square (SST)= $\sum X_1)^2+(\sum X_2)^2+(\sum X_3)^2+(\sum X_4)^2+(\sum X_5)^2\text{-C.F.}$

$$=424.33^2+218.9^2+469.59^2+283.7^2+348.55^2\text{-}121811$$

$$=650460.72\text{-}121811$$

$$=528650$$

Sum of a square within return (SSE)=SST-SSC

$$=528650\text{-}(\text{-}84264)$$

$$=612914$$

Table 4.34: ANOVA table.

Source of variance	Sum of source	Degree of freedom	Mean sum of square	F-ratio
Between return	SSC=-84264	C-1=5-1=4	MSC= -16852.8	F= -0.55
Within return	SSE=612914	N-C=25-5=20	MSE=30645.7	
Total	528650	N-1=25-1=24		

Tabulated value of F for V1=4 and V5=20 at 5% level of significance is equal to 2.87

Decision: Since the calculated value of F for (4,20) degree of freedom at 5% level of significance is less than tabulated value, Null hypothesis is accepted. i.e. there is no

significance in average of common stocks of listed commercial banks and market portfolio return.

5.1 Major Findings of this Study

The study was based mainly on primary data, collected by using questionnaire. In addition, secondary data have also been used to full fill the objectives of this research. Some of the major findings of this analysis from both primary and secondary data are summarized and presented as follows:

- Most of the investors are found investing for price appreciation than earning from dividend; some investors also invest for the increment of their social status.

- Most of the investors like to invest in banking sector. They believe that the share price of banking sector always rises. Finance and Insurance sector is their second priority. As not performing well in the market they are less interested to invest in manufacturing, Trading and other sectors.

- Most of the investors think Net worth as an important factor affecting MPS than EPS, DPS and Company Goodwill. They also believe EPS as a main factor affecting stock return than MPS, Net worth and Company Goodwill.

- Investors give prefers in fixed deposit and the real estate rather than securities. They feel more safe in these two alternative than that of securities. Although securities is more preferred alternative than the Bullion by the investors.

- Investors perceived as a successful company which declares bonus and right shares. The declaration of dividend is the next important measuring rod of company's performance by the investors.

- Before investing in primary market i.e. in IPO, investors consider "Sector of the investment" as a factor that drives them to the market. They consider "capital structure" of the company at last after the "founder and management" and "future plan".

- Before investing in securities of the secondary market, investors consider first that the security is from which sector. The future DPS which is the return of the investment is given last preference for consideration after MPS and the Goodwill of the company.

- Only 35 percent investors consider risk as manageable factor, 31.25 percent investors think risk as an unknown factor where as 30 percent think predictable and rest 3.75 percent think as a known factor of investment.

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- Most of the investors do not want to take high risk. 55 percent investors prefer to take moderate risk with moderate return. 37.5 percent want high return with high risk and only 7.5 percent investor's want low return with low risk.

- Major portion of the investors i.e. 41.25 percent consult their friend before making investment. 26.25 percent investors consult brokers, 18.75 percent investors make their decision themselves and only 13.75 percent investors consult professionals for making their investment sound enough.

- Most of the investors' i.e. 45 percent are informed through newspaper. 28.75 percent investors are informed brokers, 20 percent from their friends and rest 6.25 percent investors informed through electric media.

- Investors do not want to participate in AGM regularly. Only 45 percent investors participate regularly in AGM. 30 percent investors participate some times, 15 percent investors participate by proxy and rest 10 percent investors do not participate in AGM.

- Investors do not want to retain the stock if the trend of market price is increasing or decreasing. Most of the investors prefer to sell the stock if the trend of market price is increasing and or decreasing.

- Most of the investors think information printed in prospectus as more optimistic and false statement. Only 16.25 percent investors believe the information printed in prospectus as a true presentation.

- The existing rules and regulations of stock market is not satisfactory as per response of 46.25 percent investors. 32.50 percent investors think it is a satisfactory and 21.25 percent thinks as an adequate.

- About 45 percent investors perceived management attitudes towards them as poor. 38.75 percent investors perceived as satisfactory and only 16.25 percent have positive response to the management.

- Most of the investors want their more number of representations on board to protect their interest. They give second priority to regular flows of information whereas awareness program by government authorities and increased shareholders activism is on third and last priority given by them to secure their interest in stock market.

- Major portion of the investors are not satisfied with the current performance of stock market. 53.75 percent investor thinks the current performance of stock market as poor performance. 41.25 percent investors think it is a satisfactory

whereas only 5 percent investors think the current performance as an excellent one.

- From the analysis of secondary data, the expected return of BOKL is found highest i.e. 93.92 percent among all securities. The expected return of HBL is lower among all sample companies and the expected return of market is found 38 percent.

- The measurement of total risk i.e. is highest in the stock of NABIL and it is also highest in the all sample companies hence it is more risky than others. The standard deviation of HBL is lower than all. The standard deviation of market is found 24.90%.

- The relative measurement of risk with return i.e. CV is 92.73% of NIBL which is maximum among all sample companies while 66.81% of SCBL is lower among all. The CV of market is 65.52%..

- The four commercial bank stocks are under priced and one bank stock is over Priced among the five listed commercial banks i.e. investors need to buy these stocks. The NABIL bank stock is over priced. So, the stockholder wants to sell these securities.

- The first hypothesis is based on the taste of average return of common stocks of listed companies are equal to the market return or not and it was found that if the level of significance is 5%, Null hypothesis is accepted. i.e. Average returns of listed commercial banks are equal to market return,

- The second hypothesis is based on the test the significance difference in average return of common stock of listed commercial banks and overall market portfolio and it was found that the Null hypothesis is accepted at 5% of level of significance i.e. there is no significance difference in average return of common stock of listed commercial banks and overall market portfolio.

- The many stock are positively correlated, few are negatively correlated and some are perfectly positively correlated. So, some risk can be reduced or eliminated and some are not reduce and eliminated.

Investors fears on decrement of the stock price when it is in increasing trend, hence they want to sell the stocks and when there is decreasing trend of MPS of stocks, they predict market price further decrease and want to sell the stock. Most of the investors want to invest in moderate level of risk with moderate return.

Investors thinking about risk, analyzing the investment before and their consultation habit with experts and professionals is not satisfactory. Investing with out analyzing and taking expert's opinion may increase the risk.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is the final body of this research. It contains summarize description of the research. Beside it, conclusion drawn from this research and the recommendations to correct some aspects to improve the position of the Nepalese stock market is also presented in this chapter.

5.1 Summary

Fair and timely information disclosure is essential ingredient to function the security market efficiently. Information deficiency in the capital market may be one of the reasons for determination of share price by excessive speculation. This may lead to the domination by the gamblers and speculators in the capital market. The regulatory norms on submission and disclosure of information by the listed banks are meant for ensuring good corporate governance, transparency and investor protection.

The first chapter of this research concludes background of the study, focus of the study, statement of the study and limitation of the study. This study was conducted to analyze the investor's awareness in Nepalese stock market. The first objective was to know the present transaction system of stock market. Similarly, second objective of this research was to examine whether the investors are fully aware or not in the share trading system. Third objective of this research was to analyze and evaluate the risk and return of common stock of some selected banking. Finally the last objective was to give suggestion and recommendation to the concern persons and office.

The second chapter is review of literature. The review is done on the topic INVESTORS CONSCIOUS IN NEPALESE STOCK MARKET. Review of literature is conducted separately through review of article, books, journals, dissertations, company prospectus etc. In this chapter the major terms as well as tools has been described briefly. Similarly review of different research, articles and journals are also presented in the chapter.

The third chapter is research mythology. It relates to the overall approach to the research process. Research methodology is the way to solve a research problem systematically. It describes the methods and process followed in the entire research process. Hence this chapter deals with the method and process applied for this research study. This study covers quantitative methodology in a greater extent and also uses descriptive methods based on both technical and logical aspects. On the basis of historical data, different financial and statistical tools are used for the analysis of different variables. Component

of research methodology are also presented to give clearer picture. The financial tools like MPS, DPS, EPS, return on common stock, expected return on common stock, standard deviation, coefficient of variation, portfolio risk, portfolio return, and required rate of return have been used to measure risk and return of commercial banks and also T-test and ANOVA has also been used as statistical tools to determined financial position of the listed sample commercial bank.

In the fourth chapter, different data collected has been presented separately. This is the main body of the research which gave the different output to fulfill the objective of the research. To fulfill such objective, I have collected both primary as well as secondary data and analyze it in my best knowledge. Primary data has been collected by structured questionnaire. It has been distributed to the 80 investors randomly and gathered different opinion from them.

Beside it, I have gathered verbal information from different respondent of Nepal Stock Exchange and security Board. It has been presented in the same chapter to know the current transaction or trade system of stocks.

Similarly, I have gathered secondary data from current annual report of SEBON. It is risk and return, portfolio risk, port portfolio return, T-test and ANOVA of different selected banks. The collected data has been analyzed and presented by using different financial and statistical tools in the same chapter.

Further, overall return of market is computed on the basis of closing NEPSE index. Side by side the comparison of individual stock return with market return is presented in the same chapter.

The study was based mainly on primary data, collected by using questionnaire. In addition, secondary data have also been used to full fill the objectives of this research. At the end of the chapter, some of the major findings of this analysis from both primary and secondary data are summarized and presented.

5.2 Conclusion

The awareness of investors about the company in which they are investing is not satisfactory as they give more emphasis on banking sector for investment. Investing without knowledge about capital structure, founder and management and future plan of the company may leads the investment towards the wrong way and there will be greater probability of suffering loss. There is high chance of exploitations of the investors by the market intermediaries, as the awareness of investors about the rules and regulations on the

behalf of them is not satisfactory. Due to the high degree of dissatisfaction to the rules and regulations among investors, it is concluded that the existing rules and regulations are not appropriate and in favor of investors.

Most of the investors are not satisfied with the management attitudes towards them and thus it is concluded that the current attitudes towards public share holders is not appropriate. They are not agreeing with the current performance of stock market and thus stock market performance is not adequate as it would be. Most of the investors prefer to invest in the banking sector. They do not like to invest in other sector because of their lack of sufficient knowledge. Most of the investors are buying shares of banking sectors only and making portfolios from the same sector. But investing in the same shares of same industry can not reduce risk as they correlate positively.

Since both the quality of information available to the investors and their rationality is low, they have very little knowledge of trading procedures, price formation mechanism and risk diversification. The lack of investor's education training and research has made capital market least prioritized sector of the state. Most of the investors in Nepalese capital market do not believe on statement published on prospectus by the company before going to public. Despite this fact they put their application for higher price in future. There is prevalent belief that buying share is a sure shot way of making profit. They do not think the decrement of share price from its par value. The rumor and whim is highly responsible in influencing the decision of the investors in share investment. Rather than analyzing to find out whether the company is worthwhile or not, they run behind the rumors and whim of the market.

5.3 Recommendations

There is no doubt that the level of awareness of investors in Nepalese capital market is quite low. It is thus necessary to increase the level of awareness of individual investors towards various aspects of capital market. Based on the finding of the study, the following recommendations have been made.

➤ The transparency and openness of transactions, quality of professional service and improved legal regulatory and supervisory frameworks are the urgent needs to build up the confidence of the potential investors in Nepalese capital market. This requires an integral plan of action not piecemeal effort.

➤ Policy should be adopted to attract the investors towards the secondary market to mobilize high liquidity of market.

- Investors should make a proper analysis or consultation with experts before selling or purchasing the securities. NEPSE and SEBO/N should manage the sufficient, updated and relevant information about the listed companies that would help the investors in their investment decision making.

- Investors should be aware about the rules and regulation and the function of stock exchange and capital market to protect them from being exploited. The rules and regulation should be timely updated and its implementation should be effective.

- Policy should be adopted to reduce the exploitation of the investors by the market intermediaries and to stop manipulation practices. Effective measure should also be taken to make the market more efficient.

- Investors should be adopted to reduce the exploitation of the investors by the market intermediaries and to stop manipulation practices. Effective measure should also be taken to make the market more efficient.

- Investor should analyze the financial performance of the banks, its current position and future plans before investing in its securities. This is one game where self-knowledge, superior forecasting ability, and should understanding about the information can give a winning edge to the investor.

- Although SEBO/N has been trying to enhance the understanding of the existing stock investors and the potential investors by disseminating the information using various media and its own publications, it is not enough and satisfactory. Investors outside Kathmandu valley are facing various difficulties in getting information regarding securities market. So it should make necessary arrangements to increase the participation of investors outside of kathmandu valley.

- As investors are less informed and less aware there will be greater chance of exploitation. In this regard, suitable packages of information for investor's should be developed and awareness program should be lunched through different media.

- To protect investor's interest on capital market, the government should promulgate the suitable policies. The amendment of concerned act and its regulations should be made.

- Market professionalism should be developed. Research on emerging issues on capital market should be conducted. Programs should be lunched to educate investors. There should be effective contribution of public companies on investor's awareness program.

- Investors should consult brokers and professionals before making investment decision. Investors should change their perception about banking sector as an always profitable one. They must search other sectors that can provide high return with low risk. Brokers and professional services on stock market should be expanded.

- Grievance handling mechanism of investors should be developed. Management should give high attention to satisfy their investors. They should preserve the interest of minorities.

- Investors should invest by making portfolio of different sectors to minimize risk and maximize return. Portfolio should be constructed on negatively correlated assets to reduce significant level of risk.

- Informed and well aware investors are the back bone for the development of capital market. They should define their priorities themselves. Every investor should read journals and newspapers as well as there publications related to stock market issues of different organization. They should keep record of daily stock price and trading volume published by NEPSE.

- In the age of modern developed technology, the trading system of NEPSE needs to be modernized. It needs to develop efficient and effective information channel to provide updated data and related information. NEPSE needs to initiate different programs for investor's education through investor's meetings and seminars in different subject matters of stock market.

- As a main regulatory body SEBO/N needs to take quick action against breaking rules and regulatory by any company or any other components of stock markets. Situation of getting benefit in breaking rules and regulation should be avoided. SEBO/N should examine the company's performance before giving approval to issue shares to the general public. Presentation of fake information and artificial data should be controlled and that should be punished to protect investors from exploitation.

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Questions for Primary Research

Please rank the following:

1.   Why do you invest your money in shares of companies?

     a.   For Price appreciation   ☐

     b.   For Earning dividend   ☐

     c.   For Social status   ☐

2.   Which sector do you prefer to invest your money?

     a.   Banking   ☐

     b.   Finance & Insurance   ☐

     c.   Manufacturing and Trading and others   ☐

3.   Which factor affecting the market price of share?

     a.   Earning per share   ☐

     b.   Net worth   ☐

     c.   Dividend per share   ☐

4.   Which factor affecting the return on stock most?

     a.   Net worth   ☐

     b.   Company's goodwill   ☐

     c.   Earning per share   ☐

     d.   Market price per share   ☐

5.   Which areas do you think is the best alternative to invest?

     a.   Fixed deposit   ☐

     b.   Securities   ☐

     c.   Real estate   ☐

     d.   Bullion   ☐

6.   Which indicator do you think is as performance measure of a company?

     a.   Declaration of dividend   ☐

     b.   Systematic follow of information   ☐

     c.   Issue of bonus and right share   ☐

     d.   Timely AGM   ☐

7.   Which factor those drive you to the market at the time of initial public offering?

     a.   Sector   ☐

     b.   Founder and management of the company   ☐

      ☐

      c.   Future plans of the company

      d.   Capital structure of the company   ▭

8.   Which factor those drive you to invest in the secondary market?

      a.   Market price of the share   ▭

      b.   Goodwill of the company   ▭

      c.   Dividend per share   ▭

      d.   Sector   ▭

9.   What do you suggest for improvement to be done to protect public interest in stock market in Nepal?

      a.   Investors awareness program by Government authorities   ▭

      b.   Regular flows of information   ▭

      c.   Increased shareholder activism   ▭

      d.   More representation of public on Board   ▭

Please tick one of them following:

10.   How you access the nature of the risk on the stock investment?

      a.   Known   ▭

      b.   Unknown   ▭

      c.   Predictable   ▭

      d.   Manageable   ▭

11. Which one do you prefer on the stock investment?

    a. High risk with high return ☐

    b. Moderate risk with moderate return ☐

    c. Low risk with low return ☐

12. How far you consult those before investing in stocks?

    a. Brokers ☐

    b. Friends ☐

    c. Self decision ☐

    d. Professional ☐

13. Which sources from you get the information about stock market?

    a. Newspaper ☐

    b. Brokers ☐

    c. Friends ☐

    d. Electronic media ☐

14. What is your response on increasing market price of the stocks?

    a. Sell ☐

    b. Buy ☐

    c. Don't trade ☐

15. What is response on decreasing market price of the stocks?

    a. Sell ☐

    b. Buy ☐

    c. Don't trade ☐

16. How far you participate on company's Annual general meeting?

    a. Regular ☐

    b. Sometimes ☐

    c. By proxy ☐

    d. No participation ☐

17. How do you react on the statement published by the company before going to public?

    a. True statement ☐

    ☐

b. False statement

c. More optimistic ☐

18. What is your opinion about existing rules and regulations of stock market in Nepal?

    a. Satisfactory ☐

    b. Poor ☐

    c. Adequate ☐

19. What do you feel about management attitudes towards public shareholders?

    a. Positive ☐

    b. Poor ☐

    c. Satisfactory ☐

20. What is your response on current performance of stock market in Nepal?

    a. Excellent ☐

    b. Satisfactory ☐

    c. Poor ☐

Appendix-1

Appendix- 1.a
Response about Investors' Objective on Stock Investment

S.N.	Alternatives	Rank wise no. of Response			Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**				
1	For Dividend	22	49	9	80	147	1.83	2
2	For Price Appreciation	54	19	7	80	113	1.41	1
3	For Social Status	4	10	66	80	222	2.77	3

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.b
Response about Sectoral Preference of Investors

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**	**4**				
1	Banking	56	21	3	0	80	107	1.33	1
2	Finance & Insurance	20	50	8	2	80	152	1.90	2
3	Manfg. & Trading	4	6	60	10	80	236	2.95	3
4	Others	0	3	9	68	80	305	3.81	4

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.c
Response about Factor Affecting MPS of Stock

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**	**4**				
1	EPS	22	25	28	5	80	176	2.20	2
2	DPS	15	18	35	12	80	204	2.55	3
3	Net Worth	35	26	11	8	80	152	1.90	1
4	Company's Goodwill	8	11	6	55	80	268	3.35	4

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.d
Response about Factor Affecting Stock Return

S.N.	Alternatives	Rank wise no of		Total	Weighted	Mean	Overall

		Response				Response	Value	Weight	Rank
		1	**2**	**3**	**4**				
1	EPS	33	25	12	10	80	159	1.98	1
2	DPS	22	26	28	4	80	174	2.17	2
3	Net Worth	16	18	30	16	80	206	2.57	3
4	Company's Goodwill	9	11	10	50	80	261	3.26	4

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.e
Response about Factor Affecting Stock Return

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**	**4**				
1	Securities	18	20	23	19	80	203	2.53	3
2	Real State	22	22	27	9	80	183	2.29	2
3	Bullion	10	12	13	45	80	253	3.16	4
4	Company's Goodwill	30	26	17	7	80	161	2.01	1

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.f
Response about Preferred Factor for Measuring Company's Performance

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**	**4**				
1	Issue of Bonus & Right Share	12	5	25	38	80	249	3.112	3
2	Declaration of Dividend	27	31	14	8	80	163	2.03	2
3	Timely AGM	38	30	12	0	80	134	1.67	1
4	Systematic Flows of Information	3	14	29	34	80	254	3.17	4

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.g
Response about Driving Factors for Investor's to Primary Market

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	**2**	**3**	**4**				
1	Capital Structure	11	13	19	37	80	242	3.02	4

2	Future Plans	15	23	27	15	80	202	2.52	3
3	Sector	32	27	12	9	80	158	1.97	1
4	Founder & Management	22	17	22	19	80	198	2.47	2

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.h
Response about Preferred Factor for Measuring Company's Performance

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	2	3	4				
1	MPS	22	24	21	13	80	185	2.31	2
2	DPS	11	13	22	34	80	239	2.98	4
3	Company's Goodwill	14	16	25	25	80	221	2.76	3
4	Sector	33	27	12	8	80	155	1.93	1

Note: Alternative having the lowest mean weight is the most important.

Appendix- 1.i
Response about Protection of Interest in Stock Market

S.N.	Alternatives	Rank wise no of Response				Total Response	Weighted Value	Mean Weight	Overall Rank
		1	2	3	4				
1	More Representation of Public on Board	36	22	13	9	80	155	1.93	1
2	Regular Flows of Information	22	23	19	16	80	189	2.36	2
3	Investors Awareness Program by Govt. Authorities	15	27	26	12	80	195	2.43	3
4	Increased Shareholders Activism	7	8	22	43	80	218	2.72	4

Note: Alternative having the lowest mean weight is the most important.

Appendix-2
Table 1: Expected Return, S.D. and C.V. of C.S. of NABIL.

Fiscal Year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt_{-1}) + Dt}{Pt_{-1}} \times 100\%$	$Rj-\overline{Rj}$	$(Rj-\overline{Rj})^2$

			Yearly Return	$R_j - \overline{R_j}$	$(R_j-\overline{R_j})^2$
2002/03	735	-	-	-	-
2003/04	Rs 1000	Rs 65	44.898%	-39.962	1596.96
2004/05	Rs 1505	Rs 70	57.5%	-27.36	748.57
2005/06	Rs 2240	Rs 85	54.485%	-30.375	922.638
2006/07	Rs 5050	Rs 2120	220.134%	135.274	18299
2007/08	Rs 5275	Rs 2170	47.3267%	-37.533	1408.75
N=5			Rj = 424.3437%		$\sum (R_j - \overline{R_j})^2$ =22976

We have,

$$\text{Expected return (Avg}(\overline{R})) = \frac{\sum (R_j)}{n}$$

$$=424.34/5$$

$$=84.86\%$$

$$\text{Standard deviation } (\dagger) = \sqrt{\frac{\sum (Rj - Rj)^2}{n-1}}$$

$$= \sqrt{(22976/4)}$$

$$=75.78\%$$

$$\text{Coefficient of Variation (C.V.)} = \frac{\dagger}{(\text{Avg}(\overline{R}))}$$

$$= 75.78/84.86$$

$$= 89.30\%$$

Table 2: Expected Return, S.D. and C.V. of C.S. of NIBL.

Fiscal Year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt_{-1}) + Dt}{Pt_{-1}} \times 100\%$	$Rj-\overline{Rj}$	$(Rj-\overline{Rj})^2$
2002/03	Rs.795	-	-	-	-
2003/04	Rs.940	Rs.15	20.12579%	-36.6142	1340.601
2004/05	Rs.800	Rs .12.5	-13.5638%	-70.3038	4942.628

2005/06	Rs.1260	Rs.467	115.875%	59.135	3496.948
2006/07	Rs.1729	Rs.437.2	71.92063%	15.18063	230.4517
2007/08	Rs.2450	Rs.824	89.35801%	32.61801	1063.935
N=5			Rj = 283.71563%	$\sum (R_j - \overline{R}_j)^2$=11074.56	

We have,

$$\text{Expected return (Avg}(\overline{R})) = \frac{\sum (R_j)}{n}$$

$$=283.71/5$$

$$=56.74\%$$

$$\text{Standard deviation } (\dagger) = \sqrt{\frac{\sum (Rj - \overline{Rj})^2}{n-1}}$$

$$= \sqrt{(11074.56/4)}$$

$$=52.62\%$$

$$\text{Coefficient of Variation (C.V.)} = \frac{\dagger}{(\text{Avg}(\overline{R}))}$$

$$= 52.62/56.74$$

$$= 93.73\%$$

Table 3: Expected Return, S.D. and C.V. of C.S. of SCBL.

Fiscal Year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt\text{-}1) + Dt}{Pt\text{-}1} \times 100\%$	Rj-$\overline{Rj}$	(Rj-$\overline{Rj}$)^2
2002/03	Rs.1640	-	-	-	-
2003/04	Rs.1745	Rs.110	13.1098	-56.6	3203.59
2004/05	Rs.2345	Rs.120	41.2607	-28.449	809.36
2005/06	Rs.3775	Rs.507.5	82.6226	12.9126	166.735
2006/07	Rs.5900	Rs.3030	136.556	66.8463	4468.43

2007/08	Rs.6830	Rs.3495	75	5.29	27.9841
N=5			Rj = 348.5491	$\sum (R_j - \overline{R_j})^2$ =8676.10	

We have,

$$\text{Expected return (Avg(}\overline{R}\text{))}= \frac{\sum (R_j)}{n}$$

$$=348.54/5$$

$$=69.71\%$$

$$\text{Standard deviation } (\dagger)= \sqrt{\frac{\sum (Rj - Rj)^2}{n-1}}$$

$$= \sqrt{(8676.1/4)}$$

$$=46.57\%$$

$$\text{Coefficient of Variation (C.V.)} = \frac{\dagger}{(\text{Avg}(\overline{\overline{R}}))}$$

$$= 46.57/69.71$$

$$=66.81\%$$

Table 4:- Expected Return, S.D. and C.V. of C.S. of HBL.

Fiscal Year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$	$Rj-\overline{Rj}$	$(Rj-\overline{Rj})^2$
2002/03	836	-	-	-	-
2003/04	Rs 840	Rs 168	20.2153%	-23.565	555.295
2004/05	Rs 920	Rs 195.58	32.8071%	-10.973	120.404
2005/06	Rs 1100	Rs 85	28.8043%	-14.976	224.27
2006/07	Rs 1740	Rs 450	99.0909%	55.3109	3059.3
2007/08	Rs 1980	Rs 421	37.9885%	-5.7915	33.5414
N=5			Rj = 218.9061%	$\sum (R_j - \overline{R}_j)^2 = 3992.8$	

We have,

$$\text{Expected return (Avg}(\overline{R}\,)) = \frac{\sum (R_j)}{n}$$

$$= 218.90/5$$

$$= 43.78\%$$

$$\text{Standard deviation } (\dagger\,) = \sqrt{\frac{\sum (Rj - Rj)^2}{n-1}}$$

$$= \sqrt{(3992.8/4)}$$

$$= 31.60\%$$

$$\text{Coefficient of Variation (C.V.)} = \frac{\dagger}{(\text{Avg}(\overline{R}))}$$

$$= 31.60/43.78$$

$$= 72.16\%$$

Table 5: Expected Return, S.D. and C.V. of C.S. of BOKL.

Fiscal year	Closing Market Price (Pt)	Total Dividend (Dt)	Yearly Return $Rj = \dfrac{(Pt-Pt-1) + Dt}{Pt-1} \times 100\%$	$Rj-\overline{Rj}$	$(Rj-\overline{Rj})^2$
059/060	198	-	-	-	-
060/061	Rs 295	Rs 10	54.0404%	-39.88	1590.38
061/062	Rs 430	Rs 15	50.8475%	-43.073	1855.24
062/063	Rs 850	Rs 273	161.163%	67.2428	4521.59
063/064	Rs 1375	Rs 20	64.1176%	-29.802	888.18
064/065	Rs 2350	Rs.942.11	139.426%	45.5062	2070.81
N=5			Rj = 469.5945%	$\sum (R_j - \overline{R_j})^2 = 10926.2$	

We have,

Expected return $(Avg(\overline{R})) = \dfrac{\sum (R_j)}{n}$

$$=469.59/5$$

$$=93.92\%$$

Standard deviation $(\dagger) = \sqrt{\dfrac{\sum (Rj - Rj)^2}{n-1}}$

$$= \sqrt{(10926.2/4)}$$

$$=52.26\%$$

Coefficient of Variation (C.V.) $= \dfrac{\dagger}{(Avg(\overline{R}))}$

$$= 52.26/93.92$$

$$= 55.64\%$$

Table 6: Calculation of Realized Rate of Return, Standard Deviation, Expected return and C.V. of overall market.

Fiscal year	NEPSE index (NI)	$R_m=(NI_1-NI_0)/NI_0$	R_m-Avg.(R_m)	$(R_m$-Avg$(R_m))^2$
02/03	204.86	-	-	-
03/04	222.04	8.38621%	-29.62	877.344
04/05	286.67	29.1074%	-8.9	79.21
05/06	386.83	34.9391%	-3.07	9.4249
06/07	683.95	76.8089%	38.8	1505.44
07/08	963.36	40.8524%	2.85	8.1225
Total		190.09%		2479.54

We have,

Expected return of market $[Avg(R)]= \sum (R)/n$

$$= 190.09/5$$

$$=38\%$$

Standard deviation of the market $(\dagger) = \sqrt{\sum ((R - Avg(R))2)/(n-1)}$

$$=\sqrt{2479.54/(5-1)}$$

$$=24.90\%$$

Coefficient of Variation of market(C.V.)= $\dagger$ / Avg(R)*100%

$$=24.90/38$$

$$= 65.52\%$$

Appendix-3

Beta coefficient between individual bank and market return

Nabil Bank

Table 1: Beta coefficient between nabil and market.

Fiscal year	R_j	R_j-$\overline{R_j}$	R_m	R_m-$\overline{R_m}$	$(R_j$-$\overline{R_j})(R_m$-$\overline{R_m})$
060/061	44.90	-39.96	8.38	-29.62	1183.62
061/062	57.5	-27.36	29.11	-8.89	243.23
062/063	54.48	-30.38	34.94	-3.06	92.96
063/064	220.13	135.27	76.81	38.81	5249.83
064/065	47.32	-37.54	40.85	2.85	-106.99
Total	$\sum R_j =$ 424.33		$\sum R_m =$ 190.09		$\sum (R_j - \overline{R_j})(R_m - \overline{R_m})$ =6662.65
N=5	$\overline{R_j}$ = 84.86	S.D. ($_j$) =75.78%	$\overline{R_m}$ = 38%	S.D. ($_m$) = 24.90%	

$Cov_{jm} = \sum (R_j - \overline{R_j})(R_m - \overline{R_m}) / N\text{-}1 =$ 6662.65/(5-1)=1665.66

Correlation coefficient $x = \dfrac{Cov_{jm}}{\dagger_j \dagger_m} =$ 1665.66/(75.78*24.90)=0.88

Beta of individual bank(S)= $(x *_j *_m)/ _m^2$ =0.88*78.78*24.90/24.90^2=2.70

Himalayan Bank

Table2: Beta coefficient between Himalayan bank and nepse market.

Fiscal year	R_j	R_j-$\overline{R_j}$	R_m	R_m-$\overline{R_m}$	$(R_j$-$\overline{R_j})(R_m$-$\overline{R_m})$
060/061	20.21	-23.57	8.38	-29.62	698.143
061/062	32.81	-10.97	29.11	-8.89	97.5233
062/063	28.80	-14.98	34.94	-3.06	45.8388
063/064	99.09	55.31	76.81	38.81	2146.58
064/065	37.99	-5.79	40.85	2.85	-16.502
Total	$\sum R_j =$ 218.9		$\sum R_m =$ 190.09		$\sum (R_j - \overline{R_j})(R_m - \overline{R_m})$ =2971.5831
N=5	$\overline{R_j}$ = 43.78	S.D. ($_j$) = 31.60%	$\overline{R_m}$ = 38%	S.D. ($_m$) = 24.90%	

$Cov_{jm} = \sum (R_j - \overline{R_j})(R_m - \overline{R_m}) / N\text{-}1 =$ 2971.58/(5-1)=742.90

Correlation coefficient $x = \dfrac{Cov_{jm}}{\dagger_j \dagger_m} =$ 742.90/(31.60*24.90)=0.94

Beta of individual bank(S)= $(x *_j *_m)/ _m^2$ =0.94*31.60*24.90/24.90^2=1.20

Bank of Kathmandu Limited

Table3: Beta coefficient between Bank of Kathmandu and Market.

Fiscal year	R_j	$R_j - \overline{R_j}$	R_m	$R_m - \overline{R_m}$	$(R_j - \overline{R_j})(R_m - \overline{R_m})$
060/061	54.04	-39.88	8.38	-29.62	1181.25
061/062	50.85	-43.07	29.11	-8.89	382.892
062/063	161.16	67.24	34.94	-3.06	-205.75
063/064	64.12	-29.8	76.81	38.81	-1156.5
064/065	139.42	45.5	40.85	2.85	129.675
Total	$\sum R_j = 469.59$		$\sum R_m = 190.09$		$\sum (R_j - \overline{R_j})(R_m - \overline{R_m})$ =331.567
N=5	$\overline{R_j}$ =93.92%	S.D. (σ_j) = 52.26%	$\overline{R_m}$ = 38%	S.D. (σ_m) = 24.90%	

$Cov_{jm} = \sum (R_j - \overline{R_j})(R_m - \overline{R_m}) / N-1$= 331.56/(5-1)=82.89

Correlation coefficient $\rho = \dfrac{Cov_{jm}}{\sigma_j \sigma_m} =$ 82.89/(52.26*24.90)=0.06

Beta of individual bank(β)= $(\rho * \sigma_j * \sigma_m)/ \sigma_m^2$ =0.06*52.26*24.90/24.90²=0.12

Nepal Investment Bank Limited

Table4: Beta coefficient between Nepal Investment Bank Limited and Market.

Fiscal year	R_j	$R_j - \overline{R_j}$	R_m	$R_m - \overline{R_m}$	$(R_j - \overline{R_j})(R_m - \overline{R_m})$
060/061	20.12	-36.62	8.38	-29.62	1084.68
061/062	-13.56	-70.3	29.11	-8.89	624.967
062/063	115.87	59.13	34.94	-3.06	-180.94
063/064	71.92	15.18	76.81	38.81	589.136
064/065	89.35	32.61	40.85	2.85	92.9385
Total	$\sum R_j = 283.7$		$\sum R_m = 190.09$		$\sum (R_j - \overline{R_j})(R_m - \overline{R_m})$ =2210.78
N=5	$\overline{R_j}$ =56.74%	S.D. (σ_j) = 52.64%	$\overline{R_m}$ = 38%	S.D. (σ_m) = 24.90%	

$Cov_{jm} = \sum (R_j - \overline{R_j})(R_m - \overline{R_m}) / N-1$= 2210.78/(5-1)=552.70

Correlation coefficient $\rho = \dfrac{Cov_{jm}}{\sigma_j \sigma_m} =$ 552.70/(52.64*24.90)=0.42

Beta of individual bank(β)= $(\rho * \sigma_j * \sigma_m)/ \sigma_m^2$ =0.42*0.42*52.64/24.90²=0.89

Standard Chartered Bank Limited

Table5: Beta coefficient between Standard Chartered Bank and Market.

Fiscal year	R_j	$R_j - \overline{R_j}$	R_m	$R_m - \overline{R_m}$	$(R_j - \overline{R_j})(R_m - \overline{R_m})$
060/061	13.11	-56.6	8.38	-29.62	1676.5
061/062	41.261	-28.45	29.11	-8.89	252.914
062/063	82.623	12.913	34.94	-3.06	-39.513
063/064	136.56	66.846	76.81	38.81	2594.29
064/065	75	5.29	40.85	2.85	15.0765
Total	$\sum R_j = 348.554$		$\sum R_m = 190.09$		$\sum(R_j - \overline{R_j})(R_m - \overline{R_m}) = 4499.2675$
N=5	$\overline{R_j} = 69.71\%$	S.D. $(\sigma_j) = 46.57\%$	$\overline{R_m} = 38\%$	S.D. $(\sigma_m) = 24.90\%$	

$Cov_{jm} = \sum(R_j - \overline{R_j})(R_m - \overline{R_m}) / N-1 = 4499.27/(5-1) = 1124.8$

Correlation coefficient $\rho = \dfrac{Cov_{jm}}{\sigma_j \sigma_m} = 1124.8/(46.57*24.90) = 0.97$

Beta of individual bank(β) = $(\rho * \sigma_j * \sigma_m)/\sigma_m^2 = 0.97*46.57*24.90/24.90^2 = 1.83$

Appendix-4

Table 1: Calculation of Total Average Sample Mean

| Fiscal year | Holding period return | | | | | Total | Total [avg(X)] |
	Nabil (X_1)	HBL (X_2)	BKL (X_3)	NIBL (X_4)	SCBNL (X_5)		
03/04	44.90	20.21	54.04	20.12	13.11	152.38	30.476
04/05	57.5	32.81	50.85	-13.56	41.261	168.86	33.7722
05/06	54.48	28.80	161.16	115.87	82.623	442.93	88.5866
06/07	220.13	99.09	64.12	71.92	136.56	591.82	118.364
07/08	47.32	37.99	139.42	89.35	75	389.08	77.816
Total	424.33	218.9	469.59	283.7	348.55	1745.074	349.01

We have,

Total Average Sample Mean [Avg(X)]= $\dfrac{\sum X}{n}$

$$=349/5$$
$$= 69.8\%$$

And population Mean (~) = 38%

Table:2 Calculation of Sample Standard Deviation

Fiscal year	Total Average(X)	$(X - \overline{X})$	$(X - \overline{X})^2$
03/04	30.476	-39.324	1546.38
04/05	33.7722	-36.028	1298
05/06	88.5866	18.7866	352.936
06/07	118.364	48.564	2358.46
07/08	77.816	8.016	64.2563
Total	349.01		5620.03

We have,

$$S= \sqrt{\frac{\sum (X - \overline{X})^2}{n-1}}$$

$$= \sqrt{\frac{5620.03}{4}}$$

$$=37.48\%$$

Where,

n= Total numbers of Observation.

S= Standard deviation.

$\overline{X}$ = Sample Mean and

~ = Population Mean.

Appendix-5

Table1: Computation of test statistics:

Fiscal year	Holding period return					Sum of the square				
	Nabil (X_1)	HBL (X_2)	BKL (X_3)	NIBL (X_4)	SCBNL (X_5)	X_1^2	X_2^2	X_3^2	X_4^2	X_5^2
060/061	44.90	20.21	54.04	20.12	13.11	2016.01	408.4441	2920.32	404.8144	171.87
061/062	57.5	32.81	50.85	-13.56	41.261	3306.25	1076.496	2585.72	183.8736	1702.47
062/063	54.48	28.80	161.16	115.87	82.623	2968.07	829.44	25972.5	13425.86	6826.56
036/064	220.13	99.09	64.12	71.92	136.56	48457.22	9818.83	4111.37	5172.486	18648.6
064/065	47.32	37.99	139.42	89.35	75	2239.182	1443.24	19437.9	7983.423	5625
Total	424.33	218.9	469.59	283.7	348.55	58986.73	13576.45	55027.8	27170.45	32974.5

Table2:Computation of Beta of each Banks

Commercial Bank	Correlation (x)	Standard deviation($_j$)	Beta (s)	Remark
Nabil	0.88	75.78%	2.70	Aggressive
HBL	0.94	31.60%	1.20	Aggressive
BOKL	0.06	52.26%	0.12	Defensive
NIBL	0.42	52.64%	0.89	Defensive
SCBNL	0.97	46.57%	1.83	Aggressive

Note:- Beta of individual bank(s)= ($x *_j *_m$)/ $_m^2$

Note:- Standard deviation of market is 24.60%