Chapter 1
Introduction

1.1 Background of study

Nepal a Himalayan kingdom is located between the latitude 260 22' N to 300 27' North and longitude 800 40' E to 880 12' East with elevation ranges from 90 to 8848 m. The country is surrounded by the two most popular countries of World, India in the east, west and south and China in the North. Nepal is a land locked country and home place of natural beauty with traces of artifacts.

Nepal is one of the least developed countries in the World. More than 80 % of the total people are still in the rural areas and most of them are deprived from the minimum requirement of human livelihood. In Nepal still 31 % of people are under the line of poverty and average life expectancy of Nepalese people is 62.2 years.

Nepal has adopted mixed and liberal economic policy with the implicit objective to help the state and the private sector. Especially after restoration of the democracy, the concept of the liberalization policies has been incorporated as directive principal and state policies. This liberalization has helped in establishing many companies, banks, finance companies and manufacturing industries. Thus these establishments help the country for its development.

Commercial banks are legally formed financial institution, which accept deposits and makes loan for commercial and non commercial purpose. The history of commercial bank is not very long. The growth of commercial banks lasts two decades remained phenomenal particularly financial sector reformation in 1990's. The concept of the banking was formally executed after the establishment of the Nepal bank Ltd. in 1994 B.S. In 2014 B.S., the central bank named Nepal Rastriya Bank Ltd. was established with the objective of supervising, guiding and protecting the functions of banking sectors. As a result, the growth of commercial banks in Nepal has been mushroomed. The number of banks has been increased as per the requirement under the different

acts like Agriculture development bank under the Agriculture development Acts in 2024 B.S. Commercial banks under the commercial Acts in 2031 B.S. Nepal Arab bank Ltd. is the first join venture bank in Nepal which was established in 2041 B.S. Presently, there are twenty three commercial banks with more than 450 branches over the national frontier operating in Nepal.

Banking sector is the most vibrant part of economy which has been playing very vital role in mobilizing the financial resources from the saver to users. It, in general, collects the idle funds from different savers and accumulated funds is further proceeds to the needy centers like households sectors, business sectors. It is the heart of trade, commerce and industry. It makes the smooth flow of funds in the circulation body of the economy. It makes various functions like assets and liabilities transformation, security trading, agency functions, and economies of scale, corporate social responsibilities, and other day to day banking functions.

1.2 Focus of study

Generally, risk and return analysis is concerned to identify the sustainable position of financial sector. Risk and return is the basic concept in the corporate finance and it guides the other modern theories and principal as well as it assists in taking various financial and qualitative financial decisions. The relationship between risk and return can be defined by the investors' perception about risk and the demand for compensation. No investor will take any investment position in risky assets unless they are convinced of adequate compensation for the percept risks. In fact, there is positive relation between risk and return. Risk has been defined as the chance that the actual return deviation from the expected returns and risk is the percept fact of life that is the product of uncertainty and it magnitude depend upon the degree of variability in future's uncertain cash flows. Risk and return is an indication of opportunity of losing investment value. It is insensible to talk about returns without talking about risks because investment decision involves the trade off between risk and return and the trade off between these two variables is positive. There is

positive relation between risk and return. Thus an investor, in general, can attain more return through the selection of dominating assets that involves high risks.

Risk in a stock reflects the uncertainty about the future return i.e., actual return may be less than the expected return. The main source of uncertainty about future return is that, the price at which the stock can be affected by economics factors such as interest rates, economic growths, inflation liquidity, marketability, financial performance and strength of the dollor. The risk of stock can be measured by the price volatility.

One of the main sectors of financial market is capital market where stocks and bonds are traded. Among all, stock market is seemed to very active market and basically concerned to maximize the wealth of stockholders. It plays vital role in economy. Financial market is the mechanism designed to facilitate the exchange of security by bringing buyer and seller in the trading floor. It allows supplier and demanders of funds to make transaction. Capital market is important intermediary through the networks of funds within the economy can be made active. In general, capital market refers to the market where various long-term securities are issued and traded for the tradeoff between liquidity position risk of their prospective portfolio in the response to availability of information and marketability of securities and its prices. If the capital market is efficient, the current stock price fully reflects available information but full efficient market is very difficult to meet in the real corporate world. So, investor should learn fully and carefully as possible as about actual investment world. Political, legal, economical, social, and technological factors affect the capital market. All financial institutions are also affected by capital market. Many financial institutions are listed with Nepal Stock Exchange (NEPSE). The total number of listed companies in F/Y 2000/7 was 147. There are 16 companies listed under commercial bank group, similarly there are 16 companies listed under commercial bank group, similarly there are 16 companies in development bank group, 16 companies in manufacturing and processing group, 4 companies in hotel group, 5 in trading and other group

(Annual report of SEBON, 2007). But the present study however includes only listed commercial banks. This study has mainly focused on the risk and return analysis of common stocks investment of the selected listed banks.

1.3 Statement of the problem

Generally, investors purchase financial assets such as stocks or bonds for their desire to increase their investment wealth i.e. earn positive rate of return on their investment. Risk and return analysis is worked out to identify the sustainable position of any organization and financial institution. Capital market in Nepal has grown rapidly after the establishment of the security market named NEPSE with in the very short period of time. However, the attitudes and knowledge of the most investors have not changed yet. They are influenced by liquidity position rather than information in the financial market. Investors usually lack any idea of risk and return because most of the investors appear to be least familiar with the financial market. They can make wrong investment decisions based on the hunches rather than on real term analysis. Though some investors follow the rational investment procedure and portfolio analysis but they still lack perfect awareness about the risk and return factors. Without getting theoretical knowledge about risk associated with investment, most of the investors are making investment on the stocks. This may be termed as improper practice. This situation motivates the present researcher to undertake a research project entitled "Risk and return analysis of selected commercial banks in Nepal".

If the bank issues shares, there becomes huge demand rather than the supply but if other sectors such as hotels insurance companies and manufacturing companies issue new shares, the least investors desire to invest their money. In Nepalese context, most of people deposit their saving in banks instead of making investment in the financial assets available in the capital markets like investment in shares, debentures and other derivative securities. Many investors are not rational towards their investment decision. They don’t know how to make rationale investment by assessing the risk percept in the

investment and the level of return to compensate the percept risk. In Nepal, most of the financial institution issues only the common stocks and capital market is also dominated by the trading of the stocks. On the basis of this, the study seeks to answer the following research questions.

1. What is the level of systematic risk on common stocks of commercial banks?
2. What is the level of unsystematic risk on common stocks of commercial banks?
3. What is the average return on common stocks of commercial banks?
4. What is the total level of risk and return on common stocks of commercial banks?
5. What is the investors' perception on the risk and return on common stocks of commercial banks?

1.4 Objectives of the study

The primary objective of the present study is to analyze the risk and return of listed commercial banks in Nepal. The specifics objectives of the present study are listed down as follows:

1. To analyze the systematic risk of the selected commercial banks.
2. To analyze the unsystematic risk of the selected commercial banks.
3. To analyze the risks and return of selected commercial banks.
4. To analyze whether the common stocks of selected banks are over or under priced.
5. To find out whether the investors analyze the risk and return while making investment in the common stocks of commercial banks.

1.5 Significance of the study

The study is to point out the risk and return position of investing shares of commercial banks in Nepal. The study will be helpful for investors as well as commercial banks. It also provides proper guidelines for making choices of stocks and bonds on the basic of risk and return. It is also important to those

people who are interested to know about risk and return and capital market in Nepal. It provides the consolidated basic data and information about the NEPSE and commercial banks under study. This study will cover the investors' perception upon the risk and return factors while investing in common stocks of commercial banks. It will provide the brief information on risk and return from the investors' perspectives.

1.6 Limitations of the study

Every research study has its own limitations. The present study has following limitations.

1. There are 23 commercial banks in Nepal that are in operation, among them 16 banks are listed in NEPSE. But the study does not include the entire listed commercial banks.
2. The study is based upon the secondary data for fundamental analysis and primary data for technical analysis.
3. The study is basically concerned only with the risk and return of the listed commercial banks i.e., other aspects of the banks have not been taken under the consideration.
4. The study hasn't included those banks which were listed after 15th July 1998 A.D.
5. This study incorporates the data from 15th July 1997 to 15th July 2007.

1.7 Organizational of the study

The study report has presented the systematic presentation of the research design, analysis, presentation and findings of the study. It has divided into five chapters

Chapter 1: Introduction

The first chapter of the study is introduction, which highlighted the basic information of the research area, various problems, objectives, importance, limitations and organization of the study.

Chapter 2: Review of Literature

The second chapter of the study assures readers that they are familiar with important research that has been carried out in similar areas by earlier scholars in related areas. It also establishes that the study as link in a chain of research that is developing and emerging knowledge about concerned field.

Chapter 3: Research Methodology

The third chapter refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. It describes the various research methods (i.e. research design, source of data, data collection techniques, data collection methods).

Chapter 4: Presentation and Analysis of Data

The developed information has finished in required form in fourth chapter. Information is presented and analyzed (i.e. both primaries as well as secondary source) by using various financial and statistical tools in specified form to meet the stated objective of study.

Chapter 5: Summary, Conclusions and Recommendations

On the basis of the results from data analysis, the researcher concluded about the research work. Besides, it also gives important suggestions to the concerned organization for better improvement.

CHAPTER II
RIVIEW OF LITERATURE

This chapter presents with the discussion related to various theories and researched studies that are closely related studies and provides valuable inputs to conduct the present studies successfully. The whole chapter has been divided mainly into two parts- theoretical review and the research review. Theoretical review includes the definition and summary of published articles in different journals and past studies.

2.1 Theoretical Review

2.1.1 Concept of capital market

Capital market is also called security market as well as financial market. Capital market is the mechanism designed to faciliate the exchange the financial assets or securities by bringing buyer and seller of securities together. Precisely speaking, security market allows suppliers and demanders of funds to make transactions. It can be various types and forms classified as different bases capital market and money market, share and debenture market. For our research concern, capital markets--the market defined as any body of the individuals, whether incorporated or not, constituted for the purpose of regulating controlling the business of selling or dealing securities. According to Brigham & Eharadt, 10th edition, “capital markets are the market for intermediate or long-term debt and corporate stocks. Intermediate term refers those financial assets having the maturity periods equal to five years and more than five years. Capital market consists of the security market and non security market implies mobilization of the funds through issuance of securities like share, debenture, and other derivative securities. These securities traded in the markets are generally negotiable and hence can be traded in secondary market. Non security market refers to the mobilization of the non-financial resources. Basically capital market can be divided into two parts:

1. Primary capital market
2. Secondary capital market

Primary capital market

Primary market is the market is the market through which the funds are transferred from saver to demander. Hence, the transaction of securities issued first times takes place in primary markets. The primary for securities is new issue market, which brings together the supply and demand or source and use for new capital funds. In this market, the principal source of fund is domestic saving of individuals and firm, other suppliers include foreign investors and government. In highly developed capital market, the largest proportion of saving reaches the new issue market indirectly via a financial intermediary. For example, investment bankers other similar nature of institutions. In contrast most of the investors are unfamiliar with issue markets and its institutions such as underwriting and selling syndicates which serve middlemen between the corporate demanders of funds and the individual investors.

Secondary capital market

Once the have been issued in the primary market, investor may seller trade them in the secondary market called secondary capital market. It deals with previously issued share mainly traded through the stock exchange, over the counter (OTC) market and the direct dealing. The majority of all security transaction generally.

2.1.2 Development of capital market in Nepal

Capital market in Nepal is in infancy position. A stock investment practice in Nepal has been developed after the establishment of the Biratnagar Jute Industry and Nepal bank Ltd. in 1937 AD. Till 1980's the majority of shares issuing companies would belongs to the government ownership. Initial public Offerings (IPO's) were hardly found in practices and funds were collected through the direct placement of bonds. The prime objectives of the raising the

fund would be the development of the infrastructure and pubic welfare programs. It has helped flourishing the primary government bond market. On the other hands, the share of Nepal Bank Ltd. were in existence but limited to ownership of the RANA's (Khadka, 2004). Government had issued treasury bills in 1962 AD for the first time to finance the infrastructure development. Furthermore, it was folled by the by the issuance of the development bonds in 1964 AD. Industrial policy has opened the door of the establishment of the institution name Security Market Center (SMC) in 1977 AD. Security Exchange Act (SEA) was approved by legislation and came into existence with effect from 13th April, 1984 AD. The former Securities Exchange Center was converted into Nepal stock Exchange (NEPSE) with the major objective of arranging marketability and liquidity of to the government and corporate securities. Floor trading through market intermediaries such as brokers' market makers has also evolved; restoration of democracy following the political movement of 1990 has brought lots of reforms in the finance sector. Liberalization in the real sense was initiated. Nepal launched 'Extended Adjustment Program' in 1992 AD by taking Extended Structural Adjustment Facility (ESAF) through the amendment in the SEA. This has led to established of the Securities Exchange Board Nepal (SEBO/N) and was given the responsibility of regulating and developing the transactions of the stocks and bonds in the floor through its member intermediaries where NEPSE is to facilitate the transactions of the stocks and bonds in the floors through its member intermediaries.

NEPSE presently has 27 brokers, 11 issue managers and 2 portfolio managers that is dealer in the secondary market. Currently there are 147 listed companies but this number is subject to change. Similarly NEPSE is planning to increase the share broker number by 27 to make 50 in the near future. Some processes are already made for this. Similarly, Non Residence Nepalese (NRN) has declared to establish a multipurpose mutual fund investment company eith amount of Rs. 10 billion in nearer future which help to grow the capital market in Nepal. In addition to this, various state-owned enterprises like Nepal

Electricity Authority (NEA) has already issued bond and Nepal Telecom Corporation (NTC) planning to issue bonds. Thus market share to the general public which is encouraging for the capital market encouraging and becoming alternative investment sectors for the investors.

2.1.3 Meaning of risk

Different investors define risk in different ways. In general, risk can be defined as the likelihood that actual return from an investment will be less than the forecast return. Stated differently, it is the variability of return from an investment. (Hampton, 1998)

Risk is defined in the Webster's dictionary "as a hazard a peril: exposure to loss of injury". Thus, risk refers to chance that some unfavorable events may occur. If we bet on the horses, we are risking our money. If we invest in speculative stocks we are taking a kind of risks in a hope of making appreciable returns. (Brigham, Capeskin and Erhards, 2001)

Risk is the variability of possible returns around the expected returns of an investment. Each investor has his/her own attitudes towards risks and how much he/she can tolerate. Since, investment have risks associated with them, the investors must determine combination of alternatives matches that tradeoff the risk and compensation for percept risks. (Basnet, 2006)

In reality, risk occurs when we cannot be certain about the possible future outcomes of particular activity or events. So, we are not sure that risk will occur in the future consequently. Risk results from the fact that the action such as investment can provide the more than one outcome in future. (Western and Brigham)

According to Saunders and Cornett, 2002, "A major objective of the financial management is to increase the Financial Institutions' return for its owners. They often come however at the cost of increased risk. The effective management of this risk is central to a financial institutions' performance. Indeed, it can be argued that the main business of financial institution is to manage the risk for the purpose of maximization of return. So, financial

institution manager must devote the significant time to understanding and managing the various risks to which their financial institutions are exposed".

In real sense, risk is the chance of losing future return and investment amount in future. Assets having grate chance of loss are viewed as more risky than lesser chance of loss. More formally, the term risk is used interchangeably with uncertainty to refer the variability of return associated with the given assets.

Risk is measured in many ways but commonly three methods are viewed as useful standard. These are:

Beta coefficient

This is a mathematical value that measures the risk of one asset in term of its effect on the risk of group of assets called portfolio. It is concerned solely with market related risk as would be the concern for the investor holding stocks and bonds. It is derived mathematically so that a high beta indicates a high level of risk and low beta represents a low level of risk.

Standard deviation

This is the measurement of the dispersion of forecast returns when such returns approximate a normal probability distribution. It is a statistical concept and widely used to measure risk from holding a single asset. The standard deviation is derived so that a high standard deviation represents a large dispersion of return and it involved high degree of risk. On the other hand, a low standard deviation is a small dispersion and represents low degree of risk.

Subjective estimates

A subjective risk measure occurs when qualitative rather than quantitative measures are used to measure dispersion. We will use the definition of risk that deals with dispersion of return. We will also note that mathematical approaches can be used to estimate such dispersion.

2.1.4 Sources of risk

An investment is commitment of money that is expected to generate addition money. Every investment entails some degree of risks. A major objective of financial institution is to increase the returns for its owner by taking minimum risk. The effective management of the risk is central to its performance. Indeed, it can be argued that the main business function of financial institution is managing these risks through the consumption of maximum time and efforts in understanding and managing the various source and kinds of risks factors with its different natures and complexities. The primary risks factors that create investment uncertainties are as follows:

Interest rate risk

Asset transformation function is the key functions of financial institution. It involves buying primary securities or assets and issuing secondary securities or liabilities to fund assets purchase. The primary security purchased by financial institutions often has maturity and liquidity characteristics which are different from those of secondary security that financial institutions sell. In mismatching the maturities of asserts and liabilities as part of their asset transformation function. Financial institutions potentially expose themselves the interest rate risks. Suppose when interest rate increases and maturity period of assets is greater than the maturity period of liabilities. At that time, if interest rate increases it decreases the market value of assets in comparison of its liabilities. So, interest rate is defined as the potential variability of return caused potential variability of return caused by the changes in its market rate interest rate. Interest rate can be variable. If we consider the single period return formula for the bond and stock. In interest rate risk, if market interest rate raises the investment values and market prices falls and vice-versa. The variability of return results interest risk. The interest rate risk affects the prices of bonds, stocks, real estate, gold and other derivatives securities.

Bull-Bear market risks

Market risk is risk incurred in the trading of assets and liabilities due to changes in market forces like interest rates, exchange rates. Furthermore, market risk is the risk related to uncertainty on the earning on its trading portfolios caused by changes in the market condition.

Saunders and Cornett in tenth addition have outlined two comments on market risk.

These are as follows:

Comment 1: market risk is value at risk (VAR) which is related to uncertainty.

Comment 2: market risk is caused due to four major market forces. These are price of assets, interest rate, market volatility, market liquidity.

Market risk can be also cleared in Bull-Bear approach. This approach advocates that risk can rise from the variability of the market return resulting from the alternating bull and bear market forces. Bull market creates when security index arises fairly and consisting from also point called trough for a period of time, the bull market ends when the market index reaches a peak and starts downward trend. The period during which the market declines to the next trough is called a bear risk.

Credit risk

It is also called default risk. Default risk is probability that the borrower is unable to fulfill the term promised under the loan agreement. Saunders and Cornett have outlined three principles as follows:

Principle 1: It is the risk losing principal and interest amount.

Principle 2: When financial institution makes loans or buys securities with longer maturities. There is chance of higher credit risk where principal plus interest earned may not recover adequate in full amount.

Principle 3: Credit risk can be firm specific and systematic risk.

Liquidity risk

Liquidity risk is sudden surges in liability with drawl may leave as financial institution in a position of having to liquidate assets in a very short period of time and at low prices. Liquidity risks arises when on its liability holders such as depositor or insurance policy maker etc. demand immediate cash for the financial claim they hold with financial institution or when holders of loan commitment or credit line suddenly exercise their right to borrow or draw down their right their loan commitments. At that situation the financial institutions must either borrow additional funds or sells assets to meet the demands for the withdrawal of funds. In most cases financial institution has to face the liquidity crisis at the time when liability holder demands higher cash consequently. In other sense, liquidity risk is that position of an assets total variability of return which results from the prices discount given on sales. Commission paid in order to sale with out delay. Perfectly liquid assets are highly marketable either price discounts must be given or these cost must be incurred by seller, in order to find a new investor for an assets is the larger the prices discount and /or commission which must be given up by the seller in order to affect a quick sale.

Callability risk

Some bonds and preferred stocks are issued with a provision that allows the issuer to call them in for repurchase. Issuer like the call provision because it allows them to buyback outstanding preferred stock and /on bond with funds from a newer issue if market interest rate drop below the level being paid on the outstanding securities. There is chance of creating callability risk.

That portion of a security's total variability of returns which derives from the possibility that the issue may be called is the callability risk. Callability risk commands a risk premium that comes in the form of a slightly higher average rate of return. This additional return should increase as the risk that the issue will be called increase.

Convertibility risk

Call ability risk and convertibility risks are in two aspects. First both are contractual stipulations that included in the term of original security issue. Second, both of these provisions alter the variability of return from the affected security. Convertibility risk is that portion of the variability of return from a convertible bond of convertible preferred stocks. That reflects the possibility that the investment may be converted into the issuer's common stocks at a time or under terms harmful to the investor's best interest.

Industrial risk

An industry may be viewed as a group of companies that compete with each other to market homogenous products. Industry risk is that portion of risk that can be an investment variability of return caused by events that affects the product and firms that make up of an industry. The stage of industry cycle, international tariffs and/of quotas on the product produced by an industry related taxes, industry wide labor union problems, environmental restriction, raw materials acts and affect all the firms in the industry simultaneously. As a result of these commonalities, the prices of the securities issued by competing firms tend to rise and fall together.

Political risk

Political risk arises from the exploitation of a politically weak group for the benefits of politically strong group, with the efforts of various groups to improve their relative positions increasing the variability return from the affected assets. Regardless of whether the changes that cause political or by economic interests, the resulting variability of return is called political risk if it is accomplished through legislative, judicial or administrative branches of government. Political risk can be classified as international political risk and domestic political risk.

Other risks

Besides these above mentioned risks, there are other risks like off balance sheet risk, technological and operational risk, country and sovereign risk, insolvency risk etc.

2.1.5 Types of risks

Total risk or total variation of the rate or return for an individual security or portfolio is measured by the standard deviation or variance of the rate of return. According to Capital Asset Pricing Model (CAPM), total risk can be divided into two parts i.e. systematic risk and unsystematic risk.

Systematic risk

It is the also called non-diversifiable risk. The systematic risk is market related. In other words, it arises from the changes in the economy and market condition. For example, high inflation, recession, impact of political factors, wars, depression, long-term changes, etc, which are beyond the control of company management. It affects all the firms in the market. The portion of risk is non-diversifiable and cannot be reduced. The systematic risk is rewarded in the form of risk premium. Sometimes, systematic risk is called market risk. Systematic risk affects almost all assets in the economy, at least to some degree, whereas systematic risk affects at most a small number of assets. The principle of diversification has an important implication to a diversified investor, only systematic risk matters. It follows that in deciding whether or not buy a particular individual asset, a diversified investor will only concerned with that asset's systematic risk. This is a key observation and it allows us to say great deal about the risks and returns on individual asset, in particular, it is the basis for a famous relationship between risk and return called the security market line. To develop the SML, we introduce the equally famous Beta coefficient one of the measurement unit of modern finance. Beta coefficient and SML are the key concepts because to get supply us with at least part of the

answer to the question of how to go about determining the required return on an investment.

Unsystematic risks

The unsystematic risk is non market factors related. In other word, it arises from the project specific factors for example inefficiency of management failure in new product in production, employee strikes, lawsuits and any other event that is unique to the company. It is inherent individual companies or projects. This portion of risk is diversifiable and it is possible to reduce or eliminate through diversification of the investments. It is called unique or asset specific risk.

2.1.6 Meaning of return

The meaning of return is defined as different investors. The rate of return from capital investment is a concept that has different meaning to different investors. Some competitive seek near term cash inflow and give less value to more distant returns. Return can be expressed by cash dividend or capital gain or loss. Still some investors measure return using financial ratios. Single holding period return may be defined as all possible future cash flows that can be earned holding securities up to holding period. It can be also defined as the changes in the value plus any cash distribution expressed as a percentage of the beginning of the period of investment value. An investor can obtain two kind of income from the investment is a share or bonds. They are as follows:

1. Income from price appreciation or losses from price depreciation. It is called capital losses and gain.
2. Cash flows income from cash dividend or coupon interest payment.

Return shows financial position of any organization. The company position of any organization may be better if it has higher return. Return is rewards for an investor from his or her organization. Investors always want to maximize expected return subject to their tolerance for risk. Return is motivating forces

and it is the key method available to investors in capering investment alternatives. Realized rate of and expected rate of return which are often used in language of investment. Realized rate of return is after the fact return that was earned or it is the historical return.

The return on investment can be measured as the total gain and losses expressed on the behalf of owner over the given period of time. It is commonly stated as the change in value plus any cash distribution expressed as percentage of the beginning period investment value. The expression for calculating the rate of return (Ks) earned any assets over the period (t) is commonly defined as

$$K_t = \frac{P_t - P_{t-1} + C_t}{P_{t-1}}$$

Where,

K_t = actual or expected or realized rate of return

P_t = price or value of asset at time (t) or beginning price

P_{t-1} = price or value of assets at time t-1 or ending price

C_t = cash flows received from the investment in the time period t-1 to t

2.1.7 Expected rate of return

The expected rate of return or holding period return is based upon the expected cash receipts over the holding period and expected ending or selling price. Depending upon the assumption made about cash receipts and ending price, a number of expected returns rate are possible. These possible rates estimated by the investors are summarized in the expected rate of return. According to (Cheney and Moses, 1995) “the expected rate of return must be greater or equal to the required rate of return in order for the investor to find the investment acceptable.”

2.1.8 Capital Asset Pricing Model (CAPM)

CAPM provides a framework for measuring the systematic risk of an individual security and relate it to the systematic risk of well diversified portfolio. CAPM is used in finance frequently to analyze the relationship

between the risk and rate of return. The conclusion of the CAPM is: the relevant risk of an individual stock is contribution to risk of a well-diversified portfolio.

Indeed, in 1990 AD, the greatest world prize the Nobel Prize was awarded to the developers of CAPM, Professor Harry Markowitz and William F. Sharpe. In the context of CAPM, the risk of individual security is defined as the volatility of the security returns vis-à-vis the return of market portfolio. CAPM is simple concept and has real world applicability. The model describes the relationship between risk and return or expected return. In this model, a security's expected return is the risk free rate plus a premium based on systematic risk of the security. Beta coefficient is the heart of CAPM model. It is the better measure of risk, the most important aspect of risk is the overall risk significantly affects investment opportunities and even more important, the owner wealth. The basic theory that links together risk and return for all assets is called Capital Asset Pricing Model. The CAPM equation on security market line (SML) is usually written as:

$$E(R_J) = R_F + \beta_J [\, E(R_M) - R_F \,]$$

Where,

$E(R_J)$ = the required rate of return on the assets

R_F = the rate of return of risk free assets

$E(R_M)$ = the expected or ex-ante return on the market portfolio

β_J = a measure of the non-diversifiable risk of the J_{th} security called assets beta. It can be calculated as

$$\beta_J = \frac{COV(R_J R_M)}{VAR(R_M)}$$

Where,

$COV(R_J R_M)$ = covariance between risk free return and market return

$VAR(R_M)$ = variance of market returns

There are some assumptions under the CAPM model. According to (Sharpe, Alex, and Bailey 1998) has outlines eight assumptions as follows.

1. Investors evaluate portfolio by looking at the expected return and standard deviation of the portfolio over one period horizon.
2. Individual assets are infinitely divisible. It implies that an investor can buy a fraction of a share of s/he so desires.
3. There is a risk free rate at which an investor may lend i.e. invest money or borrow money.
4. Taxes and transaction costs are irrelevant.
5. All the investors have the same one person horizon.
6. The risk free rate is the same for all investors.
7. Information is freely and instantly available to all the investors.
8. Investors are homogenous expectations. It implies that everyone has same perception in regard to the expected returns, standard deviation and covariance of the securities.

CAPM provides a measure of risk and return. The systematic risk or market risk of a security is measured in term of its sensitivity to the market movement. This sensitivity is referred to security's Beta (β). Beta reflects systematic risk that can not be eliminated. Investor can eliminate unsystematic risk when they invest their wealth in a well diversified portfolio. A beta of 1.00 indicates average level of risk while more than 1.00 means risk more than market portfolio. A zero beta coefficient means no risk. The graphical presentation of CAPM is called the Security Market Line (SML).

2.1.9 Over, under and fairly pricing of securities

The securities can be either under priced or over priced. It can be known calculating through required rate of return and average rate of return. When average return exceeds the excepted return then, the securities is under priced and vice versa. Required rate of return can be used as a discounting factor to determine the intrinsic value of stock. It means there is inverse relationship between required rate of return and intrinsic value of stock.

2.2 Research review

These days information highway or the internet has become to the most easily accessible medium to gain information in subject matter. Different books and article have been consulted while conducting the research to derive the comparative and analytical conclusion of this study. The review of relevant articles publish in different journals are available online on international Network for the Availability of Scientific Publication (NASP). In this section has been reviewed and presented.

2.2.1 Review of journal

Financial economics has been defined as the application of economic theory to financial markets (Smith, 1996). It is largely body of theory including such well known models as modern portfolio theory (Markowitz, 1952), the capital asset pricing model (CAPM) (Sharpe, 1964), the efficient market hypothesis (Samuelson and Fama, 1965) and option pricing model (Black and Scholars 1973). Though these models are all included in institute of faculty education limited in 1995, their acceptance or use is controversial.

Akhigbe and Whyte (2004) in their research paper, “The Gram-Leach-Billey Act” of 1999: Risk implications for the Financial Service Industry have focused onn risk implication of banking and private sectors. The research paper has included many other studies some of the stufies find that banj expansion into banking activities can affect of events that permitted only limited entry by banks into non-banking activities. The study is conducted on systematic, unsystematic and total risk, such risk are calculated by using statistical tools i.e. variance and standard deviation, T-statistical and signed rank which is recently by Aminud, Delong and Saunder in 2002. The study has included 340 banks for the sample size than they partition two sub- samples: 46 large banks and 294 small banks. The major finding of the study is that evidence of a significant decline in systematic risk for the banks securities firmand insurance companies but a significant increase in total and unsystematic risk for the banks and insurance companies. The study has included five years period data. The

study also found that bank and insurance companies are less risk than other securities business. If security wants to decline in risk, security firm can be explained by their ability to diversify into less risky banking and insurance activities. The research paper result suggests that regulators should carefully monitor and supervise banking activities in new era of financial modernization to migigate adverse effects from the increase in risk.

Pagano's (2001) has a study on how theories of Financial Intermediation of Corporate Risk-Management Influence Bank Risk-Taking Behavior. This paper has based on the relation for the risk taking and risk management behavior from a both corporate finance and banking perspective. That data set covers the period from 1986-94, 1986-90 and 1991-94 but overall time of the study is 9 year period. In this study, the research scholar has used mathematical tools that are the model beta, standard deviation, total risk (systematic and unsystematic risk), and interest rate risk. The main objective of the study is to examine the relation for risk taking and risk management behavior for both corporate financial and a banking perspective. After combining the theoretical insights from the corporate finance and banking literatures related to hedging and risk taking the paper reviewed empirical tests based on these theories to determine which of these theories are best supportive by the data.

Management incentives appear to be must consistently supported rational for the describing how bank manage risk. In particular, moderate/high levels of equity ownership reduce bank risk while positive amount of stock option grants increase bank risk-taking behavior. The empirical tests of theory of corporate risk management need to consider individual subcomponents of total risk and the bank ability to trade these risks in a component financial market.

Berkowitz and Brien's (2002) in their research paper "How Accurate are Value-At-Risk Models at Commercial Banks" has focused on first direct evidence on the performance of value at risk model for trading firms. The result shows that VAR forecasts for six large commercial banks have exceed nominal coverage levels over the past two years and for the some banks, VARs we substantially removed from the lower range of trading P & l. While such

conservative estimates imply higher levels of capital coverage for trading risk, the reported VARs are less useful as a measure of actual portfolio risk.

They have used standard deviation, means, correlation coefficient VAR correlation coefficient, and Beach Mark and Portfolio model. To a certain extent, the study is limited by the fact that banks only forecast a single percentile of the portfolio distribution significant more could be learned about the empirical performance of internal valuation models of density forecast were recorded. Density forecast evaluation techniques described in Disbold, Gunther and Tay (1998) and Berkowitz (2001) provide researchers with substantially more information to asses the dimension in which models need improvement and those in which models do well.

2.2.2 Review of related studies

Bhatta's study on assessment of the performance of listed companies in Nepal (196) has based on the data of ten listed companies from 1990 to 1995. One of the major objectives of this study is to analyze the performance of listed companies in terms of risk and return and internal rate of return, systematic risk and diversification of the risk through portfolio context. The major finding of the study is that a highly significant positive correlation has been addressed of the between risk and return character of the company. Investors expect higher return from those stocks that associates higher risk, Nepalese capital market is not sufficient one, so the information relating to market and company itself. Neither investor's analyze the overall relevant information of the stocks nor does the member of stocks exchange try t disseminate the information. Therefore, the market return and risk both may not show high priced stocks.

Pandey, Sijapathi (2000) has conducted a study on risk and return analyze of common stock investment by taking six insurance companies as sample. She has used analytical tools like rate of return, standard deviation, coefficient of variance, beta coefficient and t-test has used. According to this study, the main objectives are to calculate the risk and return of the common stocks and portfolio and also to understand and identify the problem faced by the

individual investor and insurance companies. The major findings of the study are generally public have least understanding about the risk of the investments which may be due to poor education, lack of adequate information, etc., that may obstruct the development of stock market. There is no significant different between the performance of common stock of insurance companies and overall market portfolio. The study has covered five years period.

Pandey (2000) has a study on risk and return analysis of common stock investment. The main objective of the study is to analysis the risk and return of common stock investment in banking and financial sectors. The study also related to insurance companies. In the study, she has taken six insurance companies in account. To measure the risk and return, she has used standard deviation, expected return, variance coefficient and beta. On her study, concludes that: among all the security common stock has known to be the most risky security. Higher the risk, higher will be the return. Most of the investors have attracted to common stock security because of its higher expected return.

As for the investor, it is important to analyze each investment, company to potential returns with the risk. On average, the potential returns from an investment should compensate for the level of risk under taken. If proper allocation of assets is performed; it can reduce risk and can even be eliminated if well diversified.

Mishra (2001) analyzed risk and return on common stock investment of commercial bank in Nepal with special reference to five listed commercial banks. The main objective of the study was to promote and distribution of the securities and purchase, sales or exchange of securities. He also tried to render contribution to the development of capital market by making securities transaction fair, healthy, efficient and responsible. In this study, the researcher has used mathematical tools that are expected return, standard deviation, coefficient of variance, dividend per share, portfolio return beta coefficient, required rate of return. The period of the study was taken six years data from (2051-2057). On his study, it was notifies that there is positive correlation between risk and return. Character of the company, Nepalese capital market

being inefficient, the price index itself is not sufficient to give the whole information about the prevailing market situation and the company. It was also noticed that investors do not have any idea about the producers of securities issuance. Neither company nor the stockbrokers transmit any information to the investor about the current market situation and hence it becomes different for a common investor to invest in the securities.

Mishra also has focused that Nepalese banks and government should try to promote healthy practices so that the stockbrokers do not give false information to the investor for their personal benefit, which is a common practice in Nepal. Investors should get regular information about the systematic risk (beta), return on equity and P/E ratio of various listed companies in the same way as it has given in economies times of companies listed in Indian stock exchange.

Upadhaya (2001) conducted a research entitled risk and return on common stock investment of commercial banks in Nepal. His research study is based on descriptive and analytical research design, which covers the five years period from 1994-1999. The main objective of the study was to analyze the risk and return of the common stock of commercial banks in Nepalese stock market, the study focused on the common stock of commercial banks, one of the objectives that are related to this study was to evaluate common stock of listed commercial banks in term of risk and return. The major finding of the study is that expected return on the common stock of the NGBL has maximum, which is very high rate of return. Other common stock of living higher return of NBBL and EBL with more than 59 percent expected return. Expected return of NABIL is least risky. Mr. Upadhaya has focused on changing environment of Nepalese business and economy but did not focus on relationship between closing MPS and EPS.

Satyal (2002) has a study on risk and return analysis of listed companies for the analysis, among listed companies eight are taken into account. Among them two are from banking sectors, two finance companies, two insurance companies, one trading and one manufacturing and processing company. The main objectives of the study were to analyze risk, return and other relevant

variables that help in making decision about investment on securities of the listed companies and to examine the movement of market price of share, also to provide suggestions on the basis of findings.

He has used holding period return and expected rate or return to calculate the returns of the companies. Calculations of standard deviation, coefficient variation (CV) and beta were used to measure risk and CAPM for portfolio analysis. The expected return of Nepal investment bank is 36 percent, CV is 1.06 and risk is 38.3 percent. The beta of its share is 0.66. Expected return of Himalayan bank limited is 52.66 percent, risk is 29.3 and CV is 0.556. The beta is 1.567 so HBL is less risky than NIB. For the study, the researcher has taken 5 years period.

Shrestha (2003) has a study on risk and return on common stock investment of banking sectors in Nepal. The main objective of the study was to analysis the systematic and unsystematic risk associated with security. The study was covered six years data from 1996-2001.

In this study, the researcher has used analytical tools i.e. return of common stock, expected return, standard deviation, beta coefficient, CAPM, coefficient of determinants and hypothesis (t-test). The major findings of his study are NBBL's common stock is yielding the highest realized rate of return with 71.80 percent where as it is the lowest 26.6 percent incase of NIB Ltd. The banking industry average 47.85 percent, the commercial banks NBBL, BOKL and EBL respectively rate of return are 71.8 percent, 67.6 percent and 65.6 percent. All the commercial banks required rate of return is less than expected rate of return which means that they are all under price therefore it will be beneficial to the investors who are going to purchase the companies' common stocks. From the study, it has found that investment in banking sectors is beneficial instead of other financial sectors.

Tamang (2003) has a study on risk and return analysis of commercial banks in Nepal. The main objectives of the study is to determine whether the share of the commercial banks are correctly priced or not by analyzing the required rate of return using the capital asset pricing model also to measure the systematic

and unsystematic risk of the commercial banks. In this study, the researcher has used mathematical tools i.e. market model, single period return, expected rate of return, standard deviation, coefficient of variation, beta coefficient (B). The period of the study has taken 5 years data from 1996-2001. The major finding of the study, the systematic risk of Nepal Arab bank has the highest unsystematic risk but total risk or variance of Bangladesh is the highest i.e. 10 percent. From the study, it was also found that the shares of Nepalese commercial banks are heavily trade in NEPSE. None of the bank's shares price are correctly priced.

Joshi (2004) has conducted a research on risk and return analysis of common stock of five listed commercial banks. The main objective of the scholar's study was to assess the risk associated with return on common stock investment of the basis of selected tools. For the study, the researcher is used five years data 1998 -2002.

He has used arithmetic mean to calculate the return, standard deviation and coefficient of variations, which are used to measure unsystematic risk and beta coefficient. The measurement explains sensitivity or volatility of the stock with market and individual banks. Correlation is a statistical tool i.e. is used to measure relationship between risk and return. The researcher also used t-test to calculate hypothesis. The major findings of his study are that banking sector has the expected return is 21.77 percent, risk is 36.1 percent and CV is 1.66, similarly finance and insurance sector has 21.77 percent and 1.66, hotel sectors has 10.16 percent, 72.4 percent, 7.123, trading sectors has 6.68 percent, 80.68 percent, 11.76, other sectors has -16.61 percent, 50.45 percent and 3.037. Market expected return of 10.2 percent and risk of 39.57 percent, CV of 3.88. SCB has maximum market capitalization and NBBL has the minimum market capitalization. Market capitalization as well as NEPSE index has heavily influenced by banking sector. If investors wish to generate higher return then they should bear higher risk and invest in the share of SCBL and if they are risk averters and they want to invest in single assets. They can invest in the share of NBL or HBL because these two stocks have lower risk that of portfolio risk.

Khadka (2005) has s study on analysis of risk and return on selected Nepalese commercial banks listed in NEPSE. The main objective of the study is to measure systematic and unsystematic risk of commercial banks. The study has covered 6 years period and used expected return, coefficient to calculate the risk and return of commercial banks. The major finding of the study, based on the coefficient of variation, which measures risk/unit of the stock individually, Standard Chartered Bank Nepal Ltd. has the lowest coefficient of variation i.e. 1.89 and NABIL bank has the highest one i.e. 3.35. The total systematic risk has related due to the individual shares and correlation coefficient with the market portfolio. The residual risk or unsystematic risk is company specific is rather than market pervasive. Though the share of commercial banks in Nepal is heavily trade in NEPSE, none of the share price is correctly priced.

Tiwari (2007) conducted a research on the title of "Risk and Return Analysis of Selected Finance Companies Listed in Nepal" on the specific object to analysis the risk and return associated with the common stock of six finance companies. They are Kathmandu Finance Co. Ltd., Sanjhana Finance Co. Ltd., National Finance Co. Ltd., Citizen Investment Trust, Ace Finance Co. Ltd., and peoples Finance Co. Ltd. His research has been based on the collected data from the secondary source. Nepal Stock Exchange (NEPSE) Ltd is the main organization, which provides most of the data required for the study from year 1998 to 2002. For analyzing the data, he has used various statistical techniques of simple liner regression as well as other financial tools. The major findings of his study were as follows:

- All the finance company have positive expected return as well as most of the finance company has the return near to the average.
- All the investment involved certain amount of risk (i.e. standard deviation) as well as most of the finance company have the risk less than the average.
- The value of best suggests majority of finance company stock volatility is less than the market volatility and they are defensive stock.

- Some finance companies securities have highest value of CV (3.49). Although many of the finance companies CV is less than the average CV (1.77) but not in acceptable level.
- There is positive relationship between expected return and deferent measure of risk of the finance company.
- The return of majority of finance companies has higher degree of positive correlation with the return of other companies.
- The overall effect of portfolio on risk and return shows mixed result. It means the portfolio helps to increase the return in some case but in some case it has also decreased the result up to negative level. But in other hand, neatly in all case it has helped to decrease the level of risk up to some extent.

Thapa (2007) has carried out a research on title "Risk and Return in Stock Market Investment in Nepal: Issue and Challenges." Her major objectives of the study were to find out and analyse the risk and return as well as to examine the trend of risk, return, total paid up value, annual turnover and capitalization of twenty three companies out of listed companies. Five companies of each sector from Banking, Finance and Insurance sector; two of each from Hotel, Trading, Manufacturing and Processing and other companies, are included in this study. Her research has been based on the collected data from secondary source as well as some information primary source (2054/55 to 2062/63). For analyzing data, she has applied various statistical tools in her study to find out the risk and return. She has concluded with findings which are as follows:

- Most of the investors are found to be risk averters. They are investing in portfolio having more than four securities.
- Most preferable sector for investors is banking and finance sectors.
- Stock brokers are major source of information to the investors which show they have a remarkable role in share market.
- Increasing trends of share price and surplus money for investors are the influencing factors to buy share by investors.
- Profitability and marketability has equal influence for motivation to invest.

- The level of investor's satisfaction towards the present trading system (open-out cry system) has found low. Most investors are not satisfied with it, because whim and rumors influenced every time. Thus, most of investors wish to have automation trading system.
- The expected return of securities market as a whole by using NEPSE index is 11.72 percent. Banking and other sectors stand higher expected return then market, while Manufacturing and Processing, Finance, Insurance, Hotel and Trading sectors have lower the expected return compared to the market return.
- In terms of CV, market has 2.70 CV. All sectors have found highest CV in comparison with market relative risk.
- In comparison of market portfolio and average return of selected companies shows that there is no difference significantly.
- The total paid of value of the all sectors expects trading is likely to decreasing in trends. The annual turnover of the all sectors is increasing trends. Likewise, the market capitalization of all sectors expected trading is likely to increasing trends.

Shrestha (2008) has carried out a research on title "Risk and Return Behavior of listed Commercial Banks in NEPSE." His major objectives of the study were to find out and analyse the risk and return behavior. His research has been based on the collected data from secondary source as well as some information primary source. For analyzing data, he has applied various statistical tools in her study to find out the risk and return. He has concluded with findings which are as follows:

- Risk and Return of the selected commercial banks are not consistence. The average risk of selected commercial banks is 40.07% whereas return is only 9.23%. The highest risk is 67.61 % of Bank of Kathmandu Ltd. whereas higher return is 23.49% of NABIL Bank Ltd.
- The selected commercial bank having higher risk pose fewer rates of return and Bank having low risk have higher return.

- The portfolio analysis provides empirical evidence of disparity between risk and return of selected commercial banks.
- The average risk of the commercial bank combination under portfolio analysis is 28.21% but return is -0.23%.
- Among 28 combinations, 4 combinations have higher risk and higher return, 11 combinations have higher risk but low rate of return and 13 combinations have higher risk whereas negative return.
- Most of the selected commercial banks have sensitive stock with market. Among 8 selected commercial banks, 5 of the banks have value of beta greater than 1 and 3 of them have value of beta is less than 1.
- Bank of Kathmandu Ltd has the higher value of beta (2.25). Similarly it has the highest risk of 67.61% and return is 22.04%.
- In comparison of overall market return of NEPSE and average return of selected commercial banks shown that there is no significantly difference.

2.3 Research Gap

Previous researchers analyzed the Risk and Return by using secondary source of information in terms of Risk return practices. But actually speaking, risk can be determined by various factors which eventually affect the return. In this study Risk and Return of selected commercial is measuring by using secondary as well as primary data applying various statistical tools and Questionnaires. Among of them, primary analysis in terms for risk and return may be the strong determinant for investing in banks. In present context, these are the heart issue in Nepalese commercial banks. Most of the investors are found to be investing in the share of banks only believing on whim and humors. The previous scholars could not submit the present facts. Present study tries to define risk and return analysis by applying those various facts. It can be very useful or important in this area. Thus, present study may be valuable piece of research work.

CHAPTER III
RESEARCH METHODOLOGY

This chapter gives the theoretical foundation of data collection and analysis for the research study. It represents the highlight of research design, population, sample size, data collection techniques, sources of data and data analysis tools. It shows the framework of data collection and presentation and analysis. Research methodology has been used to fulfill the objectives of the study.

3.1 Research design

The present study is based on descriptive and analytical research design. Descriptive research design is used to describe the relationship between risk and return from tables, graphs, trend lines, and figures with basic calculation of present collected data. Similarly analytical research design is used to analyze the standard deviation, correlation coefficient, coefficient of variation, beta coefficient, risk premium, expected return, and average rate of return, of sampled banks. Analytical research design evaluates the present data clearly. The study has been carried out the ten years periods from 1st July 1997 to 1st July 2006.

3.2 Population and sample

Total population of the study is 16 commercial banks listed in NEPSE which are taken on the basis of listed years of commercial banks. The study is carried out those commercial banks which are listed before 15th July 1998 A.D. in NEPSE. For research purpose, Himalayan Bank Ltd, Everest Bank Ltd, Nabil Bank Ltd and Nepal Investment Bank Ltd are selected for comparative study. These banks have the large volume of transactions and they also have many branches in different sectors of the country. So, the large numbers of employees are also involved in commercial banks. Therefore, the present study could not cover all the employees of selected banks. However, the researcher tried to cover as many employees as possible.

3.3 Sources of data

The data for the study depends upon the secondary sources as well as primary data. The main source of data is the reports of NEPSE, reports of the SEBO/N, websites, and annual reports of commercial banks and periodicals published data of NRB. Annual report of NEPSE has been used to take financial statement and trading report of listed commercial banks. The data has been taken from NEPSE to with draw the opening and closing prices. Similarly, SEBO/N has been visited to collect annual report of sampled banks. Websites have been clicked to take the operational data of commercial banks. For the primary data, a survey on the risk and return on common stock from the investors' perspective has been conducted. The numbers of respondents are 60 who respond the questionnaire properly.

3.4 Data collection techniques

The data for the present study have been collected from secondary sources for the fundamental analysis and primary data has been collected for technical analysis. The annual reports of commercial banks have been taken from SEBO/N. Similarly; NEPSE price and sector price have been taken from NEPSE. NRB was visited to collect the Treasury-Bills rate and banking and financial statistics. After that collected data were recorded in mater sheet manually then data were entered to spread sheet to work out statistical and financial analysis ratios. These data are also used to prepare figures and tables. To process the data of the present study manual and computer based program were used like Microsoft word and excel.

3.5 Data analysis tools

All the data are presented and analyzed to fulfill the objectives developed in the introduction chapter to illustrate the research. Worksheets and figures have been used for the data presentation to evaluate risk and returns. Categorically, the present study has used financial and statistical tools.

3.5.1 Financial tools

3.5.1.1 CAPM or Security Market Line (SML)

Using CAPM, the investors can estimate the required rate of return of the stock. The intrinsic value of the stock is inversely relates to the required rate of return. Other thing remaining the same, the higher the required rate of return will lower the intrinsic value of the stock. CAPM helps for pricing implication of common stock.

The relationship between as asset return and its systematic risk can be expressed by CAPM, which is also called security market line showing the relationship between the systematic risk index (beta) and the required rate of return. The equation for the CAPM or SML is

$E(R_J)$ = Risk free rate + risk premium

$E(R_J)$ = Risk free rate + quantity of risk × price of risk

$E(R_J) = R_F + \beta_J [E(R_M) - R_F]$

where,

$E(R_J)$ = the required rate of return on the assets

R_F = the rate of return of risk free assets

$E(R_M)$ = the expected or ex-ante return on the market portfolio

β_J = a measure of the non-diversifiable risk of the J_{th} security called assets Beta. It can be calculated as,

$$\beta_J = \frac{COV(R_J R_M)}{VAR(R_M)}$$

where,

$COV(R_J R_M)$ = covariance between risk free return and market return

$VAR(R_M)$ = variance of market returns

3.5.1.2 Risk premium

Risk premium is a reward for bearing risk. In other word, risk premium as the different between the return on a risky investment and that a risk free investment. To calculate risk premium, Treasury bill rates (TBs) has been used

as a risk free rate. Treasury bills are short term government securities. It can buy and sold any time, thus, they have liquidity. Also, they don't have the default risk. Treasury bills are also called risk free securities where variation is always zero. For the study, Treasury bills period has taken 364 days. The equation of risk premium can be as follows:

Risk premium = $R_J - R_F$

where,

R_J = year end return on risky assets

R_F = return of risk free assets

3.5.1.3 The expected rate of return

The expected rate of return is the expected after tax increase in the value of initial investment over the holding period. The overall tax of return can be decomposed into capital appreciation and dividend components. Capital appreciation is the difference between investor's end of period price and the beginning of period price.

Single holding period return refers to the one year holding period return. Thus, the expected on realized or ex-post rate of return can be calculated as follows:

$$\text{Expected rate of return } (\overline{R_J}) = \frac{\text{Ending price Beginning price}}{\text{Beginning price}}$$

3.5.1.4 Beta Coefficient

The beta coefficient is an idea of systematic risk. It may be used for ranking the systematic risk of different assets. If beta is large than 1, then the assets are more volatile than the market, which is called aggressive assets. If beta is less than 1, the assets are considered as defensive assets as its price fluctuations are less volatiles than market. On the other hand, if the beta is equal to 1 then the asset is said to be average as its price move proportional to the market changes. Beta of market is always one. (Clark 1997)

The beta coefficient can be calculated as follows,

$$\beta_J = \frac{COV(_J, _M)}{ó_M^2}$$

Where,

β_J = the beta value of security J

σ_M^2 = variance of market

COV $(_J, _M)$ = covariance between security J and market. It can be calculate as follows,

$$\text{Covariance of } (R_J, \overline{R_M}) = \frac{\sum [R_J - \overline{R_J}] \times [R_M - \overline{R_M}]}{N-1}$$

3.5.1.5 Systematic risk

It gives us the proportion of risk that can not be diversified away. In other words, it is the out of control of management. So it is called un-diversifiable risk. It can be calculated as follows,

Systematic risk = $\beta^2 \times \sigma_M^2$

3.5.1.6 Unsystematic risk

It gives us the proportion of risk that can be diversified away. In other words, it is the under the control of management. So, it is called diversifiable risk. It can be calculated as follows,

Unsystematic risk = total risk (variance) – systematic risk

3.5.1.7 Correlation coefficient

Correlation coefficient is the relationship between two variables where one variable is independent and other variables are dependent. Correlation coefficient always lies in the range of +1 to -1. Karl Pearson's method is used to calculate correlation coefficient. A positive correlation coefficient indicates that the returns from two securities generally move in the same direction or vice-versa. Correlation is used to test the significant relationship between risk

and expected return. Microsoft Excel is used to calculate correlation between risk and return. It can be calculates as follows,

Correlation coefficient between security 'J' and market 'M' (r_{jm}) = $\frac{COV(j,m)}{ó_j\, ó_M}$

3.5.2 Statistical tools

3.5.2.1 Average rate of return

Average rate of return is calculated by using the air thematic mean instead of geometric mean.

Average rate of return ($\overline{RJ}$) = $\frac{\sum R_J}{N}$

Where,

$\sum R_J$ = summation of all annual reports

N = number of the observation (year)

3.5.2.2 The standard deviation

It is quantitative measure of the total risk of assets. It provides more information about the risk of the assets. It is a measure of the dispersion of returns around the mean. The formula for calculating the standard deviation is,

$$\sigma_J = \left[\frac{\sum (R_J - \overline{R_J})^2}{N-1}\right]^{1/2}$$

Where,

σ_J = standard deviation of return on stock J during the time period N

R_J = expected rate of return

($\overline{RJ}$) = the average rate of return

N = number of observation

3.5.2.3 The coefficient of variation (CV)

The coefficient of variation is the ratio of the standard deviation of a distribution to mean of the distribution. It is a measure of relative risk. The formula for calculating correlation coefficient is,

$$CV = \frac{ó_J}{\overline{R_J}}$$

Where,

σ_J = standard deviation of return on stock J during the time period N

$\overline{R_J}$ = the average rate of return on stock J

CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA

This chapter focuses on the data analysis and data presentation of the sampled banks. Categorically this chapter has been divided into two sections. First section deals with the analysis of risk and return on common stocks of selected bank based on fundamental approach. For this, the required data has been obtained from the secondary source. Similarly, second section deals with the analysis of risk and return on common stocks of selected bank from the investors' perspective. For this the required data has been obtained from the primary source.

4.1 Data presentation and analysis based on secondary data

First section deals with the analysis of risk and return on common stocks of selected bank based on fundamental approach. The study covers ten years period from 15th July 1998 to 15th July 2007. This chapter consists of historical return, average return, coefficient of variation, standard deviation, correlation coefficient and beta coefficient of sampled banks. Beta coefficient of banks is used to measure market sensitivity. The standard deviation is used to measure diversify risk. Similarly, year end return and average return are used to evaluate the return position of sampled banks. It has demonstrated the figures and table to analyze the present data.

4.1.1 Analysis of historical return of sampled banks

The present study includes four commercial banks listed with NEPSE. They are NABIL, HBL, NIB and EBL. The study periods covers 15th July 1998 to 15th July 2007. To analyze the risk and return of commercial banks, various return figures and tables has been used. Historical return of samples banks is calculated by using dividend per share and closing and opening price of

sampled banks. This chapter also makes the comparative analysis of return of all four sampled banks.

4.1.1.1 Analysis and historical return of NABIL bank

The year end return of NABIL over the study period, closing price of common stock per share and total dividend which is sum of cash and stock dividend: converted into monetary value based on market price of respective year have been presented in Table 4.1

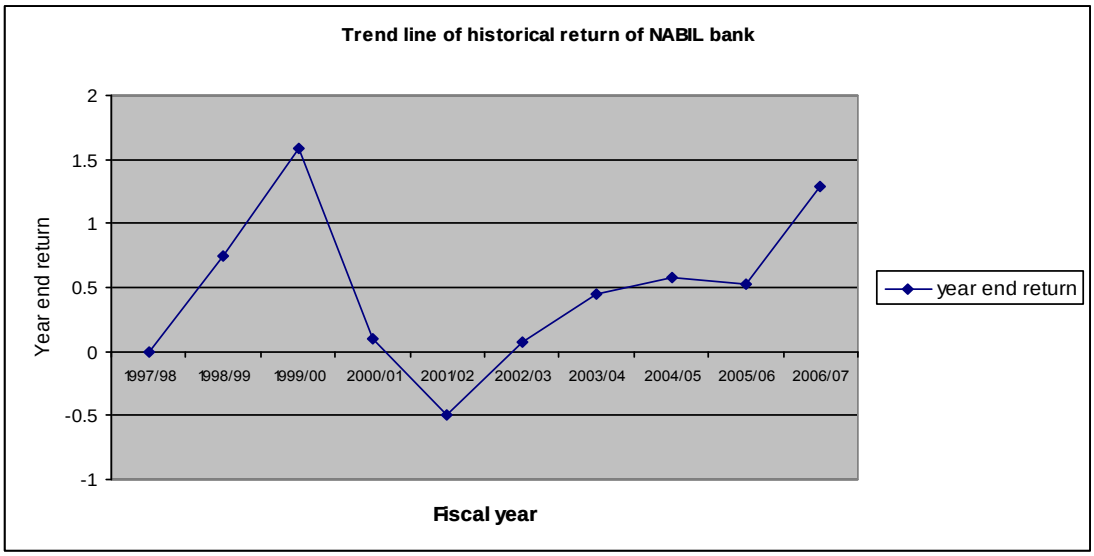
Table 4.1 Historical return and average rate of return on Common stock of NABIL

Years	Closing price per share	DPS	Year end return (Rj)
1997/98	430	30	0
1998/99	700	50	0.74
1999/00	1400	405	1.58
2000/01	1500	40	0.1
2001/02	735	20	-0.49
2002/03	735	50	0.07
2003/04	1000	65	0.45
2004/05	1505	70	0.58
2005/06	2240	70	0.53
2006/07	5050	85	1.29
			4.85

Average rate of return ($\overline{RJ}$) = $\frac{\sum R_J}{N}$ = 53.89 percentage

Closing market price per share is highest in F/Y 2006/07 i.e. Rs 5050 and minimum in F/Y 1997/98 which is Rs. 430. In F/Y 1999/00, closing price has doubled than previous year. However, bank had declared the stock dividend in same year and results high year end return in this. The figure 4.1 shows the graphical representation of the year end return with its time line.

Figure 4.1 Trend line of historical return on common stock of NABIL bank



In this graph, the fiscal year and year end return is shown in the x-axis and y-axis respectively. The graph reflects that NABIL bank has maximum year return is in F/Y 1999/00, i.e. 158 percentages and least returns is in F/Y 2001/02, i.e. – 49 percentages which is negative.

4.1.1.2 Analysis and historical return on common stock of Himalayan bank

The year end return of HBL over the study period, closing price of common stock per share and total dividend which is sum of cash and stock dividend; converted into monetary value based on market price of respective year, have been presented in Table 4.2

Table 4.2 Historical return and average rate of return on common stock of HBL

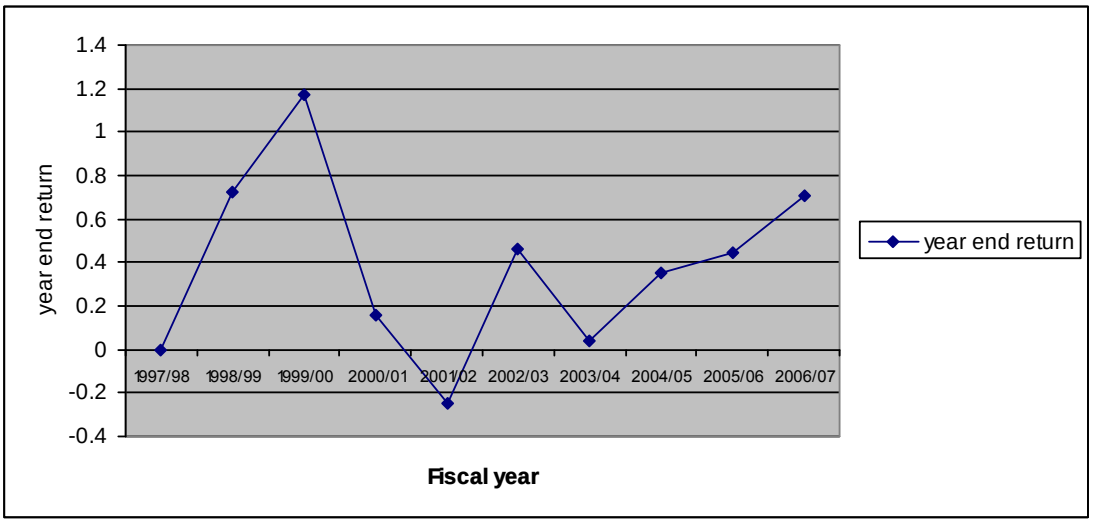
Years	Closing price per share	DPS	Year end return (Rj)
1997/98	755	503	
1998/99	1000	300	0.72
1999/00	1700	475	1.175
2000/01	1500	475.5	0.16
2001/02	1000	125	-0.25
2002/03	836	210.32	0.46
2003/04	840	30	0.041

2004/05	920	199.58	0.356
2005/06	1100	230.32	0.446
2006/07	1760	118	0.7073
			3.8153

Average rate of return ($\overline{RJ}$) = $\frac{\sum R_J}{N}$ = 38.15 percentage

Closing market price per share is highest in F/Y 2006/07 i.e. Rs 1760 and minimum in F/Y 1997/98, which is Rs 755. The bank has been adopting a policy of distributing stock dividend for a number of fiscal year except in year 2003/04. On an average, the bank is able to earn 38.15 percent return over the period. The figure 4.2 shows the graphical representation of the year end return with its time line.

Figure 4.2 Trend line of historical return on common stock of HBL



Historical return of HBL is seemed to be fluctuating ups and down over the sampled period enormously and highest rate of return is in F/Y 199/00 which is 117.5 percent and lowest rate of return over the period is in F/Y 2001/02 which is negative and bank has almost downward trend of earning historical return over the period of time how ever there is slight increase in return in the succeeding years. The banks return is going on very variable trends.

4.1.1.3 Analysis and historical return on common stock of Nepal Investment bank

The year end return of NIB over the study period, closing price of common stock per share and total dividend which is sum of cash and stock dividend; converted into monetary value based on market price of respective year have been presented in Table 4.3

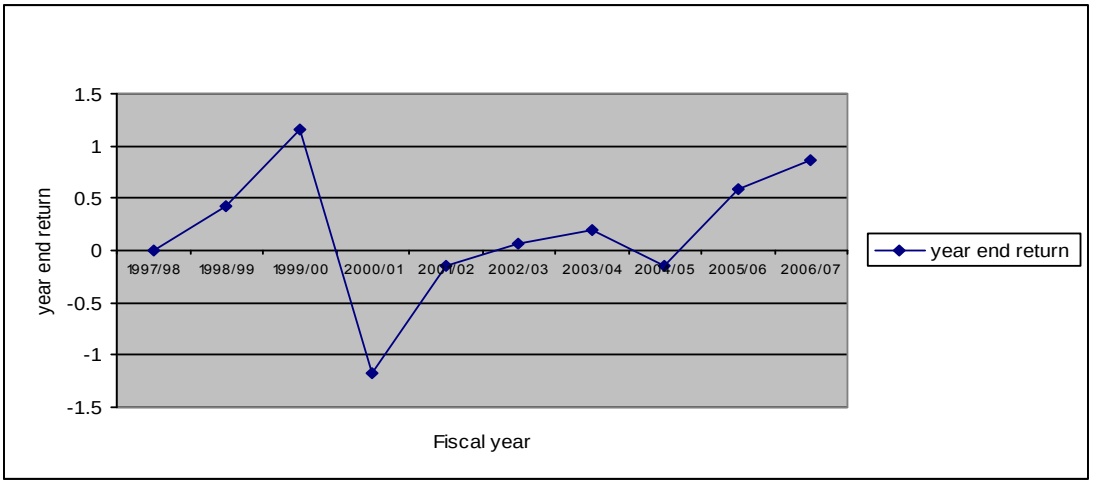
Table 4.3 Historical return and average rate of return on common stock of NIB

Years	Closing price per share	DPS	Year end return (Rj)
1997/98	600	50	
1998/99	822	30	0.42
1999/00	1401	377.75	1.16
2000/01	1150	0	-1.18
2001/02	760	228	-0.14
2002/03	795	20	0.07
2003/04	940	15	0.2
2004/05	800	125	-0.14
2005/06	1260	12.5	0.59
2006/07	1729	625.15	0.87
			1.85

Average rate of return ($\overline{RJ}$) = $\frac{\sum R_J}{N}$ = 18.50 percentage

Closing market price per share is highest in F/Y 2006/07 i.e. Rs 1729 and minimum in F/Y 1997/98 which is Rs 600. The price of stock per share is in increasing trend in very minimal way. On an average, the bank is able to earn 18.50 percent return over the period. The figure 4.3 shows the graphical representation of the year end return with its time line.

Figure 4.3 Trend line of historical return on common stock of NIB



Historical return of NIB is seemed to be fluctuating slightly ups and down over the sampled period and highest rate of return is in F/Y 1999/00 which is 116 percents and lowest rate of return over the period is in F/Y 2000/01which is negative and bank had earned negative returns in F/Y 1999/00, 2000/01 and 2004/05, after then is again started to increase till the F/Y 2006/07.

4.1.4 Analysis of historical return on common stock of Everest bank

The year end return of EBL over the study period, closing price of common stock per share and total dividend which is sum of cash and stock dividend; converted into monetary value based on market price of respective year, have been presented in Table 4.4

Table 4.4 Historical return and average rate of return on common stock of EBL

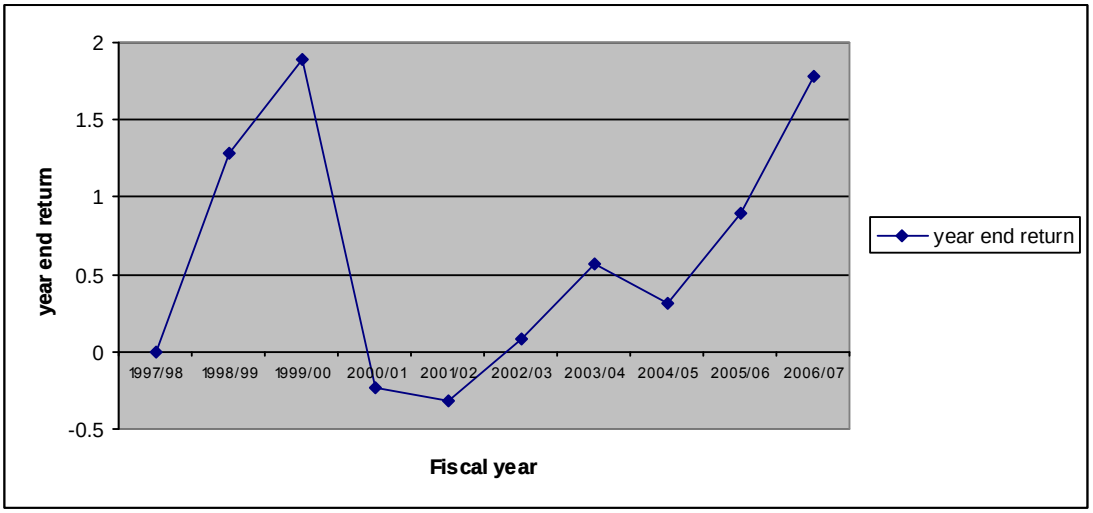
Years	Closing price per share	DPS	Year end return (Rj)
1997/98	184	0	
1998/99	407	15	1.29
1999/00	980	195	1.889
2000/01	750	0	-0.23
2001/02	430	86	-0.312
2002/03	445	20	0.08
2003/04	680	20	0.57
2004/05	870	20	0.31

2005/06	1379	275.8	0.9
2006/07	2430	25	1.78
			6.277

Average rate of return ($\overline{RJ}$) = $\frac{\sum R_J}{N}$ = 62.77 percentage

Closing market price per share is highest in F/Y 2006//07 i.e. Rs 2430 and minimum in F/Y 1997/98 which is Rs 184. In year 1999, closing price has been more than doubled than previous year. However, bank had declared the stock dividend in F/Y 1999/00 and 2005/06. Moreover, the bank has not provided any dividend in F/Y 1997/98 and in F/Y 2000/01. The price of share has been increased steadily over the period though there was little bit ups and down over the period. On an average, the bank is able to earn highest rate of average return among sample banks that is 62.77 percent. The figure 4.4 shows the graphical representation of the year end return with its time line.

Figure 4.4 Trend line of historical return on common of EBL



Historical return of EBL is seemed to be fluctuating significantly at the beginning of the years and reached at minimum in F/Y 2001/02 and then again started to fluctuate moderately in increasing trends in the successive years. It has not provided any sorts of dividend in F/Y 2000/01. The price of stock has

been declined twice at the same time. As a result, bank has to earned negative rate of historical return in the respective year.

4.1.2 Comparative analysis of historical return on common stock of sampled banks

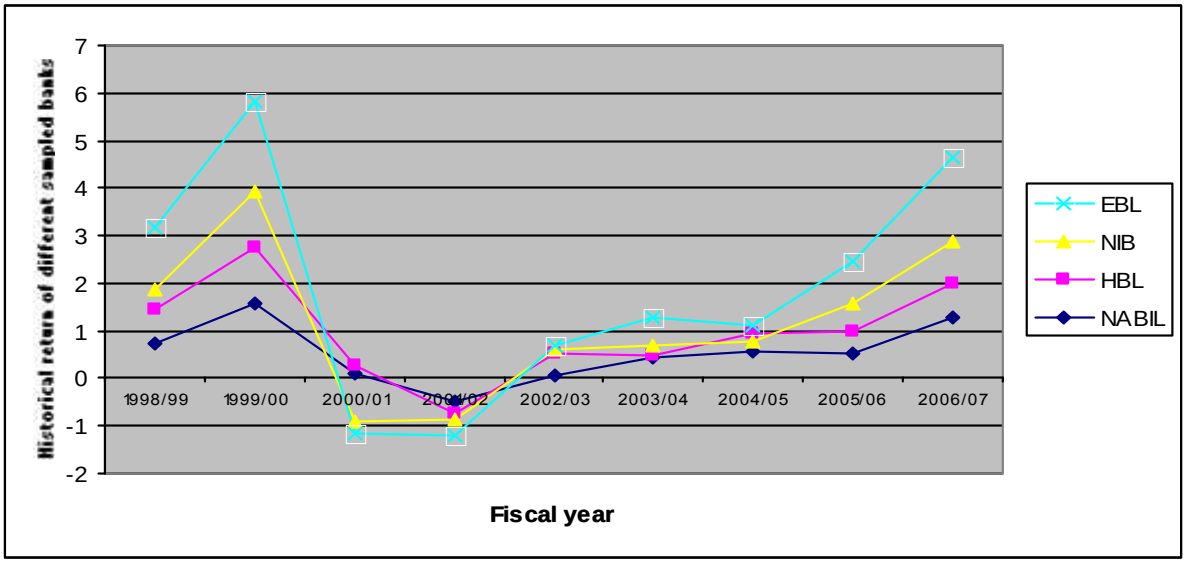
Comparative analysis of historical returned of sampled banks over the study periods has been presented in table 4.5.

Table 4.5 Comparative analysis of historical return on common stock of sampled banks

Years	NABIL	HBL	NIB	EBL
1998/99	0.74	0.72	0.42	1.29
1999/00	1.58	1.175	1.16	1.889
2000/01	0.1	0.16	-1.18	-0.23
2001/02	-0.49	-0.25	-0.14	-0.312
2002/03	0.07	0.46	0.07	0.08
2003/04	0.45	0.041	0.2	0.57
2004/05	0.58	0.356	-0.14	0.31
2005/06	0.53	0.446	0.59	0.9
2006/07	1.29	0.7073	0.87	1.78
Average	**0.538889**	**0.423922**	**0.205556**	**0.697444**

From this table, it is revealed that EBL has the highest average rate of return that is 69.74 percent and NIB has the lowest rate of return that is 20.55 percent, based on the study periods of time. All of sampled banks have earned negative rate of return in the F/Y 2001/02. Highest rate of historical return is earned by EBL in F/Y 1999/00 and lowest rate of return is earned by NIB which is minus 118 percents in F/Y 2000/01. It can be further presented in line chart to make a comparative analysis of historical returns of sampled banks.

Figure 4.5 Comparative analysis of historical return on common stock of sampled banks



The line chart presents the overall overview of historical return of all sampled banks and its common trend in the financial market. When figure has been taken under consideration then it can be seen that all of the banks has same trends of the up and down fluctuation. First of every bank return has increasing trend as all the curve is moving upward slope till the F/Y 1999/00 and curve line starts to slope downward up to F/Y 2001/02 where each bank are able to earn minimal or negative rate of return but after the F/Y 2001/02 there is increasing trend of historical return of every banks but increasing ratio is not same which is reflected by the curve line of returns of different banks which has been again start to move in upward slopping. If we see the curve then, it can be easily seen that EBL has the highest return and NIB has the lowest return.

4.1.3 Analysis of commercial bank return on common stock with market rate of return

Capital market indicates overall share price of listed companies where 147 companies were listed till the study period but commercial banks sector index indicates share price of listed commercial banks only. In this section, the study has described the relationship between market index and commercial index

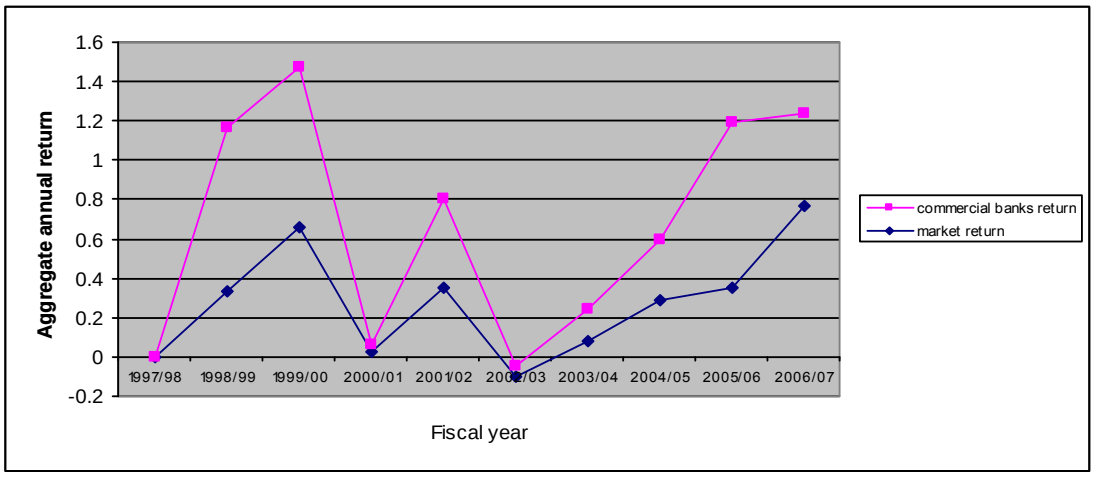
sector. The data for the study has been taken from NEPSE annual report. To calculate annual return, the study has been using opening and closing index, capital market annual return and commercial banks sector index. Capital market annual return and commercial banks index return over the study period has been presented in Table 4.6

Table 4.6 Expected market return and commercial banks return on common stock

Year	Closing NEPSE Index	Aggregate annual return of capital market	Commercial banks closing index	Aggregate annual return of commercial Banks (Rm)
1997/98	163.35		118.82	
1998/99	216.35	0.33	219.04	0.84
1999/00	360.7	0.66	392.71	0.81
2000/01	348.43	0.03	384.04	0.03
2001/02	227.54	0.35	212.68	0.45
2002/03	204.86	-0.1	200.67	0.05
2003/04	222.04	0.08	231.97	0.16
2004/05	286.67	0.29	304.64	0.31
2005/06	386.63	0.35	437.49	0.84
2006/07	683.95	0.77	639.93	0.47
Total		2.76		3.96
Average		0.306666667		0.44

In F/Y 2006/07, NEPSE index and commercial bank index have maximum value. Both commercial banks sector and capital market return is negative in F/Y 2002/03. Commercial banks sector index has maximum in F/Y 2006/07 as well as overall market index return is also maximum in same year. It is seemed that overall market index is highly affected by the commercial banks index because both sector has negative return in F/Y 2002/03 and there is significant increase in there return of both index in F/Y 2006/07 and it reveals that there is high positive correlation between the overall market return and the bank index return. It happens due to the dominant transactions of the banking sector in the NEPSE. Commercial banks index and overall market return index has been presented in figure 4.6.

Figure No. 4.6: Expected market return and commercial banks return on common stock



4.1.4 Comparison between average rate of return on common stock and required rate of return of commercial bank index in Nepal.

Capital asset pricing model (CAPM) has been used to evaluate required rate of return of sampled banks which is given in research methodology 3.5.2.1. To calculate required rate of return, average rate of return has been taken from table 4.1.4 and excess return has calculated by using average required rate of return. Risk free rate of return has been taken from NRB and given in Appendix 2. It is average rate of Treasury bill of 364 days of past nine year's rate of Treasury bills. Average rate of return and required rate return over the study period has been presented in table 4.7.

Table 4.7 Comparison between average rates of return and expected rate of return on common stock of commercial banks

Banks	Average rate of return	Required rate of return	Excess return	Over and under
NABIL	0.5389	0.317146	0.2218	under priced
HBL	0.3779	0.274985	0.1029	under priced
NIB	0.3167	0.2696	0.0471	under priced
EBL	0.5867	0.3457	0.241	under priced

Table 4.7 exhibit annualized expected rate of return on stock of commercial banks. It also exhibits required rate of return of commercial banks on stocks. The required rate of return of NABIL, EBL, NIB and EBL is 0.31746, 0275,

0.27 and 0.3457 respectively. Average rate of return of NABIL bank has accessed by 22.18 percent than its required rate of return. It implies that the common stock of this bank is under priced. It means the bank has expected to earn a higher rate of return is necessary to compensate and investor for the level of systematic risk he bears. Similarly, excess average rate of return of HBL is 10.29 percent, so stock of this bank is also under priced. NIB has also higher rate of average return over required rate of return. So, both of bank's stock are under priced.

4.1.5 Risk analysis

Previous analysis has only assessed return position of individual banks but in this section, the study has analyzed risk position of individual commercial bank and its comparative analysis. The study has mainly focused on standard deviation, beta coefficient, risk indicator (systematic and unsystematic risk) and relative measurement of risk coefficient (coefficient variation). From the risk perspective, standard deviation, variation, variation coefficient is calculated. Beta is used as indicator to measure the relative risk of individual stock to market. In term of beta when beta is negative, the movement of market (NEPSE) is negative.

4.1.5.1 Risk analysis of NABIL bank

Table 4.8 Risk analysis of NABIL

Indicators	Results of NABIL Bank
Variance	0.3962
Standard deviation	0.6294
Beta coefficient	0.9891
Coefficient variation	1.1656
Systematic Risk	0.2056
Unsystematic Risk	0.1906
Average Rate of return	0.5389
Covariance	0.2079

Beta of NABIL is 0.9891. It reveals that the stock has positive correlation with market i.e. NEPSE. As Beta of the stock is measured 0.9891, the positive

changes in NEPSE. If it will be one percent, the stock will have positive response by 0.9891 from the view point of volatility, the stock is less volatile than the market, and the stocks therefore can be categorized as defensive stock. There is 62.94 percent chance of deviation around the average rate of return. It means there is chance of variability in return by 62.94 percent. NABIL has minimized the unsystematic risk by 19.06 percent only.

4.1.5.2 Risk analysis of HBL bank

Risk analysis of HBL bank over the study period has been presented in Table 4.9

Table 4.9 Risk analysis of HBL

Indicators	Results of HBL
Variance	0.1917
Standard deviation	0.4378
Beta coefficient	0.8281
Coefficient variation	1.1585
Systematic Risk	0.1741
Unsystematic Risk	0.0176
Average Rate of return	0.3779
Covariance	0.1741

Beta of HBL is 0.8281. It reveals that the stock has positive correlation with market i.e. NEPSE. As Beta of the stock is measured 0.8281, the positive changes in NEPSE. As Beta of the stock is measured 0.8281, the positive changes in NEPSE. If it will be one percent, the stock will have positive response by 0.8281. From the view point of volatility, the stock is less volatile than the market. The stocks, therefore, can be categorized as defensive stock. There is 43.78 percent deviation around the average rate of return. It means there is chance of variability in return by 43.78 percent. HBL has the lowest diversifiable risk i.e. 0.0176. The risk per unit return is 1.1585. It means an investor could hold 1.158 unit risks to earn one unit of return.

4.1.5.3 Risk analysis of NIB

Risk analysis of NIB bank over the study period has been presented in Table 4.10

Table 4.10 Risk analysis of NIB

Indicators	Results of NIB
Variance	0.2173
Standard deviation	0.4662
Beta coefficient	0.8076
Coefficient variation	1.4719
Systematic Risk	0.1371
Unsystematic Risk	0.0802
Average Rate of return	0.3167
Covariance	0.1616

Beta of NIB is 0.8076. It reveals that the stock has positive correlation with market i.e. NEPSE. As Beta of the stock is measured 0.8076, the positive changes in NEPSE. If it will be one percent, the stock will have positive response by 0.8076. From the view point of volatility, the stock is less volatile than the market. The stocks therefore, can be categorized as defensive stock. There is 46.62 percent deviation around the average rate of return. It means there is chance of variability in return by 46.62 percent. NIB has the lowest diversifiable risk i.e. 0.0802. The risk for per unit return is 1.4719.

4.1.5.4 Risk analysis of EBL

Risk analysis of EBL bank over the study period has been presented in Table 4.11

Table 4.11 Risk analysis of EBL

Indicators	Results of EBL
Variance	0.466
Standard deviation	0.6828
Beta coefficient	0.8076
Coefficient variation	1.1635
Systematic Risk	0.1371
Unsystematic Risk	0.0802
Average Rate of return	0.3162
Covariance	0.2308

Beta of EBL is 1.098. It reveals that the stock has highly positive correlation with market i.e. NEPSE. As Beta of the stock is measured 1.098, the positive changes in NEPSE. If it will be one percent, the stock will have positive response by 1.098. From the view point of volatility, the stock is less volatile than the market. The stocks therefore, can be categorized as defensive stock. There is 68.28 percent deviation around the average rate of return. It means there is chance of variability in return by 68.28 percent. EBL has the high diversifiable risk i.e. 0.2126. The stock has to bear 1.1635 unit risk to earn per unit rate of return. It is lower than the NIB.

4.1.6 Comparative analysis of four sampled banks

The section has mainly focused on comparative analysis of four commercial banks. For the analysis, the data has been taken from the table 4.8 to 4.11. Comparative analysis of four sampled banks over the study period has been presented in table 4.12.

Table 4.12 Comparative analysis of four sampled banks

Indicators	EBL	NIB	HBL	NABIL
Variance	0.466	0.2173	0.1917	0.3962
Standard deviation	0.6828	0.4662	0.4378	0.6294
Beta coefficient	0.8076	0.8076	0.8281	0.9891
Coefficient variation	1.1635	1.4719	1.1585	1.1656
Systematic Risk	0.1371	0.1371	0.1741	0.2056
Unsystematic Risk	0.0802	0.0802	0.0176	0.1906
Average Rate of return	0.3167	0.3167	0.3779	0.5389
Covariance	0.2308	0.1616	0.1741	0.2079

Table 4.12 has been presented overall risk indicators of all sampled banks. EBL has the highest rate of return of 58.67 percent with standard deviation of 68.28 percent. NIB has maintained the lowest expected rate of return i.e. 31.67 percent with standard deviation of 0.4662. The expected rate of return of NABIL and HBL is found 53.89 percent and 37.79 percent with standard deviation of 62.94 and 43.78 respectively. From this, it can be found that NIB has higher risk relative to the return. As coefficient of variation reflects the risk for per unit return, EBL has the lowest variance so that this bank has less risky.

Contrast, NIB has the highest coefficient variation. So, it has risk on its common stocks. Overall, EBL has almost fifty-fifty portion diversifiable and un-diversifiable risk.

4.1.7 Correlation between risk and expected return

Correlation coefficient indicates the relationship between two or more variables. It shows the relation between two variables either in positive and negative dimension. The correlation coefficient has been analyzed in table 4.13. Theoretically, when risk increases return also increases and vice-versa. For the analysis, standard deviation and expected rate of return has been taken from previous calculation. And it has been calculated by using Microsoft Excel Programme. Correlation between risk and expected return has been presented in Table 4.13.

Table 4.13 Correlation between risk and expected return

Banks	Expected return	Standard deviation
NABIL	0.5389	0.6294
HBL	0.3779	0.4378
NIB	0.3167	0.4662
EBL	0.5876	0.6828

Correlation coefficient between risk and return is 0.957421795

It has been presented the correlation between standard deviation and expected rate of return in table. The result shows that there is significant positive correlation between risk and return. It indicates when risk increases then the return is also increases.

4.1.8 Major Findings of the study based on secondary data

- Average rate of return of NABIL, HBL, NIB and EBL are 53.89%, 37.79%, 31.67% and 58.67% respectively. Among four sampled banks, EBL has the highest rate of return and NIB has lowest return.
- In year 2000, all the sampled banks have negative annual return or no return. Annual return of NABIL, HBL, NIB is -49 %, 25%, 14%, -31.2 % respectively and in the same year NEPSE index movement is also negative i.e. -0.03.
- Standard deviation of NABIL, HBL, NIB and EBL are 62.94, 43.78, 46.62 and 68.28 % respectively and Beta coefficient of NABIL, HBL, NIB and EBL are 0.9891, 0.8281, 0.8076 and 1.098 respectively. The standard deviation of EBL is highest and HBL is lowest.
- Coefficient of variation of NABIL, HBL, NIB and EBL are 1.1656, 1.1585, 1.4714, and 1.1635 respectively. Coefficient of NABIL is highest and HBL has lowest.
- According to CAPM theory, EBL has the highest required rate of return i.e. 34.57 % and NIB has lowest i.e. 26.96 % and the entire sampled bank are under priced.
- Systematic risk of NABIL, HBL, NIB and EBL are 0.2056, 0.1441, 0.1371 and 0.2534 respectively. Similarly, risk of NABIL, HBL, NIB and EBL are 0.1906, 0.047, 0.0802 and 0.2126 respectively.
- The average rate of return and standard deviation of return are highly positively correlated i.e. 0.957421795.

4.2 Data presentation and analysis based on primary data

This section deals with the analysis of risk and return on common stocks of selected banks from the investors' perspective. For this the required data has been obtained from the primary source. The research has made ample efforts to explore information about how investors' are making decision for stock investment on commercial bank from the perspective of risk and return factor. A structured questionnaire was distributed to 60 investors asking to provide

their views and information on the point expressed in the question. Following section presents analysis of investors' views and information in the same order as they were asked in the questionnaire.

1. Investment made on the common stocks of commercial bank

As the all questionnaire has been distributed to those respondents who have already made investment in common stock of commercial bank, 100% respondent has opined that they have invested in the common stock.

2. Basis of investment

Investment on common stocks of commercial banks has been made based on a number of means. This research has utilized this information on those variables which motivates investors to invest common stocks of commercial banks. In this research question following information from respondent has been obtained.

Figure 4.7

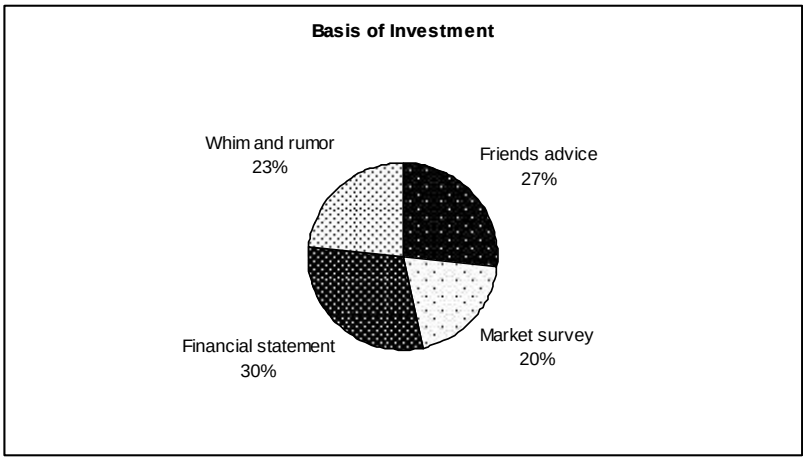


Figure 4.7 shows that, majority of the respondent (30%) stated that they consider financial statement review while making investment decision. At the same time, 26.67 % respondent opined that friends' advice is the base of their investment. Some of the respondent (23.33%) told that whim and rumor was the key of their investment. And remaining (20%) has mentioned that they have invested their money based on the information obtained from market survey. It

has made clear financial investment review has been a reliable base of the investment on common stocks of commercial banks in Nepal.

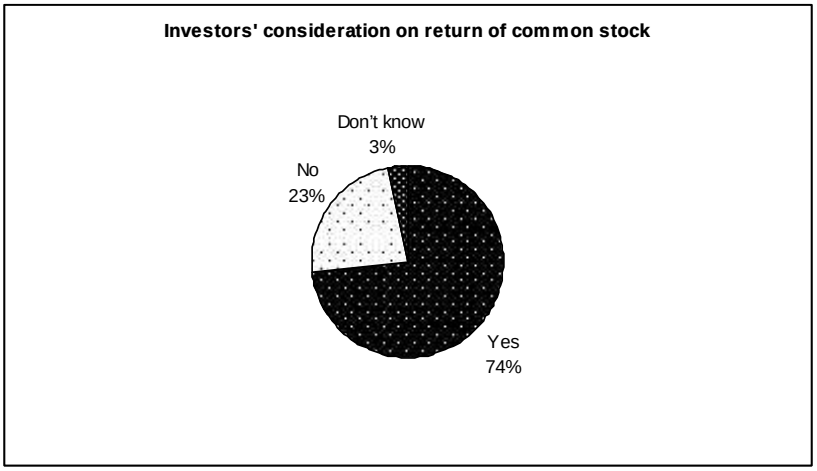
3. Nature of investor

Investor may have different kinds of nature towards their investment. In order to explore their nature they were asked what kind of investor they are by providing five options. 30% respondent have presented as a risk seeker and 26.67% as a risk averter. At the same time 23.33% are neutral between risk seeker and risk averter. And remaining (20%) respondent has mentioned that they have no any idea about it.

4. Consideration on return on the common stocks of commercial banks

The expected rate or return or holding period return is based upon the expected cash receipts over the holding period and expected ending or selling price. So every investor should consider the expected rate of return that can be earned from their investment on common stocks. For this, research question is designed to know whether the investor take return as decisional variable for their investment or not. The result obtained from the respondents has been presented and illustrated with the help of following figure.

Figure no. 4.8



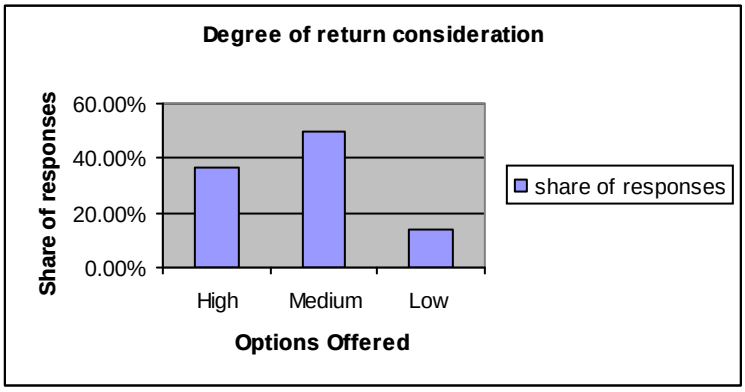
This pie chart presents the proportion of investors' consideration on return on common stocks of commercial banks while making investment. Majority of respondents (73.33%) has considered return on common stock while

approximately one fourth (23.33%) respondents have reported that they has ignored return involved in their investment. Remaining respondents (3.34%) has expressed that they were not aware about return. To sum up, it is concluded that most of investor also evaluate return factor while putting their money on shares.

5. Degree of consideration on return on common stock of commercial bank while making investment

In this research question, respondents were asked to scale their consideration level of return of stock. They were given scales i.e. high, medium and low. The result obtained can be presented in the following bar diagram with detailed expansion.

Figure 4.9



From this bar diagram, it is cleared that 50% investors have average level consideration on return while 36.36% respondents put high value to return. A few investors have minor consideration on it.

6. Consideration on risk on the common stocks of commercial banks

Risk is the variability of possible returns around the expected returns of an investment. It is an essential factor to be considered while making investment on common stock. There is no return without bearing risk in every investment. For this, respondents were asked to put their responses whether they are aware about risk or not. The result obtained can be portrayed with the following pie chart with brief description.

Figure 4.10

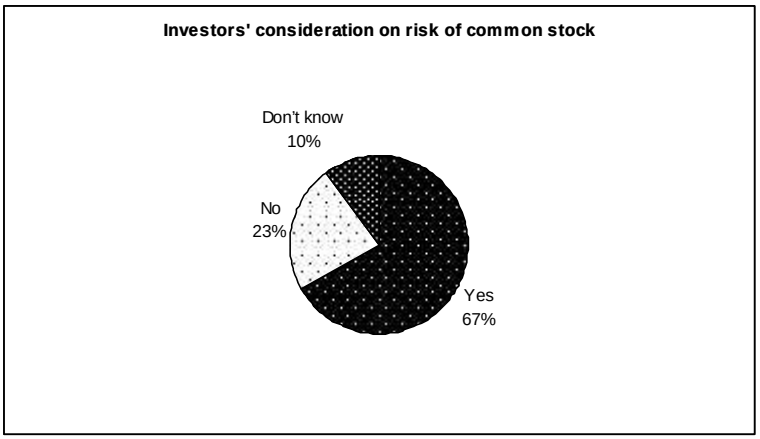
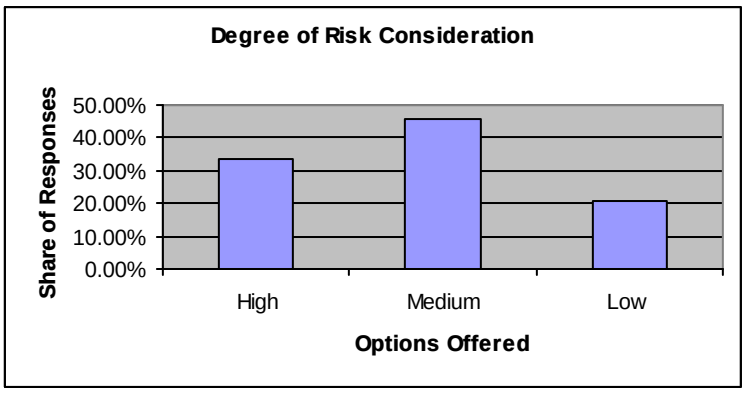


Figure 4.10 illustrates that 66.67% respondents were considered risk as major variable for their investment decision. Likewise, roughly one fourth (23.33%) respondents have no any consideration on risk. Remaining respondents (3.34%) has no any idea about the risk. To conclude, risk has been taken as considerable factor in making investment decision.

7. Degree of consideration on risk on common stock of commercial bank while making investment

In this research question, respondents were asked to scale their consideration level of risk on stock. They were given three scales i.e. high, medium and low. The result obtained can be presented in the following bar diagram with detailed expansion.

Figure 4.11



From this bar diagram, it is cleared that 45.83% investors have average level consideration on return. 33.34% of the respondents put high value to return. A

few investors (20.83%) have minor consideration on it. Comparatively, it is found that more investors consider return than risk involved in their investment decision at moderate level.

8. Nature of analysis for investment decision

Investment decision is a process where various analysis should be conducted t construct a sound portfolio of investment in order to maximize return and minimize risk. For this purpose, this research question has been developed to obtain the information about the nature of analysis mentioning three options i.e. financial analysis, market analysis and both. 26.67% of the total respondents have been reported that they had conducted only financial analysis to measure the viability and profitability of their investment on stock through the banks' financial variables like risk and return calculation, dividend policy and market price per share etc. This result shows Nepalese investors are not in the position to conduct financial analysis to design better investment decision. Likewise, 30 % of the respondents only conduct market analysis to measure the viability and profitability of their investment on stock through analyzing the banks' goodwill and image, share market performance, market rumor and future expectation. Besides these, maximum numbers (43.33%) of respondents have told that they had conducted both analysis to derive more accurate decisional variable to make their investment decision sound.

9. Priority assigned to the factors to be considered while conducting financial analysis

For the further clarification of research question number 8, this research question has been developed to prioritize the factors to be considered while conducting financial analysis. They were given four different variables namely return factor, risk factor, dividend policy and market price per share which were to be ranked in a highest important to lowest important by assigning I to the highest important and IV to the lowest important to those investors who have conducted financial analysis. Referring to Appendix 12 and table for

question number 9, it has been found that investors have given highest ranking to return factor, they have given second ranking to market price per share. Likewise, they have given third and fourth to risk factor and dividend policy respectively. From this, it is observed that most of the Nepalese investors have high consideration on return factor while investing their money on the common stock of commercial banks based on the financial analysis approach.

10. Priority assigned to the factors to be considered while conducting market analysis

For the further clarification of research question number 8, this research question has been developed to prioritize the factors to be considered while conducting market analysis. They were given four different variables namely market rumor, future expectation, goodwill and image of the commercial bank and share market performance, which were to be ranked in a highest important to lowest important by assigning I to the highest important and IV to the lowest important to those investors who have conducted financial analysis. Referring to Appendix 12 and table for question number 10, it has been found that investors have given highest ranking to goodwill and image of the commercial bank; they have given second ranking to share market performance. Likewise, they have given third and fourth to future expectation and market rumor respectively. Form this, it is observed that most of the Nepalese investors have high consideration on goodwill and image of the commercial bank while investing their money on the common stock of commercial banks based on the market analysis approach.

11. Degree of awareness in Nepalese investors about risk and return

Finally, this research question has been asked to know whether the Nepalese investors are aware adequately about the risk and return factor or not. As it is fact that most of the Nepalese investors are investing their money in share knowingly and unknowingly and this question try to find out the position of

Nepalese investors about the knowledge of risk and return. The result obtained from the respondent has been presented in following pie chart.

Figure 4.12

This figure shows that majority (50%) of prospective investors are treated as low awareness about risk and return factors. 30% of the respondents reported that Nepalese investors have adequate awareness about risk and return factors. And the remaining (20%) have expressed that they have no any prediction about the research question.

4.2.1 Major Findings of the study based on primary data

- Financial statement survey and friends advice are the base of investment on common stocks of commercial banks in Nepal. At the same time, same investors also make market survey to build on base for their investment.
- Majority of investors are risk seekers who consider risk in their investment on common stock but the consideration level is at the middle level rather than high. Likewise, there are also some investors who consider return factors and tend to avoid high risk and consider return at middle level.
- Most of the investors expressed that they have conducted both analysis. At the same time some of investors have conducted only either financial analysis or market analysis.

- Those who have conducted either financial analysis or both type of analysis has ranked return factor in first priority and only than market price per share, risk and dividend in second, third and fourth priority.
- Those who have conducted either market analysis or both type of analysis has ranked goodwill and image of the banks in first priority and only than share market performance, future expectation and market rumor in second, third and fourth priority.
- Majority of investors agreed that most of the Nepalese investors have not adequate awareness about risk and return factors.

Chapter V

Summary, Conclusion & Recommendation

5 Introduction

An investor holds shares with an intention to earn money. Finance theory states that in every, there is some risk associated with it. While an investment in share has the prospects of earning good return, it also has a risk of loosing large amount of equity. A stock market can be a risky place for investors if they fail to know how to protect themselves from potential losses. So, this chapter explains the overall analysis of this research study in a summarized way, draft a conclusion and provide vital recommendation to the readers.

5.1 Summary

Risk and return analysis is the part of the business world. If there is no risk, there is no return. Risk and return measures the performance on any corporate house. It is the key factor in the financial sector and could be a good indicator to the prospect who one to make investment on the securities of enterprises. For any investment decision, investors want to the expected rate of return from the investment and risk associated with in it. The economy is growing rapidly, which forces the change in the variable of world economy in galloping manner. No investors would like to make their investment in the risky asset which holds higher risk and yield lower rate of return.

Banking sector is the most dynamic part of the economy which collects unused funds and mobilizes it in needy sector. It is heart of trade, commerce and industry. In Nepal joint venture and private sector bank has performed sound results than the government sector bank because high skill management, efficiency and proper risk management. Capital market plays vital role to develop the economic world. NEPSE in Nepal is the heart of capital market. Capital market has two wings i.e. primary capital market and secondary capital market. Various companies' securities are traded in such type of market. Most

of the investor is least aware about the risk and return factor associated in each investment. They make their investment in hunches and their own intuition rather then calculating the expected rate of return and comparing it market rate of return. The present study has been analyzed the risk and return parameter of common stock investment. Common stock is regarded most risky security and one of the major paper asset, traded in security market. The major objective of this research study is to analyze the risk and return of commercial banks in the context of Nepal especially focused in the commercial banks listed in the NEPSE.

Four listed commercial banks in NEPSE have been taken as sample and their individual risk and return were calculated and analyzed as whole to find out the performance of each bank. While analyzing risk and return in brief review of literature for the present study has been made and theoretical review and related studies where fundamental concept has been prepared to facilitate the study more accurate and effective. The study has also included research methodology to fulfill the objective of the present study. To analyze the standard deviation, beta coefficient, required rate of return, expected rate of return, coefficient variation have been calculated on the basis of major finding. This research study has also made a survey where a structured questionnaire has been filled up by 60 respondents and the result obtained from these primary data has been analyzed and conclusion has been derived regarding the risk and return on common stock of commercial banks from the investors' perspective. Based on the derived conclusion a very useful recommendation has been made.

5.2 Conclusions

Following conclusions from study has been drawn.

1. 1 While considering the systematic (un-diversified) risk of commercial banks, NIB has the least systematic risk and EBL has the highest one among the selected banks.
2. When unsystematic (diversifiable) risk is considered it is be found that HBL has lowest risk and EBL has the highest one.

3. At the same time when total risk is considered, HBL is considered lowest risky and EBL has the highest risk.
4. Beta coefficient of EBL has the highest and NIB has the lowest. It shows NIB is least risky and EBL is top most one among the selected banks.
5. If relative risk measurement through coefficient variation is considered then, NIB has the highest per unit of risk as measured by coefficient of variation.
6. Looking at only return factors, average return of EBL is the highest and that of NIB is the lowest rate of return.
7. According to CAPM approach, EBL has the highest required rate of return. And NIB has the lowest one. All the sampled banks are under priced. So it is concluded that it is advisable to purchase common stock of such companies by the investors.
8. When correlation with risk and return of the banks are observed, it is found that return is highly correlated with risk and it proves that without bearing risk there is less chance of earning return. In other words the risk is highly related with the return.
9. From the study it is found that none of the banks share price is rightly determined as all the banks' average rate of return is more than the required rate of return for the investor. This brings the difference of market prices from the intrinsic value.
10. Financial statement review and friend advice are the main source of inspiration for the Nepalese investors to make their investment decision on common stocks of commercial bank in Nepal.
11. Though some of the investors tend to bear risk as being the risk seeker but the degree of risk consideration remain on average. Like wise most of the investors also tend to avoid risk and value high to return as s decisional factor. The degree of consideration on return is also on average.
12. Most of the investors conduct market analysis and financial analysis together. At the same time, a few investors conduct either of one analysis.

13. When investors conduct financial analysis, return factor and market price per share are the major inputs for further analysis.
14. When investors conduct market analysis, goodwill and image of the commercial bank as well as market performance are the major inputs for further analysis.
15. Most of the Nepalese investor is reported lack of adequate awareness on risk and return involved in share investment in commercial bank.

5.3 Recommendations

Above conclusions have prescribed following recommendations.

1. There is unrealistic relationship between required rate of return and expected rate of return of sampled banks' securities. Excess return of banks is more than 20 percent which may not be realistic. So, all the investors are recommended to conduct technical analysis as well as fundamental analysis to know the correct price of common stock. Technical analysis reveals stock's future performance based on the market price trend and investors' future expectation.
2. The common stock returns of commercial banks are highly sensitive to market. They are highly positively correlated to the market. So, market should be further analyzed by the investors to balance the risk and return properly.
3. Generally, it is believed that higher the return, higher will be the risk. Investment risks are better covered through a large and diversified portfolio. Diversifying an investment is a way of reducing the risk. Here, all the risky sampled banks are recommended to diversify their investment policy in less risky securities.
4. The result of correlation between risk and return is insignificant. The result is unsatisfactory because the sample size of the study is too small and the data for the study is used from annual report and website which may not be sufficient so it is suggested that for the further researcher will recommend including sufficient sample size.

5. If investor is risk averter, it is recommended him or her to invest in NIB and if investor is risk seeker, then suggested to invest in EBL.
6. Nepalese investors are requested to develop an appropriate basis for their investment on common stock as per the requirement. They are recommended to invest their fund by performing multiple analysis.
7. As risk and return are positively correlated they are requested to assess these factors as a important and recommended to analyze these factors with different financial tools and techniques.
8. All investors are recommended to put adequate consideration on risk and return factors while making investment on common stocks of commercial banks. They are requested to follow not only a few factors like market price per share, goodwill and image of commercial banks, dividend policy and market rumor etc.

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Appendix 1

Commercial banks operating in Nepal

S.N.	Names of banks	Operating date (OD)	Listing Date
1	Nepal Bank Limited	11/15/1937	
2	Rastriya Banijya Bank	01/23/1966	
3	NABIL Bank Ltd*	16/07/1984	24/11/1985
4	Nepal Bangladesh Bank Ltd	05/06/1993	24/12/1995
5	Standard Chartered Bank Ltd	03/01/1987	04/07/1998
6	Himalayan Bank Ltd*	18/01/1993	05/07/1993
7	Nepal SBI Bank Ltd	07/071993	17/01/1995
8	Nepal Investment Bank Ltd*	27/02/1986	22/07/1986
9	Everest Bank Ltd*	18/10/1994	07/04/1996
10	Bank of Kathmandu Ltd	12/03/1995	07/07/1997
11	Nepal Credit and Commerce Bank Ltd	14/10/1996	13/06/2000
12	Lumbini Bank Ltd	17/07/1996	10/11/2004
13	Nepal Industrial and Commerce Bank Ltd	21/07/1998	31/01/2005
14	Kumari Bank Ltd	03/04/2001	29/07/2004
15	Laxmi Bank Ltd	03/04/2002	21/04/2004

Source : NEPSE and NRB

- *Sample of the study

Appendix 2

Commercial bank index

Year 15th July	NEPSE index (closing)	Commercial bank Index (closing)	Treasury Bills Rates
1997/98	163.35	118.82	3.5037
1998/99	216.35	219.04	2.1222
1999/00	360.7	392.71	4.5812
2000/01	348.43	384.04	4.9535
2001/02	227.54	212.68	4.717
2002/03	204.86	200.67	3.4975
2003/04	222.04	231.97	3.7273
2004/05	286.67	304.64	4.2882
2005/06	386.63	437.49	4.3962
2006/07	683.95	639.93	4.7348

Source: Calculated on the basis of the data extracted from NEPSE and annual report of annual reports of sampled banks.

Appendix 3
NABIL Bank Ltd

Year	Closing Price (Rs)	Opening Price (Rs)	Cash dividend (%)	Stock dividend (%)
1997/98	430	-	30	-
1998/99	700	430	50	-
1999/00	1400	700	55	-
2000/01	1500	1400	40	25
2001/02	735	1500	30	-
2002/03	735	735	50	-
2003/04	1000	735	65	-
2004/05	1505	1000	70	-
2005/06	2240	1505	70	-
2006/07	5050	2240	85	-

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 4
Himalayan Bank Ltd

Year	Closing Price (Rs)	Opening Price (Rs)	Cash dividend (%)	Stock dividend (%)
1997/98	755	-	50	60
1998/99	1000	755	50	25
1999/00	1700	1000	50	25
2000/01	1500	1700	27.1	30
2001/02	1000	1500	25	10
2002/03	836	1000	1.32	25
2003/04	840	836	20	-
2004/05	920	840	11.58	20
2005/06	1100	920	10	10
2006/07	1760	1100	85	5

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 5
Nepal Investment Bank Ltd

Year	Closing Price (Rs)	Opening Price (Rs)	Cash dividend (%)	Stock dividend (%)
1997/98	600	-	50	-
1998/99	822	600	30	-
1999/00	1401	822	27.5	25
2000/01	1150	1401	-	-
2001/02	760	1150	-	30
2002/03	795	760	20	-
2003/04	940	795	15	-
2004/05	800	940	12.5	-
2005/06	1260	800	12.5	-
2006/07	1729	1260	20	35

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 6
Everest Bank Ltd

Year	Closing Price (Rs)	Opening Price (Rs)	Cash dividend (%)	Stock dividend (%)
1997/98	184	-	-	-
1998/99	407	184	15	-
1999/00	980	407	-	20
2000/01	750	980	-	-
2001/02	430	750	-	20
2002/03	445	430	20	-
2003/04	680	445	20	-
2004/05	870	680	20	-
2005/06	1379	870	-	20
2006/07	2430	1379	25	-

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 7
Calculation of standard deviation, variance, coefficient of variation and Beta coefficient of NABIL Bank Ltd.

Year	Rj	Rm	$(Rj- \bar{Rj})$	$(Rj - \bar{Rj})^2$	$(Rj- \bar{Rj}) \times (Rm- \bar{Rm})$	$(Rm- \bar{Rm})$	$(Rm- Rm)^2$
1998/99	0.74	0.84	0.2	0.04	0.104	0.52	0.27
1999/00	1.58	0.81	1.04	1.0816	0.5096	0.49	0.24
2000/01	0.1	-0.03	-0.44	0.1936	0.154	-0.35	0.123
2001/02	-0.49	-0.45	-1.03	1.0609	0.7931	-0.77	0.59
2002/03	0.07	-0.05	-0.47	0.2209	0.1739	-0.37	0.137
2003/04	0.45	0.16	-0.09	0.0081	0.0144	-0.16	0.0256
2004/05	0.58	0.31	0.04	0.0016	-0.0004	-0.01	0.0001
2005/06	0.53	0.84	0.01	0.0001	0.0052	0.52	0.2704
2006/07	1.29	0.47	0.75	0.5625	0.1125	0.15	0.0225
total	4.85	2.9		3.1693	1.663		1.684
average	0.54	0.32					

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 8
Calculation of standard deviation, variance, coefficient of variation and Beta coefficient of Himalayan Bank Ltd.

Year	Rj	Rm	$(Rj- \bar{Rj})$	$(Rj - \bar{Rj})^2$	$(Rj- \bar{Rj}) \times (Rm- \bar{Rm})$	$(Rm- \bar{Rm})$	$(Rm- Rm)^2$
1998/99	0.72	0.84	0.3421	0.1170	0.1779	0.52	0.27
1999/00	1.175	0.81	0.7971	0.6354	0.3906	0.49	0.24
2000/01	0.16	-0.03	-0.2179	0.0475	0.0763	-0.35	0.123
2001/02	0.25	-0.45	-0.6279	0.3943	0.4835	-0.77	0.59
2002/03	0.046	-0.05	-0.3319	0.1102	0.1228	-0.37	0.137
2003/04	0.041	0.16	-0.3369	0.1135	0.0539	-0.16	0.0256
2004/05	0.356	0.31	-0.0219	0.0005	0.0002	-0.01	0.0001
2005/06	0.45	0.84	0.0721	0.0052	0.0375	0.52	0.2704
2006/07	0.71	0.47	0.3321	0.1103	0.0498	0.15	0.0225
total	3.4013	2.9		1.5338	1.3925		1.684
average		0.32					

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 9
Calculation of standard deviation, variance, coefficient of variation and Beta coefficient of Nepal Investment Bank Ltd.

Year	Rj	Rm	$(Rj- \bar{Rj})$	$(Rj - \bar{Rj})^2$	$(Rj- \bar{Rj}) \times (Rm- \bar{Rm})$	$(Rm- \bar{Rm})$	$(Rm- Rm)^2$
1998/99	0.42	0.84	0.1033	0.0107	0.0537	0.52	0.27
1999/00	1.16	0.81	0.8433	0.7112	0.4132	0.49	0.24
2000/01	-0.18	-0.03	-0.4967	0.2467	0.1738	-0.35	0.123
2001/02	-0.14	-0.45	-0.4567	0.2686	0.3517	-0.77	0.59
2002/03	0.07	-0.05	-0.2467	0.0609	0.0913	-0.37	0.137
2003/04	0.02	0.16	-0.2967	0.0880	0.0475	-0.16	0.0256
2004/05	-0.14	0.31	-0.1767	0.0312	0.0018	-0.01	0.0001
2005/06	0.59	0.84	0.2733	0.0747	0.1421	0.52	0.2704
2006/07	0.87	0.47	0.5533	0.3061	0.083	0.15	0.0225
total	2.8503	2.9		1.7381	1.3581		1.684
average	0.3167	0.32					

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 10
Calculation of standard deviation, variance, coefficient of variation and Beta coefficient of Everest Bank Ltd.

Year	Rj	Rm	$(Rj- \bar{Rj})$	$(Rj - \bar{Rj})^2$	$(Rj- \bar{Rj}) \times (Rm- \bar{Rm})$	$(Rm- \bar{Rm})$	$(Rm- Rm)^2$
1998/99	0.29	0.84	-0.2967	0.088	-0.1543	0.52	0.27
1999/00	1.889	0.81	1.3023	1.6960	0.6381	0.49	0.24
2000/01	-0.23	-0.03	-0.8167	0.6670	0.2858	-0.35	0.123
2001/02	-0.312	-0.45	-0.8987	0.8077	9.6920	-0.77	0.59
2002/03	0.08	-0.05	-0.0567	0.2567	0.1875	-0.37	0.137
2003/04	0.57	0.16	-0.0167	0.0003	0.0027	-0.16	0.0256
2004/05	0.31	0.31	-0.2767	0.0766	0.0028	-0.01	0.0001
2005/06	0.90	0.84	0.3133	0.0982	0.1629	0.52	0.2704
2006/07	0.78	0.47	0.1933	0.0374	0.0290	0.15	0.0225
total	5.2803	2.9		3.7278	1.8465		1.684
average	0.5867	0.32					

Source: Calculated on the basis of the data extracted from NEPSE and annual reports of sampled banks.

Appendix 11

A Survey on the risk and return on common stock from the investors' perspective

Dear respondents,

I am collecting the data concerned with risk and return on common stock from the investors' perspective for the project work in partial fulfillment of the requirements for the degree of MBA and it would be grant value of your help in this project work, if you help by filling up the following questionnaires.

Name (optional); ……
Position: ……..
Experience: …… years.
Institution: …….
Address: …….

1. Have you invested in the common stock of commercial banks in Nepal? (Tick one)
   a. Yes b. No
2. On what basis, you have made investment on common stocks of commercial banks? (Tick one)
   a. Friends advice ( )
   b. Market survey ( )
   c. Financial statement review ( )
   d. Whim and rumor ( )

3. What kind of investor are you?
   a. Risk seeker ( )
   b. Risk averter ( )
   c. Neither risk seeker nor risk averter ( )
   d. Don't know ( )

4. Do you consider return on common stocks of commercial banks while making investment? (Tick one)
   a. Yes b. No c. Don't know

5. To what extent do you consider the return involved in investing on common stocks of commercial banks? Please indicate on the following scale:

6. Do you consider risk on common stock of commercial banks while making investment? (Tick one)
   a. Yes b. No c. Don't know

7. To what extent do you consider the risk involved in investing on common stocks of commercial banks? Please indicate on the following scale:
   a. High b. Medium c. Low

8.What kind of analysis do you conduct for your investment decision? (Tick one)
a. Financial analysis b. Market analysis c. Both

9. If you conduct financial analysis which of following factors do you prioritize? (Rank the following factor according to priority given) I for high priority ….. IV for low priority.

a. Return factor ( )
b. Risk factor ( )
c. Dividend policy ( )
d. Market price per share ( )

10. If you conduct market analysis which of following factors do you prioritize? (Rank the following factor according to priority given) I for high priority……. IV for low priority.

a. Market rumor ( )
b. Future expectation ( )
c. Goodwill and image of the commercial bank ( )
d. Share market performance ( )

11. Do you think that Nepalese investors are aware adequately about the risk and return factors? (Tick one)

a. Yes b. No c. Don't know

Thank you

Appendix 12

RESPONSE OBTAINED ON QUESTION NO.2

Options offered	Response obtained	Share on total response
Friends advice	16	26.67%
Market survey	12	20%
Financial statement review	18	30%
Whim and rumor	14	23.33%
Total	60	100%

RESPONSE OBTAINED ON QUESTION NO.3

Options offered	Response obtained	Share on total response
Risk seeker	18	30%
Risk averter	16	26.67%
Neither risk seeker nor risk averter	14	23.33%
Don't know	12	20%
Total	60	100%

RESPONSE OBTAINED ON QUESTION NO.4

Options offered	Response obtained	Share on total response
Yes	44	73.33%
No	14	23.33%
Don't know	2	3.34%
Total	60	100%

RESPONSE OBTAINED ON QUESTION NO.5

Options offered	Response obtained	Share on total response
High	16	36.36%
Medium	22	50%
Low	6	13.64%
Total	44	100%

RESPONSE OBTAINED ON QUESTION NO.6

Options offered	Response obtained	Share on total response
Yes	40	66.67%
No	14	23.33%
Don't know	6	10%
Total	60	100%

RESPONSE OBTAINED ON QUESTION NO.7

Options offered	Response obtained	Share on total response
High	16	33.34%
Medium	22	45.83%
Low	10	20.83%
Total	48	100%

RESPONSE OBTAINED ON QUESTION NO.8

Options offered	Response obtained	Share on total response
Financial analysis	16	26.67%
Market analysis	18	30%
Both	26	43.33%
Total	60	100%

RESPONSE OBTAINED ON QUESTION NO.9

Research variable	Ranking			
	I	II	III	IV
Return factor	22	10	6	
Risk factor	16	17	4	12
Dividend policy		6	10	18
Market price per share	12	19	11	10

RESPONSE OBTAINED ON QUESTION NO.10

Research variable	Ranking			
	I	II	III	IV
Market rumor	12	4	8	24
Future expectation	8	16	20	8
Goodwill and image of the Commercial bank	16	8	12	8
Share market performance	12	18	4	4

RESPONSE OBTAINED ON QUESTION NO.11

Options offered	Response obtained	Share on total response
Yes	18	30%
No	30	50%
Don’t know	12	20%
Total	60	100%

Appendix 13
Highlights of Sample Banks

NABIL Bank Limited: Nabil bank is the first joint venture bank in Nepal. It was established in 1984. The data if established, it had known as Nepal Arab bank limited but now it is known as only Nabil bank limited. The bank was listed in NEPSE in the year 1985 A.D. The paid up capital of the bank in fiscal year 1996/97 was only Rs 261.64 million. It has 25 branches all over the Nepal.

Himalayan Bank Limited: Himalayan bank limited was established in 1993 in collaboration with Habib bank limited, Pakistan. It is the fourth joint venture bank in Nepal and it was listed in NEPSE in 1993. The paid up capital of the bank in fiscal year 1995/96 was only Rs 120 million, which is gradually reached up to Rs 634.50 million 2004/05. Himalayan bank has more than 20 branches all over the Nepal.

Investment Bank Limited: Nepal investment bank is the third joint venture bank of Nepal established in 1985 A.D. It was joint venture with credit Argicole Indosuez, France but the share was transferred to group of Nepalese business house in 2001 A.D. Since it no more belonged to Indosuez, the mane also changed to Nepal Investment Bank Limited. Nepal Investment bank was listed in NEPSE in 1987 A.D. Its paid up capital is Rs 587.74 million in fiscal year 2004/05. Nepal investment bank limited has more than 15 branches all over the Nepal.

Everest Bank Limited: Everest bank limited was established in 1994 A.D. with the joint venture of Punjab National Bank Limited, India. It was listed in NEPSE in 1996 A.D. Authorized, issued and paid up capital of Everest bank limited are Rs 600 million, 466.80 million and Rs 455 million respectively. It has more than 20 branches all over the Nepal.