

# CHAPTER- I

## INTRODUDCTON

### 1.1 General Background

Economic development is the vital for the development of a country. It supports the other development sectors such as social, political, legal, educational etc. The development process requires the productive activities, which in turn is the result of the investment venture in productive sectors from public utilities to consumer products and services. To activate these development works needs a huge amount of fund, which a single or partners cannot always invest in these ventures. In this situation, need of numerous investors are realized. Security market provides an important platform for all the potential investors which can avail the required fund to the operators.

For the growth and existence of the productive enterprises, there will be a need of short to medium to long –term capital funds. These required funds could be raised through financial market. Money market and capital market are the two components of financial market. Short-term funds are provided by money market whereas medium & long-term funds are provided by capital market. This study is mainly concerned with the study of capital market only. The two components of capital market are securities market & non-securities market. Among them, the main focus of this study is on securities market.

Securities market refers to the market where securities like government bonds, corporate bonds, debentures, ordinary shares, mutual funds & certificates etc are bought and sold as other commodities. There are two types of securities market i.e. primary market & Secondary market. Primary market refers to the market for new issue whereas secondary market principally refers to the stock market. Stock market is the major component of the securities market.

In Nepal, NEPSE, a nonprofit organization, is only an organization, which has authority to impart free marketability and liquidity to the government bonds and corporate securities by facilitating transaction in its trading floor through financial intermediaries. NEPSE has only authority in the pricing of the shares. People who buy shares are common stock holders and they are residual ownership of the firm of in other words they are investors. They are also the participants in the risk and return of their investment. Common stock may be considered as risky security. Hence price of the share highly depends upon the risk and return of the investment.

Risk and return of any investment is directly proportional to each other i.e. if there is high risk in an investment then there will be more chance of high return. "Risk was defined as the variability of the possible outcomes from that which was expected:" As we know risk is the fact of investment. It is considered as a product of uncertainty whose magnitude depends upon the degree of variability in uncertain cash flows. In fact, risk is an indication of chance of losing investment. So, investors are generally found to be risk adverse. But one cannot forget the presence of risk in any investment. Without risk there will be no investment and without investment one cannot even imagine of the return. Hence risk is a degree of variable between real and expected outcomes.

"Risk refers to a set of unique outcomes for given events which can be assigned probabilities, which uncertainty refers to the outcomes of given events are too unsure to be assigned probabilities" (Khan and Jain, 2007:12.2).

In other words "Risk is a pornography which is hard to define but it will be known if we see it. Investor went to be back higher return to invest in common stock, but their expected return may not be changed in realities. This uncertainty is the major risk to the investor in stock market investment" (Van Horn, 2000:89).

Return is the result of risk i.e. return is the reward for taking risk. In other words, it is the income received in investment. People invest their belongings with an expectation of getting some reward for leaving its liquidity. So they are risk conscious, they only invest in those opportunities where they can get higher return. Investment decision are based on expectations about the future i.e. expectations for both risk and return. Rate of return is the most important outcome form an investment. Hence investors want favorable return to be yield by its stock and invest in those, which yield more return. The return on investment is dividend plus changes in market price of the shares. It is expressed in percent. Return is uncertain, so the actual return on investment in common stock may differ substantially from the expected return. However, return cannot be increased substantially but risk can be reduced by diversification of funds in different stocks making a portfolio. Hence, return is the motivation to the investors for taking more risk in future also.

The return on investment is usually as dividend plus any change in market price of share and it is usually expressed in percentage. Both dividend and change in market price are uncertain items. So, the actual return on investment in common stock may differ substantially from the expected return. Thus return from common stock is of two types i.e. dividend receives and price appreciation of investment. To investment in common stock the following investment procedure need to be considered (Sharp, W.F., Alexander, G.J., and Bailey, J.V., 2005:11)

A stock reflects the uncertainty about future return. The main source of uncertainty is the price at which the stock will be sold. Dividends tend to be much more stable than stock prices which contribute to the immediate return received by investors and at the same time reduce the amount of risk. Stock price is affected by economic factors such as interest rates, economic growth, inflation etc. It is also affected by micro-economic factors such as specific policies enacted by firm, policies of the government, policies of international trade etc. Hence, the investment in common Stock is considered as

the risky investment. And the risk of which can be measured by its price volatility i.e. its beta.

### **Introduction of selected companies**

**NABIL** is the first jvb of Nepal. It is operations in 19-03-2041 B.S. It has listed since 08-09-2042 B.S.in NEPSE. The paid up capital of NABIL is 20297.69 lakhs. 50% equity share of Nabil is hold by NBL and out of another 50% share, 20% has been hold by financial institution and remaining 30% share were issued to general public of Nepal. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society.

**HBL** is operations in 05-09-2049 B.S. by a group of prominent businessman, bankers and financial institutions with Habbi Bank Limited of Pakistan, as the joint venture partner. It has listed in NEPSE since 21-03-2050 B.S. Its paid up capital is 24000.00 lakhs.

**EBL** started its operating in 2051 with a view and objective of intending professionalized and efficient banking service to various segments of the society. The bank is providing customer banking services to various segment of the society. The bank is providing friendly services through its branch network. It has listed in NEPSE since 25-12-2052 B.S. It's paid up capital is 13915.70 lakhs.

**MBL** was started in 2057 as the first regional commercial bank to start banking business from the western region of Nepal with its head office in pokhara. It is one of the full fledged commercial bank operating in Nepal and it ranks in the topmost among the private commercial banks. MBL is striving to facilities its customer needs by delivering the best of services in combination with the state of the art technologies and best international practices. It has listed in NEPSE since 14-02-2060 B.S. Its paid up capital is 16271.97 lakhs.

**KBL**, come into existence as the fifteen commercial bank of nepal by starting its banking operations from chaitra 21, 2057 BS. With banking services in the nepalies financial market. The bank has paid up capital of Rs. 16038.00 lakh of which 70% is contributed from promoters and remaining from public. KBL has been providing wide range of modern banking services through 29 points of representations located in various urban and semi urban part of the country, 20 outside and 9 inside the balley. The bank is pioneer in providing some of the latest banking services like E-Banking and SMS banking services in Nepal It has listed in NEPSE since 14-04-2061 B.S.

## **1.2 Statement of the Problem**

In a rational investment decision, risk and return analysis plays a crucial role. This analysis helps to select the less risky as well as profitable investment area among the different alternatives.

The concept of capital market had emerged only after the establishment of the NEPSE. After that it had grown rapidly within a very short span of time. Since the problem of Nepalese stock market have not been diagnosed and identified so, the policy makers are unable to make the appropriate policy for the development of the stock market. Most of the government efforts for the stock market have not contributed at its best to develop the market. Behavior of the stock prices shows the mis-valuation of the stock prices and the timely price-earning information is not made available to the investors, besides our capital market do not have separate institutions, which can provided valuable information regarding stock market behavior, fluctuations to stock prices, risk- return analysis of individual and portfolio stock investment to the rational investors, which assist in accelerating the stock market efficiency. Due to the lack of information, it is most likely that the stock intermediaries to an extent exploit investors that they may feel total wastage of money and time by investing in common stock.

Investors are responsible for making rational investment decision. But the lack of information and poor knowledge hinders the making of rational decision. Besides investors attitude and perception also plays important role in investment decision. In Nepal most of the investors do not have their own perception. They just go for others successful investors do not have their own perception. They just go for others successful investment ventures. Further, they even can't understand the risk return behavior of the securities. Knowledge of business environment, stock price behavior, company's dividend policy, government policy towards general public investors, individual company's growth rate is very essential for investors. Not only general public even the university graduates and postgraduates do not seem to have idea of the risk and return of the stock. Due to lack of information to analyze the risk and return on common stock investment, investors seem to be confused in making rational investment decision.

For the development of proper investment situations the government has not given the requisite encouragement. The government does have plans and policies for it but they are merely a paper work, none of them have been implemented for the purpose. Investors are the main source of fund for any company and they are the back-bone of economic development of the nation. But they are not given the required concern. It's because of lack of regular communications. In any sort of business, communication plays a crucial role, without it one will be isolated. Hence, in Nepal, major weakness is seen in the implementation of stock market efficiency. The main reasons behind it are lack of education, lack of knowledge of risk and return, lack of policies, lack of information etc that hinders the analysis of risk and return of individual and portfolio stock.

To sum up this study deals with the following issues:

1. How much return is provided by the commercial bank to their common stockholder?
2. What kind of relation does exist with risk and return?
3. Does the relation between risk and return support the theory of CAPM??

4. Does the portfolio of common stock of commercial bank, finance company and insurance company help to reduce the risk?
5. What is the effect of portfolio on return?

### **1.3 Objective of the Study**

This study aims to examine the role of risk and return in the price of shares. This study objects to find the in-depth knowledge about whether the risk and return factors of the investment affect the price of the shares or not. Hence, the basic objective of this study is to analyze analysis of risk and return on stock price. To draw conclusion on the basic objective, many sub objectives can be analyzed. So, the more specific objectives are as follows:

- To evaluate common stock investment in terms of risk and return.
- To analyze whether the shares are overpriced or under priced.
- To specify how risky to invest in the common stock
- To explore the risk minimization process.
- To provide feedback about the effect of risk and return analysis on the stock market in Nepal.

### **1.4 Significance of the Study**

This study will be more significant for exploring and increasing the stock investment. This study is used, as partial fulfillment for Masters of Business Studies. Besides it will provide little knowledge of Nepalese stock market. People had been entered in stock market without proper analysis due to the exaggeration and rumors about it. Now most of the participants repel from the stock market. This situation indicates that there is a high potentiality in stock investment, which can be changed into fruitful investment by increasing transparency, flow of information and developing analytical power of public stock investors.

The analysis of risk and return is very important in making managerial decision. Besides, investors are responsible for making rational decision. So, this study is very significant for analyzing risk and return ultimately assisting investors in making rational decision. These studies also influence the risk and return of the shareholders consequently the risk and return analysis influences the market price of the stock. Hence, before making a deal investors must analyze the risk and return of an individual stock as well as the good portfolio between the investments. So, this study is significant in providing knowledge to the investors about the risk and return of their investment.

The study tries to understand how far these institutions are able to provide the satisfactory return with minimum risk in such quite unfavorable situation. Obviously saying, this study is essential to check the investment return to the stockholders their investment. The study detects the inefficiencies of these institutions and helps to explore the appropriate and effective measures for the remedy of investment problem. Thus it concludes that the study is matter of crying need to identify the possible return with minimum risk. This study clearly shows identify the investment inefficiency of the Nepalese investors and helps to explore remove such weakness as far as possible and this study will include the history of stock market, five year trend of NEPSE and correlating between rates of return among the securities of some selected companies. Therefore this study will be significant to those who want to invest in securities and the future researches of concerned field.

### **1.5 Limitation of the Study:**

In spite of the conceptualization made, analysis performed and generalization drawn regarding the analysis of risk and return on stock price, there may be many areas for the criticism in this study. Due to the time and resource constraints this study unexceptional has as with some other the following limitations:

- This study is based on the tools developed in context of efficient market conditions but in reality it may not be so.



- No effort has been made to verify the data provided by the Nepal Stock Exchange Ltd (NEPSE) and others corporate bodies from their official records.
- This study is to fulfill the partial requirement of the MBS program. So, it may not be project.
- This study mainly concerned with commercial banks, Insurance companies and Finance companies, which are listed in NEPSE. These data are based up to six year (2006/2007 to 2010/2011) transaction period in secondary market.
- This study is based on secondary data.

## **1.6 Organization of the Study**

This study is organized in five chapters.

First chapter is named introduction, which deals with the basic of the study. This chapter covers General Background, Statement of Problem, Objectives of the study, Significance of the study, Limitations and Organization of the study.

Second chapter named review of literature deals with the study of available literatures already existed about the topic. This includes review of books, journal, article and related thesis. The research gap also include at the end of the study.

Third chapter named research methodology deals with methodology, tools and techniques used for sources of data, hypothesis of the study, tools used for analysis of the collected data.

Fourth chapter named presentation and analysis of data is the main body of the study. It will analysis, interprets and scores the empirical findings of the study.

Fifth chapter named summary, conclusions and recommendation is the conclusive one. It summarizes the study, draws conclusions from the study and if necessary also recommends as per the conclusion.

After this chapter there will be bibliography and appendices.

## **CHAPTER –II**

### **REVIEW OF LITERATURE**

#### **2.1 Introduction**

In this chapter previous studies related to the subject matter of this research are reviewed. This study is simply the continuity in research. “The purpose of reviewing the literature is to develop some expertise in one’s area to see what new contributions can be made and to receive some ideas for developing a research design”. (Wolff and Panta, 1999: 30)

In this chapter, some basic academic course books and other related studies are reviewed. There is very limited research works performed in this specific topic “Analysis of Risk and Return on stock price”. But some of the master degree thesis somehow related to this topic and independent studies carried out by researcher are also taken into consideration.

#### **2.2 Conceptual Framework**

Investment, risk and return are the financial terms, which are relatively associated with each other. Investment simply means sacrificing current fund for future cash inflows and the future is uncertain. Uncertainty obviously points out risk. So, in this section, books form different authors are reviewed to conceptualize the subject matter.

##### **2.2.1 Investment**

Investment, in its broadest sense, means the sacrifice of current rupees and resources for the sake of future rupees and resources. It is a commitment of money and other resources that are expected to generate additional money and resources in the future.

According to Mr. Bhalla there are basically three concepts of investment (Bhalla, 1983:3)

1. Economic investment: i.e. an economists' definition of investment.
2. Investment in a general or extended sense. Which is used by 'the man of the street'
3. The sense in which it is going to be very much interested namely financial investment.

“An investment is the current commitment of money or other resource in the hope of reaping future benefits”. Every investment entails some degree of risk. It's commitment of money that is expected to generate additional money. An investment will select the investment that will provide the maximum future return at an acceptable level of risk. A wide range of investment alternative is available to individual investors. In addition to the traditional common stock, preferred stock and bond alternatives, other financial assets- such as convertible, warrants, rights, commodity future, financial future and options on individual common stock. Real assets alternative such as real estate, precious metal and collectibles are available for investment. This alternative investment fall into eight major categories. (Khan & Jain 2007: 12.6)

1. Equity Securities
2. Short-term debt securities
3. Intermediate and long term debt securities
4. Hybrid securities.
5. Derivative securities
6. Real assets
7. International investment
8. Other investment alternative

## **Common Stock**

Common stock represents equity or an ownership position in a corporation. It is a source of long term financing. The common stock certificates are legal documents that give an evidence of ownership in a company that is organized as a corporation. Common stocks are marketable financial instruments. Sole proprietorships are other forms of business organizations, but only corporations can issue common stock. Risk is the highest in common stock and so must be in its expected return. (Cheney and Mosses, 1995:8)

According to Mr. Bhalla when investors buy common stock, they receive certificate of ownership as a proof of there being part owners of the company. The certificate states the number of share purchased and their par value (Bhall, 1983.196).

Common stock is the first security of a corporation to be issued and, in the event of bankruptcy, the last to be retired. It is the ownership interest of a corporation. Each share of stock is fraction of the rights and privilege that belongs to the owners of a business. A stock certificate is evidence of that fractional ownership.

The main characteristics of common stocks are as follows:

**a) Priority to Assets and Earnings**

Common stocks holders have a residual claim on the earnings and assets of their corporation.

**b) Par Value**

Owners of common stock in a corporation are referred to as shareholders or stockholders. They receive stock certificates for the shares they own. There is often a state value on each stock certificate called the par value. The par value of each share of most common stock in Nepal is NRs. 100.

**c) Authorized, Issued and outstanding shares**

The corporate charter of a company of specifies the number of authorized shares of stock that the company can issues maximum without amending its charter.

**d) Voting Rights**

The common shareholder's right to vote in the affairs of the company. In most of the common stock each shareholders casts one vote in one share. A proxy is a temporary transfer to the right to vote.

**e) Maturity**

The capital obtained from this source is called as fixed capital. This cannot be redeemed in the mid life of the organization.

**f) Retained earnings**

Retained earnings are the balance sheet account that indicates the total amount of earnings that is retained in the business. These earnings have reinvested in the firm.

**g) Stock certificate**

Stock certificate is usually registered with the name, address and holding of the investor included on the corporation books, which represented the ownership of a firm's stock.

**h) Ownership rights**

Common stockholders are owners of the firm they often have voting right that permits them to select the firm's director and to vote on special issue.

Common stockholders are entitled to certain rights and privileges. They are

**i. Control:**

Common stock has voting rights that can be used to elect corporate direction that, in turn appoint the corporate offices.

**ii. Preemptive Right:**

A preemptive right gives existing shareholders the first option to purchase a proportionate interest in a new issue of a corporation stock. The purpose of this provision is to protect stockholders against a loss of voting Control and dilution in the value of their shares. The preemptive right is usually satisfied by the use of right offering.

**iii. Liquidation Rights:**

As owners rather creditors, common stockholders receive no priority in the distribution of assets resulting from a liquidation of a corporation. Typically, after assets are sold and liabilities and preferred stockholders are satisfied, little if any cash will be available for common stockholders. Financial resources are available, even for periods when the corporation stockholders. Financial resources are available, even for periods when the corporation has experienced a loll.

**iv. Right to Income and Distribution of additional Shares:**

Common stock holders have no legal right to receive income distribution from the corporation. As a practical matter, however, the board of directions may declare cash dividends to the stockholders, provided the financial resources are available, even for periods when the corporation has experienced a loss.

**Common Stock Values:**

The common stock value includes par value, book value and market value. These terms are quite different and in some cases the dollar amounts of these values are not related for an individual stock.

**i. Par value:**

The face value of the stock, established at the time the stock is initially issued is par value. Without a stock split or other action by the board of directors, the par value of the stock does not change. In Nepal common stock are often issued at par value or Rs. 100.

**ii. Book Value:**

Book value per share is calculated by dividing the total common equity on the balance sheet by the numbers of common shares outstanding. This figure represents the assets value per share after deducting liabilities and preferred stock. Typically, common stock in a profitable corporation will be valued based on earning power and will sell at prices significantly greater than book value.

**iii. Market Value:**

Market value in the secondary markets is determined by supply and demand factors. Market value is influenced by many factors including economic and industry conditions, expected earnings and dividends and market and company risk considerations.

**2.2.2 Return on Common Stock:**

Return is the reward for uncertainty of risk. The concept of return has different meaning to different investor. Return is the main attraction for investors to invest in risky securities as stock accepting a varying degree of risk tolerance. Return is the total gain or loss experienced on investment over period of time.

According to Mr. J.C. Van Horne “The benefit associated with ownership includes the cash dividends paid during the year together with an appreciation in market price, or capital gain realized at the end of the year”. (Van Horn, 1998:2)

After tax increase in the value of initial investment is the investment return, the increase in value can come from two sources: a direct cash payment to the investor or an increase in market value of the investment relative to the original purchase price. An investment single period rate of return denoted by ‘r’ is simply the total return an investor would receive during the investment period or holding period stated as a percentage of the investments price at the start of the holding period.

$$r = \frac{D_t + (P_t - P_0)}{P_0}$$

Where,

$r$  = Single period rate of return

$D_t$  = Dividend per share at the end of period 't'

$P_t$  = Market price at the end of period 't'

$P_0$  = Current market price or purchase price

$P_t - P_0$  = Income from price appreciation (or Loss from price depreciation) sometimes called capital gains or loss

Above formula can be used to determine both actual single period return as well as expected return. Holding period's return is often calculated for period other than one year. Many holding periods returns over periods shorter or longer than one year are annualized. In general, if the length of the holding period is not specified, it is assumed to be one year.

### **2.2.3 Risk on common Stock**

Risk is uncertainty associated with the end of period value of an investment. Risk refers to the chance that some unfavorable even with occur (Weston & Brigham, 1996:182).

Oxford dictionary define risk as possibility or chance of meeting danger, suffering loss, injuring etc. The chance of loss on an investment due to many factors including inflation, interest rate, default politics, foreign exchange, call provision etc. In other words risk was defined as the variability of possible outcome from that which was expected (Van Horn, 2006:165).



Uncertainties and risks are the facts of life to the common stock holders. Different people perceive uncertainty and risk in different ways. Some perceived uncertainty as simply a lack of definite outcomes. It is anything that could happen any unknown event, which may be favorable or unfavorable. Other many people consider risk as a chance of happening some unfavorable event or danger of losing some value. The terminology uncertainty and risk are often used interchangeably.

Risk is defined as the changes of investment loss or more formally the variability of the actual return from the expected return associated with a given assets. The greater the variability of return on assets sold to be riskier asset and the more certain the return from an assets, the less the variability and therefore the less risk.

### **Source of Risk:**

According to Mr. Francis every investment involves uncertainty that make future investment returns risky. Sources of uncertainty that contribute to investment risk are as follows: (Van & James, 2006: 14.16)

#### **i. Interest Rate Risk**

Interest rate risk is defined as the potential variability of return caused by changes in the market interest rates. Market interest rate influences the value of an asset and hence its return. If the market interest rate rises, the value of an asset will decrease. A higher interest rate means a higher discount rate and a higher discount rate causes a lower present value of any asset.

#### **ii. Purchasing Power Risk**

Purchasing power risk is the variability of return an investor suffers because of inflation. Inflation erodes the purchasing power of the rupees and increases investment risk. The rate of inflation is measured by percentage change in the consumer price index over the period.

**iii. Bull Bear Market Risk**

Bull Bear Market Risk arises from the variability in market returns resulting from altering bull and market forces.

**iv. Management Risk**

Management risk is defined as the variability of return caused by a decision made by a firm's management and board of directors. Furthermore, errors made by business managers can harm who invested in their firm.

**v. Default Risk**

Default risk is that portion of an investment's total risk that results from changes in the financial integrity of the investment. It is related to the probability that some or all the initial investment will not be returned.

**vi. Liquidity Risk**

Liquidity risk is associated with uncertainty created by the inability to sell the investment quickly for cash. The return variability will increase if price discounts and sales commission are to be given in order to liquidate assets in time. The less the liquidity, the greater will be the risk.

**vii. Convertible Risk**

Convertible risk is that portion of the total variability of return forms a convertible bond or a convertible preferred stock that reflects the possibility that the investment may be converted into the issuer's common stock at a time or under terms harmful to the investor's best interest.

### viii. Political Risk

The variability of return accomplished through legislative judicial or administrative branches of the government are called political risk. Political risk can be further classified as international and domestic political risk.

### ix. Industry Risk

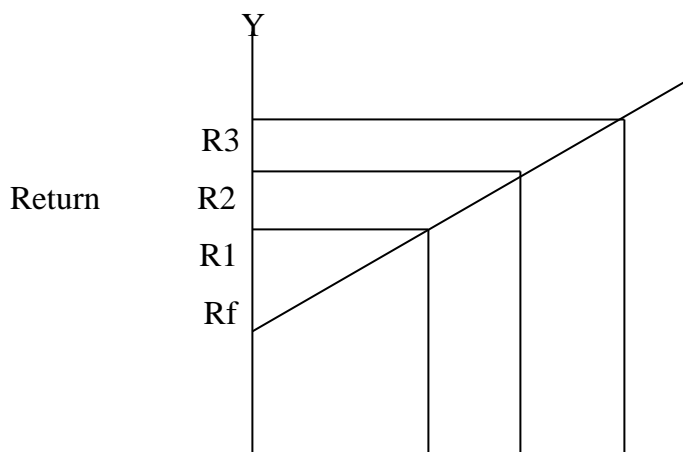
An industry risk is that portion an investment's total variability of return caused by events that affect the products and firms that make up an industry.

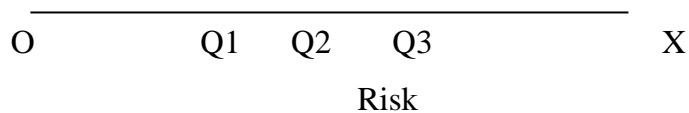
## 2.2.4 Relationship between Risk and Return

The relationship between the risk and return is described by investor's perception about risk and their demand for compensation. No investors will like to invest in risky assets unless he/she is assured of adequate compensation for the assumption of risk. Therefore it is the investors required risk premiums that establish a link between risk and return. In a market dominated by rational investor high risk will command by rational premium and the trade- off between the two assumes a linear relationship between risk and risk premium. "Rational investors would agree that an investment's required return should increase as the risk of investment increase. Most investors would also agree how the expected rate of return should be calculated. But when the discussion turn to risk the debate begins." (J.M. Cheney & E.S Moses, op. cit. p 41)

**Figure 2.1**

**Relationship between Risk and Return**





*Source J.M. Cheney & E.S Moses, op. cit. p 41*

The figure represents a higher premium for higher risk in a linear fashion indicating a premium of  $(R1 - R2)$  for Q1 degree of risk  $(R2-R1)$  for Q2 degree of risk and so on. The assumption of linear relationship states the risk premium increases in decrease in proportion to change in level of risk.  $R_f$  stands for return on risk free security. The partial interest is the difference in rates of return across securities, since they provide valuable clues to the market's trade-off between risks and return scientific progress in any field depends on accrued measurement. Many measurement are interesting in them, by their most important scientific role is to test the validity of theory. Since most financial theory is focused on an explanation of the level, structure and behavior of rates of return, their accurate measurement is essential if theory is to be tested and improved.

Generally, there is a positive relationship between risk and return. It means an investor can usually attain more return by selecting dominant assets that involve more risk. While it is not always true that a riskier asset will pay a higher average rate of return, it is usually. The reason is that investors are risk averse. As a result, high risk assets must offer investors high returns to induce them to make the riskier investment. Naturally, investors are likely to prefer more return and less risk. It means investors will not choose an investment that guarantee less return when investments promising higher returns in the same level of risk class are readily available.

### **2.2.5 Portfolio analysis**

Portfolio of assets usually offers the advantage of reducing risk though diversification. A portfolio is a combination of investment assets. The portfolio is the holding of securities and investment in financial assets i.e. bond, stock. Portfolio

management is related to the efficient portfolio investment in financial assets. A portfolio is defined as a combination of assets. Portfolio theory deals with the selection of optimal portfolios; that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return. Since portfolio theory has been developed most thoroughly for financial assets stocks and bonds. However, extensions of financial assets portfolio theory to physical assets are readily made and centrality the concepts are relevant in capital budgeting.

The rate of return on portfolio is always a weighted average of the returns of the individual securities in the portfolio. A fundamental aspect of portfolio theory is the idea that the riskiness inherent in any single assets held in a portfolio analysis is performed to develop a portfolio that has the maximum return whatever level of risk an investor thinks appropriate. If portfolio is being constructed they can reduce unsystematic risk without losing consideration return. Therefore, we need to extend our analysis of risk and return to portfolio position. Portfolio theory, originally proposed by Harry M. Markowitz is based on the assumption that the utility of the investor is a function of two factors: mean return and variance of its square root, the standard deviation of return. Hence it is also referred as the mean variance portfolio theory or two parameter portfolio theory.

There influence reduces portfolio risk in relation to the standard deviation of individual securities in isolation:

- Extend to which the correlation between the returns from the individual securities is less than one.
- Number of the securities in the portfolio
- Proportion or weight of the individual securities in the portfolio in relation to their correlation among one another.

## **2.2.6 CAPM (Capital Assets Pricing Model)**

As already mentioned, total risk can be measured by the variance of returns. This total risk is partitioned into its systematic and unsystematic components. And in the context of systematic risk, the concept of CAPM is essential. In the book 'Investment analysis and portfolio management' written by Prasanna Chandra, he had focused on capital asset pricing model. The CAPM predicts the relationship between the risk of an assets and its expected return. This relationship is very useful in many ways. First, it produces a benchmark for evaluating various investments. For e.g. when we are analyzing a security we are interested in knowing whether the expected return from it is in line with its fair return as per the CAPM. Second, it helps us to make an informed guess about the return that can be expected from an asset that has not yet been traded in the market. For e.g. how should a firm price its initial public offering of stock? Although the empirical evidence on the CAPM is mixed, it is widely used because of the valuable insight it offers and its accuracy is deemed satisfactory for most practical applications.

CAPM is a model that describes the relationship between risk and expected return. In this model, a security's expected return is the risk free rate plus a premium base on the systematic risk of the security. This model is:

$$K_j = R_f + [E(R_m) - R_f]\beta_j$$

Where,

$K_j$  = Required Rate of Return for stock j

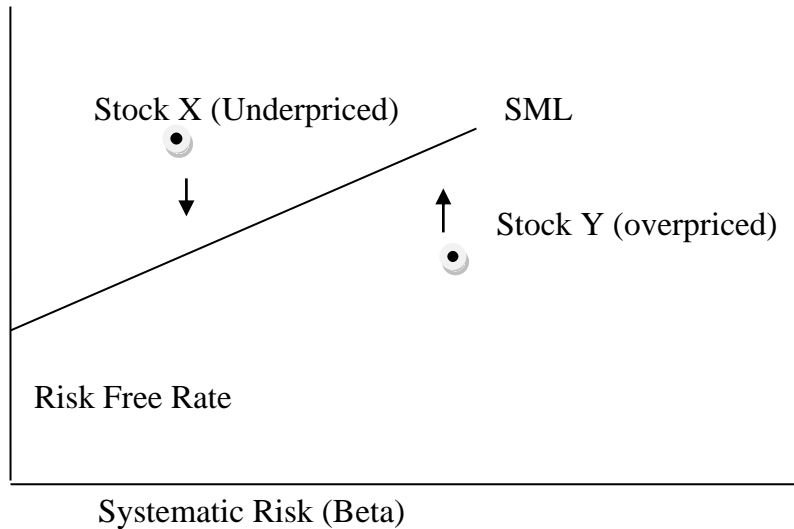
$R_f$  = Risk free rate of return

$E(R_m)$  = Expected return for the market portfolio

$\beta_j$  = Beta coefficient for stock j

Here, beta is an index of systematic risk. It measures the sensitivity of a stock's return to change in returns on the market portfolio. The beta of a portfolio is simply a weighted average of the individual stock betas in the portfolio.

**Figure 2.2**  
**Underpriced and overpriced stocks during Temporary Market**  
**Disequilibrium**



*Source: Van Horn, James C., Wachowicz and John M. (1998).*

We just finished saying that in market equilibrium the required rate of return on a stock equals its expected return. That is all stocks will lie on the security line. What happens when this is not so? Suppose that in figure 2.2 the security market line is drawn on the basis of what investors as a whole know to be the approximate relationship between the required rate of return and systematic or unavoidable risk. For some reason, two stock call them X and Y are improperly priced. Stock X is underpriced relative to the security market line, where as stock Y is overprice.

As a result, stock X is expected to provide a rate of return greater than that required base on its systematic risk. In contrast, stock Y is expected to provide lower return than that required to compensate for its systematic risk. Investors seeing the opportunity for superior returns by investing in stock X. Should rush to buy it. This action would drive the price up and the expected return down. How long would this continue? It would continue until the market price was seen that the expected return

would now lie on the security market line. In the case of stock Y, investors holding this stock would sell it, recognizing that they could obtain a higher return for the same amount of systematic risk with other stocks. This selling pressure would drive Y's market price down and its expected return up until the expected return was on the security market line.

### **2.3 Review of related research**

The study done by Dr. Pradhan (2006) entitled with "*Stock Market Behavior in a Small Capital Market: A Case of Nepal*" published in the book of Research in Nepalese Finance.

This study helps to provide at least some insight into stock market behavior in Nepalese context by concerning listed and traded share in secondary market. The purpose of this study is to address the stock market equity, market value to book value, pricing earnings and dividend with interest coverage. To find out the above objective, the study period is based on pooled cross sectional data of 17 enterprises from 1986 through 1990 whose stocks are listed in stock exchange center and traded in the stock market. He has concluded with findings which are as follows:

- Large stocks have larger price earnings ratios, larger ratios of market value to book value of equity, and smaller dividends. However, price earnings ratios are more variable for smaller stocks whereas market value to book value of equity is more variable for larger stocks.
- Larger stocks also have higher liquidity, higher leverage, lower profitability, lower assets turnover and lower interest coverage but these are more variable for smaller stocks than for larger stocks.
- Smaller dividend, lower profitability, lower assets turnover and lower interest coverage for larger stocks may be attributed to the fact that most of larger stocks are at their initial stage of operation.
- Stocks with larger market value to book value of equity have larger price earnings ratios and lower dividends. Price earnings ratios are more variable for



stocks with larger market value to book value ratios and dividend ratios are more variable for stocks with smaller market value to book value.

- Stocks with larger market value to book value ratios have lower liquidity, higher leverage, lower earnings, lower turnover and lower interest coverage. However, liquidity and leverage are more variable for stocks with large market value to book value ratios while earning, assets turnover and interest coverage are more variable for stocks with smaller market value to book value ratios.
- Stocks with larger price earnings ratios have larger market value to book value to equity and smaller dividends ratios. But these ratios of market value to book value of equity and dividends are more variable for smaller stocks than for larger stocks.
- Stock with larger price earnings ratios has lower liquidity, higher leverage, lower profitability, lower asset turnover and lower interest coverage. However, liquidity, leverage, earnings, turnover and interest coverage are all more variable for stocks with smaller price earnings ratios.

The study done by Professor Dr. Shrestha (1995) in the title of “*Shareholder’s Democracy and Annual General Meeting Feedback*” is reviewed here.

Dr. Shrestha prefers to consider this book as assemblage of opinions which he had express in different occasions of various annual general meeting here. He had critically analyzed the situation of common stock investors and the situation of common stock investors and the situations that is not improving till date.

The content of the books have been divided into two parts. The first part includes views on the right of the shareholders regarding how they can express then in democrat perspective. Whereas the second part consists of feedback and the issues raised by shareholders are different annual general meeting of the public limited companies and financial institutions.

Writer has found the overall shareholders democracy in terms of the protection of their interest is basically focused on the payment of satisfactory wealth by

appreciating the value or share they hold. In many cases the existing authoritarian mentality of management seems to have not considered the shareholders in deciding managerial plans and policies. Many general meeting feedbacks reveal no serious response to the feelings of shareholders. Thus it reflects unwillingness of the management and board of directors to change their traditionally held activities towards shareholders.

## **2.4 Review of Articles**

The Article by Paudel (2011)“*Why Share Market is Instability*” was published in Karobar National Economic Daily.

The major findings of this article are as follows:

- Political instability, government rules and regulation, economic strategy of political parties, the largest organization of the world are going to be collapse, world economic crises, the increasing price of the oil are the main cause to instability the share market in Nepal.
- Most of the Nepalese investors are attraction to invest their capital in the derivative market, issue of large number of share, poor knowledge of share market, lack of capital, high interest rate in share loan are the other causes to instability the share market in Nepal.

So, finally he concluded that if we want to improve the Nepalese share market, the following works should be done.

- The interest rate of the share loans should be decreased.
- The rules and regulation of the government should be changed.
- The political instability should be end as soon as possible.

He advised those of the investors who are investing their capital in the share market, not to sell the share in current situation. It is increasing after 1-3 years.

**Haugen and Baker (2006)**, entitled “*Commonality in the Determinants of Expected Stock Returns*” they presented with evidence that the determinants of the cross section of expected stock return were stable in their identify and influence from

period to period and from country. The determinants were related to risk, liquidity, price level, growth potential and stock price history. Out of sample predications of expected returns, using moving average values for the pay-offs to these firm characteristics were strongly and consistently accurate. Two findings, however, distinguished their paper from others in the contemporary literature. First, the stock with higher expected and realized rate of return was unambiguously of lower risk than the stocks with lower returns. Second, they found that the important determinants of expected stock returns were strikingly common to the major equity markets of the world. Given the nature of the texts, it was highly unlikely that those results may be attributed to bias or data snooping. Consequently, the result seems to reveal a major failure in the efficient market hypothesis.

**Dangol (2009)** “*A survey of stock market reaction to public information*” (PYC Journal of Management 2009 vol. II)

According to his survey, he got following major findings.

- Shares of commercial Finance company, developments Finance company and finance companies were more popular among the Nepalese investors.
- Capital appreciation is the main important motive behind investing in the common stock.
- Based on the flow of new information most of the respondents have been found to have strong belief on impact of new information of Price movements.

**Joshi (2008)** “*Impact of Dividend and Retained earnings on share price.*” (PYC Journal of Management 2008 vol. I To explain relationship between Dividend, Retained Earnings and Share prices. Both dividend and retained earnings have significant impact on the variation of price no matter whether they are financial sector or non-financial sector. The relationship of dividend and share price is positive in almost all cases but in some cases there is negative relationship between retained earnings and share prices.

**Gautam (2008)** *“How to Start in Stock Market”* Nowadays people are interested in buying shares from the secondary market (Nepal Stock Exchange) as they are searching for good investment avenues when the interest rates offered by the commercial Finance company on the deposits have fallen to record low. Here is some advice to buyers who are new to it, are not investing a huge amount and whose motive is to make some monetary gains out of the shares only (as dividend and capital gain) rather than holding an influential stake in the company. In this issue the advice is for decisions while buying stock.

Making a decision before buying a share without proper knowledge about the particular company is like plunging head on into an unknown pond. Before diving into a pond, one should have sufficient information about its depth, the contents at the bottom and some other related matter. Similarly, a person wanting to buy shares of any company must have sufficient knowledge about different aspects of that company and among those, the financial aspects is most important. If a decision is made without proper knowledge of various facts affecting the market value and profitability of the stock concerned, it may result in heavy loss.

These advices are especially for those buyers who do not intend to hold the shares for long period or buy shares in huge quantity with motive of influencing future decisions of that company. The main interest of such people is to maximize their profits in a reasonably short period. Such interest may be to take advantage from rising market price, to add the stock of shares on holds incurring minimum extra cost, to gain maximum in terms of dividend and so on. Similarly, minimizing the probable financial loss from the stock purchased should always be given top priority. For this, the financial statements, especially annual report submitted in the annual general meeting of the company, should be studied and analyzed seriously. Apart from this report, the future programs of the management and the history of the company should also be studied. If possible the buyers should develop the habit of studying the quarterly financial reports too and compare such reports of one company with that of

another similar company. Finance companies or Finance company publish their financial reports very three or six months in the national dailies. Such reports can also be obtained from the company's corporate office.

## **2.5 Review of Unpublished Thesis**

**Mishra (2007)** analyzed "*Risk and Return on Common Stock Investment of Commercial Banks in Nepal*" with special reference to five listed commercial Banks.

### **His Main Objectives**

- To promote and protect the interest of the investor by regulating the issuance sales and distribution of securities and purchase, sale or exchange of securities.
- To supervise and monitor the activities of the stock exchange of other related firms carrying on securities business.
- To render contribution to the development of capital market by making securities transactions fair health, efficient and responsible.

### **His Major Finding**

- It was noticed that there is a 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 information about the prevailing market. Situation and the company proper regulation should be introduced so that there is more transparency in issuance, sales and distribution of the securities.
- Investors do not have any idea about the procedures of the securities issuance. Neither company nor the stock brokers transmit any information to the investors about the current market situation and hence it becomes different for common investors to investor in the securities.
- Both government authorities and the stock exchange regulator body should try to promote healthy practices so that the stock brokers don not give false

information to the investors 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 in Nepal stock exchange. Security exchange board of Nepal should make this mandates that it is easier for the investors to calculate risk and risk return of portfolio and transparent is increased.

**Panthi (2008)** has conducted the research about “*Analysis of risk and return of commercial Bank in Nepal* “. This study has taken five commercial banks covering five years period (2058/063). This study was based on secondary data taken form NEPSE.

#### **His Main Objectives**

- To evaluate the terms of risk and return of listed commercial banks
- To examine diversification reduce the risk

#### **His Major Findings**

- Diversification of fund by marking portfolio can reduce unsystematic of the individual security
- The stock has high return with respect to the amount of the systematic risk during the study period.

**Acharya (2009)**, has submitted a thesis “*Risk and Return Analysis in common stock investment of some listed companies of Nepal*”. The study period of three year period is 2059/064. This study used primary based on secondary source with 8 companies.

### **His Main Objectives**

- To assess the relationship between risk and return.
- To identify factors responsible for risk and return.

The study used market prices per share, dividend per share and other statistical tools to analysis the data. Acharaya has pointed out various finding based on the data and information, which are in given below.

### **His Major Finding**

- On the basic of industry wise comparison commercial banking industry's expected rate of return is maximum while other industries expected return is lowest among the industries.
- The beta coefficient in this section of market sensitively analysis which measure the on the different assets. Beta coefficient of these eight sample companies showed mixed results. Five companies are defensive.

**Manandher (2010)**, the study performed by "*A Study on Risk and Return Analysis on Common Stock of Listed Commercial Bank in Nepal*". The main objective of the study is to analyze the risk return and other relevant variables that help in making decisions about investment on securities of the listed commercial banks. The other specific objectives of this study are as follows:

### **His Main Objectives**

- To evaluate common stock of listed commercial bank in terms of risk and return and to perform sector wise comparison on the basis of market capitalization.
- To identity whether the share of commercial banks are overpriced, under priced or at equilibrium price.
- To identify the correlation between returns of commercial banks.
- To construct optimum portfolio from listed common stock.

- To make relevant suggestion and practical idea and materialize recommendations based on findings.

### **His Major Finding**

- Among all the securities common stock is known to be most risky security.
- Higher the risk higher will be the return.
- Most of investors attached to common stock securities because of its higher expected returns.
- As for the investors it is important to analyze each investment, company to pentagonal returns with the risk and average the potential returns from an investment should compensate for the level of risk undertaken.

**Gyawali (2011)**, has conducted a research about “*Risk and return on common stock*”. Gyawali used secondary data analysis with five commercial banks covering 5 years period from 2061/065.

### **His Main Objectives**

- To determine the risk, return and other relevant factors that directly affect the investment in common stock.
- To evaluate the common stock of the listed commercial banks in terms of risk and return to perform sector wise comparison on the basis of market capitalization.

### **His Major Finding**

- Among five commercial banks standard chartered bank and Himalayan bank is the continuous dividend payer.
- Among sample banks Nepal Bangladesh bank ltd its has lowest expected return.
- Bangladesh bank is high risky and standard bank is low risky.



**Shrestha (2012)** has conducted research on "*Stock Price Behavior in Nepal*". This study aims to examine the efficiency of stock market in Nepal. The objective of the study was:

**His Main Objectives:**

- To examine the serial correlation of successive daily price changes of the individual stocks.
- To determine whether the sequence of price changes is consistent with changes of the series of random numbers expected under the independent Bernoulli process.
- To determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in Nepalese stock market.
- To provide feedback policy towards institutional development of efficient market.

**His Major Findings:**

- After applying the required models and methodologies he found average correlation coefficient of 0.2055, 0.0825, and 0.0704 for 1, 2 and 3 lag days respectively. And for lags 5 to 15 days were less than 0.07 in overall, large number of serial correlation coefficients of the log price changes of the 30 stocks for the sample periods are significantly departed from zero.
- Most of the above all studies conducted by various researchers, it seems that Nepalese stock market is still in developing stage and it is facing various challenges. Furthermore it also shows that there are few research works.
- Most of the above stated studies use technical methods and statistical methods like run test, correlation coefficient, NEPSE trend etc. for the analysis purpose. Only few of the studies use fundamental analysis tools for the research work. More than that of none of the studies uses fundamental analysis tools for the research work. More than that none of the studies are concerned about the

financial indicators like EPS, DPS, and NWPS which are the most influencing factors for the MPS. So, this study tries to analyze the relationship of these factors with the pricing behavior of the stock of the selected companies as well as it also tries to show the influence of the important events happened in the country on market price of the stock.

## **2.6 Research Gap**

Risk and return are the most important part of finance. Large number of research is available bearing the topic “Analysis of Risk and Return on Stock Price”. Few researchers are studied and considered in this study. This study covers the relevant data and information of the latest six years i.e. fiscal year 2007/2008 to 2010/2011. Five commercial banks have been taken as sample in this study. They are HBL, Nabil, EBL, MBL and KBL. In this study, mean, S.D. C.V, Beta coefficient of among sample companies have been calculated separately. Similarly, inter firm comparison on the basis of market capitalization, analyzing status of the stock, Regression analysis, portfolio risk and return and correlation of sample companies have been calculated.

## **CHAPTER- III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology is also the major part of the thesis. It describes the method and process applied in the entire aspect of the study. Research methodology concerns to data collection procedures, focus of data, tabulation and processing of the data and analysis method. It is composed of both technical and logical aspect. Detail research methods are explained in the following way.

#### **3.2 Research design:**

The research design includes specification of the method of the purposed study and detailed plan for carrying out the study with various empirical data for the analysis of the problem. “Research design is a plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances.” (Kothari, 1991:22).

For identifying the impact of financial performances on stock prices, the relationship of selected variables with market price of share shall be analyzed. Correlation coefficient measures the relationship where as multiple regressions analysis measures the degree of influences of each identified variables upon observed market price. In this connection historical data will be used. Hence it is the historical research design. Data required for this study will be extracted from ([www.nepalstock.com](http://www.nepalstock.com)). Therefore secondary source of data collection will be applied in this study.

The major activities of this study are the collection of data tabulation and compilation of data, computation of complied data and financial parameters, findings, conclusion and recommendations. Numerical analysis will be carried as far as practicable and technique of descriptive analysis will also be used whenever necessary. The research

design is thus an integrated frame that guides the researcher in planning and executing the research works.

### **3.3 Population and sample data:**

The term population size denotes for all the data of securities listed in NEPSE and sample data are the data of securities of selected companies from population which are in a few numbers. Primarily, the present study has considered only common stock as sample. Secondly, securities which had already listed at NEPSE in F/Y 2009/10 are selected. Thirdly, random selection model on the personal judgment of researcher is used to select the sample stocks for the study. NEPSE has 102 listed companies out of which 32 companies are commercial bank, 44 are finance e companies and 14 are insurance companies. Among them 5 commercial bank have been taken as sample in this study. The data of F/Y 2005/06 to 2010/11 will be used for this study.

**Commercial Banks:** i) HBL. ii) Nabil iii) EBL. iv) MBL. v) KBL.

### **3.4 Nature and Sources of Data:**

Secondary sources were approached for data collection. Secondary data were collected from the related organizations. Required information such as NEPSE index, market price, closing price of the stock, etc. were collected from NEPSE. Financial statements and annual reports are provided by the concerned organizations. Besides the main sources of data are annual reports of NEPSE, annual reports of individual organization. All available published and unpublished materials concerning the study as well as some journal abstracts were used in this study.

### **3.5 Data collection procedure:**

This study is totally based on the secondary data. Data collection from secondary sources is proximate to the reality and authoritative too. Personal visit to the NEPSE,

SEBO and respective office of the selective companies under study was done. Similarly, annual report of selective companies under study was done.

### **3.6 Data processing:**

The collected data will be put into suitable tabular and graphical forms with the use of computer applications.

### **3.7 Data analysis tools:**

Data so obtained have no meaning unless they are arranged and presented in a systematic way further, they need to be verified and simplified for the purpose of analysis. Moreover, data and information so gathered are to be checked, edited and tabulated in such ways that provide convenience for computation and interpretation. The relevant data have been inserted in meaningful tables. Only the data that are relevant to the study have been presented in the tabular form in an understandable way and unnecessary data have been encoded. To achieve the predetermined objective of the research certain tools are used. The tools are categorized as:

- Financial tools
- Statistical tools

Data does not speak itself. Certain tools have to be used to extract some conclusion on organization's published financial statement and report. A financial analysis is along with statistical diagram easily providing the financial picture of the organization. Therefore the financial analysis, which includes different indicators that are major in analysis of the share price, will be used. In order to test the MPS, DPS, Realized rate of return, inter firm comparison on the basis of market capitalization, analysis of market risk and return, analysis of market sensitivity, analyzing status of the stock, and regression analysis have been made.

There are many tools, which are used to analyze this research study. Some of them are as follows:

**i) Required Rate of Return ( R)**

It is already mentioned that return is the income received plus any change in market price. So, it is generally expressed as a percentage of the beginning market price of the investment.

Symbolically,

$$R = \frac{D_t + (P_t - P_{t-1})}{P_{t-1}}$$

Where

R = required rate of return

$D_t$  = cash dividend received at time t

$P_t$  = price of a stock at time t

$P_{t-1}$  = price of a stock at time t-1

**ii) Expected Rate of Return [ E( $R_j$ ) ]**

This is one of the main tools to analyze this research study. Generally, the expected rate of return is obtained by arithmetic mean of the past year's return.

Symbolically,

$$E(R_j) = R_j = \sum \frac{R_j}{n}$$

Where,

$E(R_j) = R_j$  = Expected rate of return

n=No. of years

**iii) Standard Deviation ( $\sigma$ )**

It is a statistical tool, which measures the unsystematic risk i.e. it measures the variability of a distribution of return around its mean. It is the square root of variance.

Symbolically,

$$\sigma_j = \sqrt{\frac{\sum(R_j - R_m)^2}{n - 1}}$$

**iv) Coefficient of Variation(c.v.)**

It measures the relative risk, which is the ratio of standard deviation of returns to the mean of that distribution.

Symbolically,

$$C.V. = \frac{\sigma_j}{\bar{R}_j}$$

**v) Beta Coefficient**

It measures the sensitivity of a stock's return on the market portfolio.

Symbolically,

$$\beta_j = \frac{Cov(R_j R_m)}{\sigma^2_m}$$

Where,

$Cov(R_j R_m)$  = Covariance between  $R_j$  and  $R_m$

## **CHAPTER IV**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 Introduction**

This chapter is the body part of the study. It comprises detail data of market price of stock and dividend of selected sample banks and NEPSE Index. The data are arranged into table, diagram, graphs and figures as required. The arranged data are scrupulously analyzed and interpreted to serve the purpose of study using the various financial as well as statistical tools and techniques. It analyzes the risk and return of selected companies, market sensitivity of stock and their interpretation.

#### **4.2 Analysis of Individual Companies**

Due to the various limitations only five commercial banks are taken for study. Risk and return on stock price of these companies are presented and analyzed below.

##### **4.2.1 Himalayan Bank Ltd.**

The closing price is regarded as the market price per share of HBL. So the highest market price, lowest market price, the closing market price, cash dividend, stock dividend, total dividend per share and the realized return of the HBL throughout the sample years are given in table 4.1 below:



**Table: 4.1****MPS, DPS and Realized Rate of Return of HBL**

<b>Fiscal Year</b>	<b>MPS</b>			<b>DPS</b>			<b>Realized Return</b> $R = \frac{D_1 + (P_1 + P_0)}{P_0}$
	<b>High</b>	<b>Low</b>	<b>Closing</b>	<b>Cash</b>	<b>Stock</b>	<b>Total</b>	
2005/2006	1181	855	920	11.58	20	31.58	-
2006/2007	1200	900	1100	30	5	35	0.2337
2007/2008	1740	950	1740	15	25	40	0.6182
2008/2009	2856	1340	1980	25	20	45	0.1638
2009/2010	2730	1119	1760	12	31.56	43.56	-0.0891
2010/2011	1780	676	816	11.84	25	36.84	-0.5154
<b>Total</b>							<b>0.4112</b>
<b>Mean</b>	0.0822						
<b>S.D</b>	0.4194						
<b>C.V.</b>	5.1022						

*Source: Annex -I*

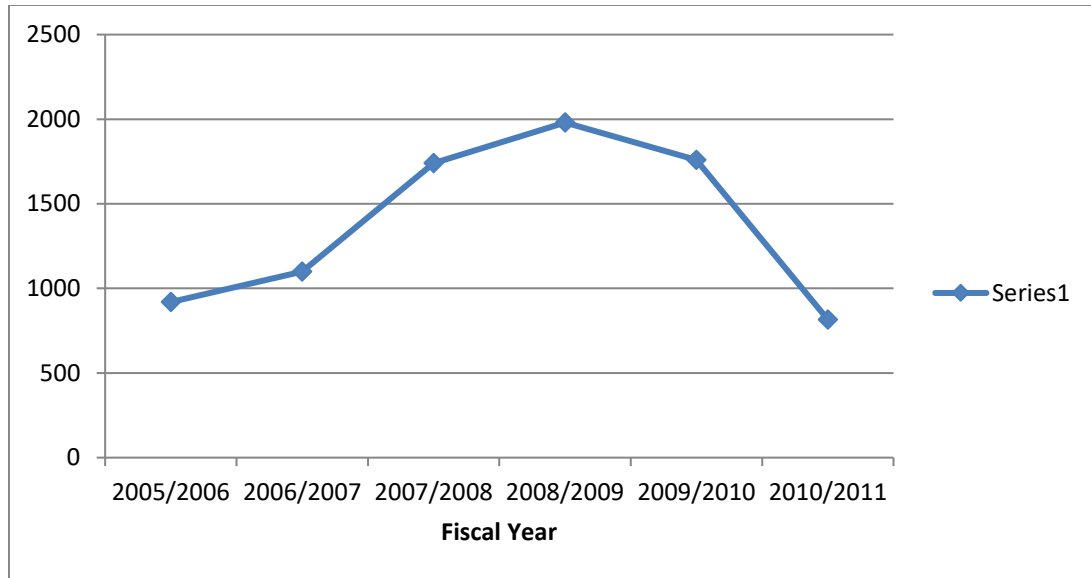
The table 4.1 shows that MPS of the HBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 816 and Rs. 1980. It is maximum in the year 2008/2009 and minimum in the year 2010/2011. The bank is distributing dividend regularly through the years.

The realized rate of return of the organization is higher in the year 2007/2008 (i.e. Rs. 0.6182) and minimum in the year 2010/2011 (i.e. Rs. -0.5154). The mean, S.D and C.V. of the bank are 8.22%, 41.94% and 5.1022 respectively.

The trend line showing year-end price movement is presented below:

**Figure: 4.1**

**Trend line showing year end price movement of HBL**



*Source Table 4.1*

The figure 4.1 shows that the closing price of the HBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 816 and Rs. 1980. It is maximum in the year 2008/2009 and minimum in the year 2010/2011.

#### **4.2.2 Nabil Bank Ltd.**

The closing price is regarded as the market price per share of Nabil. So the highest market price, lowest market price, the closing market price, cash dividend, stock dividend, total dividend per share and the realized return of the Nabil throughout the sample years are given in table 4.2 below:

**Table: 4.2****MPS, DPS and Realized Rate of Return of Nabil**

<b>Fiscal Year</b>	<b>MPS</b>			<b>DPS</b>			<b>Realized Return</b> $R = \frac{D_1 + (P_1 + P_0)}{P_0}$
	<b>High</b>	<b>Low</b>	<b>Closing</b>	<b>Cash</b>	<b>Stock</b>	<b>Total</b>	
2005/2006	1515	1000	1505	55	25	80	-
2006/2007	2300	1500	2240	40	-	40	0.5150
2007/2008	5050	2025	5050	30	-	30	1.2679
2008/2009	6700	3410	5275	60	40	100	0.0644
2009/2010	6400	3050	4899	35	50	85	-0.0552
2010/2011	5240	1665	2384	30	40	70	-0.4991
<b>Total</b>							<b>1.2930</b>
<b>Mean</b>	0.2586						
<b>S.D</b>	0.6699						
<b>C.V.</b>	2.5905						

*Source: Annex -I*

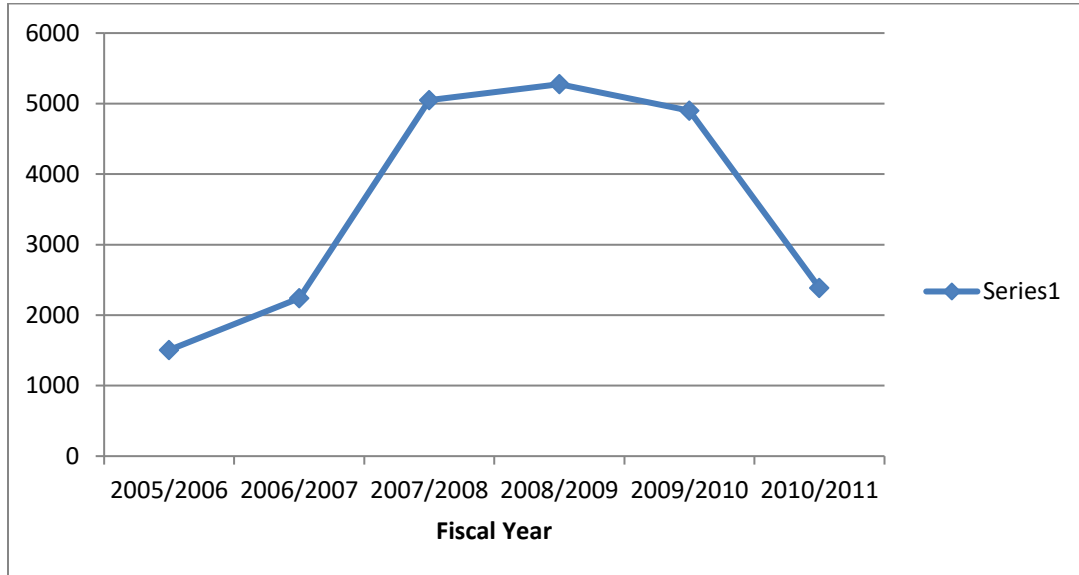
The table 4.2 shows that MPS of the Nabil is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 1505 and Rs. 5275. It is maximum in the year 2008/2009 and minimum in the year 2005/2006. The bank is distributing dividend regularly through the years.

The realized rate of return of the Nabil bank is higher in the year 2007/2008 (i.e. Rs. 1.2679) and minimum in the year 2010/2011 (i.e. Rs. -0.4991). The mean, S.D and C.V. of the bank are 25.86%, 66.99% and 2.5905 respectively.

The trend line showing year-end price movement is presented below:

**Figure: 4.2**

**Trend line showing year end price movement of Nabil**



Source table 4.2

The figure 4.2 shows that the closing price of the Nabil is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 1505 and Rs. 5275. It is maximum in the year 2008/2009 and minimum in the year 2005/2006

### **4.2.3 Everest Bank Ltd.**

The closing price is regarded as the market price per share of EBL. So the highest market price, lowest market price, the closing market price, cash dividend, stock dividend, total dividend per share and the realized return of the EBL throughout the sample years are given in table 4.3 below:

**Table: 4.3****MPS, DPS and Realized Rate of Return of EBL**

<b>Fiscal Year</b>	<b>MPS</b>			<b>DPS</b>			<b>Realized Return</b> $R = \frac{D_1 + (P_1 + P_0)}{P_0}$
	<b>High</b>	<b>Low</b>	<b>Closing</b>	<b>Cash</b>	<b>Stock</b>	<b>Total</b>	
2005/2006	905	625	870	-	20	20	-
2006/2007	1410	800	1379	25	-	25	0.6138
2007/2008	2430	1100	2430	10	30	40	0.7912
2008/2009	3195	1804	3132	20	30	50	0.3095
2009/2010	3672	1855	2455	30	30	60	-0.1970
2010/2011	2703	1071	1630	30	30	60	-0.3116
<b>Total</b>							<b>1.2059</b>
<b>Mean</b>	0.2412						
<b>S.D</b>	0.4857						
<b>C.V.</b>	2.0137						

*Source: Annex -I*

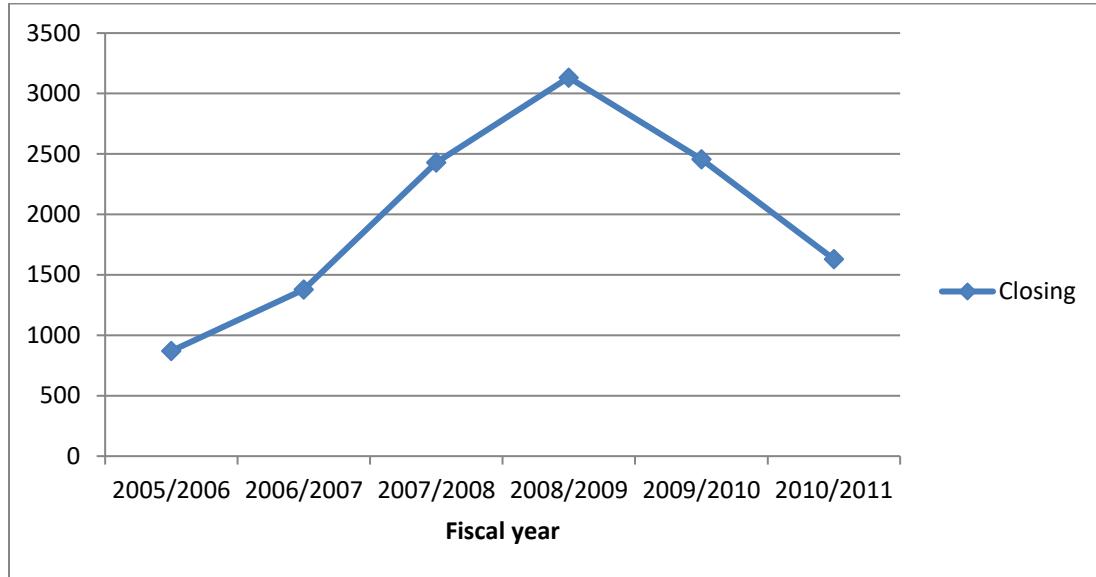
The table 4.3 shows that MPS of the EBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 870 and Rs. 3132. It is maximum in the year 2008/2009 and minimum in the year 2005/2006. The bank is distributing dividend regularly through the years.

The realized rate of return of the EBL is higher in the year 2007/2008 (i.e. Rs. 0.7912) and minimum in the year 2010/2011 (i.e. Rs. -0.3116). The mean, S.D and C.V. of the bank are 24.12%, 48.57% and 2.0137 respectively.

The trend line showing year-end price movement is presented below:

**Figure: 4.3**

**Trend line showing year end price movement of EBL**



*Source table 4.3*

The figure 4.3 shows that closing price of the EBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 870 and Rs. 3132. It is maximum in the year 2008/2009 and minimum in the year 2005/2006.

#### **4.2.4 Machhapuchhre Bank Ltd.**

The closing price is regarded as the market price per share of MBL. So the highest market price, lowest market price, the closing market price, cash dividend, stock dividend, total dividend per share and the realized return of the MBL throughout the sample years are given in table 4.4 below:

**Table: 4.4****MPS, DPS and Realized Rate of Return MBL**

<b>Fiscal Year</b>	<b>MPS</b>			<b>DPS</b>			<b>Realized Return</b> $R = \frac{D_1 + (P_1 + P_0)}{P_0}$
	<b>High</b>	<b>Low</b>	<b>Closing</b>	<b>Cash</b>	<b>Stock</b>	<b>Total</b>	
2005/2006	300	122	256	-	-	-	-
2006/2007	425	258	320	.079	15	15.79	0.3117
2007/2008	620	300	620	-	-	-	0.9375
2008/2009	1560	562	1265	1.05	20	21.05	1.0743
2009/2010	925	389	489	-	-	-	-0.6134
2010/2011	480	228	282	-	10	10	-0.4029
<b>Total</b>							<b>1.3072</b>
<b>Mean</b>	0.2614						
<b>S.D</b>	0.7627						
<b>C.V.</b>	2.9178						

*Source: Annex -I*

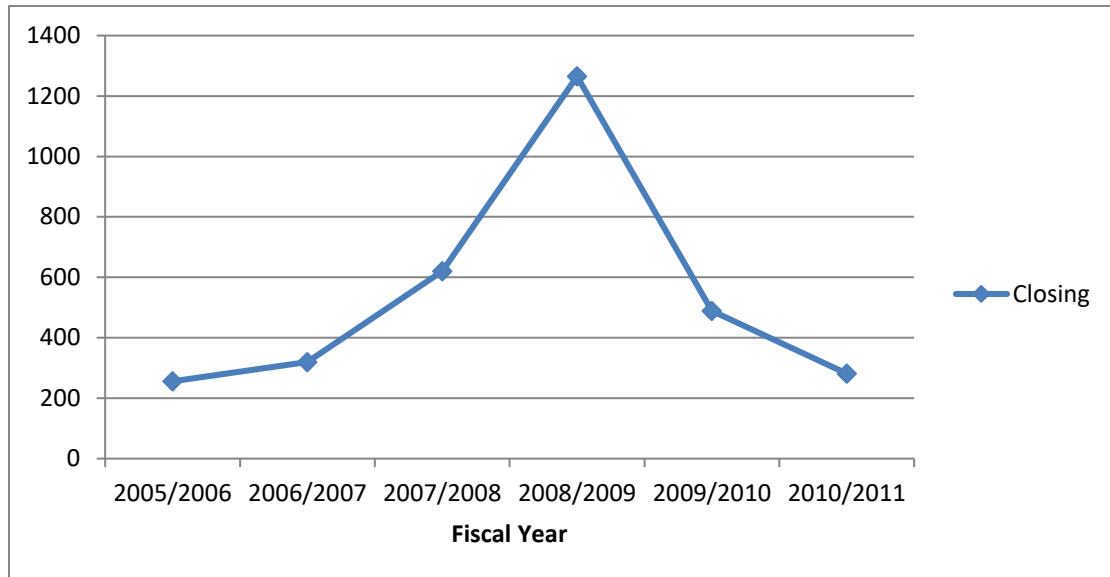
The table 4.4 shows that MPS of the MBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 256 and Rs. 1265 It is maximum in the year 2008/2009 and minimum in the year 2005/2006. MBL is distributing dividend in the year 2006/2007, 2008/2009 and 2010/2011 only.

The realized rate of return of the MBL is maximum in the year 2008/2009 (i.e. Rs. 1.0743) and minimum in the year 2009/2010 (i.e. Rs. -0.6134). The mean, S.D and C.V. of the bank are 26.14%, 76.27% and 2.9178 respectively.

The trend line showing year-end price movement is presented below:

**Figure: 4.4**

**Trend line showing year end price movement of MBL**



*Source table 4.4*

The figure 4.4 shows that the closing price of the MBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 256 and Rs. 1265. it is maximum in the year 2008/2009 and minimum in the year 2005/2006.

#### **4.2.5 Kumari Bank Ltd.**

The closing price is regarded as the market price per share of KBL. So the highest market price, lowest market price, the closing market price, cash dividend, stock dividend, total dividend per share and the realized return of the KBL throughout the sample years are given in table 4.5 below:



**Table: 4.5****MPS, DPS and Realized Rate of Return KBL**

<b>Fiscal Year</b>	<b>MPS</b>			<b>DPS</b>			<b>Realized Return</b> $R = \frac{D_1 + (P_1 + P_0)}{P_0}$
	<b>High</b>	<b>Low</b>	<b>Closing</b>	<b>Cash</b>	<b>Stock</b>	<b>Total</b>	
2005/2006	400	216	269	-	-	-	-
2006/2007	476	300	443	1.05	20	21.05	0.7251
2007/2008	865	400	830	1.05	20	21.05	0.9211
2008/2009	1565	665	1005	0.53	10	10.53	0.2235
2009/2010	1166	580	700	0.55	10.03	10.58	-0.2930
2010/2011	880	348	468	12	-	12	-0.3143
<b>Total</b>							<b>1.2624</b>
<b>Mean</b>	0.2525						
<b>S.D</b>	0.5679						
<b>C.V.</b>	2.2491						

*Source: Annex -I*

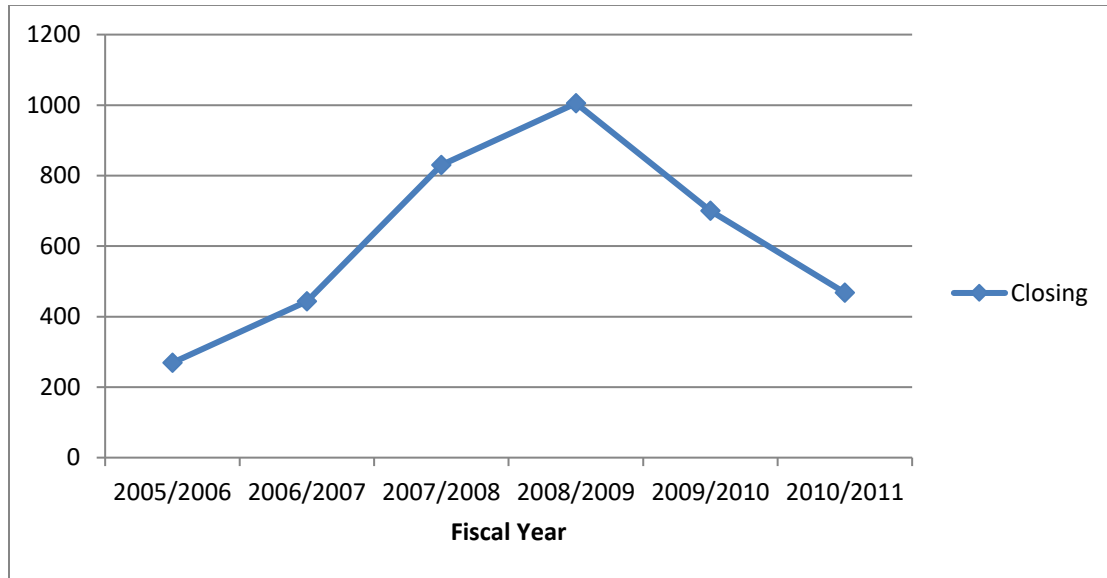
The table 4.5 shows that MPS of the KBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 269 and Rs. 1005. It is maximum in the year 2008/2009 and minimum in the year 2005/2006. MBL is distributing dividend all the sample year except 2005/2006.

The realized rate of return of the KBL is maximum in the year 2007/2008 (i.e. Rs. 0.9211) and minimum in the year 2010/2011 (i.e. Rs. -0.3143). The mean, S.D and C.V. of the bank are 25.25%, 56.79% and 2.2491 respectively.

The trend line showing year-end price movement is presented below:

**Figure: 4.5**

**Trend line showing year end price movement of KBL**



*Source table 4.5*

The figure 4.5 shows that MPS of the KBL is in increasing trend till the year 2008/2009 and is decreased thereafter. MPS ranges between Rs 269 and Rs. 1005. It is maximum in the year 2008/2009 and minimum in the year 2005/2006.

### **4.3 Inter Firm Comparison**

If we compare one firm to another firm on the basis of market capitalization, required rate of return, standard deviation, coefficient of variation etc is called interfere comparison. From the inter firm comparison, we found which firm is the largest firm, which firm earned higher return at minimum level of risk.

### 4.3.1 On the basis of Market Capitalization

Table: 4.6

Market Capitalization 16<sup>th</sup> July 2010

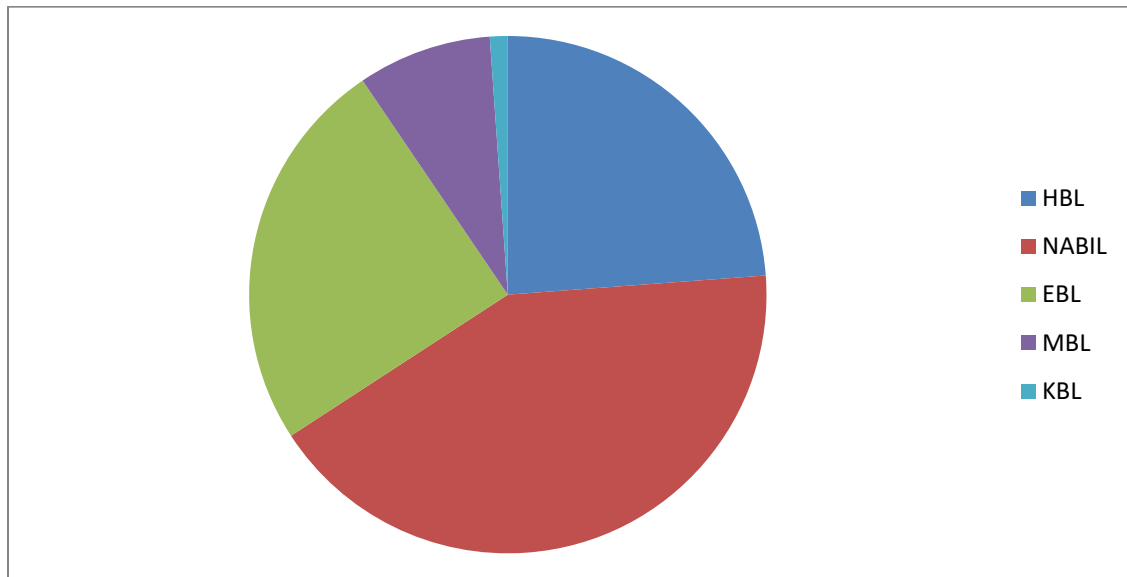
Name of Company	Equity	Closing Price	Market Capitalization	%	Ranking
HBL	16000000	816	13056000000	19.08	3 <sup>rd</sup>
NABIL	9657470	2384	23023408480	33.65	1 <sup>st</sup>
EBL	8304673	1630	13536616990	19.78	2 <sup>nd</sup>
MBL	16271965	282	4588694130	6.71	5 <sup>th</sup>
KBL	13060159	468	611214412	8.93	4 <sup>th</sup>

Source: Annual Report of Selected Companies

Pie chart showing the market capitalization of selected companies is presented below:

Figure 4.6

Pie chart showing market capitalization



Source table4.6

The table 4.13 and figure 4.13 shows the market capitalization of selected organization of 16<sup>th</sup> July 2010. It is the total value of company in the market at specified time period.

On the basis of market capitalization, Nabil is the largest and MBL is the smallest bank among the selected banks. The ranking of the companies form highest is Nabil, EBL, HBL, KBL and MBL market capitalization is 33.65, 19.78, 19.08, 8.93 and 6.71, percent respectively.

#### 4.3.2 On the basis of Risk and Return

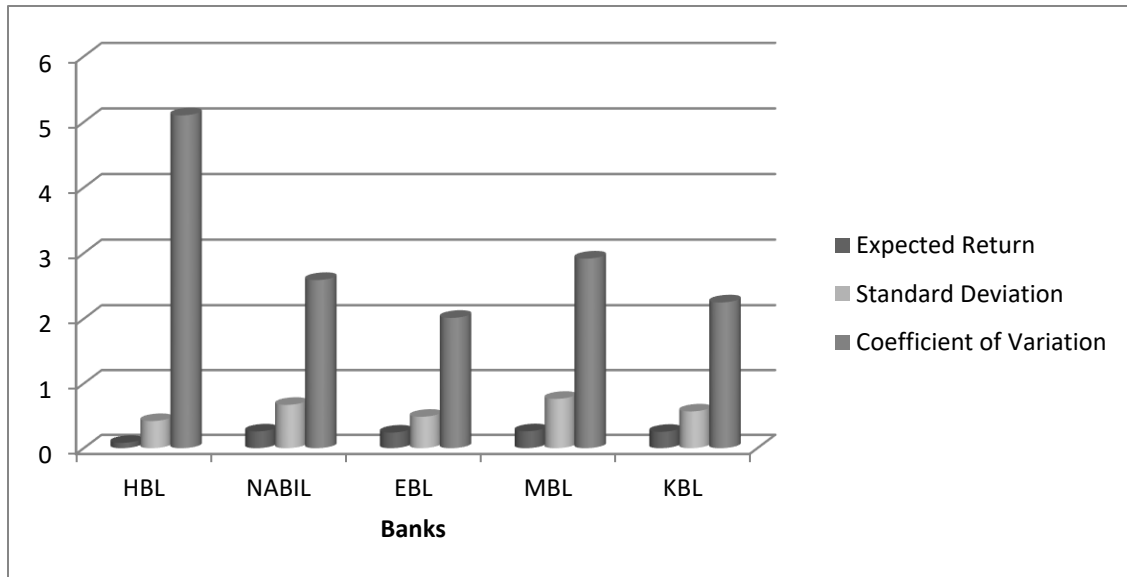
**Table: 4.7**  
**Comparative Risk- Return of Sample Companies**

<b>Name of Company</b>	<b>Expected Return</b>	<b>Standard Deviation</b>	<b>Coefficient of Variation</b>	<b>Ranking of the Basis of C.V.</b>
HBL	0.0822	0.4194	5.1022	5 <sup>th</sup>
NABIL	0.2586	0.6699	2.5905	3 <sup>th</sup>
EBL	0.2412	0.4857	2.0137	1 <sup>nd</sup>
MBL	0.2614	0.7627	2.9178	4 <sup>th</sup>
KBL	0.2525	0.5679	2.2491	2 <sup>th</sup>

*Source Annex I*

**Figure: 4.7**

**Bar diagram showing comparison of risk and return:**



*Source table 4.7*

The table 4.14 and figure 4.14 shows the expected return, S.D. and C.V. of the selected companies. The expected return of MBL is the highest and that of HBL is the lowest.

The relative measure of risk return trade off i.e. Coefficient of Variation shows the remarkable variation among the selected companies. The C.V. is range between 1.1940 and 5.9316. The lowest CV is observed for HBL and highest for EBL. The CV measure indicates the selected companies are less consistent or more variable. Ranking of the selected companies on the basis of C.V firm consistent to less consistent are EBL, KBL, NABIL, MBL and HBL respectively.

#### **4.4 Analysis of Market Risk and Return**

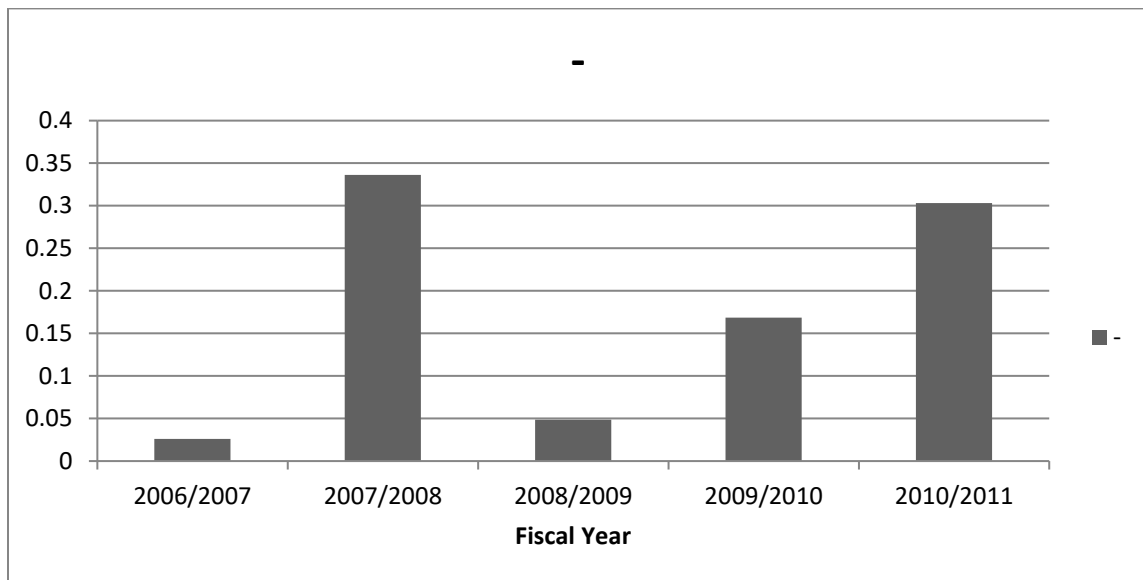
In Nepal, there is only one stock market called Nepal stock Exchange Ltd (NEPSE). The overall market movement is represented by the market Index. The NEPSE Index is adjusted and changed continuously with this NEPSE base market return, its SD and CV is presented below:

**Table: 4.8**  
**Market Risk and Return**

Fiscal Year	NEPSE Index	$R_m = \frac{NI_1 - NI_0}{NI_0}$	$R_m - R_m^-$	$(R_m - R_m^-)^2$
2005/2006	286.67	-	-	-
2006/2007	386.83	0.3494	0.1611	0.0260
2007/2008	683.95	0.7681	0.5798	0.3362
2008/2009	963.36	0.4085	0.2202	0.0485
2009/2010	749.10	-0.2224	-0.4107	0.1687
2010/2011	477.73	-0.3623	-0.5506	0.3032
Total		0.9413		0.8826
Mean	0.1883			
S.D	0.4698			
C.V	2.4950			

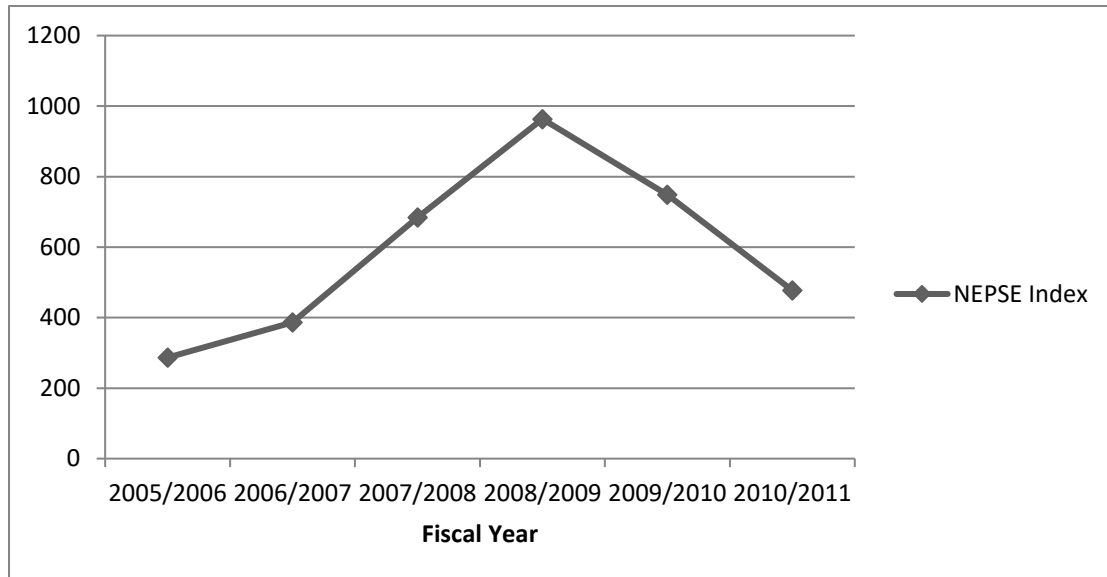
The trend line and the bar diagram of the market return of sample years is given below:

**Figure: 4.8**  
**Bar Diagram showing Market Return**



Source table 4.8

**Figure: 4.8**  
**Trend line showing NEPSE Index**



*Source table 4.8*

Market return is calculated on the basis of NEPSE Index for each year. The table 4.15 and figure 4.15, 4.16 shows that the NEPSE Index is in increasing trend in the year 2008/2009 and is in decreasing trend thereafter. It ranges between 286.67 to 963.36. It is maximum in the year 2008/2009 and minimum in the year 2005/2006. The average return of market is 18.83%, Standard Deviation of the market is 46.98% and the coefficient of Variation is 2.4950.

#### **4.5 Analysis of Market Sensitivity**

According to the CAPM, securities expected return should relate to its degree of total risk. Systematic risk is thing that matters to investor holding a well diversified portfolio. Market sensitivity of stock is expected by its beta coefficient measure of systematic risk. The greater the beta the greater will be the risk and expected return.

**Table: 4.9**  
**Calculation of Beta Coefficient:**

Company	Beta
HBL	0.8523
NABIL	1.2800
EBL	0.9950
MBL	1.4776
KBL	1.1255

*Source Annex I*

The table 4.16 shows the calculated value of beta coefficient of selected companies. Detail calculation is presented in Annex -1

The beta coefficient of selected companies ranges between 1.7182 times to -0.1251 times. MBL has the highest beta i.e. 1.4776 among the selected companies and EBL has the lowest beta i.e.0.9950. Nabil, MBL and KBL are considered as an aggressive investment since their beta is greater than market i.e. 1.

#### **4.6 Analyzing Status of the Stock**

If the required rate of return is higher than expected rate of return the stock said to be overpriced. In that situation Investor may sell the stock or may involve in short selling. Similarly if the required rate of return is lower than expected rate of return, the stock said to be underpriced. In that situation investor can make buying strategy. Hence the status of the stock of the sample companies is presented below:



**Table: 4.10****Status of stock of sample companies**

Name of Companies	$\beta$	$R_f$ %	$\bar{R}_m$ %	Required Rate of Return $E(R_j) = R_f + (\bar{R}_m - R_f)\beta_j$	Expected Return	Status of Stock
HBL	0.8523	7.85	18.83	17.2083	8.22	Over priced
Nabil	1.2800	7.85	18.83	21.9044	25.86	Under Priced
EBL	0.9950	7.85	18.83	18.7751	24.12	Under Priced
MBL	1.4776	7.85	18.33	23.3352	26.14	Under Priced
KBL	1.1255	7.85	18.33	19.6452	25.25	Under Priced

*Note  $R_f$  is assumed to the weighted average interest rate of government treasury bill (364 day) determined by NRB.*

The table 4.17 shows that Nabil, EBL, MBL and KBL tocks are underpriced since their expected return is higher than the required rate of return. Hence as already mentioned the underpriced securities are recommended to buy. Similarly HBL stocks are overpriced since their expected return is lower than the required rate of return. In that situation may sell the stock or may involve in short selling.

#### **4.7Regression Analysis**

Regression is the statistical tool which is used to determine the statistical relationship between two variables. In this study, the future realized rate of return is predicted by the help of regression analysis. Regression assumes that the two variables are closely related. Thus it determines the average product change in on variable based on certain amount of change in another. The future return is predicted on the base of realized return of respective year for individual organizations, which is given below:

**Table: 4.11**

**Trend value of selected companies**

Name	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
HBL	0.5234	0.3028	0.0822	-0.1384	-0.3590
NABIL	0.9212	0.5899	0.2586	-0.0727	-0.4040
EBL	0.8090	0.5251	0.2412	-0.0427	-0.3266
MBL	0.8574	0.5594	0.2614	-0.0366	-0.3346
KBL	0.9111	0.5818	0.2525	-0.0768	-0.4061

*Source Annex II*

The table 4.19 shows the movement of estimated value of selected companies. The estimated value of HBL, NABIL, EBL, MBL and KBL are decreasing trend. But the estimated value of all companies is decreasing trend. Because it's realized return is also increasing trend.

#### **4.8 Major Findings of the Study**

The empirical findings on the basis of the analysis to the data and their interpretations, in relation to the set objective can be summarized as follows:

- All the sample companies' market price of the stock is fluctuating through the sample period. It indicates the uncertainty of return related with the stock in these companies.
- Some companies are offering cash dividends in the regular. Some of them are offering stock dividends as well in the form of bonus share. HBL is only organization, which is declaring cash as well as stock dividend regularly through the sample years. Nabil, is offering cash dividend regularly but not stock dividend. Nabil do not offering stock dividend in the year 2006/2007 and 2007/2008. EBL do not offering cash dividend in the year 2005/2006 and do not offering stock dividend in the year 2006/2007.

- Regression analysis just compares the realized return and the estimated return. The estimated return is seen decreasing in all the companies except HBL but the realized return is seen fluctuating in most of the companies.
- The market capitalization, Nabil is the largest and KBL is the smallest bank among the selected banks. The ranking of the companies from highest is Nabil, EBL, HBL, KBL and MBL market capitalization is 33.65, 19.78, 19.08, 8.93 and 6.71, respectively.
- The CV measure indicates the selected companies are less consistent or more variable. Ranking of the selected companies on the basis of C.V in the risk and return firm consistent to less consistent are EBL, KBL, NABIL, MBL and HBL respectively.
- The beta coefficient of selected companies ranges between 1.7182 times to - 0.1251 times. MBL has the highest beta i.e. 1.7182 among the selected companies and EBL has the lowest beta i.e.0.9950. Nabil, MBL and KBL are considered as an aggressive investment since their beta is greater than market i.e. 1.
- In this research the estimated value of HBL, NABIL, EBL, MBL and KBL are decreasing trend.

## **CHAPTER-V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary:**

Risk and return, a new complex concept, is also foundation of modern investment decision. Here, risk is defined as the variability of the return of a period. The greater the variability of the return the riskier the investment would be whereas an investment involves the sacrifice of current rupees for future rupees or reward that future rupees or reward is called the return. It includes both current income and capital gains or losses that arise due to the increase or decrease on price of the security. So to maximize the security price, the financial manager must learn to assess two key determinants: risk and return.

Investors of common stock are ultimate owner of the company, who are ultimately associated with the risk and return. At present, every investment has the risk factor. Investors have to minimize the risk and maximize the return. For this, investor's consciously examine the behavior of stock return and ultimate risk associated with it and then invests their fund in efficient portfolio from which they can realize higher return with lower risk.

Although many studies are already conducted to evaluate the risk and return on common stock investment of some bank. This study is based on 5 commercial banks. The financial statements are available for at least 6 years of study period the mentioned companies. It is based on secondary data provided by SEBON, NEPSE and other related sources. Some relevant and renowned academic books, articles and five published master's thesis were reviewed.

For the data analyze major statistical tools as well as financial tools are used to measure risk and return in common stock investment for 6 years period were basically

analyzed by considering expected rate of return, S.D., C.V, Market capitalization, Market sensitivity, Status of stock and regression are formed on the basis of expected return on examine the relationship between expected return and different measure of risk.

## **5.2 Conclusion**

This research work is concerned with the analysis of risk and return of financial sector. But this study is undertaken to explore the analysis of risk and return on stock price of not only the financial sector but of the Nepalese stock market as a whole. The findings of this study may be important information for those who are directly or indirectly concerned with the common stock investment. Hence, on the basis of the study, more generalize conclusions as far as possible are tried to outlined.

- The market price of a common stock in Nepalese capital market does not seem constant. It is fluctuating and decreasing in recent years. it can be concluded that the market price of a stock is effected both micro as well as macro economic environment. These economic factors are dominating the price of a stock.
- Dividend is the earning that an investor gets after investing in a common stock. Some companies are declaring cash dividends only. Some companies are declaring cash and stock dividends.
- Most of sample companies expected rate of returns are higher than that of market except HBL. It indicates that the investment in the NABIL, EBL, MBL, KBL, companies are quite beneficial.
- Standard deviation is a measure of unsystematic risk. S.D. of HBL, NABIL, EBL, MBL, KBL are more than that of market. So, it indicates that high risk high return and vice versa.
- According to the CAPM analysis, we found three sample companies are overpriced i.e. HBL. In that situation investor can make buying strategy.

Similarly, other sample companies are under priced. So, in that situation may sell the stock or may involve in short selling.

Finally, it can be concluded that the market price of a stock is determined by micro and macro economic factors. High risk may result in high return, which in turn is helpful in increasing share price taking other factors. As a whole, stock investment seems to be risky as well as beneficial.

### **5.3 Recommendations**

Basically, this study has been focused on investors who are going to invest their capital on the financial sector. Based on above results the following suggestions have been developed;

- Investors have to prefer to invest their capital in that sector which provides higher return at minimum risk within the short period of time. Therefore, investors must be able to inform and analyze the stock market and financial condition of the companies as well as consider the micro and macro economic factors.
- The investors are recommended to receive actual information of their financial position before investing. Investors have to be clear and be aware about the financial statement of the company, brokers' behavior and attitude, real position of NEPSE and rules and regulations of the government.
- The stock is under price if their expected rate of return is lower than required rate of return. Similarly, if their expected rate of return is greater than required rate of return is said to be over price. All the under price stock have to purchase and all the over price stock have to sell.
- The selected companies that have listed their share in NEPSE should disseminate exact and update information to the general public. The financial statement of each year should be published through appropriate means. Hence the updated and exact statement should be published.

- The development of the stock market is also dependent on political stability of the nation. So, government should be stable for the development of the stock market.
- NEPSE need to modernize the trading system and effective information channel. It needs to initiate to develop different program for private investors such as meeting and seminars in different subject matters includes the rules and regulations related to the trading activities of stock that should be considered by the stock market. It may be beneficial to the investors as well as potential investors and us, who want to do research and study about the stock market.