CHAPTER 1

INTRODUCTION

1.1. Background of the Study

Common stock investment has been popular among Nepalese investors since last decade. Nepalese stock market is dominated by common stock trading of banking, insurance and other financial sectors both in terms of number and market capitalization. The growth of banking sectors seem to have a greater pace especially after the restoration of democracy in 2046 BS, when Nepal Government came up with economic liberalization policy. Besides banking and insurance, other stocks such as manufacturing, trading, hotel and hydropower, are also in existence. However, they are still not able to influence the Nepalese stock market significantly. Investors are also keenly interested to banking stocks rather than other. The reason behind so, perhaps, is the regular dividend payment made by banking sectors. When the question of investment in common stock arises, the most importantly, the investors must look into the risk and return characteristics of common stock investment and their relationship.

Investors differ in terms of their perceptions towards risk and return. Every investor has different response towards risk and return in making investment decision. The investment is said to be a sacrifice of current consumption in expectation of some more consumption in future. Every investment is undertaken with the expectation of some positive rate of return. If the investment is properly undertaken the return will commensurate the investors against the risk s/he assumes (Sharpe, Alexander and Bailey, 2002). Generally return is the motivating force in the investment. It is the reward for undertaking the investment. Return is the percentage appreciation in beginning wealth of investors. The investors are always concerned with futurity of return. Investors want to maximize their expected return subject to their tolerance for risk. Such returns take the forms of dividend and appreciation in the price of the assets held in case of common stock investment. Thus, the return comes in two forms from common stock investment: a direct cash payment to the investor and an increase in the market value of the common stock relative to original purchase price.

There is no such thing as free launch. This is rightly held in case of investment decision as well. Risk and return go together in investment. It is meaningless to talk about investment returns without talking about risk. Therefore, investment decisions involve a risk- return trade off. Risk is defined as the chance that the actual outcome from an investment will differ from the expected outcome. Statistically defined, risk is termed as the variability in alternative rate of return from investment in common stock. Risk, most generally, is the probability of the occurrence of unfavorable outcomes. Risk has different meaning in different context. Risk is 'the chance of loss or injury'. It might seem more logical to measure risk by the area in a probability distribution that lies below the expected return. Risk arises because of uncertainty. It is a chance of happening some unfavorable event or danger of loosing some material value.

There is positive relationship between risk and return. Higher will be the risk larger will be the return and smaller will be the risk then smaller will be the return. This means that an investment manager can usually attain more return by selecting dominant assets that involve more risk. While it is not always true that riskier assets will pay a higher return, it is usually true. The reason is that investors are risk averse. As a result, high risk assets must offer investors high return to induce them to make the riskier investments.

Every investment involves uncertainties about future investment returns. There are so many types of risk involved in investment which are: interest rate risk, purchasing power risk, management risk, default risk, liquidity risk, callability risk, convertibility risk, political risk and industry risk. The total risk associated to common stock investment is also categorized into two parts as systematic risk and unsystematic risk. Systematic risks arise because of systematic market forces. They are purely related to the market events and are not controllable. Systematic risk can not be diversified away by forming a portfolio of common stock investment. Therefore, they are also called non-diversifiable risk. They are related to the macro economic factors like interest rate, inflation, gross domestic product (GDP), taxation, government's fiscal and monetary policy, political stability, natural calamities and so on. Unsystematic risks are uncorrelated with these market forces. They can be reduced through diversification. They can be eliminated by holding a well diversified portfolio of investment because they are unique to every firm. They arise through the events like, labor strikes, management errors, and advertising campaigns and so on.

Common stock investment is more risky than other assets like bond or preferred stock. Because, if market goes to the unfavorable condition and a corporation goes into liquidation common stockholders bear the risk of their organization. The risk on common stock investment is characterized by the fact that investors are not committed to pay regular cash income and their wealth tied up in common stock is not subjected to repay unless the claim of other stakeholders are satisfied.

The study on risk and return on common stock investment occupies an important role in case of developing stock market like Nepal. Most investors are not aware of how the risk and return on common stock are influenced and in turn how they influence their wealth position. Behaviorally, most investors are risk averter. They prefer the lower risk for a given level of return or higher return for a given level of risk. Statistically speaking, all investors are risk averse and prefer higher expected return and lower variance of expected return.

The history of commercial bank in Nepal starts from the establishment of Nepal Bank Ltd. in 1994 B.S. It is the first bank of Nepal. Rastriya Banijya Bank was established on 2002. Today Nepal can take legitimate pride in the market growth and progress in the banking sectors. Nepal has operated its door to foreign commercial banks to operate in the country almost one and half decade back. The present study takes reference of the Commercial Banks. Therefore, a brief outline of them will be helpful for better understanding of their risk return relationship. Presently, there are 15 listed commercial banks in Nepal. For the purpose of study Nepal SBI Bank (NSBIB), Nepal Bangladesh Bank (NBB), Nepal Arab Bank Limited (NABIL), Nepal Investment Bank (NIBL), Himalayan Bank Limited (HBL), Bank of Katmandu (BOK), Standard Chartered Bank Nepal Limited (SCBNL) and Everest Bank Limited (EBL) have been selected.

i. Nepal Arab Bank Ltd. (NABIL)

Nabil Bank Limited is the first joint venture commercial bank incorporated in 1984 A.D. in Nepal. Initially Dubai Bank Ltd. (DBL) invested 50% of equity shares of Nabil bank Ltd. The shares owned by DBL were transferred to Emirates Bank. International Ltd (EBIL) Dubai. Later on EBIL sold its entire stock to National Bank Ltd; Bangladesh (NBLB). NBLB is the managing the bank accordance with the

Technical Services Agreement signed between Nepali promoters and DBL. Sharing 20% Government Organization, 20% of public sector and 50% of DBL incorporated Nabil Bank Ltd. Authorized capital and paid –up capital of Nabil Bank Ltd. are Rs. 500,000,000.00 and Rs. 491,654,000.00 respectively and the listing data was 09/08/2042 B.S. (1984A.D.)

ii. Himalayan Bank Limited (HBL)

It came into existence in 2049 B.S. as a fourth joint venture bank in Nepal. It was established under commercial Bank Act 2031 with a view to encourage efficient banking services. HBL is a joint venture with Habib Bank of Pakistan with initial paid up capital Rs. 60 million. Now it has raised its paid up capital to Rs. 429 million by capitalization of profit and issuance of bonus shares. HBL's ownership structure consists of 51% shares for promoters, 20% of Habib Bank, 14% of Employee provident Fund and 15% for public.

iii. Standard Chartered Bank Nepal Limited (SCBNL)

It was established in 2042 B.S. in joint venture with Grindlays Bank, England. Previously it was known as Nepal Grindlays Bank Limited. Later, when the Grindlays group sold its share to Standard Chartered in South Asia region, it became Standard Chartered Bank Nepal Limited. The paid up capital is Rs 339.5488 million. The ownership structure of the bank is as follows: Standard Chartered Grind lays, Sidney, Australia holds 50%, Standard Chartered Bank, United Kingdom holds 25%, and General Public holds 25%.

iv. Everest Bank Limited (EBL):

EBL was established in 1994 in Nepal having its Head Office in Lazimapt, Pulchowk. Everest Bank joined its hands with Punjab National Bank (PNB) in 1997. PNB is the largest public sector of India having 109 years of banking history and 4400 branches across India. The Banks paid up capital is 455 million. Nepalese promoters hold 50% shares, general public holds 30% and foreign partners PNB holds 20% shares. It has 15 branches across the county.

1.2. Focus of the Study

The study focuses on risk and return analysis of the common stock investment of commercial banks of Nepal. Common stock investment is one of the most risky alternatives for investment than other. The investors look into the rate of return on common stock consistent to the perceived level of risk for investment decision. However, in an imperfect market situation, like Nepalese stock market, the investors may not be well aware to understand what causes the risk and how the rate of return associated to common stock is influenced. Therefore, in the light of this fact, the study is concerned with analyzing the various types of return associated with common stock investment and also calls for understanding riskiness inherent in their investment. The study ultimately focuses on to suggest the way to attain sustainable profit by minimizing the considerable risk. For this purpose, realized return, expected return, total risk, systematic risk and unsystematic risk are analyzed to give an idea to get sustainable profit and also provide an idea about how the benefits of diversification could be attained to avoid future loss of investment in common stock.

Risk and return relationship influences the market price of the stock. Before making investment decision investors must analyze the risk and return from a particular stock. This study gives information about risk and return characteristics of common stock investment in Nepalese capital market. The study is very useful for the new investors who seek data and an idea for analysis. Stock investment is not an easy task to undertake because it needs a lot of analysis and patience. This study is helpful in getting those requirements. This study also focuses to play an important role as assistance for the further researcher who likes to carry on study in the similar field. The study is fruitful in providing potentialities for investment through the help of the flow of information and giving analytical approach for the common stock investments.

1.3. Statement of Problems

Common stock investment is the most speculative and volatile as compared to other investment alternatives. The movement in common stock price along with the cash dividend influence the common stock return significantly. However, many investors are amateur as such they are not able to understand what influences the common stock price and then return. In a developed capital market, where most investors are well aware and informed, could understand the causes of fluctuation in common stock price. But in an imperfect market situation, they have no easy access to the financial information. Even if they have, they are

not able to interpret these information. As a result, the amateur investor may involve in meaningless trading of common stock resulting into aimless fluctuation in common stock price and return. Lack of information and knowledge is one of the serious issues for individual investor in common stock investment. Moreover they are subjected to trade on 'hot tips'. Another important issue is that investors' attitude and perception play vital role in rational decisions, which in turn is influenced by the knowledge and access to the data required for the analysis. Most of the Nepalese investors have their investment in single security due to least understanding of risk return behavior of security. Therefore, main problem is the lack of information to analyze the risk and return of common stock investment. Risk and return analysis is the essential tool of investment decision because it enables investors to find the less risky and highly profitable investment in common stock. The burning issues those have motivated to carry out this study are as follows:

1. What is the relationship between EPS and MPS of joint venture banks viz. Nabil Bank, Himalayan Bank, Standard Chartered Bank and Everest bank?
2. What is the risk and return level associated to these banks?
3. How risk and returns are correlated?
4. What is the risk return relative to the market?

1.4. Objectives of the Study

The study focuses on general outline of risk and return characteristics of the common stock of listed commercial banks. Therefore, the basic objective of this study is to analyze the risk and return associated with investment in common stock and their relationship. However, the specific objectives of this study are as follows:

1. To study the relationship between EPS and MPS of sampled banks.
2. To identify the risk and return level associated to the common stock of sampled banks.
3. To analyze the relationship between risk and return among sampled banks.
4. To analyze the risk-return relationship of sampled banks with the market.

1.5 Significance of the Study

In the context of Nepal, the capital market is growing very slowly. The market is not efficient; there are very few magazines and articles related to the capital market. Because of this most

of the investors are investing on capital market without any proper information and knowledge. So, investment on capital market is just like shooting in the dark.

The study is expected to give useful information about Nepalese capital market. By analyzing risk and return and it definitely contributes to increase the analytical power of the investors in capital market.

That is why, this study will be beneficial for all the persons who are directly related to Nepalese capital market.

1.6 Limitation of the Study

Every study is conducted within the boundary of some underlying assumptions that limits the area of study to bring a meaningful conclusion. This study is also based on some limitations, which are as follows:

1. This study is conducted only to fulfill the partial requirement of Master's Degree in Business Studies (MBS) program under the Faculty of Management at Tribhuvan University within given time frame work
2. The study is solely based on secondary data and the use of primary data has been ignored.
3. The study covers the relevant data and information for five years' sample period from fiscal year 2059-60 to 2063-64.
4. The study assumes that dividend, bonus and rights declaration will automatically be adjusted in secondary market price.
5. The constraint of various references and resources with computer programs are other main limitations.
6. Lack of access of specialized software and tailored financial software of field of capital market makes study tedious and lengthy.

1.7   Organization of the Study

The study will be organized into following five chapters.

Chapter 1:   Introduction

Chapter 2:   Review of Literature

Chapter 3:   Research Methodology

Chapter 4:   Presentation and Analysis of Data

Chapter 5:   Summary, Conclusion and Recommendation

The rational behind this kind of organization is to follow a simple research methodology approach. The contents of each of the chapters are briefly mentioned as follows.

Chapter 1: Introduction

The chapter one is the introductory part of this study. It explains the major issues to be dealt with including background of study, focus of the study, statement of problem, objectives of study, significance of the study, limitation of the study and organization of the study.

Chapter 2: Review of Literature

This chapter provides the conceptual foundation of the study that were examined in various other previous studies. It is classified as theoretical review and review of related literature and studies.

Chapter 3: Research Methodology

This chapter provides an analytical base of the study. It consists of data analysis, population, sample, data processing procedure and tools and technique used for the analysis.

Chapter 4: Presentation and Analysis of Data

It deals with presentation and analysis of relevant data using various statistical tools and the major findings of the study.

Chapter 5: Summary, Conclusion and Recommendation

It comprises summary of the present study, conclusion derived thereof and recommendation for the further studies.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

The study of risk return analysis of common stock investment is not an entirely new effort. Various efforts have been made by different experts and scholars on this aspect. The previous studies can not be ignored because they help to build the foundation for development of a comprehensive framework for the present study. Therefore, the purpose of this chapter is to find out what research studies have been conducted in the present field of study and to draw a reference for the study.

The purpose of this chapter is to review available literature on risk return analysis of common stock investment in context of Nepalese firms. The prime focus of review of literature is to collect external literacy information through various books, research articles and research studies. Thus, this chapter includes review of related books, articles, journals and masters degree dissertations. First section of this chapter is focused on some conceptual aspects of risk return analysis of common stock investment; likewise, related studies are focused on the second section. As a whole, second chapter focuses on related studies of risk return analysis of common stock investment. The review of literature in the present study is divided into two parts: conceptual review and review of previous studies.

2.2 Conceptual Review

Present section deals with the review of concepts from various books which are related with the present study. This study focuses on risk return analysis of common stock investment. Common stock is a kind of ownership capital issued by corporation. Common stockholders are regarded as the owner of the corporation. From investors' perspective, common stocks are more risky investment than preferred stock and bond. But it also offers benefits like voting rights, right to participate in profit, and so on. Common stocks are more liquid than other

securities because investors are ready to buy and sell common stock more frequently than other securities. Common stockholders have last priority to share in the earnings and assets of the firm.

Common stock has one important investment characteristic and one important speculative characteristic. Their investment value and average market price tend to change irregularly but persistently over the decades as their net worth builds through the reinvestment of undistributed earning. However, most of the time, common stocks are subject to irrational and excessive price fluctuation in both directions, as the consequence of the ingrained tendency of most people to speculative or gamble that is to give way to hope fear, and greed (Chandra, 1995)**.**

2.2.1 Common Stock Return

The return from holding an investment in common stock over some period is simply a cash payment received due to ownership plus the change in market price of stock, derived by the difference between beginning and ending price of stock (Van Horne and Wachowitz, 1995). There are two approaches to look into the common stock return: the realized rate of return and the expected rate of return.

The realized rate of return is simply the average of the rate of return from common stock investment over some past holding period that a common stockholder has realized. However, investment decision is based on futurity of rate of returns. Therefore, investors look into the future rate of return that the common stock investment is expected to provide. This is called an expected rate of return. The expected rate of return for any asset is the weighted average rate of return using the probability of occurrence of each rate of return as a weight (Francis, 1992). It is based on the expected cash receipt (i.e., dividend or interest) over the holding period and the expected ending or selling price. Sharpe, Alexander and Bailey (2000) expressed that the rate of return is the rate of change in wealth over a period of time. If the rate of return is measured as a rate of change in wealth over a single period, it is called single period rate of return. This is given by:

$$\text{Return (r)} = \frac{\text{End of period wealth - Beginning of period wealth}}{\text{Beginning of period wealth}} \quad \text{................(2.1)}$$

Rate of return concept is important because it measures the speed at which the investment wealth increases or decreases. An investment's single period rate of return, denoted 'r' is simply the total return an investor would receive during the investment period or holding period stated as a percent of the investment's price at the start of the holding period (Francis, 1992). An investor can obtain two kinds of income from an investment in a share of stock: Income from price appreciation (or losses from price depreciation). Sometimes called capital gain (or losses). This quantity is denoted $P_t - P_{t-1}$. Cash dividend income represented by the convention C_t. This is given by:

$$r_t = \frac{(P_t - P_{t-1}) + C_t}{P_{t-1}} \quad \text{...(2.2)}$$

Where,

r_t =   rate of return for period t.

P_t =   market price at the end of period t.

P_{t-1} =   price at the beginning period t.

C_t =   cash flow income received during the tth period.

Total income from an investment is the sum of difference between ending price and beginning price plus cash flow in the form of dividend. The ratio of total cash flow to beginning price represents the rate of return from the investment.

2.2.2 Riskiness of Common Stock

The common stock investment does not promise a fixed rate of return. The return from common stock is volatile from one period to another. More precisely, the actual rate of return from common stock investment may be different from expected return. This gap or difference is called, in the financial language, uncertainty or risk associated with common stock investment.

Risk is the probability of the occurrence of unfavorable outcomes. But risk has different meaning in different context. In our context, risk is measured in terms of variance or standard deviation of the probability distribution of rates of return or historical returns over the period. According to the dictionary meaning, risk is "the chance of loss or injury". It might seem more logical to measure risk by the area in a probability distribution that lies below the expected return (Francis, 1992). Risk in fact is an indication of chance of loosing investment value. Different people interpret the risk in different ways. To some, it is simply a lack of definite outcome, which can be any unknown event, which may be unfavorable. It is a chance of happening some unfavorable event or danger of losing some material value.

The degree of risk of common stock is measured by the standard deviation or its square the variance. It is widely used to measure risk from holding a single assets. Greater standard deviation represents a higher risk. On the other hand, smaller deviation represents a smaller risk. Variance is denoted by 'Var(r_i)' and the standard deviation is denoted by ' ' (sigma). It can be expressed mathematically as:

$$Var(r_i) = \frac{[r_i - E(r_i)]^2}{n} \quad \text{…………………..(2.3)}$$

Financial analyst and statisticians prefer to use a quantitative risk surrogate called the variance of returns, denoted by Var.(r). The variance is well known among statisticians, several hand calculators and computers are programmed to calculate it. The variance of an asset's rate of return equals the sum of the products of the required deviations of each possible rate of returns from the expected rate of return multiplied by the probability that the rate of return occurs (Francis, 1991:13).

The square root of the variance of the rate of returns is called the standard deviation of the rate of return (Francis, 1991).

13

$$= \quad \sqrt{\text{Var}(r_i)} \ \dots\dots\dots\dots\dots(2.4)$$

The standard deviation and the variance are equally acceptable and conceptually equivalent quantitative measures of an asset to risk (Francis, 1991). The standard deviation can sometime be misleading in comparing the risk or uncertainty surrounding alternatives if they differ in size. To adjust for the size or scale problem, the standard deviation can be divided by the expected return to compute the coefficient of variation.

If a choice has to be made between two investments that have the same expected return but different standard deviations, most people would choose the one with the lower standard deviation and therefore the lower risk. Similarly, given a choice between two investments with the same risk but different expected returns, investors would generally prefer the investment with the higher expected return. To most people, this is common sense return is "good", risk is "bad", and consequently, investors want as much return and as little risk as possible. But how do we choose between two investments if one has the higher expected return but the other the lower standard deviation? To help answer this question we use another measure of risk, the coefficient of variation. Which is the standard deviation divided by the expected return (Weston and Brigham, 1991).

$$\text{Coefficient of variation (C.V)} = \frac{\overline{\quad\quad}}{E(r_i)} \ \dots\dots\dots\dots\dots(2.5)$$

Coefficient of variation shows the risk per unit of return and it provides a more meaningful basis for comparison when the expected return on tow alternatives are not the same. (Weston and Brigham,1991:120)

2.2.3 Systematic and Unsystematic Risk

Total risk of stock is measure by the standard deviation and its square- the variance and total risk is a composition of systematic risk and unsystematic risk. The systematic risk is also known as the non-diversifiable risk. It can not be diversified. This risk is that portion of total variability in return caused by market factors that simultaneously affect the prices of all

securities. Systematic risk is due to that factors which affect the over all market such as changes in the macro economic factors like interest rate, Inflation, expectation of investors, gross domestic product, tax reform by Government etc. More ever, it is the cause of external environment of the firm.

Unsystematic risk can be reducing through diversification. This type of risk is unique to an organization and portfolio of investment. Diversifiable risk creates through the events like, labors strikes, availability of raw materials etc. The relation among total risk, systematic risk and unsystematic risk are shown in equation (2.6).

Total risk= systematic risk + unsystematic risk ………….(2.6)

Symbolically, the relation in equation (2.6) can be re-written as in equation (2.7)

$$Var(r_i) = b_i^2 \, Var(r_m) + Var(r_e) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots(2.7)$$

The portfolio theory deals with the fact that if an asset is included in well diversified portfolio, the risk that the asset contributes to the portfolio is the systematic risk.

Portfolio is combination of individual or a group of assets. Portfolio is the holding of security and investment in more than one asset like common stock, preferred stock, bond, debenture etc.

Investors have different types of investment opportunity but they have limited resources for investment so that investors have to select that investment, which maximizes return for a given level of risk. Therefore it is needed to extent analysis of risk and return to include in portfolio. There are two types of objectives primary and secondary. The primary objectives are regular and stable return, safety of investment, appreciation of capital, tax benefit etc.

The expected return on a portfolio is simply the Weighted Average of expected returns on the individual assets in the portfolio with being the fraction of the total portfolio invested in each asset.

$E(rp) = wiE(ri) + wj \ E(rj)$……………………(2.8)

Where,

E(rp)   =   Expected return on a portfolio consisting assets I and j

Wi   =   proportion of wealth invested in assets 'I'

Wj   =   Proportion of wealth invested in assets 'j'

E(ri)   =   Expected return on assets 'i'

E(rj)   =   Expected return on assets 'j'

Portfolio risk is the risk of individual securities plus covariance between the securities.

Symbolically,

$$(RP) = \sqrt{wi^2 \ i^2 + wj^2 \ j^2 + 2wiwj \ cov \ (Ri, \ Rj)} \quad …………(2.9)$$

CAPM is a model that describes the relationship between risk and expected price. It also describes how the price and interest rate on risky financial assets are determined in the capital market. In this model, a security is expected return is the risk free rate plus a premium based on the systematic risk of the security, where risk is measured by the beta co-efficient.

CAPM provides a measure of risk and method of estimating the market's risk return line. The market or systematic risk of security is measured in terms of its sensitivity to the market movement. This sensitivity is referred to the securities beta. Investors can eliminate unsystematic risk when they invest their wealth in a well diversified market portfolio." (Panday, 1995:344)

Van Horne, (2000:68) has purposed the CAPM developed by Markowitz (1959:8), the expected return for the individual security linking with the risk co-efficient. According to him, the expected return for stock 'j' is

$$\overline{RJ} = Rf + (\overline{RM} - Rf)\,Bj \dots\dots\dots\dots\dots(2.10)$$

Markowitz diversification may be defined as combining assets which are less than perfectly positively co-related in order to reduce portfolio returns. (Francis, 1991:234)

"The graphical version of CAPM is called the security market line which shows the relation between risk and the required rate of return." (Chandra, 1994)

The security market line clearly shows that return is the increasing function. The SML equation as suggested for the computation of expected rate of return on common stock. This model is,

Figure 2.1: Security Market Line
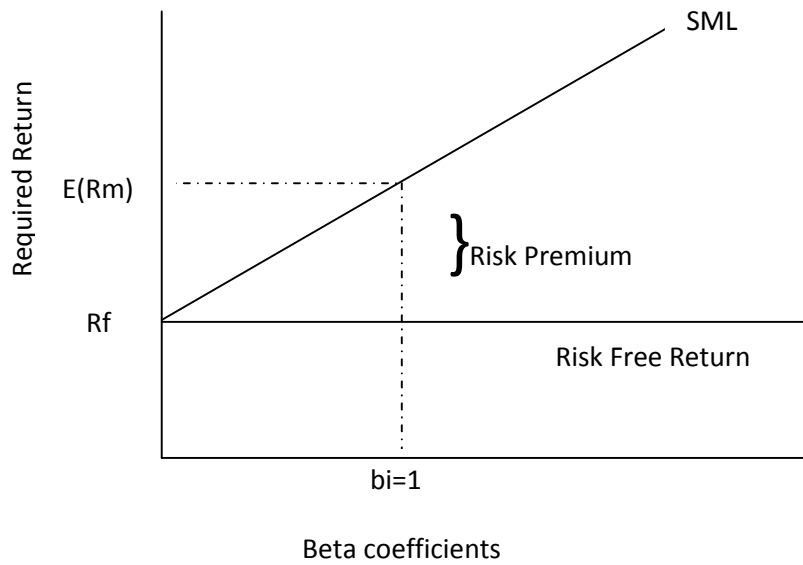
In market equilibrium the required rate of return on stock equals its expected return. That is all stocks will be on the security market line. What happens when this is not so? The primary concern of portfolio management is to identify the overpriced and under price of security, overpriced and under priced securities are identified either comprised of required rate of return or expected return.

Figure 2.2: Underpriced and Overpriced Implication
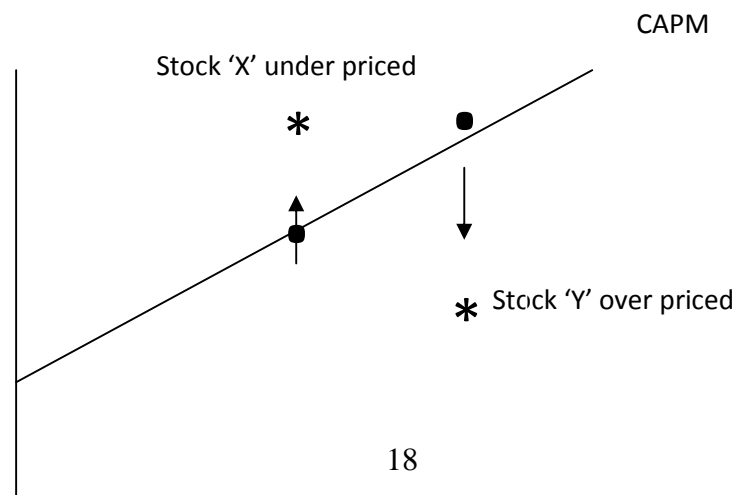
Rf

_____

Where,

✳ = Required return

●

= Expected return

RF = Risk free return

As a result stock 'X' is expected to provide a rate of return grater than the required, base on its systematic risk. Stock 'Y' is expected to provide a lower return than required to compensate for its systematic risk. Investors seeing the opportunity for superior returns by investing in stock 'X' should rush to buy it. In the case of stock 'Y' investors holding this stock should sell it. So that investors should buy the security 'X' which is under priced and investor should sell the security 'Y' which is overpriced.

The CAPM is based on the efficient market hypothesis and provides a basis to measure the systematic risk in terms of covariance of its return with the market return.

2.3 Review from Related Studies

This section presents the review of studies related with the topic are reviewed. The objective of this section is to define risk and return described and measured by different studies. It also helps to understand more about risk and return.

2.3.1. Review from Journals

Athorny, Jones and Swang's Study:

Athorny, Jones and Swang (1980) studied on conventional measure of the total risk born by common stockholders. They used the total risk as the variability of rates of return. They composed three different risk elements for the variance of the rate of return on i^{th} stock by using the following market model:

$$Var. (Rj) = \quad j2 \, X \, Var. (Rm) + Var. (ej)$$

Where, Var. (Rj) is total variance of return on security j, Var. (Rm) is variance of the return on the market portfolio of risky assets Var. (ej) is a variance of the disturbance term of security j and is covariance (Rj, Rm): and covariance ej, Rm. They concluded that the rate of return in common stock investment is affected by the two type of risk that are shown in above mentioned market model, they are total variability associated to stock return is subjected to variability in market return variability associated to unexplained residual error terms.

Bowman's Study:

A study conducted by Bowman (1990) on "The theoretical relationship between systematic risk and financial variable" examined the relationship between risk and financial variables. Systematic risk of levered firm is equal to systematic risk of the same firm without leverage. There is no direct relationship between earning variability and market risk. Systematic risk is directly related to the accounting beta. There is no theoretical basis for relationship of dividend payout and beta. There is not only theoretical relationship between dividends and systematic risk but also size and growth of the firm and systematic risk. This study shows that there is a theoretical relationship between systematic risk and firm's accounting beta and systematic function are not a function of earning variability, dividends policies and size and growth of firm.

Bodurtha and Mark's Study:

Bodurtha and Mark (1991) tested the CAPM with time varying risks and returns from monthly observations on total equity returns for firms listed in NYSE and monthly Treasury bills yields. The estimation period covers 1926-1985. They used time series returns for five value-weighted portfolios as the assets priced by CAPM and the market return that they used is the CRSP value weighted market return.

Their paper models, estimates, and tests for the importance of time varying risk premium and returns variability within the context of conditional version of the Sharpe-Linter-Mossion CAMP. Its main contribution is its demonstration of how the generalized method of moments (GMM) can servers as a convenient alternative to maximum likelihood estimation of simultaneous equation system of auto-regressive conditionally heterosidasticity (ARCH) models. The conditional CAPM allows assets risk premium. In the conditional CAPM, an assets beta is the ratio of the conditional co-variance between the assets and markets returns and the conditional variance of the market's returns and the conditional variance of the market returns, this paper modeled these conditional COV. And variance as ARCH processes and the market risk premium as an auto regression.

The study concluded that the conditional CAPM and a purely statistical representation of conditional first and second moments cannot adequately explain the data. However, incorporating a January dummy variable in the mean-excess returns goes a long way in accounting for the effect of committed variables. In final specification of the conditional CAPM augmented by shifting mean-excess returns in January, significant ARCH components in the betas and a previously undocumented quarterly components in the volatility of the market portfolio, and CAPM with constant betas is strongly rejected by the data.

Thus studies on stock returns with respect to betas, dividend yield, earnings yield, dividend pay-out, total capitalization, number of funds established are maximum devoted to examine the performance of mutual funds. Higher dividends may forecast higher return unlike higher earnings forecast low returns had not been found to be related to each others as CAPM suggest.

Malkiel's Study:

Malkiel (1995) analyzed the returns from investing in equity mutual funds from 1971 to 1991 utilizing a unique data set including returns form all mutual funds existing each year. This study also evaluated the performance of mutual funds in terms of risk adjusted returns using CAPM. The study concluded that funds have under performed benchmark portfolios both after management expenses and even gross expenses. The study also indicated that the average alpha is negative with returns are used and positive when gross returns are used, but neither is significantly different from zero. While considerable performance persistence existed during the 1970's there was no consistency in fund returns during the 1980's. Fund betas and returns were not related as the CAPM suggest.

2.3.2 Review from Nepalese Studies

In the field of finance very few independent studies can be found. However, the available independent studies which are related to the Nepalese stock market and about shareholders democracy, views expressed by different person in their articles regarding risk and return of common stock of commercial banks are presented or reviewed here in this section.

Pradhan's Study:

A study about "Stock market behavior in small capital market" in case of Nepal has been conducted by Pradhan (1993). The purpose of study is to find stock market equity, market value to book value, price earning and dividends with liquidity, leverage profitability, asset turn over and interest coverage. To find out the above objectives, he has taken 5 years study period and he found, there are positive relationships between dividend payout and liquidity. Dividend per share and market price per share was positively correlated and higher the earning on stocks, larger the ratio of dividends per share to market per share. Here only related findings are taken into accounts.

Shrestha's Study:

Another study carried out by Shrestha (2049 B.S.) entitled "Shareholders Democracy and Annual General Meeting Feed Back, Portfolio Analysis" critically analyzed the situation of common stock investors and the situation that is not improving till date. In this study, he

found, in many cases the exciting authoritarian mentality of management seems to have not considered the shareholders in the managerial plans and policies. A top-level decision often bypasses the interest of shareholders. As the management lacks serious concern about the protection of shareholder's rights and expectations. The annual general meeting has become a platform for shareholders to express their opinion and grievance in front of the management and board of directors. And many general meeting feedbacks reveal no serious response to feelings of shareholders. Thus, it reflects unwilling ness of the management and board of director to change their traditionally held activities towards shareholders.

Pokhrel's Study:

An article published in the Business Age, Oct-Nov 1999, and entitled 'stock market doing pretty well' by Pokharel (1999) is reviewed here. "The investment made in the shares of Himalayan Bank Ltd. In October last year, before Dashain, has fetched twice as returns now. If investment had been made in the shares of bank of Kathmandu Ltd. the returns would have been three times as much. If the investment were on the shares of Nepal Lever Ltd. or Bottlers Nepal Terai, the capital appreciation would be more attractive than scheme of a finance company that would get him 14% interest per annum."

The study has analyzed that it was better to invest in common stocks or not by analyzing the data from October 1998 and he found that the shares of individual company showed very good performance. Even the market price of nearly dead MCM Mutual fund has been doubled in the year. NEPSE index showed upward trend for all shares in this period. The study gave following reasons behind the appreciation of shares price.

- Reasonably same companies have rewarded the shareholders overtime.
- Reduction on interest rate of money market diverted savings towards stock investment.
- Financial institutions and co-operative have provided loan to the stock investors their share as collateral. At the same time, healthy speculation is making them market interesting.
- Investors are being aware about the system. They tend to analyze the fundamentals of companies and are appearing more rational in their investment decision than they were before.

) Regulating authority is enforcing the required reform measure to maintain transparency.

) Continuity maintained in the government policy is an added advantage the market.

Finally, the study suggested that the capital market needs more of infrastructure investment than institutional investment. Once the required infrastructure can facilitate the market, the size of the market could be made even bigger by interdicting new instruments such as government bonds. The institutional investors will then automatically pour in.

Ojha's Study:

A research paper by Ojha (2000) in the title of "Financial performance and common stock pricing" concluded that an investment in common stock of a corporate firm neither ensures annual return nor ensures the return of principal. Therefore, investment in common stock is very sensitive on the ground of the risk. Dividend of common stockholders is paid only if the firm makes an operating profit after tax. The company can return the principal in case of its liquidation only to extent of the residual assets after satisfying to all of its creditors and preferential shareholders. Besides this, investor have to sacrifice the return on their investment in common stock, which could be earned investing fund elsewhere in the next best opportunity.

The study focused on the financial performance where financial activities involve decision regarding

- Forecasting and planning of financial requirement.
- Investment decision
- Financing decision.

Further, he added that the stock price in Nepal is determined more by other factors rather than the financial performance of the concerned company.

Neupane's Study:

Neupane (2002) has conducted a seminar paper on the topic, "Empirical Tests of Applicability of CAPM on Securities Traded at Nepal Stock Exchange." The major objective of this study was to analyze the ability of the CAPM model to explain the behavior of stock returns in Nepalese stock markets. By considering monthly return of 36 months for 8 major joint venture banks from secondary source (NEPSE Ltd.) it is concluded that on an average the CAPM is able to predict the behavior of stock returns.

2.3.3. Review from Masters Degree Dissertation

In this section some masters' degree dissertations are reviewed which have focused on analyzing risk-return behavior associated with common stock investment. The objective of

this section is to know how the relation between risk and return is described and measured by different researchers.

Bhatta's Study:

Bhatta (1996) in his thesis paper, "Assessment of the performance of listed companies in Nepal" concludes that a highly significant positive correlationship has been addressed between risk and return character of the company. Investors expect higher returns from those stocks which associates higher risk. Nepalese capital market is not efficient one so the stock price does not contain all the information relating to market and company itself. Neither investors analyze the overall relevant information of the stocks nor does the member of stock exchange try to disseminate the information. So the market return and risk both may not show high priced stocks.

Khatiwada's Study:

Khatiwada (1996) in his dissertation entitled "A Study on Securities Investment in Nepal" concluded that leaving some exceptional cases aside, almost all the Companies experienced their market price of shares going down by less than fifty percent in 1995. Even the banking group could not spare the share price going down. More specifically, the year 1995 was a disheartening period for the stock price. It is because, most of the companies' share price during this period were down even in some cases below the face value.

Sapkota's Study:

A study by Sapkota (2000) on "Risk and Return Analysis in common stock Investment" analyzed the risk and return of securities, potential investor who wants to invest in security but repel by imaginary and an unreal risk. This study describes the risk, return, volatility of stock and some relevant and irrelevant factors which are very important to make decision in stock investment. This study noted that, it enables the investors to put the return as they can expect lower risk. They may take into better prospective. The study focused that the banking industry is the biggest one in terms of market capitalization and turnover and return for common stock of commercial banking sectors are more parallel with market return. Nepalese economy is in emerging stage but due to lack of the appropriate information and other knowledge, Nepalese private investors cannot analyze the securities as well as market

properly. This study has also found risky and higher return projects by analyzing coefficient of variance, beta.

This study has recommended that private investors should try and work out their attitude towards the risk of various investment and Nepal Government needs to manage the trading of government securities in NEPSE.

Pandey's Study:

Pandey (2000) in his paper, "Risk and Return analysis of common stock investment" concludes that among all the securities common stock is known to be the most risky security. Higher the risk, higher will be the return. Most of the investors are attracted to common stock security because of its higher expected return.

Upadhayay's Study:

Upadhayay (2001) has conducted the study on "Risk and Return on common stock investment of commercial Bank in Nepal" with the objective to evaluate the common stock of the listed commercial banks in terms of risk and return and to perform sector wise comparison on the basis of market capitalization. The study was able to find that Nepalese investors are not able to analyze the securities and market properly due to lack of information and proper knowledge. The common stock of Nepal Grindlays Bank (Now Standard Chartered Bank) bears the maximum realized rate of return and risk, and Nepal SBI Bank has minimum realized rate of return and risk, common stock of Everest Bank is most volatile and common stock of Nepal Indosuez Bank is the least volatile and common stock of all the commercial banks are overpriced.

This study has observed the "High Risk-Return Relationship". Common stock of NABL is most risky and Nepal SBI is least risky, Common stock Everest Bank is most volatile, common stock of Indosuez bank is the least volatile and common stocks of all the commercial banks are overpriced. The study has recommended for the portfolio construction of the stocks that have higher return with no correlation or negative correlation to diversify away risk properly.

Paudel's Study:

Paudel's (2001) conducted a study on "Investing shares of Commercial Banks in Nepal". This study was based on the data collected for eight banks from 1996 to 2001. The study was focused into identifying the over-priced and/or under-priced implication of common stocks by analyzing the risk and return associated. The study concluded that most stocks were found to be defensive than the market except the stocks of Bank of Kathmandu which had beta coefficient greater than 1. The study also observed that the stocks of Nepal Arab Bank Limited, Indosuez Bank Limited and Himalayan Bank Limited were overvalued and those of Standard chartered Bank Limited, Nepal SBI Bank Limited and Bank of Kathmandu Limited were underpriced.

Acharya's Study:

Acharya (2002) in his thesis paper, "Analysis of Risk and Return Associate with common stock investment of Joint Venture banks in Nepal" concluded that generally average investors are risk averse. They prefer to invest on such investment which provided higher return at the given level of risk. It is widely known that investment on portfolio generates higher and constants return as compared to single assets. The reason is that the lower return on one asset offset the higher return from another asset. It is obvious that investor can avoid risk by adopting portfolio but the situation in Nepal is different. The evidence shows that most of the investors prefer to invest in single security rather than portfolio because of the lack of knowledge about portfolio risk and diversification.

Panthi's Study:

Panthi (2004) in his dissertation entitled "Analysis of Risk and Return of Common Stock Investment of Commercial Banks of Nepal" concluded that the expected return on common stock NB bank was found to be the highest with the highest level of risk as measured by standard deviation. Whereas the relative measure of risk as given by coefficient of variation was found to higher for Nepal SBI bank Limited. The study also observed a positive relation between the stock's return of NABIl bank and Nepal Investment Bank Limited where as it

was found to be negative for the Nepal Investment Bank and Himalayan Bank Limited. The study covered the data collected from fiscal year 2053/054 B.S. to 2057/58 B.S.

Chapagain's Study:

Chapagain's (2007) conducted a study on "Risk and Return on Common Stock Investment of few Listed Commercial Banks in Nepal". The study covered the data collected for 6 banks from fiscal year 1999/2000 to 2005/06. The objective of this study was to determine the effect of portfolio on the risk return and identifying the overpriced and underpriced stocks. The study also observed that the stocks of sampled banks are highly positively correlated with market.

Mishra's Study:

Mishra (2007) has tried to examine the risk and return characters of common stocks of only five listed commercial banks in his thesis paper **"Risk and Return on Common Stock Investment of Commercial Bank in Nepal."** In his study Mr. Mishra had used the data over period of five years in order to calculate risk and return and identify whether their stocks are over-priced, under-priced or equilibrium priced. In his study. Mr. Mishra had concluded that; "The relationship between risk and return is described by investor's perception about risk and their demand for compensation. No investor will like to invest in risk assets unless he is assured of adequate compensation for the acceptance of risk. Hence, risks play a central role in analysis of investment. Risk and return is getting considerable attention in financial field. Financial relations have been used for centuries as rule of thumb to aid in understanding trade of between risk and return but they only scratch the surface."

Maharjan's Study:

Maharjan (2007) in his study entitled **"Measurement of Risk and Return on Investment on Common Stock of Commercial Banks in Nepal"** concluded that "Risk and return is getting considerable attention in financial management. Risk and return is the key factor to analyze the financial condition of the company for investors. The relationship between risk and return is described by investors' perception about bearing invest their capital on risky assets unless they are not assured of adequate compensation for accepting the risk. Investors often ask about the total risk, they will be assuming in an investment and like to know if the risk

premium provided is enough. Higher the risk command higher premium and assumes the linear relationship between risk and risk premium."

Finally, the study suggested that private investors should try and workout there attitude towards the risk of various investment and Nepal Government needs to manage the trading of government securities in NEPSE. The study has recommended for the portfolio construction of the stocks that have higher return with no correlation or negative correlation to diversify away risk properly. The studies shows that most of the investors prefer to invest in single security rather than portfolio because of the lack of knowledge about portfolio risk and diversification. The study also recommended that the stocks of sample banks are highly positively correlated with market. At last the relationship between risk and return is described by investor's perception about risk and there demand for compensation. Risk and return in getting considerable attention in financial management. It is the key factor to analyze the financial statement of the institute for investors.

CHAPTER 3

RESEARCH METHODOLOGY

Research Methodology may be defined as a systematic process that is adopted by the researcher in studying problems with certain objectives in view. In other words, research methodology describes the methods and processes applied in the entire aspects of the study, focus of data, data gathering instruments and procedures, data tabulating and processing and methods of analysis.

This study follows the scientific research method. Any systematic and organized pursuit of investigation is known as scientific method. These compose both technical as well as logical aspects. The chapter has been divided into five parts. First part is research design, second describes the population and sample, third describes the data collection procedure, fourth describes the sample characteristics and last deals with data analysis.

3.1 Research Design

Research design is necessary to fulfill the objectives of well set research. Research design may be defined as framework, plan and structure for collecting, analyzing and evaluating data. The study is based on descriptive from FY 2059/60 to 2063/64. It deals with common stocks investment in joint venture banks on the basis of available information. As the title suggests, it is more analytical and empiranalytical research design. The study is based on recent historical data, which covers five years period and less descriptive. The research has been completed within about one year period.

3.2 Population Sample and Sampling Method

Population of study is listed at present 20 commercial banks in Nepal. Out of which, at present 17 commercial banks are listed in NEPSE for trading in secondary market. Among those banks only four banks are taken as sample. They are NABIL, HBL, SCBL, and EBL. The samples are taken randomly.

3.3 Data Collection Procedure

Most of the data are collected from the secondary sources. During the study, informal opinion survey has also been taken with the individual investors, bank official, and employees from securities Board of Nepal and Nepal Stock Exchange Ltd. Price of the different stocks and NEPSE indices have been collected from web site of NEPSE and other supplementary information has also been collected from Internet. Financial statements of commercial banks and their annual reports have also been collected. NEPSE periodicals articles and previous research reports etc has been considered.

3.4 Sample Characteristics

The sample comprises joint venture bank's common stock for analyzing data. In addition other listed common stocks at NEPSE are also considered as population.

3.5 Method of Data Analysis

The collected data are analyzed by using various financial tools as well as statistical tools, which are given and defined below.

3.5.1 Market Price of stock (P)

Market price of stock is the basic variable of this study. Among high, low and closing price, each year's closing price has been taken as market price of stock, which has specific time span of one year and study is in annual basis. Closing Price is used as market Price of stock. Due to the variance in price within year, it is difficult to predict the market price. Although average price could be used as market price. It is also complex to collect the day's price of five year period. On the other hand average of high and low price is assumed not to be

reliable and representative information. Therefore, it is appropriate to use closing price as a market price.

3.5.2 Dividend

Dividend is allocation of earnings to the shareholders. It represents the percentage of earning that firm pays in cash and sometime in stock. It is easy to calculate amount of dividend if company pays dividend only in cash but when the company pays dividend in stock. It is difficult to calculate total dividend: it is just (Bonus Share) payment of additional stock to shareholders. It represents nothing more than a recapitalization of the company's earnings; stockholders proportional ownership remained unchanged due to the declaration of stock dividend. Price of stock declines because of stock dividend has no economic significance in the perfect market. To get the real amount of dividend, for simplicity, the following model will be appropriate.

Total div. amount = cash div. + stock div. % * Next year's MPS……….(3.1)

Symbolically it is expressed as:

$$D_T = D_C + \left(\frac{SD}{SE} \right) (P_S) \ \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(3.2)$$

Where,

D_T = Total dividend

D_C = Cash dividend

SD = Stock dividend

SE = Existing stock

P_s = Next year's market price of the stock

3.5.3 Return on Common Stock Investment (R)

An investment's single period rate of return, denoted R, is simply the total return that investors would receive during investment period or holding period stated as a percentage of investment's price at the start of holding period. It includes the cash dividend paid during the year together with an appreciation in the market price or capital gain, realized at the end of the year. More formally the one period rate of return is:

$$R = \frac{\textit{Dividend + [Ending Price – Beginning Price]}}{\textit{Beginning Price}} \dots\dots\dots\dots\dots\dots(3.3)$$

Symbolically it is expressed as:

$$R = \frac{D_t + (P_t - P_{t-1})}{P_{t-1}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(3.4)$$

Where,

R = Actual rate of return on Common Stock at the time t

D_t = Cash dividend at the time t

P_t = Market price at the end of period t-1 ($P_t - P_{t-1}$ denotes the Capital gain)

3.5.4 Expected Rate of Return on Common Stock (R_j)

The study also aims to find out the expected return on the investment in common stock. Usually this rate is obtained as arithmetic means of past years' return. Symbolically, R can be expressed as follows:

$$\overline{R}_i = \left(\frac{R}{n}\right) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots..(3.5)$$

Where,

R= Expected rate of return on sock j

n= Number of years that the return is taken

= Sign of summation

3.5.5 Standard Deviation ( )

It is a statistical measure of the variability of a distribution of return around its mean. It is the square root of the variance and measures the total risk of stock investment. Higher standard deviation represents high risk and vice versa. Symbolically ' can be expressed as follows:

$$\sigma_j = \sqrt{\Sigma \overline{(R_j - R_j)^2}} \qquad \text{...(3.6)}$$

Where,

σ_j = Standard deviation of return on stock j during the period n

3.5.6 Co-efficient of Variation (C.V)

CV is the ratio of standard deviation of returns to the mean of that distribution. It is a measure to relative risk. The higher the CV, the greater the risk. Symbolically the CV can be expressed as follows:

$$\text{C.V.} = \frac{\sigma_j}{\overline{R_j}} \qquad \text{...(3.7)}$$

Where,

C.V. = Coefficient of variation

σ_j = Standard deviation of return on stock j

R_j = Expected rate of return on stock j

3.5.7 Portfolio Return (Rp)

Portfolio is a combination of investment in two or more than two securities. The rate of return on a portfolio is a weighted average of the returns for securities making up that portfolio where the weights are equal to the proportion of total funds invested in each security.

$$Rp = \sum_{j=1}^{n} W_j R_j \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(3.8)$$

Where,

R_p= Expected return on portfolio

W_j= The proportion of total funds invested in security j

R_j= The expected return on security j

n= Total number of securities in the portfolio

3.5.8 Portfolio Risk (p)

The risk of a portfolio is not a simple weighted average of standard deviation of the individual securities. Portfolio risk depends not only on the riskiness of the securities constituting the portfolio but also on the relationship among the returns from those securities. Symbolically in case of two assets, portfolio risk can be expressed as follows:

$$p = \sqrt{w^2_A \sigma^2_A + w^2_B \sigma^2_B + 2w_A w_B \sigma_A \sigma_B r_{AB}} \dots\dots\dots\dots\dots\dots\dots\dots(3.9)$$

Where,

$_p$ = Portfolio Risk

W_A= Proportion of stock A held in the portfolio

W_B= Proportion of stock B held in the portfolio

r_{AB}= Correlation between stocks

3.5.9 Risk Minimizing Portfolio

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

$$W_{A=} \frac{\sigma^2_B - Cov\ (\ r_A\ r_B\ )}{\sigma^2_A + \sigma^2_B - 2\ Cov\ (\ r_A\ r_B\ )} \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(3.10)$$

Where,

W_A = Weight or proportion of assets A that minimize risk of portfolio of stock A and B

$\_A$ = Standard deviation of assets A

$\_B$ = Standard deviation of assets B

Cov ($r_A\ r_B$) = Covariance between return of A and B

3.5.10 Required Rate of Return (K_j)

Required rate of return is minimum expected rate of return needed to induce investors to invest his/her fund. It is always more than risk less rate of return. Normally, when an individual asset is giving higher rate of return, this type of investment is known as under – priced investment. Such under priced assets should be purchased. On the other hand, if the realized rate of return is less then required rate of return of a particulars assets, it is said to be overpriced assets. Such assets should not be purchased, instead if one is holding such it should be sold immediately. Symbolically required rate of return can be expressed as follows:

$K_j = RF + (R_m - R_F)\ b_i$ …………………………..(3.11)

Where,

K_j = Required rate of return on 'i' security

R_m = Expected Return on market

RF = Risk free rate of return

b_i = Beta coefficient

3.5.11 Beta Coefficient (b_j)

Beta is a measure of the systematic risk of a security that cannot be avoided through diversification. Beta is a relative measure of risk of an individual stock relative to the market portfolio of all stocks. If the security's returns move more (less) than the market's returns as the latter changes, the security's returns have more (less) volatility than those of market. It is important to note that beta measures a security's volatility in price relative to a benchmark, the market portfolio of all stocks. Asset's historical returns are used in finding the assets beta coefficient.

The market portfolio has a beta of 1. A security with beta of 1.5 indicates that on average, security returns are 1.5 times as volatile as market returns both up and down. This would be considered an aggressive security because when the overall market return rises or falls 10 percent, this security on average would rise or fall 15 percent. Stocks having a beta less than 1 would be considered more conservative investment than the overall market.

Beta is useful for comparing the relative systematic risk of different stocks and in practice is used by investors to judge stock's riskiness. Beta coefficient can be expressed as follows:

$$bi = \frac{Cov\ (Ri\ Rm\ )}{\sigma^2_m} \quad \text{..(3.12)}$$

Where,

Cov(RiRm) = Covariance of the return on assets i and the market portfolio.

$\sigma^2{}_m$ = Variance of the return on the market portfolio.

R_m = Required rate of return on the market Portfolio of securities.

3.5.12 Portfolio Beta

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

$$b_i = w_i\, b_j \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.(3.13)$$

Where,

W_j = proportion of portfolio's total rupees value represented by assets j

b_i = Beta coefficient of assets j

b_p = Portfolio beta coefficient

Portfolio betas are interpreted in the same way as individual assets betas. They indicate the degree of responsiveness of portfolio's return to changes in the market return.

3.5.13 Correlation Coefficient (r_{xy})

Correlation coefficient measures the degree of relationship with which two securities move together. The numerical value of correlation ranges from $+1.0$ to -1.0. If the sign is positive, the securities tend to move up and down together. If two securities move in the same direction, they are positively correlated. If it is negative, the securities move in opposite direction. That is when the return for one security decreases, the return for other increases. The magnitude of correlation coefficient indicates the degree of relationship between the returns on two securities. Symbolically, correlation coefficient can be expressed as follows:

$$r_{xy} = \frac{Cov\,(r_x\, r_y)}{} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.(3.14)$$

3.6. Method of Analysis and Presentation

Results are presented in tabular form and clear interpretation on is given simultaneously. All the methods of analysis and presentation are applied as simple as possible. Detail calculations are presented in appendix at the end of dissertation. To make report simple and easily understandable, charts, figures and graphs have been used.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

This chapter focuses on the analysis of data analysis and their presentation of the sampled banks. In this chapter, the effort has been made to analyze "risk and return on common stock investment of commercial banks." It consists of the descriptive analysis of the banks under review, calculation of required rate of return, average rate of return, total risk including calculation of beta and other indicators to estimate total risk and finally analysis on base of statistical tools employed and interpretation. The analysis of data includes of organizing, tabulating and assessing financial and statistical result. Different tables and diagrams are drawn to made result more simple and understandable.

4.1 Descriptive Analysis of Bank

As the study has taken a special reference to listed commercial banks, risk and return of selected joint venture bank is analyzed hers. At present, there are twenty-three commercial banks, among them, the study has focused on four joint venture commercial bank. The study has covered a financial statement analysis of the sampled banks which make aware the investors and make an effort to link this data with the risk and return analysis of the sampled banks. The detail analysis and the data presentation of those commercial banks are shown below.

4.1.1. Nabil Bank Limited

Nabil Bank Ltd. was established on July 12th, 1984 under a technical service agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank Ltd. Dubai, Nabil Bank is the first and major joint venture bank in the country with key points of representation all over the kingdom of Nepal sharing 50% is owned by N.B. International Limited, Ireland, sharing by 20% from financial institution on Nepal and sharing by 30% from general people.

It has 500 million rupees authorized capital. 491.6544 million rupees issued capital and paid up capital has been 491.6544 million rupees.

After 11 years of active participation, Emirates Bank International Limited (EBL) divested its 50% share holding in Nabil to National Bank Limited (NBL), Dhaka, Bangladesh. EBL's decision to divest this investment was influenced by restructuring of their own worldwide activities and strategy to concentrate only in United Arab Emirates and Pakistan with increased economic co-operation under the SAARC frame work particularly in the field of trade and commerce and induction of SAPTA agreement, the participation of National Bank Limited of Bangladesh in Nepal, seemed to be most timely. However, the Board of Directors had decided to release the technical assistance contract with National Bank Limited, Dhaka, Bangladesh in May 2001 in a view to that the management of the Nabil Bank Limited could be handled by the Nepalese employees.

It introduced MasterCard to the Nepalese Rupees and US Dollar and now also issues Visa Card and is shortly to introduce Visa Electron. Growing network ATM facilities are available to account holders. Debit cards with PIN numbers are issued to enable customers to avail of 24 hour ATM facility. Nabil is the sole Principal Agent Bank in Nepal of Western Union Financial Services & facilities transfer of funds, through an on-line computer system. In keeping with the Bank's tradition of providing superior services to its customers as well as to increase its shareholder' return on investments in the long term. Nabil has already commenced the implementation of a world class banking software developed by a world renowned software company.

Market price, Dividend , Dividend Yield , EPS P/E Ratio & Market Book Value Ratio of Nabil Bank is shown in **Appendix B (I).** Here, only the year-end MPS is taken for the analysis.   The total dividend is calculated as the method mentioned in the research methodology in **Chapter III** and shown in the **Appendix B (I).** The movement of the closing price and EPS is presented graphically in the figure below.

Figure 4.1

Closing Price & EPS
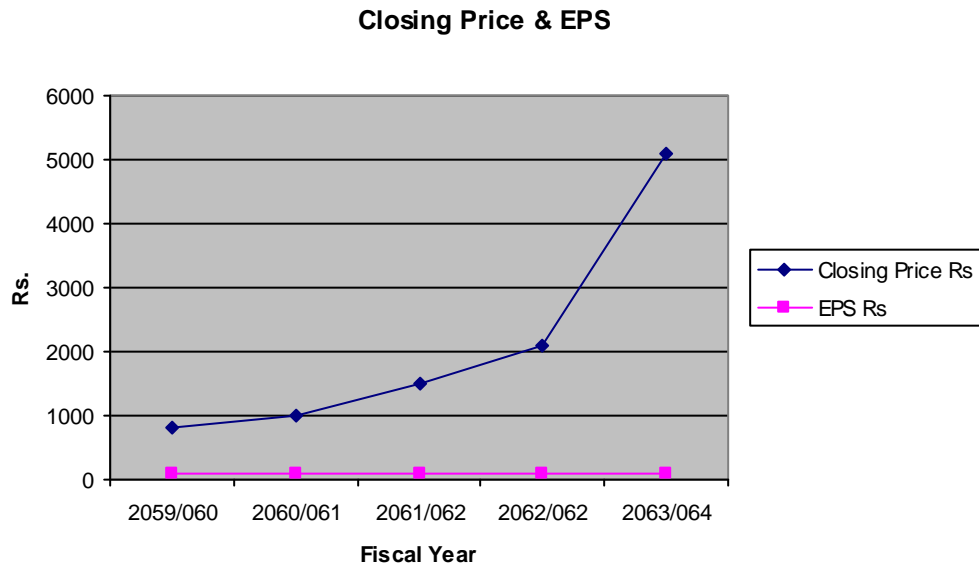
Closing market price of share is the lowest in fiscal year 2059/060 and subsequent years, the MPS seems to be increasing trend , it was the highest in fiscal year 2063/064. Market to book value ratio was 2.77 in the fiscal year 2059/060; where same was 12.08 in fiscal year 2063/064. Therefore, it reveals that both the market book values as well as market per share are increased. Earning Per share is lowest in year 2059/060 and highest in year 2063/064.

Figure 4.2

DPS Rs
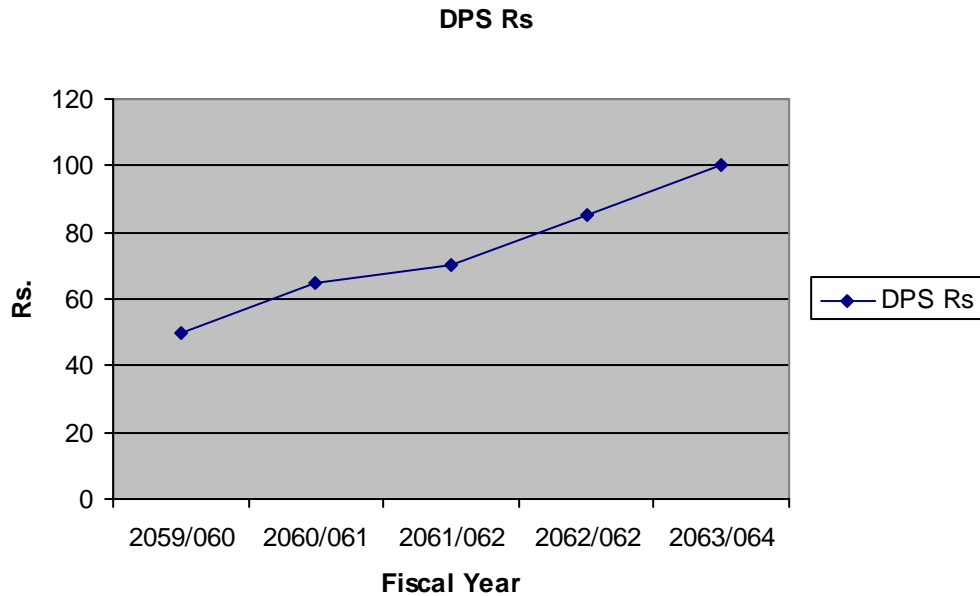
Book has been distributed cash dividend to the shareholders each and every year ranging Rs. 50 to Rs. 100, which is gradually increasing every year. The percentage of dividend is calculated 50%, 65%, 70%, 85% and 100%, it is related with the profit and capital. Therefore, the dividend distribution is based on performance. But it is wise to distribute dividend considering the future plan and program and also the NRB guidelines.

The increased price and its relation with dividend, dividend yield is calculated. The dividend yield percent of the bank is highest in the year 2059/060 and lowest in the year 2063/04. Dividend yield is declining from 6.76 to 1.98 and the market price is increasing every year which indicates the investors are investing on the basis of technical analysis without considering performance analysis of the company. It indicates that either the investors are investing for capital gain or basically the market is driven by the rumor.

Price earning ratio, upon which the investors may take judgment or make base of the firm's performance. It reflects investor's expectation about the growth in the firm's earning. In the same time, management is also interested in this market appraisal of the firm's performance and keep eye on it to find the causes if this ratio declines. Price earning ratio of the banks is recorded change from 8.74 to 36.84 times, which is 321.51% increment in five year period. It reflects the considerable growth in the firm's earnings.

4.1.2. Himalayan Bank Ltd.

Himalayan Bank Ltd., the fourth joint venture bank in Nepal was established in 1991 in collaboration with Habib Bank Ltd., Pakistan. Unlike the banks previously mentioned. The shareholding pattern of the foreign counter part is only 20% where as the remaining part is financed by promoter group 51%, Nepalese financial institute 14% and general public 15%.

Himalayan Bank Limited was incorporated in 1992 by the distinguished bossiness personalities of Nepal in partnership with employee's provident fund and Habib Bank Limited, which is one of the largest commercial bank of Pakistan. It is the first generation bank. Bank operation was commenced from January 1993.

It is the first commercial bank of Nepal with maximum number of share holding by the Nepalese private sector. Besides commercial activities, the bank also offers industrial and merchant banking. In 21st century, despite the cutthroat completion in the Nepalese banking sector. Himalayan Bank Limited has been able to maintain a lead in primary banking activities loans and Deposits.

The bank at present has 17 branches working around the country. The bank has a very aggressive plan of establishing more branches in different parts of the kingdom in near future. Himalaya n Bank limited has access to the worldwide

Correspondent network of Habib Bank for fund transfer, letter of credit or any banking business anywhere in the world.

Besides, Himalayan Bank Limited has correspondent arrangements with 178 internationally renowned banks like American Express Bank, Citi Bank, Abn Amro etc.

Himalayan Bank's policy is to extend quality and personalized services to its customers as promptly as possible. All customers are treated with almost courtesy as valued clients. The Bank, as far as possible, offers tailor made facilities to its clients, based on the unique needs and requirements. To extend more efficient services to its customers.

Himalayan Bank has been adopting o innovative and latest banking technology. This has not only helped the bank to constantly improve its services level but has also kept it prepared for future adaptation of new technology. Himalayan bank is committed to be a "Power to lead".

Market price, Dividend, Dividend Yield, EPS, P/E Ratio & Market Book value Ratio of Himalayan Bank in **Appendix B(II).** Here, only the year-end MPS is taken for the analysis. The total dividend is calculated as the method mentioned in the research methodology in **Chapter III** and shown in the **Appendix B(II).**

The movement of the closing price and EPS is presented graphically in the figure below.

Figure 4.3

Closing Price & EPS
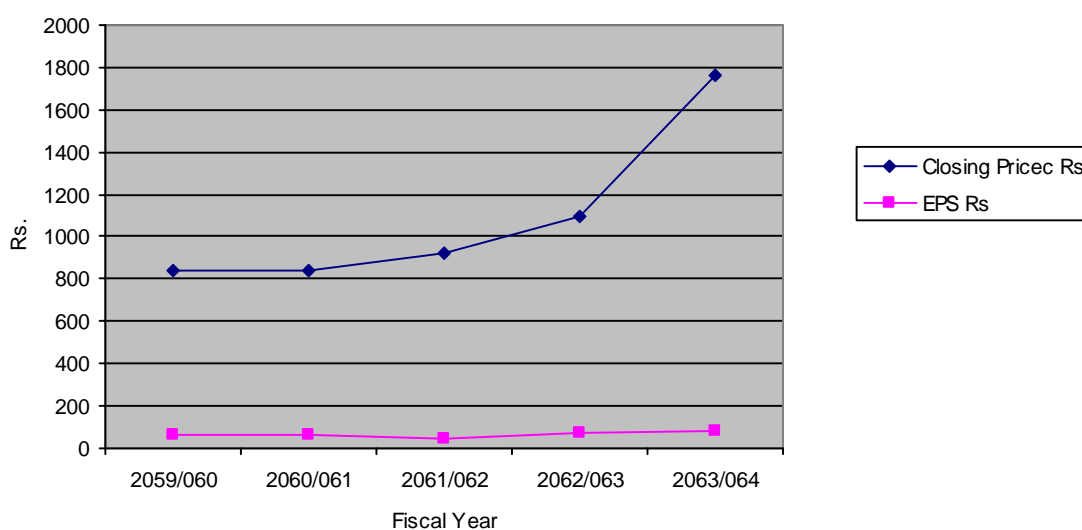
Closing market price of share is the lowest in fiscal year 2059/60 and subsequent years, the MPS seems to be increasing trend, it was the highest in year 2063/64. Market to book value ratio was 3.37 in the fiscal year 2059/60; where same was 6.57 in the fiscal year 2063/64.

Therefore, it reveals that both the market book values as well as market per share are increased. Earning Per share is lowest in year 2061/62 and highest in year 2063/64.

Figure 4.4
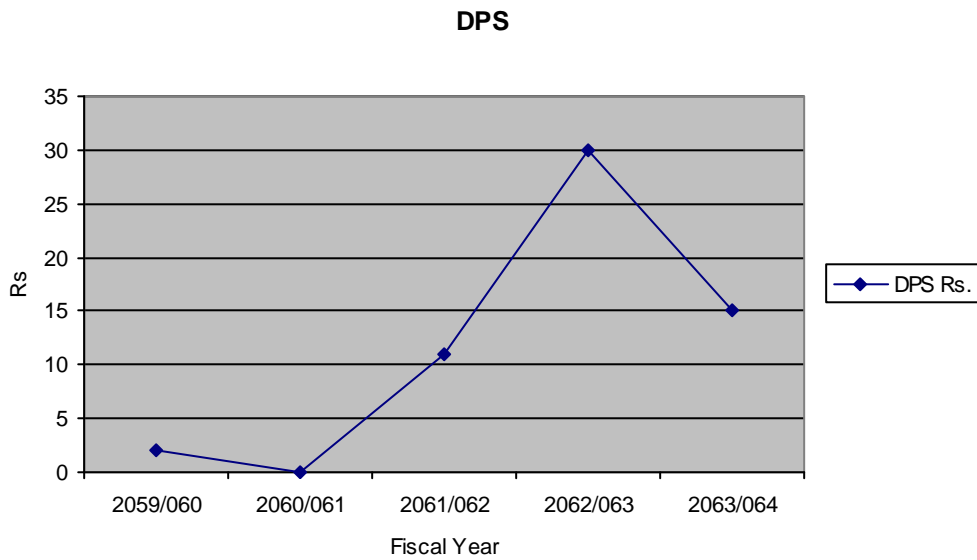
DPS

Bank has been distributed cash dividend to the shareholders each and every year ranging Rs1.32 to Rs.30 except in the fiscal year 2060/61, Himalayan bank has distributed stock dividend 25%, 20%, 20% and 5% in year 2059/60, 2060/61, 2061/62 and 2062/63 respectively.

The percentage of dividend is calculated 1.32%, 11.58%, 30% and 15%, it is related with the profit and capital. Therefore, the dividend distribution is based on performance. But it is wise to distribute dividend considering the future plan and program and also the NRB guidelines.

The increased price and its relation with dividend, dividend yield is calculated. The dividend yield percent of the bank is highest in the year 2062/63 and lowest in the year 2060/61. Dividend yield is declining from 0.16 to 0 in the fiscal year 2059/60 and 2060/61 respectively. In the fiscal year 2061/62 and 2062/63 it has been increased from 1.26 to 2.73 and again in the fiscal year 2063/64, it has been decreased to 0.86 but the market price is increasing every year which indicates the investors are investing on the basis of technical analysis without considering performance analysis of the company. It indicates that either the investors are investing for capital gain or basically the market is driven by the rumor.

Price earning ratio, upon which the investors may take judgment or make base of the firm's performance. It reflects investor's expectation about the growth in the firm's earning. In the same time, management is also interested in the market appraisal of the firm's performance and keep eye on it to find the causes if this ratio declines. Price earning ratio of the banks is recorded change from 16.91 to 28.69 times, which is 70% increment in five years period. It reflects the considerable growth in the firm's earnings.

4.1.3 Standard Chartered Bank

The Bank was originally established as a joint venture of Grindlays Bank PLC and Nepal Bank limited in 1985 with the shareholding ratio of ANZ Grindlays Bank limited 50%. Nepal Bank 33.33% and the General Public 16.66%. Along with the change of ownership to Standard Chartered, the Banking area of SCBL, saw the rise of a new dawn changing the general image of the Bank. With this acquisition, Standard Chartered Bank now owns 50% share of Nepal Grind lays Bank limited (NGB L) previously owned by ANZ Grind lays.

With the mission statement to be the leading international bank in out principal markets, the bank operates through number of branches, spread throughout Nepal and focuses mainly on corporate, consumer and commercial banking, providing services for international firms, as

well. The bank contributed to a to the government offices as the highest private corporate tax payer in the kingdom.

To be the best provider of financial sector in the country great emphasis is put on training staff. To improve the skills and knowledge of the staff the bank continues to provide development programs, in – house training programs, including on the job training and job rotation.

Market price, Dividend, Dividend Yield, EPS, P/E Ratio & Market Book Value Ratio of Standard Chartered Bank is shown in **Appendix B (III).** Here, only the year-end MPS is taken for the analysis. The total dividend is calculated as the method mentioned in the research methodology and shown in the **Appendix B (III).** The movement of the closing price and EPS is presented graphically in the figure below.

Figure 4.5
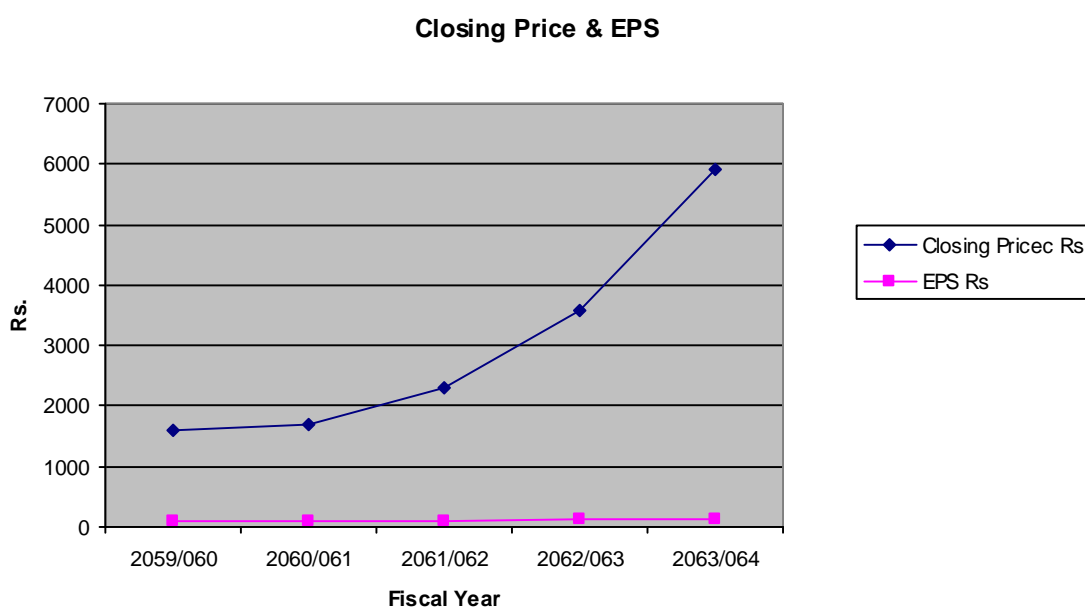
Closing Price & EPS

Closing market price of share is the lowest in fiscal year 2059/60 and subsequent years, the MPS seems to be increasing trend, it was the highest in year 2063/64. Market to book value ratio was 4.07 in the fiscal year 2059/60; where it was 11.52 in the fiscal year 2063/64. Therefore, it reveals that both the market book values as well as market per share are increased. Earning Per share is Lowest in year 2061/62 and highest in year 2062/63.

Figure 4.6
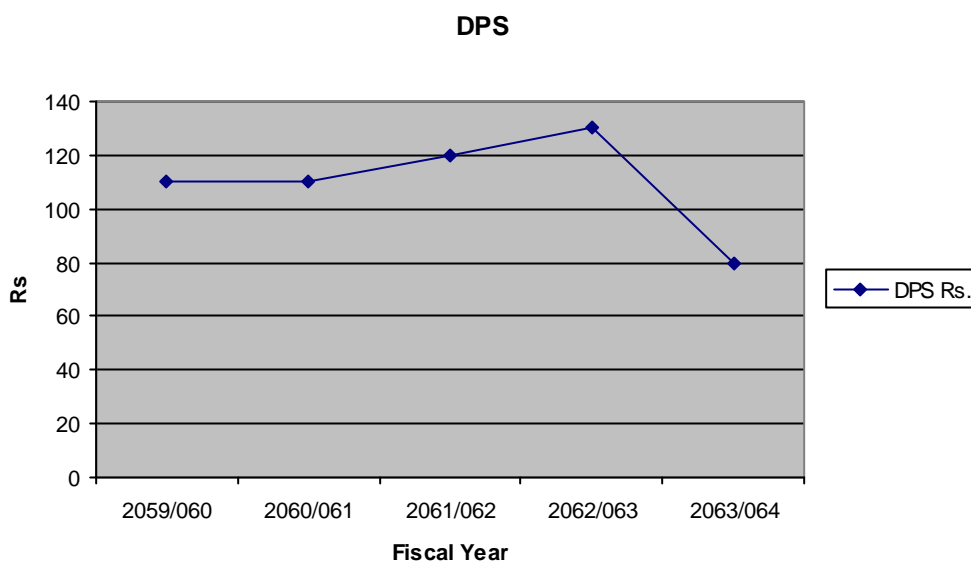
DPS

Bank has been distributed cash dividend to the shareholders each and every year ranging Rs. 80 to Rs. 130. Standard Chartered Bank has distributed stock dividend 10% and 10% in year 2059/60 and 2062/63 respectively. The per cent age of dividend is calculated 110%, 110%, 120%, 130% and 80%, it is related with the profit and capital. Therefore, the dividend distribution is based on performance. But it is wise to distribute dividend considering the future plan and program and also the NRB guidelines.

The increased price and its relation with dividend, dividend yield is calculated. The dividend yield percent of the bank is highest in the year 2062/63 and lowest in the year 2060/61. Dividend yield is declining from 0.16 to 0 in the fiscal year 2059/60 and 2060/61 respectively. In the fiscal year 2061/62 and 2062/63 it has been increased from 1.26 to 2.73 and again in the fiscal year 2063/64, it has been decreased to 0.86 but the market price is increasing every year which indicates the investors are investing on the basis of technical analysis without considering performance analysis of the company. It indicates that either the investors are investing for capital gain or basically the market is driven by the rumor.

Price earning ratio, upon which the investors may take judgment or make base of the firm's performance. It reflects investor's expectation about the growth in the firm's earning. In the same time, management is also interested in the market appraisal of the firm's performance and keep eye on it to find the causes if this ratio declines. Price earning ratio of the banks is

recorded change from 10.98 to 35.25 times, which is 221.04% increment in five years period. It reflects the considerable growth in the firm's earnings.

4.1.4 Everest Bank Limited

Everest Bank Limited started its operation in 1994 with a view and objectives of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer friendly services through a network of 22 braches. This bank was established as a joint venture bank with Punjab National Bank with 20% share holding. The Punjab National Bank is one of the largest nationalized bank in India having 112 years of banking history. Punjab National Bank is a technology driven bank serving over 35 billion customers through a network of over 4500 branches spread all over the country with a total business of around INR 2178.74 billion .

Everest Bank has recognized the value of offerings a complete range of services and has pioneered in extending various customer friendly products such as home loan, education loan, EBL flexi loan, EBL property plus (future lease rental). Home Equity loan, vehicles loan, loan against Share. Loan against Life Insurance Policy and Loan for Professional. Everest Bank Limited was the first bank to introduce Any Branch Banking system (ABBS) in Nepal. All the branches of the bank are connected with ABBS which enables the customers to do all their transactions from any branches other than where they have. Their account, Everest bank has introduced the Mobile Vehicle Banking system to see the segment deprives of proper banking facilities through Birtamod branch, which is the first of its kind.

Market price, Dividend, Dividend Yield, EPS, P/E Ratio & Market Book Value Ratio of Everest Bank is shown in **Appendix B (IV).** Here, only the year-end MPS is taken for the analysis. The total dividend is calculated as the method mentioned in the research methodology in **Chapter III** and shown in the **Appendix B (IV).** The movement of the closing price and EPS is presented graphically in the figure below.

Figure 4.7

Closing Price & EPS
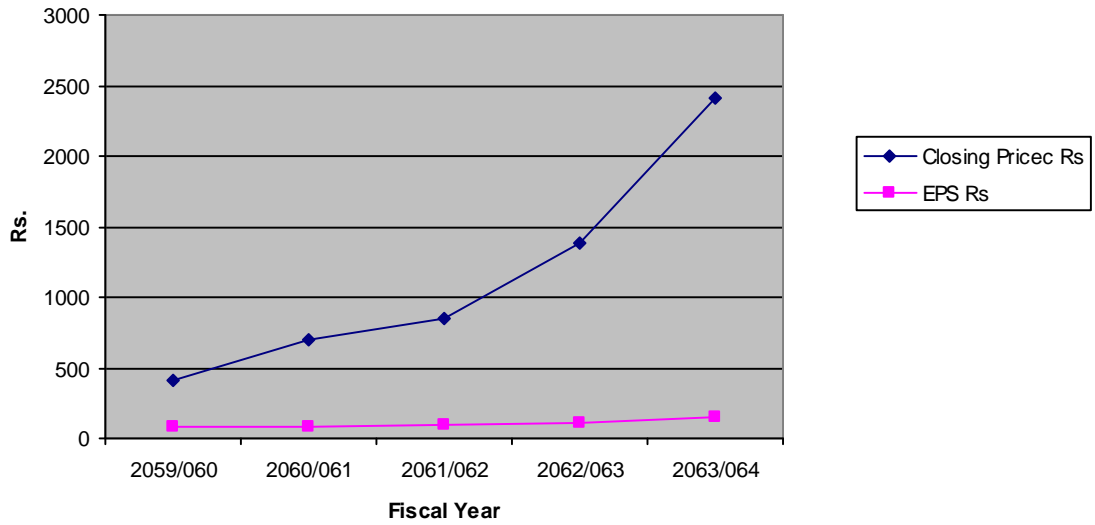
Closing market price of share is the lowest in fiscal year 2059/60 and subsequent years, the MPS seems to be increasing trend, it was the highest in year 2063/64. Market to book value ratio was 2.96 in the fiscal year 2059/60; where same was 8.30 in the fiscal year 2063/64. Therefore, it reveals that both the market book values as well as market per share are increased. Earning Per share is Lowest in year 2059/60 and highest in year 2063/64.

Figure 4.8

DPS
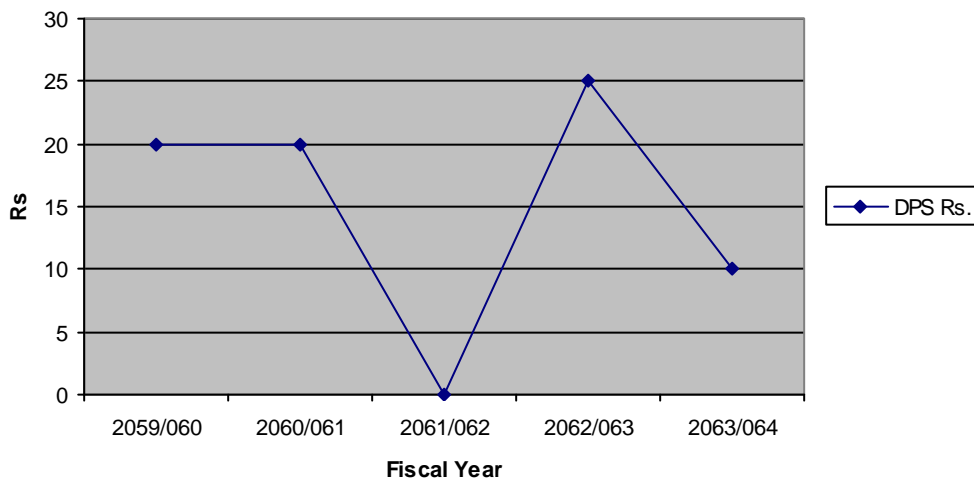
Bank has been distributed cash dividend to the shareholders each and every year ranging Rs. 10 to Rs. 25 except in the fiscal year 2061/62. Everest Bank has distributed stock dividend

20% in fiscal year 2061/62. The percentage of dividend is calculated 20%, 20%, 25% and 10% , it is related with the profit and capital. Therefore, the dividend distribution is based on performance. But it is wise to distribute dividend considering the future plan and program and also the NRB guidelines.

The increased price and its relation with dividend, dividend yield is calculated. The dividend yield percent of the bank is highest in the year 2059/60 and lowest in the year 2061/62. From the fiscal year 2059/60 to 2061/62; dividend yield is declining from 4.49 to 0 . Again it has been increased in the fiscal year 2062/63 and decreased in the fiscal year 2063/64, but the market price is increasing every year which indicates the investors are investing on the basis of technical analysis without considering performance analysis of the company. It indicates that either the investors are investing for capital gain or basically the market is driven by the rumor.

Price earning ratio, upon which the investors may take judgment or make base of the firm's performance. It reflects investor's expectation about the growth in the firm's earning. In the same time, management is also interested in the market appraisal of the firm's performance and keep eye on it to find the causes if this ratio declines. Price earning ratio of the banks is recorded change from 14.90 to 31.00 times, which is 108.50% increment in five years period. It reflects the considerable growth in the firm's earnings.

4.2 Analysis of NEPSE (Market Return)

Expected Return on Market (Rm) - the market return- is the return on the market portfolio of all traded securities. Year ended the NEPSE index is used as the market return into account.

Table 4.1

NEPSE Index & Annual Market Return

| Fiscal Year	NEPSE INDEX	Annual Market Return (R)
2058/59	219.35	
2059/60	199.90	-0.0877
2060/61	231.97	0.1604
2061/62	304.67	0.3133

2062/63	437.49	0.4361
2063/64	789.21	0.8031
	Total	1.8014

Data Source www.nepalstock.com

The NEPSE index was lowest in the year 2059/60 and high in the year 2063/64. In the year 2059/60, the index started to rise till the year 2063/64 and it is believed that in the coming fiscal year also, the index will rise. The movement of NEPSE index is given in the figure below.

Figure 4.9

NEPSE INDEX
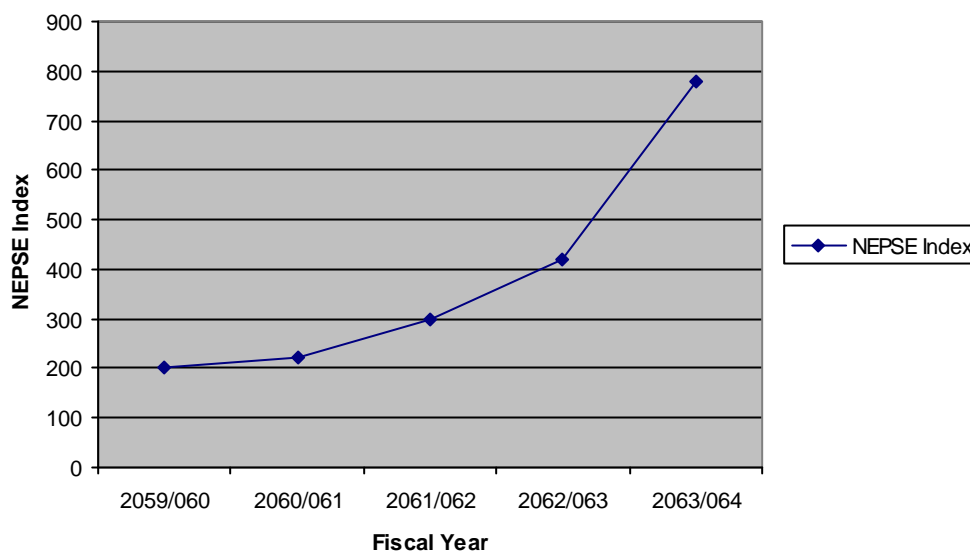
Similarly, from the above table we can find that market return in the year 2063/64 was very high while in the year 2059/60, it was very low and negative return. Since, the annual market return is in increasing trend, which is also believed to be in this trend for next year. The annual market return of five years is given in the diagram below.

Figure 4.10

Expected Return on Market
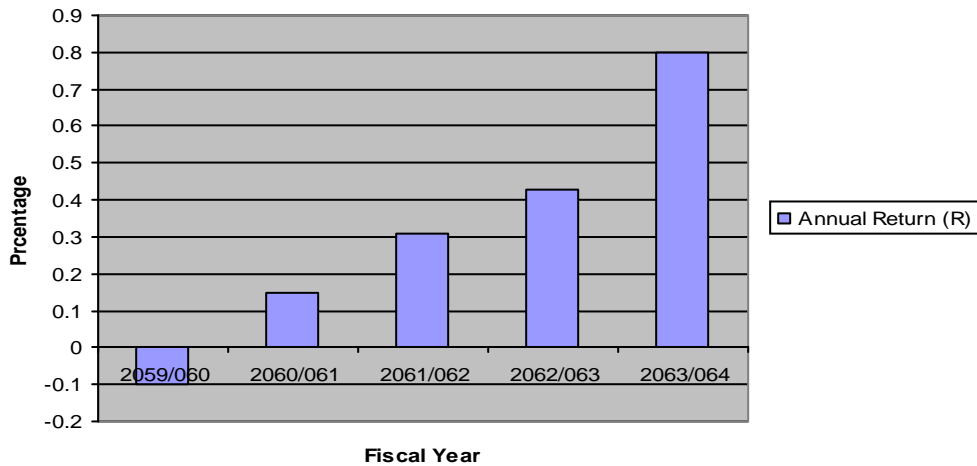
The calculation of market expected rate of return, standard deviation, coefficient of variation and variance are given in **Appendix C (V).**

Table 4.2

Average rate of Return, Standard Deviation, and C.V of Market Portfolio

Average rate of return	0.3603
Standard Deviation	0.2824
Coefficient of Variation	0.7838
Variance of the return on the market portfolio	0.0797

The expected return of the market is 36.03% while its standard deviation, i.e. risk is 28.24%. Similarly, coefficient of variation of the NEPSE is 0.7838.

4.3 Statistical and Financial Analysis of Banks

In this part, historical or ex-post (after the fact) risk and return has been observe. There is no doubt that the ex-ante or expected return differs from historical return. To bridge this gap, many investigations have worked on it, but it is not with out objection. 'However, despite the objection, it is worth while to examine historical returns to see how they can be used to come up will meaningful prediction about the future.

4.3.1 Nabil Bank Ltd.

The calculations of following statistical and financial indicators are shown in **Appendix C (I), Appendix D (I) and Appendix D (V).**

Table 4.3

Statistical and Financial Indicators of Nabil

Covariance	0.1160
Standard deviation	43.24%
Coefficient of variation	0.736
Beta	1.4555
Alpha	0.0627
Coefficient of correlation	0.95
Coefficient of determination	0.9025
Total Risk	43.24%
Systematic Risk	41.08%
Unsystematic Risk	2.16%

Required Rate of return	50.84%
Average rate of return	58.71%
Excess rate of return	7.88%

Average rate of return (R_N) of Nabil Bank Limited is 58.71% greater than required rate of return. This positive excess return implies that the security is under priced. It reveals that this bank is expected to earn a higher rate of return, is necessary to compensate an investor for the level of systematic risk it bears. If an investor holds the shares of Nabil Bank, obviously he/she will earn 7.88% more return than the proper compensation for the level of risk, which can not be diversified way (market risk).

Beta of Nabil Bank is 1.4555. It reveals that the stock has positive correlation with the market (NEPSE). The return of Nabil Bank is more volatile than the market. As beta of this stock is measured 1.4555, the positive change in NEPSE. If 1% changes in NEPSE, the stock return will have positive response by 1.4555%. This stock therefore, can be categorized as aggressive stock.

The intercept (Alpha) is 0.0627 or 6.27%. It shows that the return of Nabil Bank is 6.27% even market return is zero. From the portfolio management point of view, one can the increase the weight of the stock with positive alpha. The coefficient of correlation of the bank is 0.95. This positive correlation indicates that when the market return goes up by 1%, return of bank also goes up by 0.95.

Looking at the coefficient of variation, the share of Nabil Bank has risk 0.736 per unit of return. Standard deviation measure the total risk of an investment which is 43.24%. Only a portion of the total risk is rewarded by the bank share's returns and the unrewarded portion of the risk is the unsystematic risk. Out of the total risk associated with the common stock investment of Nabil Bank, 2.16% of risk is unsystematic risk or diversifiable risk. Systematic risk or non-diversifiable risk is 41.08% which indicates that total variability in return caused by market factors that simultaneously affect the price of all securities.

4.3.2 Himalayan Bank Ltd.

The calculations of following statistical and financial indicators are shown in **Appendix C (II), Appendix D (II) and Appendix D (V).**

Table 4.4

Statistical and Financial Indicators of HBL

Covariance	0.0538
Standard deviation	20.24%
Coefficient of variation	0.6481
Beta	0.6750
Alpha	0.0691
Coefficient of correlation	0.94
Coefficient of determination	0.8836
Total Risk	20.24%
Systematic Risk	19.03%
Unsystematic Risk	1.21%
Required Rate of return	25.45%
Average rate of return	31.23%
Excess rate of return	5.78%

Average rate of return (R_H) of Himalayan Bank Limited is 31.23% greater than required rate of return. This positive excess return implies that the security is under priced. It reveals that this bank is expected to earn a higher rate of return, is necessary to compensate an investor for the level of systematic risk it bears. If an investor holds the shares of Himalayan Bank, obviously he/she will earn 5.78% more return than the proper compensation for the level of risk, which can not be diversified way (market risk).

Beta of Himalayan Bank is 0.6750. It reveals that the stock has positive correlation with the market (NEPSE) but less than 1, so it moves with market but by the low percent. As beta of this stock is measured 0.6750, the positive change in NEPSE. If 1% changes in NEPSE, the stock return will have positive response by 0.6750%. This stock therefore can be categorized as defensive stock.

The intercept (Alpha) is 0.0691 or 6.91%. It shows that the return of Himalayan Bank is 6.91% even market return is zero. From the portfolio management point of view, one can the increase the weight of the stock with positive alpha. The coefficient of correlation of the bank is 0.94. This positive correlation indicates that when the market return goes up by 1%, return of bank also goes up by 0.94.

Looking at the coefficient of variation, the share of Himalayan Bank has risk 0.6481 per unit of return. Standard deviation measure the total risk of an investment which is 20.24%.

Only a portion of the total risk is rewarded by the bank share's returns and the unrewarded portion of the risk is the unsystematic risk. Out of the total risk associated with the common stock investment of Himalayan Bank, 1.21% of risk is unsystematic risk or diversifiable risk.

Systematic risk or non-diversifiable risk is 19.03% which indicates that total variability in return caused by market factors, simultaneously affect the price of all securities.

4.3.3 Standard Chartered Bank Ltd

The calculations of following statistical and financial indicators are shown in **Appendix C(III), Appendix D (III) and Appendix D (V).**

Table 4.5

Statistical and Financial Indicators of SCBL

Covariance	0.0543
Standard deviation	30.91%
Coefficient of variation	0.6761
Beta	0.6813

Alpha	0.2117
Coefficient of correlation	0.62
Coefficient of determination	0.3844
Total Risk	30.91%
Systematic Risk	19.61%
Unsystematic Risk	11.75%
Required Rate of Return	25.66%
Average rate of return	45.72%
Excess rate of return	20.06%

Average rate of return (Rs) of Standard Chartered Bank Limited is 45.72% greater than required rate of return. This positive excess return implies that the security is under priced. It reveals that this bank is expected to earn a higher rate of return, is necessary to compensative an investor for the level of systematic risk it bears. If an investor holds the share of Standard Chartered Bank, obviously he/she will earn 20.06% more return than the proper compensation for the level of risk, which can not be diversified way (market risk).

Beta of Standard Chartered Bank is 0.6750, it reveals that the stock has positive correlation with the market (NEPSE) but less than 1. so it moves with market but by the low percent. As beta of this stock is measured 0.6750, the positive change in NEPSE. If 1% changes in NEPSE, the stock return will have positive response by 0.6750%. This stock therefore can be categorized as defensive stock.

The intercept (Alpha) is 0.2117 or 21.17%. It shows that the return of Standard Chartered Bank is 21.17% even market return is zero. From the portfolio management point of view, one can increase the weight of the stock with positive alpha. The coefficient of correlation of the bank is 0.62. This positive correlation indicates that when the market return goes up by 1% return of bank also goes up by 0.62. Looking at the coefficient of variation, the share of Standard Chartered Bank has risk 0.6761 per unit of return. Standard deviation measure the total risk of an investment which is 30.91%. Only a portion of the total risk is rewarded by the bank share's returns and the unrewarded portion of the risk is the unsystematic risk. Out of the total risk associated with the common stock investment of Standard Chartered Bank, 11.75% of risk is unsystematic risk or diversifiable risk. Systematic risk or un-diversifiable risk is 19.16% which indicates that total variability in return caused by market factors, simultaneously affect the price of all securities.

4.3.4 Everest Bank Limited

The calculations of following statistical and financial indicators are shown in **Appendix C(IV), Appendix D (IV) and Appendix D(V).**

Table 4.6 Statistical and Financial Indicators of   EBL

Covariance	0.0548
Standard deviation	26.94%
Coefficient of variation	0.4948
Beta	0.687
Alpha	0.0297
Coefficient of correlation	0.72
Coefficient of determination	0.5184
Total Risk	26.94%
Systematic Risk	19.4%
Unsystematic Risk	7.74%
Required Rate of Return	25.85%
Average rate of return	54.54%
Excess rate of return	28.60%

Average rate of return (R_E) of Everest Bank Limited is 54.45% greater than required rate of return. This positive excess return implies that the security is under priced. It reveals that this bank is expected to earn a higher rate of return, is necessary to compensative an investor for the level of systematic risk it bears. If an investor holds the share of Everest Bank, obviously he/she will earn 28.60% more return than the proper compensation for the level of risk, which can not be diversified way (market risk).

Beta of Everest Bank is 0.6870, It reveals that the stock has positive correlation with the market (NEPSE) but less than 1. so it moves with market but by the low percent. As beta of this stock is measured 0.6870, the positive change in NEPSE. If 1% changes in NEPSE, the stock return will have positive response by 0.687%. This stock therefore can be categorized as defensive stock.

The intercept (Alpha) is 0.0297 or 2.97%. It shows that the return of Everest Bank is 2.97% even market return is zero. From the portfolio management point of view, one can the

increase the weight of the stock with positive alpha. The coefficient of correlation of the bank is 0.72. This positive correlation indicates that when the market return goes up by 1% return of bank also goes up by 0.72.

Looking at the coefficient of variation, the share of Everest Bank has risk 0.4948 per unit of return. Standard deviation measure the total risk of an investment which is 26.94%. Only a portion of the total risk is rewarded by the bank share's returns and the unrewarded portion of the risk is the unsystematic risk. Out of the total risk associated with the common stock investment of Everest Bank, 7.54% of risk is unsystematic risk or diversifiable risk. Systematic risk or non-diversifiable risk is 19.40% which indicates that total variability in return caused by market factors; simultaneously affect the price of all securities.

4.4 Comparative Analysis of Selected Commercial Banks

4.4.1 Comparative Analysis of Annual Return of Selected Commercial Banks and Market.

Closing market price of share and total dividend of the banks are used to calculate annual return of the bank for each year. The annual return of the NEPSE, Nabil Bank, Himalayan Bank, Standard Chartered Bank and Everest Bank is shown in the table 4.7 below.

Table 4.7

Annual Return of Selected Banks and Market

Fiscal Year	Market return	Nabil	HBL	SCBL	EBL
2059/60	-0.0877	0.1286	**0.0473**	0.2416	0.0814
2060/61	0.1604	0.4392	0.2249	0.1311	0.5730
2061/62	0.3133	0.5750	0.3709	0.4126	0.6850
2062/63	0.4361	0.4937	0.3228	0.9168	0.6138

|					
2063/64	0.8031	**1.2991**	0.5955	0.5841	0.7694
Average	0.3603	0.5871	0.3123	0.4572	0.5454

* Calculation Based on NEPSE Index

From the above table, it is found that the annual return of these four banks was fluctuating trend where as the annual market return was increasing trend. Overall, the highest annual return was 1.2991 of Nabil Bank in fiscal year 2063/64 and the lowest annual return was 0.0473 of Himalayan Bank in the fiscal year 2059/60 in the five year review period.

On the average, Nabil Bank has the highest annual return and Himalayan Bank has the lowest annual return. The annual return of the banks and market is presented graphically in the diagram below.

Figure 4.11

Comparative Annual Returns of Selected Banks
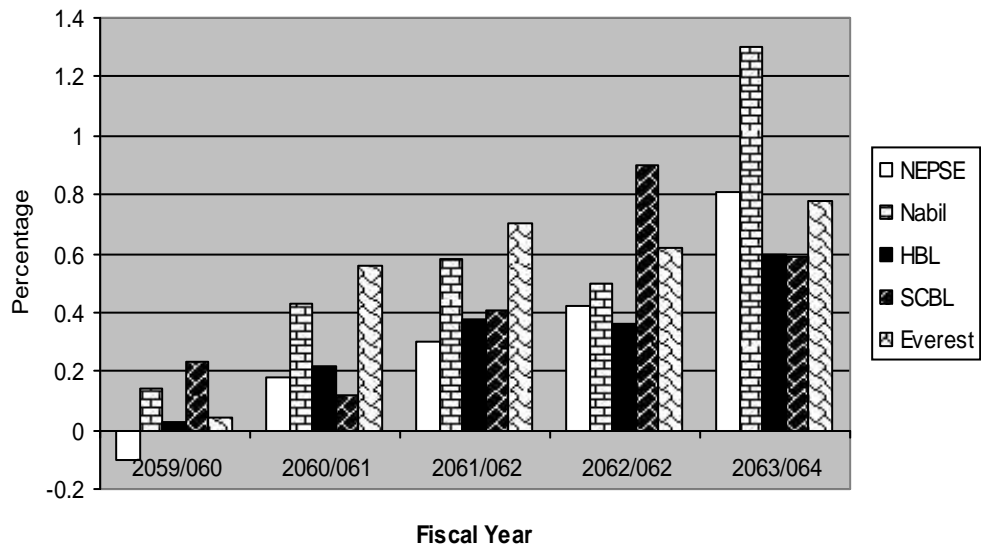
4.4.2 Comparative Analysis of Expected Return, Standard Deviation and Coefficient of Variation of Selected Commercial Banks

A comparative analysis of expected return, standard deviation and coefficient of variation of the selected commercial banks is performed here. The calculation of Standard deviation, expected return and coefficient of variation of selected commercial banks are given in the **Appendix C (I, II, III, & IV).** The comparative analysis is tabulated in the Table 4.8 below.

Table 4.8

Expected Return, Standard Deviation and Coefficient of Variation of Selected Commercial Banks

Banks	Expected Return(%)	Standard Deviation (%)	CV	Return	Remarks SD	CV
Nabil	50.83	43.24	0.7360		Highest	Highest
HBL	31.23	20.24	0.6481	Lowest	Lowest	
SCBNL	45.72	30.91	0.6761			
EBL	54.54	26.94	0.4948	Highest		Lowest

From the above table, we can find that Himalayan Bank has the lowest standard deviation and expected return, suggesting that it is the less risky stock than others and it proves that lower the risk and the return is also low. It shows that Himalayan Bank is risk averter. Similarly, the stock Nabil is the most risky than others as standard deviation and coefficient of variation is the highest among these banks. It shows that the Nabil Bank is risk taker. The expected return of Everest Bank is highest and the coefficient of variation is low among these banks. In terms of coefficient of variation, the stock of Nabil is most risky. The above data are graphically presented in the diagram shown below.

Figure 4.12

Comparative Risk and Return of Selected Banks
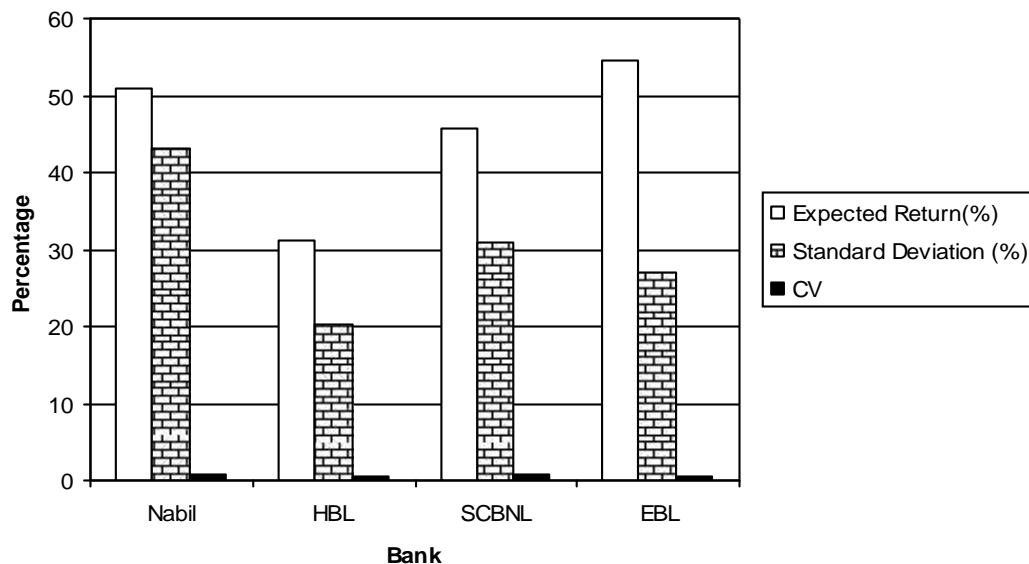
4.4.3 Comparative Analysis of Price Earning Ratio of Selected Commercial Banks

Market Price Earning Per Share of the bank of each year has been taken to calculate the Price Earning Ratio. The Price Earning Ratio of Nabil Bank, Himalayan Bank, Standard Chartered Bank and Everest Bank are shown in the table 4.9 below.

Table 4.9

65

Price Earning Ratio of Selected Banks

Fiscal Year	Nabil	HBL	SCBL	EBL
2059/60	**8.74**	16.91	10.98	14.90
2060/61	10.80	17.12	12.60	14.90
2061/62	14.27	19.20	16.38	16.00
2062/63	17.34	18.57	21.47	22.00
2063/64	**36.84**	28.69	35.25	31.00
Total	87.99	100.49	96.68	98.80
Average	**17.598**	**20.098**	**19.336**	**19.760**

From the above table, we find that the price earning ratio of these four banks have increasing trend except the Himalayan Bank has fluctuating trend. From the fiscal year 2059/60, the price earning ratio of Himalayan Bank has been increased, but in the fiscal year 2062/63, it has been decreased to 18.57. Overall , the highest price earning ratio was 36.84 in fiscal year 2063/64 and the lowest price earning ratio was 8.74 of Nabil Bank in the fiscal year 2059/60. On an average, Himalayan Bank has the highest price earning ratio and Standard Chartered Bank has the lowest price earning ratio. The average price earning ratio is within 20 times, this is due to the lowest time in previous year if we considered it with Indian scenario, and it resembles the same but in fact being the sample size small, the scenario does not reflect the true and fair picture. From the price – earning ratio table above, a drastic increase in the ratios of all the four banks under consideration can be seen. This result can occur due to increase in price and reduction or constant scenario of EPS. The above table reflects the price change indicating the sharp increase in market price of these four banks. This change although drastic and unprecedented can be attributed to the market rumors or inside information prevalent in our secondary market. As a result what can be inferred is that the share market prices of the banks do not provide an absolutely true picture of the financial value as ought to be theoretically.

4.5 Major Findings of the Study

In this part, historical or ex-post (after the fact) risk and return has been observe. There is no doubt that the expected return differs from historical return. To bridge this gap, many investigators have worked on it. However, despite the objection, it is worth while to examine

historical returns to see how they can be used to come up will meaningful prediction above the future.

From the risk perspective, standard deviation, variation, coefficient of variation is calculated through; beta is taken as an indicator to measure the relative risk of the individual stock to the market.

Table 4.10   Major Statistical and Financial Indicators of Sample Banks

Indicators	Nabil	HBL	SCBL	EBL
Covariance	0.1160	0.0538	0.0543	0.0548
Standard deviation	43.24%	20.24%	30.91%	26.94%
Coefficient of variation	0.736	0.6481	0.6761	0.4948
Beta	1.4555	0.6750	0.6813	0.687
Alpha	0.0627	0.0691	0.2117	0.0297
Coefficient of correlation	0.95	0.94	0.62	0.72
Coe. of determination	0.9025	0.8836	0.3844	0.5184
Total Risk	43.24%	20.24%	30.91%	6.94%
Systematic Risk	41.08%	19.03%	19.61%	19.4%
Unsystematic Risk	2.16%	1.21%	11.75%	7.74%
Required Rate of return	50.84%	25.45%	25.66%	25.85%
Average rate of return	58.71%	31.23%	45.72%	54.54%
Excess rate of return	7.88%	5.78%	20.06%	28.60%

a.   As seen in the table above, all the examined stocks realized rates of return are not equal to the calculated required rate of return. This analysis shows that the entire banks stock's required rate of return is less than average mean returns of individual stock. The stocks with higher realized rate of return than the required rate of returns are under priced and the prices of stocks will increase in the market that is striving toward the equilibrium. Therefore all of the four banks stocks are under priced.

b.   Returns on all the stocks have positive correlation with the returns on market. However, the correlation coefficient ranges from -1 to +1 which indicates that return on individual

stocks move less than the proportionate movements of the returns on market portfolio consisting of all shares.

c. Nabil Bank appears to be aggressive stock as beta coefficient more than one, it indicates that the share are more risky that the market. Himalayan Bank, Standard Chartered Bank and Everest Bank appear to be defensive stock as beta coefficient are less than one, it indicates that the share are less risky that the market . All stocks have positive alpha value. All the stocks can generate income even market does earn nothing.

d. From the above table, it is found that the annual return of these four banks have fluctuating trend where as the annual market return has increasing trend. Overall, the highest annual return was 1.2991 of Nabil Bank in fiscal year 2063/64 and the lowest annual return was 0.0473 of Himalayan Bank in the fiscal year 2059/60 in the five year review period. On an average, Nabil Bank has the highest annual return and Himalayan Bank has the lowest annual return.

e. Maximum return of Nabil Bank under the review period is 129.91% in year 2063/64 where as the same period market has highest return that is 80.31%. Maximum return of Everest Bank   under the review period is 76.94% in year 2063/64 where as Himalayan Bank has lowest return that is 4.73% in the year 2059/60.

f. Based on the standard deviation of the returns on stocks, the stocks of Nabil Bank can be considered as high-risk securities. The standard deviation of the returns on stocks of Himalayan bank is the lowest one. However, the realized rate of returns are not the same and in such case the used of standard deviation may not provide meaningful basis for meaningful risk. Looking at the coefficients of variation, the stocks of Everest Bank has the lowest risk per unit of return, the highest being with the stocks of Nabil Bank. The systematic part of the total risk is due to the individual stocks correlation coefficient with the market portfolio. All the stocks have systematic risk less than total risk. Only a portion of the total risk is rewarded by the bank share's returns and the unrewarded portion of the risk is the unsystematic risk. The unsystematic risk with the stocks of

Standard Chartered Bank is highest and the stock of Himalayan is lowest in review period.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The business world of today is completely different from the past. The economy is growing rapidly, which force the life style change fast too. The changing life standard has always been challenging to the business community. On the other hand, it also provides opportunities to produce different types of goods and services to fulfill the changing needs of people. In order to balance change and needs, continuous flow of investment is must. No investor invests his/her capital until he/she is fully assured that investment is safe. Everyone invests expecting more some return from their investment. According to the risk bearing nature, the investors can be divided into three category; risk seeker, risk avoider and neutral. Risk is the fact of life and return is reward for bearing the risk.

People invest in shares for different purposes. Usually, investors invest their capital hoping to gain some capital growth in future. In this context, risk and return characteristics play a vital role in choosing the investment alternatives. It is thus, said that relationship between risk and return is described by investor's perception about risk and their demand for compensation. No investor will like to invest in risky assets unless he is assured of adequate compensation for the acceptance of that risk. Therefore, risk plays a central role in the analysis of investments. Higher risk gives higher return and the trade off between the two assumes a linear relationship between risk and return.

Capital market is regarded as the most suitable avenue to invest as they provide an effective vehicle for making investment choices which suit investors' own preferences of risk and returns based on available information and the most popular and reliable place to invest. Thus,

capital market plays a major role in economic development of the country as general people invest their savings and capital in it. It is a barometer of economic development and sustainable growth of the capital market depend upon the hosts' factors.

NEPSE is the only stock market in Nepal. Apart from being developed from the time it established, more effort is necessary for the better development of the stock market. Investors still hesitate to invest in securities because of lack of proper knowledge and well guidance in this field. Investors want to have full information about risk and return from their investment and they should be confident about their investment being utilized in secured field.

Since the main objective of the study is to analyze the risk and return of common stock in Nepalese context, the study mainly focused on the common stocks of listed joint venture commercial banks. Thus, four listed commercial banks are taken as reference to achieve its objectives. While analyzing risk and return, brief review of related studies has been performed. Scientific methods are used in data analysis and tables, graphs, diagrams are used, where possible, to interpret and present the results. Data are collected from the annual reports of individual banks, annual report of SEBO, NEPSE, quarterly reports from NRB and internet. Findings of analysis and conclusion are drawn as follows.

5.2 Conclusion

NEPSE is still operating in its nascent stage. Most of the listed companies rarely publish their financial statements comprehensively within a specified time frame. Although the overall objective is to study about investment in common stocks of selected joint venture commercial banks in Nepal from the perspective of general investors, it is mainly concentrated on the risk and return elements of the stock, since it is the two most important factors for investment. The capital market of Nepal has grown significantly, so investor's investment opportunity has also been increased.

The Market Price of Share of all the commercial banks showed the same trend of increasing. The market price share of Standard Chartered Bank is the highest while that of Himalayan Bank is the lowest in the year 2063/64 among the selected joint venture commercial bank.

Return is the changes in value plus any cash distribution expressed as a percentage of the initial value of an investment. The expected return of Nabil Bank is maximum (58.71%) among the selected banks. This is due to the effect of very unrealistic annual return in fiscal year 2063/064. Similarly, the expected returns of Himalayan Bank is minimum (31.23%) among the selected banks .The expected returns of Standard Chartered Bank and Everest Bank are respectively 45.72% and 54.54% during the five year review period.

Risk is the variability of returns, which is measured in terms of standard deviation. On the basis of standard deviation, common stock of Nabil Bank is more risky since it has higher standard deviation and common stock of Himalayan Bank is least risky because of its lowest standard deviation. On the other hand, we know that the coefficient of variation is more rational basis of investment decision, which measures the risk per unit of return. On the basis of coefficient of variation, Everest Bank is the best among the selected banks. Everest Bank has 0.4948 unit of risk per 1 unit of return. But common stocks of Nabil Bank has the highest risk per 1 unit of return i.e. 0.736. Standard deviation is only the measure of unsystematic risk, which is not defined by the market. Another measure aspect of the risk is systematic risk, which is defined by the market and measured by beta coefficient. Beta coefficient explains the sensitivity or volatility of the stock with market, higher the beta, greater the volatility. In this context, Common stock of Nabil Bank is most volatile i.e. 1.4555, which shows that the bank has aggressive type of stock and positive correlation with market. Common stock of Himalayan Bank is least volatile i.e. o.6750 which shows the bank has defensive type of stock. Similarly Standard Chartered Bank and Everest Bank have defensive type of stock as their beta coefficient is less than one.

Diversification of fund by making a portfolio can reduce unsystematic risk of individual security significantly. If investors select the securities for investment, which have highly negative correlation of returns, the risk can be reduced totally. All the selected banks have positive correlation with the market which lies between -1 to +1. Alpha explains the rate of return of individual stocks even the market is stationary. Amongst the sampled banks, Standard Chartered Bank has the highest alpha indicating that is earn 21.17% even market does earn nothing. The lowest alpha of Everest Bank signifies that it earned the lowest 2.97% even market earns nothing.

One of the main significance of beta is in Capital Asset Pricing Model. Capital Assets Pricing Model is the model that describes the relationship between risk and required rate of return. Comparison between expected rate of return and required rate of return identify whether the stock is overpriced or under priced. If the required rate of return is lower than expected rate of return, stock is known as under priced. If the required rate of return is greater than the expected return, the stock is overpriced. This study shows all the stocks of commercial banks are under-priced. This means that the stock value will be increased in near future. All the stocks are in demand so; investor can buy the common stock of any bank.

Price earning ratio of the sampled banks ranges from 17.598 times to 20.098 times. Generally said, it indicates investors' expectation about the firm's performance. The realized rate of return of Nabil Bank was the highest amongst the observed banks price earning ratio (5 year average) of the same bank is the lowest. Pricing earning ratio of Himalayan Bank was recorded the highest 20.098 entire banks realized rate of return of the same bank is the lowest. Perhaps this kind of relationship in Nepalese stock market deserves further investigation.

Capital market plays a major role for the economic development of any country like Nepal. It is a barometer of economic development and sustainable growth of the capital market depend upon the hosts of factors. From the government policy to the individual awareness are equally important to maintain investment environment.

In Nepalese Capital market, the contribution of the real sector is negligible. Banking and financial sectors occupy majority of pie in terms of capitalization and turnover. Nepalese capital market is not well developed and the movement of the prices mostly is originated of psychological factor. Coverage of media is minimal. Rationale behind irrationality of Nepalese capital market is to be unearthed. The major conclusions which emerge from study are drawn as follows;

The average rate of interest of 364 day T-Bill was 3.50% and the realized rate of return on market is 36.03% indicating that the market risk premium was 32.53%. The range of data of T-Bill was ranging from 3.5 to 4.71. It has an implication to determine the required rate of return..

Through the shares of Commercial Banks in Nepal are heavily traded in NEPSE, none of the share price is correctly priced. Theoretically, the market price of an overpriced share will fall and that of under priced will rise in order to maintain (increase/decrease) the expected return so that the expected (realized rate of return) will be equal to the required rate of return. Therefore, the price of the entire share will have a positive price trend towards the equilibrium.

5.3 Recommendations

Basically, this study has focused on individual investors. Moreover other components of stock market are also considered to some extent. Based upon the data analysis recommendations/suggestions are presented as follows;

a. Recommendation to the Investors

Investors should be clear about their objectives. Stock market investment is a risky business. To gain in the stock market investment, investors should be always clear about ones own strengths, weakness, needs, desires and flexibility to take risk. This is one game where self-knowledge, sound understand on the information of stock market can give a winning edge to the investors. Investment should be done with clear objective and is suggested that a better investigation need to be carried before investing otherwise, it will be like pouring water in sand hopping to collect water.

Investors have to think about both risk and return. Investors have to focus their mind both on risk and return. Risk and return are associated with each other. Therefore, before thinking about higher return, they also have to think about the risk associated with this return. So the risk averter investors can invest on the moderate types of shares having low risk and high return.

Investors must think about the condition of the market and economic and non economic factors affecting the market. Normally investors think that investment on stock market is ever

beneficial. They think that the price of shares always increases and there is every time benefit. But in really, it is not true. The price share may decreases due to several reasons like systematic risk and unsystematic risk and these factors affect the stock market. Especially the political factors influence the price of share in Nepal because these scenarios affect the economic policy. So, before investing the fund on stocks of any companies, investors must think about the condition of the market and economic and non economic factors affecting the when market. To win the market, sell the share when market is rising and buy the share when market is falling and hold the share. It will perform better than the market.

Investors' decision should be based on reliable information rather than the rumors. Before making an investment decision in stock market, assessment of personal risk attitude, needs and requirements will always be helpful. To make several discussions with stock broker before reaching at the decision, on the basis of reliable information rather than the rumor and illogical perception will ultimately favor the investors. Investors should make their decision on financial parameters of the company. They should not rush over these factors.

People invest in the share market for different purposes. Some possible objectives would be to maximize dividend income, maximize capital gain in the short run, maximize total capital gain and minimize risk. The study found some suggestions regarding this as below;

i. If the purpose of investing in shares is to maximize dividend income then it is better to invest in low priced stock which pay equal dividend rate as high priced stock. Investing in shares of finance companies and insurance companies falls in the category.

ii. If the purpose of investing in shares is to maximize return by capital gain then it is better to invest in highly fluctuating (in MPS) companies or newly listed companies. The price changes can provide a handsome capital gain to the investors.

iii. If the fundamental objective of buying securities is for the purpose of borrowing, then it is better to invest in those securities that promises more   certain return as well as growth. Such stocks are those of Nabil Bank , Standard Chartered Bank and Everest Bank.

iv. If the objective is to minimize the risk, investors require selecting stocks that remain less fluctuating in the market. Investing in stock of Himalayan Bank is the best in this category

It will be better to diversify the investment before investing. While investing in common stock, it is advised to diversify the investment. Diversification will reduce the risk associated with the individual stocks. For the diversification, theoretically, it would be better to select the stocks which have higher return with negatively correlated stocks. Since, it is hard to found the perfectly negative correlation, it is better to choose the correlation which lies on the range of +0.4 to +0.75. In this sense, it is prescribed to select the common stock of Standard Chartered Bank and Himalayan Bank for diversification.

b. Recommendation to the NEPSE and SEBO

i. The role of the NEPSE and the SEBO should be concise, clear and effective. The establishment of the NEPSE has not been so long, that is why the prevalently regulatory process has not been found effective and satisfactory. The role of the NEPSE and the SEBO should be concerned concise, clear and effective. Ethical perspectives should be incorporated the Nepal Government and other concerned authorities has to play decisive role to create conductive environment. The malpractices like insider trading and manipulation of the stock's price through secret information channel should be harassed and penalized. The minimum number of shares to be traded and the maximum shareholding limit should be increased rationally. The NEPSE should well co-ordinate with other line agencies. Adherence to the policy is must. Perhaps, NEPSE has to enforce.

ii. NEPSE and SEBO must published the data in their journal and organize training programs and seminars. Lack of timely rules and regulations regarding investing in stock market also have a negative impact in the investors. Therefore, authorized institutions like NEPSE and SEBO should disseminate such information through their journals and organize training program and seminars to educate private and general investors regarding these rules and regulations.

iii. NEPSE and SEBO needs to take quick actions in breaking rules and regulation by and company. The false or fraud report of the corporate firms mislead the general investors, so those companies/ firms who provide false or fraud report should be delisted from the NEPSE and should reprimand strongly so that other companies/firms may learn from it. As a main regulatory body, SEBO needs to take quick action in breaking rules and regulations by any company or any other component of stock market.

iv. NEPSE should adopt modern and sophisticated trading system. The present infrastructure facilities available in the NEPSE's trading floor are not adequate to make quick and reliable transactions. Therefore, it is imperative for the NEPSE to adopt modern and sophisticated trading system. Effective information channel should be launched. Data available in the websites of NEPSE should be up-to-date and the concept of on line trading should be developed.

v. Government has to implement the rules and regulations regarding stock market strictly. Government needs to amend the rules and regulation regarding stock market in time to time and to make the policy that protects the individual investor's right. And also need to follow up the implementation of rules and regulations and to make sure the objectives are achieved. On that regard, Nepal Government needs to monitor and to make active all the components of stock market properly. The government has to implement the rules and regulations strictly; otherwise it will be meaning less. The political problem of the country is another burning issue, which affects the economy of the nation adversely. At present, the industry and share market is in declining trend and it will be completely finish if present political problem will not solve soon.

BIBLIOGRAPHY

American Institute of Banking (1972), *Principles of Bank Operation.* USA.

Bhalla, V.K. (1983). *Investment Management.* New Delhi: S. Chand and Company Ltd.

Bhalla, V.K. (1977). *Managing International Investment and Finance.* New Delhi: Anmol Publications Pvt. Ltd.

Brigham, E. F., Gapenski, L. C, and Ehrdhart, M. C. (2001). *Financial Management.* New Delhi: Harcourt Asia Pvt. Ltd.

Chaney, J. M. and Edward, A. M. (1999). *Fundamentals of Investments.* New York; West Publishing Company.

Francis, J. C. (2000). *Investment Analysis and Management.* New York; McGraw Hill,

Gitman, L. J. (2001). *Principles of Managerial Finance.* Singapore; Addison Wesley Longman Pvt. Ltd.

Gupata, O.P. (1989). *Stock Market Efficiency and Price Bahavior.* New Delhi: Anmol Publications.

Gupta, O.P. and Abral, P.N. (1999). *Dictionary of Commerce.* New Delhi: Anmol Publication.

Gupta, D.P. (1984). *The Banking System: Its Role in Export Development.* Geneva: International Trade centre.

Goetzmann, W. N. (1999). *An Introduction to Investment Theory,* Yale School of Management.

Hampton, J. J. (1996). *Financial Decision Making: Concept, Problem and Cases.* New Delhi: Prentice Hill of India Pvt. Ltd.

Khan, M.Y. and Jain, P.K. (1981). *Financial Management.* New Delhi; Tata McGraw Hill Publishing Company Ltd.

Kothari, C.R. (2000). *Research Methodology: Method and Technique.* New Delhi: Wishwa Prakashan.

Loric, James H., Dodd. Peter and Kimpton (1983), *The Stock Market Theories and Evidence.* USA; Irwin Inc.

Mahat, R.S. (1981). *Capital Market, Financial Flows and Industrial Finance in Nepal.* Kathmandu: Sajha Prakashan.

Pandey, I.M. (2001). *Financial Management.* New Delhi: Vikash Publishing House Pvt, Ltd.

Rebort, O. Edmister (1980). *Financial Institution.* New York. McGraw- Hill Book Company.

Sayer, R.S. (1976). *Modern Banking.* India: Oxford Clarenden Press.

Sharpe, William F., Alexander, Gordon J. and Bailey, Jaffrey V. (1995), *Investment*, 5th edition, USA; Prentice Hall.

Sharpe, William F., Alexander, Gordon J. and Bailey. Jeffrey V. (1999). *Investment.* 6th edition, New Delhi; Prentice Hall of India Pvt. Ltd.

Sharpe, W. F., Alexander J. G. and Bailey J. V. (2003). *Investment Analysis and Management.* New York: McGraw Hill.

Shrestha, M.K. (1992). *Financial Management: Theory and Practice.* Kathmandu: Curriculam Development Center, Tribhuvan University;

The New Encyclopedia Britannica (1985). *The World Book.* London.

Van Horne, James C. (1997). *Financial Management and Policy.* New Delhi: Prentice Hall of India Pvt. Ltd.

Van Horne, James C. and Jr. Wachowitz, John M. (1985). *Fundamental of Financial Management.* U.S.A: Prentice Hall Inc.

Weston. J. Fred and E.F. Brigham (1992). *Essential of Managerial Finance.* Chicago: The Dryden Press.

Weston. J. Fred and Copeland. Thomas E. (1990). *Managerial Finance.* Orlando, Florida: The Dryden Press.

Wolff, Howard K. and Pant Prem R. (1999). *Social Science Research and Thesis Writing.* Kathmandu: Buddha Academic Enterprises.

UNPUBLISHED MASTER THESIS

Bhatta, Gopal Prasad (1995), *Assessment of the Performance of Listed Companies in Nepal.* An unpublished MBA thesis, Central Department of Management, T.U.

Bhatta, Tanka Raj (2003), *Investment in Share of Commercial Bank in Nepal;* An Assessment of Risk and Return Element . An unpublished MBS thesis. Shankar Dev Campus , T.U.

Mishra, Shankar Kumar (2002), *Risk and Return on Common Stock Investment of Commercial Bank in Nepal,* An unpublished MBS thesis. Shankar Dev Campus, T.U.

Maharjan, Surndra Man (2004), *Measurements of Risk and Return on Investment on Common Stock of Commercial Banks in Nepal,* An unpublished MBS thesis, Shankar Dev Campus, T.U.

Pandey, Pramina (2001), *Risk and Return Analysis of Common Stock Investment,* An unpublished MBS thesis, Shankar Dev Campus, T.U.

Sapkota, Jeet Bahadur (2000), *Risk and Return Analysis of Common Stock Investment,* An unpublished MBS thesis, Central Department of Management , T.U.

Shrestha, Anup Kumar (2005), *Investment in Shares of Commercial Banks of Nepal; From the Perspective of Capital Assets Pricing Model,* An unpublished MBS thesis, Central Department of Management, T.U.