

**STOCK PRICE BEHAVIOR OF COMMERCIAL BANK OF  
NEPAL**

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## RECOMMENDATION

This is to certify that the thesis

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Entitled

**“STOCK PRICE BEHAVIOR OF COMMERCIAL BANK OF NEPAL”**

has been prepared as approved by this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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## **VIVA-VOCE SHEET**

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommended the thesis to be accepted as the partial fulfillment of the requirement for Master’s Degree in Business Studies (M.B.S.).

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## **DECLARATION**

I hereby declare that the work done in this thesis entitled "STOCK PRICE BEHAVIOR OF COMMERCIAL BANK OF NEPAL" submitted to Saptagandaki Multiple Campus, faculty of management, Tribhuvan University of Nepal is my original work. It is done in the form of partial fulfillment of the requirement of the degree of Master of Business studies (MBS) under the supervision and guidance of Mr. Kapil Dev Subedi, Lecturer of Saptagandaki Multiple Campus.

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## LIST OF ABBREVIATIONS

$\bar{X}$	:	Arithmetic mean
BS	:	Bikram Sambat
C.V.	:	Coefficient of variation
DPS	:	Dividend per share
EPS	:	Earning per share
MPS	:	Market price per share
BPS	:	Book price per share
F/Y	:	Fiscal year
P/E	:	price earnings ratio
D/Y	:	Dividend yield
E/Y	:	Earning yield
HBL	:	Himalayan Bank Limited
NIBL	:	Nepal Investment Bank Limited
SCB	:	Standard Chartered Bank
EB	:	Everest Bank
SB	:	Siddhartha Bank
r	:	Correlation coefficient
$r^2$	:	Coefficient of Determinants
SE	:	Standard error Estimation
S.D.	:	Standard Deviation
SEBON	:	Securities Board of Nepal
NGO	:	Non governmental organization

# CHAPTER ONE

## 1.1 Background of the study

Fund used to get additional income is called investment. It is done to increase the value of property or to get extra income. The essential of doing investment is to wait time to get something return from it. In this sense investment is using fund at present to get additional return in future .It involves receiving resources for future without any consumption present. Investment involves long term commitment waiting for a reward.

Investment generally involves real assets or financial assets. Real assets are tangible, material things such as buildings, automobile, machinery, factories and text books .Financial assets are price of paper representing an indirect claim to real assets held by someone else-these pieces of paper representing debt or equity and stock certificates.

“Investment may be defined as he purchased by an individual or institutional investor of financial or real assets that produces a return proportional to the risk assumed over future investment.” -F. Amling

Stock markets are very important economic institutions that play a crucial role in the economy by channelling investment where it is needed and can be put to best use (Lieberman and Fergusson, 1998). So, the stock markets works as the channel through which the public saving are channelized to industrial and business enterprises. Mobilization of such resources for investment is certainly a necessary condition for economic take off, but the quality of their allocation to various investment projects is just as an important factor for growth. This is precisely what an efficient stock market to the economy (Berthelemy and Varoudakis, 1996).

Nepal is one of the least developed countries. For the development of country, capital market plays the vital role in facilitating and providing better institutional arrangement for borrowing and lending of long-term funds. It is regarded as general barometer that measures the proper collection and mobilization of saving of productive and income generating sector. The allocated efficiency in the use of funds is the basis for measuring the performance of capital market.

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

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

Stock market is an institution, area and process where stocks and other securities are bought and sold continuously. Principally stock market is the secondary market where quoted securities are sold by open offer. The trading of shares of stock takes place in the stock market on one hand it directly provides liquidity to the investors who provides fund for the establishment of the production enterprises and on the other hand it encourage the savers to save more and more enterprising economic units to starts the productive ventures.(Barua and Verma; 1995, 23)

The major function of stock market is to provide steady and continuous market for purchase and sale of securities at a competitive price by

importing marketability and liquidity. It is also a medium through which scattered savings and scarce resources are transferred into productive areas that ultimately help to the economic development and industrialization of the country. The basic function of the organization is to get profitable investment opportunities and to offer the avenue of liquidity for individuals to invest current income or borrow against future income. Because of uncertainty in investment, capital market provides a means for transferring risk among the parties to this transaction. The stock market and economic activities move into similar direction. In the Nepalese economy the demand and supply of money for investment in productive enterprises is low due to the absence of mechanism for transferring risk which in turn may be attributed to the absence of well developed stock market.

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

There are many factors that should be considered while taking investment decision in the securities market. Some of these are the book value of the stock, risk and regulations, the direction of Nepal Rastra Bank. Because of the poor corporate governance and lack of timely information the investors depend upon some available experts for the analysis of the stock price. Beside the individuals investors dominate the market, the potential investors depends on the whim and rumor in stock trading. So this

research study will try to evaluate the investor's consciousness and the ways to be more effectively aware regarding the stock exchange.

## **1.2 Focus of the study**

In Nepalese stock or security markets the market price of share moves upwards and downwards daily. So what factors affects the market price of share? How the market price of share determine in the secondary market, finding the solutions of this problem, a case study of the securities market in Nepal is essential. Generally, accuses of price movement may be signalling effect, low return and high risk, lack of adequate knowledge about share market, low income of the investor's and high price of the shares. So, there is close relationship between the share price and volume of the share traded, i.e. high price, low volume and low price, high volume.

Security prices play vital role in channelling the flow of capital into various industries. The behaviour of price of securities has been a controversial subject matter among the academics of financial and economic circles. To some extent, in fairly competitive and well advanced economy, the prices of the securities are competitive and determined by market forces. There ought not to be any different between present value and market value of shares. In other words, securities prices are sent by the demand and supply of securities. Market makers try to quote an equilibrium prices that equates the supply with the demand.

Investors invest their money with the hope of getting good return in their investable fund but due to many reasons they lose their hard earning. While investment made without analyzing the stock. Many times investors blindly invest their funds by just reading the prospectus availed by the issuing companies and many times they purchase share any

analysis. So the study is focused to stock to stock prices behaviour of commercial banks trading at NEPSE.

This study is mainly focused to know the effect of prices trend, volume of stock traded, market behaviour and impact of signalling factors on NEPSE index.

### **1.3 Statements of the Problem**

Today stock market has become global phenomenon however; the stock market in Nepal is still in infancy stage. The history and securities market began with the flotation of shares by Biratnagar Jute Mills Ltd and Nepal Bank Ltd.

Stock market behaviour is the backbone of investment sector of the country. So by promoting the stock market is sizeable economic sector gives raise the economic developments by mobilizing swing into productive sector by making suitable investment for investment environment different element like price trend, NEPSE index, volume of stock traded, rate of listing and signalling factor should be analyzed.

Usually the price of common stock in primary market is par value but in secondary market may be any price. The long securities processing cycle has restricted to the development of securities market. The investors have to wait for opportunities. Low prices and low trading volume of companies have directly related to market value of firm. Due to lack of sound dividend policy, most of the companies have not been able in maximizing the value of a firm in secondary market. Lack of sufficient information dissemination to investor and lack of transparency has another problem that exists in Nepalese stock market. It mainly affects position of the company market information system and corporate governance of the company.

Talking about the capital market in Nepal there is no way to justify that it is perfect. Being an imperfect market the floor ob price of the listed company's shares cannot represent their true values. The options remained are undervalued or overvalued stocks. There might exit situations where stocks are too overvalued or undervalued. There are various visible problems in the capital market. It is not possible to address all the problems. Considering this and the focus of the study in mind, this study has attempted to seek the answers of the following issue.

- a. What is the share price behaviour of listed companies?
- b. What is the behaviour of NEPSE index?
- c. What is the impact of volume of stock traded in stock price fluctuation?
- d. What is the impact of price trend on stock price behaviour?

These are the burning issue regarding stock price determination of secondary market in Nepal.

#### **1.4 Objectives of the Study**

The main objective of the work is to study the variation of stock prices of sampled banks and to get into the depth of causes of variation .They are not doing well in Nepalese stock market. The attempt will made to analyse the data available and most of the serial coefficients are significantly deviated from zero and statistically insignificant. It signifies that the successive price changes are dependent. Therefore, the Nepalese stock market is inefficient in pricing the shares. The specific objectives of the study are

- a. To examine the fluctuations in the Nepalese stock market.
- b. To study the shares traded in different periods.

- c. To analyze stock price trend and volume of stock traded on the secondary market.
- d. To find out the relationship of BVPS and MVPS of listed companies.
- e. To present some recommendation basis of the findings of the study.

### **1.5 Significance of the study**

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

### **1.6 Limitation of the study**

This study has limited scope, as only some samples of the listed commercial banks have been taken for study. Similarly, the study areas are also mainly focused on determining factors of share price behaviour in Nepalese commercial bank. Thus the study area is very specific. This study is dependent on both the primary and secondary data published from the related banks. So, accurate and reliable data may not be obtained. The following limitations during the course of research are:

- a. The study is limited only in the few commercial bank of Nepal.

- b. The constraints of financial resources.
- c. The study only covers the five-year data of the selected banks.

## **1.7 Organization of the Study**

This study has been divided into five chapters - introductions, review of literature research methodology, data presentation and analysis and conclusion and recommendations.

Chapter I: This chapter deals with the introduction part of the study. It includes background, statement of the problem, objective and significance of the study and limitation of the study.

Chapter II: This second chapter deals with the reviews of available literature available in the field of the study being conducted through different books, journals, unpublished dissertations which includes the theories of the concerned topic and other empirical studies conducted inside or outside the country.

Chapter III: This chapter is the most important part of the study. It explains the research design population and sample, methodology employed to conduct the study and tools and techniques used in analysis of the data as well.

Chapter IV: Fourth chapter is devoted to the data presentation, analysis interpretation and scoring the empirical finding out of the study. This chapter attempts to analyze and evaluate data with the help of analytical tools and interprets and evaluate data with the help of analytical tools and interprets the result obtained and this chapter is the main body of the text hence assumes higher places significance.

Chapter V: Fifth chapter of the study provides summary conclusion and recommendations. Besides these, bibliography and appendices are presented at the end of thesis work.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

Review of literature is a way to discover what other research in the area of our problem has uncovered. It is also a way to avoid investing problems that have already been definitely unanswered. (panta, 2002; 34) the review is done on the topic stock price behavior in Nepalese capital market. Review of literature is conducted separately through review of article, books, journals, dissertations, company prospectus etc.

#### **2.1 Conceptual Review**

The success of every investment decision matters more than the investment itself. Making sound investment decision requires both knowledge and skill. Skill is needed to evaluate risk and return associated with investment decision knowledge is regarding the complex investment alternatives available in the economic environment. Investment should be based on information and lack of this result leads to disaster. For the knowledge, the investor should select most suitable alternative among various alternatives. Thus conscious investor should consider some factor in choosing among investment alternatives.

##### **2.1.1 Introduction**

Over time, stocks have proved to be good long-term investments. Bonds, while providing lower than stocks, are less risky. Often, the best investment for an individual is some combination of stocks and bonds that provides good returns at acceptable risks. Stocks and bonds are basic financing building blocks, which helps to meet the financial needs of companies, governments, and investors. Business requires capital (money) to grow, and without capital from outside investors, a company's growth

potential is limited. Corporate business sells stocks and bonds to raise money.

Government agencies can so raise money for operations and improvement by selling bonds. Stock exchange is the heartbeat of much of the corporate, governmental and public financial activity in the world today. Stocks and bonds are bought and sold in these open markets under careful regulation, which protects companies, governmental agencies and individuals alike. Such markets are essential in raising capital for our economy. Investors buy stocks and bonds with the intentions of getting back their entire investment and making a profit. This booklet present basic information about these familiar financing building blocks and discusses the pertinent issues about investing in stocks and bonds.

### **2.1.2 Understanding stocks**

Selling shares of stock to investors is a practical way for corporations to obtain long-term funding for projects such as financing a new factory or designing and testing a new product. Buying stock allows individual investors to participate in the growth of country and foreign corporations and to benefit by sharing in a company's profits. Corporations sell fractions of the company's ownership to investors for which investors pay cash. The investors who purchase ownership of the company have their names and ownership record in the corporation's stock book. A company's investors, who have purchased pieces of company ownership, share in company profits from the receipt of cash dividends or by the increase in the value of stock. The investor's ownership is known as "share". The investors are called "shareholder". They may also receive stock certificates showing the number of shares owned. (shakya; 2005, 32 )

Money from stock sales is known as “equity” financing. Equity differs from debt financing because money from stock sales represents long-term financing which the company does not have to repay. The company benefits by not having to repay money it receives from the sales of stock and investors benefits by participating in the growth of the company and sharing in its profits for as long as they own the stock.

### **2.1.3 Stocks as a potion**

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

### **2.1.4 Common stock**

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

- (i) **May receive Dividends:** The Corporation’s board of directors may vote to share all or a portion of company profits with its shareholders in proportion to the number of shares each owns. Dividends are not paid if the company is not profitable or if the board of directors decides to pay for expansion with the profits. Corporations are not legally required to pay dividends on common stock.
- (ii) **May share in Growth and increased value:** Stock is ownership of the company. Stock ownership allows investors to share in the increased value of the company if it is successful. Likewise, if the company performs poorly, the value of an investor’s shares is

likely to drop. Investors expect their largest rewards from appreciation in the price of their stock, but there is no guarantee that the value of the stock will always increase.

- (iii) **May Transfer ownership:** Common shareholders are able to freely sell or give their stock to others unless they own stock in private companies, which may restrict the resale. Ownership of investor's shares is easily transferred in the corporation's stock book.
- (iv) **Have right to get informed:** Common shareholders are entitled to receive annual reports, which provide important financial and management information pertaining to the company's operations.
- (v) **Have a right to vote:** Common shareholders have the right to vote at shareholder's meeting in person or absentee using a proxy (an instruction on how a vote is to be cast)
- (vi) **Is junior in rank:** Dividends are paid to common shareholders after interest is first paid on all debts and dividends are paid to preferred shareholders. If the company is liquidated creditors, bondholders and preferred shareholders all must be paid before any remaining money is distributed to common shareholders.

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

### **2.1.5 Preferred Stock**

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

- (i) **Priority on Dividends:** Preferred shareholders receive their dividends after interest on debt, but before dividends are paid to common shareholders. In liquidation, creditors are paid first and then preferred shareholders are paid.
- (ii) **Fixed Dividend:** Preferred stock dividends are generally paid at a fixed rate similar to interest on a bond or a certificate of deposit. Although the rate is fixed, preferred dividends may be decreased or omitted at the discretion of the company's board of directors (unlikely interest on bonds). If profits are insufficient to pay both preferred and common dividends, the dividends will be paid to preferred shareholders before common shareholders receive anything.
- (iii) **Cumulative Dividends:** Once the dividends are resumed and before common dividends can be paid, cumulative preferred shareholders must be paid their accrued dividends.
- (iv) **Voting right:** Companies do not allow preferred shareholders to vote at shareholder meeting. In rare circumstances, preferred shareholders may be allowed to vote after dividends have not been paid for a long period of time.
- (v) **Participates in Growth and Increased Value:** Preferred stock grows in value as the value of the company increases; however, preferred stock has a more modest price appreciation potential than common stock.
- (vi) **Ability to Transfer:** Preferred shareholders may freely sell or give their stock to others. This assumes, of course, that a buyer for the stock can be found. The ownership of the share is easily transferred in the corporation's stock book.

- (vii) Right to information: Preferred shareholders receive annual reports providing information about the company's financial and management performance of the prior year.

### **2.1.6 Buyer of Stocks**

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

### **2.1.7 Causes of Buying Stocks**

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

Stock prices do not always go up. Investors must be aware that stocks can go down in price if companies are not profitable. Successful investors invest in stock as long-term investments. Over many years, gaining in the value of the stock usually made up for short-term price declines. Stocks may also benefit investors by paying "stock dividends". Occasionally, companies may desire to promote their stock while conserving company capital. In such cases, a company's directors may give shareholders additional shares instead of cash dividends. The new shares have value,

but the company's stock price usually falls slightly to adjust for the great number of shares that will participate in the company's profits.

Investors occasionally receive stock splits. Stock splits reflect substantial growth in a company's stock price. In a split, the outstanding shares of a company are divided into more shares. A 2 for 1 split of one hundred shares presently owned results in two hundred shares being owned after the split. Investors hold twice as many shares, and the price of each share is "split" to half its former price. Stock splits are used in a rising market to reduce the stock price down to an amount investors perceive as reasonable. Investors hope for a stock split, which reflects strong growth by the company.

### **2.1.8 Causes of Fluctuation of the Stock Price**

Chiefly, stock price reflects how profitable a company is. If a company loses money over a period of several months, the stock price will likely to fall. If a company is successful and has sustained earnings, the company's stockholders share in more money so the stock price rises to reflect greater investor returns. Earnings are influenced by a variety of factors. These may be grouped into three categories.

- (i) **Company Related:** Market share, product position and potential, management, and cost of operation influence individual company earnings. An example is Chrysler, the automobile manufacturer. Its stock price declined sharply due to poor car sales and poor earnings. Subsequently, stock prices recovered due to better management, improved products and sales and better earnings.
- (ii) **Industry Wide:** Foreign competition, technology consumer perceptions, and price of raw material can influence earning and stock prices of all companies within an industry. A good example is airline fare wars during which lower fares on all flights mean

lower earnings for all companies in the airline industry. Stock prices for all airlines may fall as profits are squeezed.

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

### **2.1.9 Place of Stock Trade**

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

### **2.1.10 Brokers-Dealers Firms**

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

### **2.1.11 Security Exchange**

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

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

### **2.1.12 Dividend Reinvestment Plans**

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

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

### **2.1.13 Sources of Information**

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

### **2.1.14 Stock Guides**

Stock guide provides financial information about the company, information about the company's business and the industry it serves. Guides may provide dividend information, current earnings and names of officers and directors, and high and low stock prices over the preceding weeks. Some stock guides rank or classify stocks giving investors an indication of earnings and dividend growth and stability. Stock guides are available at many libraries, from broker dealer firms, and now through on-line computer services. Investors should never purchase stock without first reading what the stock guides have to say about a company's stock.

### **2.1.15 Quotations**

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

### **2.1.16 Selection of Stock**

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

### **2.1.17 Growth Stocks**

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

### **2.1.18 Income stocks**

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

### **2.1.19 Blue Chips Stocks**

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

### **2.1.20 Small-Cap Stocks**

These are stocks in companies which are modestly capitalized, but which are not yet top tier companies. Investment in small-cap stocks often involves higher risk to the investor than purchasing blue chip stocks. Small-cap stocks have the earnings potential for rapid or dramatic price appreciation. Most do not pay dividends.

### **2.1.21 Penny Stocks**

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

### **2.1.22 Factors to be considered before Investing in securities**

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

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

typical investments considered by most. The following are the criteria investors will apply to each investment choice:

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

### **2.1.23 How to make a Good Investment in the Stock Market**

Investing in securities is like investing in a business. The objective is to get a good return. This could be either to get a regular income by way of dividends or to get a profit by way of capital appreciation of the securities or both. An investor who is interested in getting regular dividends from the company must look at the company's dividend policy carefully. Where a company has not stated their dividend policy they could make an assessment of this by analyzing the companies past dividend record and its pattern of payment. There are several ratios that may be used in investment analysis. Most commonly used ratios are as follows:

Calculating the dividend yield on the basis of the last annual dividend can give an investors an idea of what the percentage return he could expect by way of dividend ( $\text{Dividend yield} = \text{Dividend per share} / \text{Market price of a share} \times 100$ ). The dividend cover is a guide to the company's financial background indicating the total dividends covered with respect to available earnings ( $\text{Dividend cover} = \text{Profit} / \text{Dividends}$ ). Dividend payout ratio is also useful to ascertain whether the company is retaining sufficient funds for future development and growth. A high ratio indicates

that a shareholder is receiving a large part of the earning that the company is not retaining much by way of reserves. This may mean that a shareholder cannot accept much by way of capital appreciation.

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

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

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

#### **2.1.24 Aware of risks**

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

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

Financial risks can be measured by the return to shareholders and the probability of the company having to go into liquidation brought about by the inefficient use of borrowed funds or by borrowing more than what the company could service. The higher the proportion of borrowed funds, the higher is the capital gearing. This gearing ratio (gearing ratio = borrowed funds / total funds) must be considered along with the current ratio

(current ratio = current assets / current liability). If this is also high then the risk is greater. If the company has not made profits, the directors will not be able to declare a dividend.

An investor may minimize the risks by making a fully informed decision. He could obtain the advice of his broker or else he could make a decision himself by reading the annual reports of the company carefully and in addition considering the following factors: economic factors of the country and future trends, performance of the industry, quality of the company's management, reputation of the board of directors, company's current trading position, strengths and weakness of the company and the business risks involved. An investor must not be guided by rumors. To minimize risk, he may invest in securities of several companies, preferably operating in different industries. Investors should invest in securities only after having considered all of the above factors. By investing in securities traded on the stock market there is a possibility of getting a higher return by way of dividends and/or capital appreciation. Therefore to increase your income, trading in securities on the stock exchange may be advantageous.

### **2.1.25 Ten Tips for buying Stocks**

1. Buy stocks from local broker-dealer. Be very careful if you cannot find a current quotation for the stock listed in the journal.
2. Be prepared for the price of the stock to fluctuate up and down. Do not buy stock if you cannot risk loss of any money.
3. Remember the rule of thumb, which states, "when interest rates are high, stock prices die, and when interest rates are low, stock prices grow!"
4. Keep in mind that investors demand higher returns from stocks when taking on higher risks. If you are told of a stock with a high

profit potential, realize the stock probably carries a higher than normal amount of risk.

5. Consider the source of “hot stock tips.” What may be a promising stock for one person may be too risky for another. Once you hear of the stock tip, chances are that everyone else has heard the same information.
6. Understanding a stock’s risks before buying allows the investor to say, “No, I’ll pass up buying this one.” Buying stocks before their risks are known is like playing for a car you have never seen.
7. Research a stock’s earnings, dividend history, and price range in a stock guide to determine whether the stock meets your investment needs.
8. Make sure there is an active trading market where the stock may be easily sold.
9. Buy stock with the idea of holding it for the long term. If its price appreciates rapidly, so much the better, but most stocks benefits investors over the long term.
10. Do not take on too much risk when buying stock. Invest wisely and be able to sleep well at night.

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

## **2.2 Reviews of Related Studies**

### **2.2.1 Review of Articles and Journal**

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

According to James Stuart, “Public borrowing must be adjusted to conditions of trade at the particular time. It would only raise the rate of interest and have undesirable consequences for commerce. On the other

hand, when circulation is stagnating in one part of the economy and there is unemployment and a slackening of trade industry. The state should absorb this excess and through its expenditures throw it into new channels of circulation. Thus the use of public credit is convinced as the balance wheel in the economy. It keeps resources full employed and prevents stagnation in any part of the economy from having an adverse effect elsewhere. In addition public credit is a necessary instrument of war finance.” (James Stuart, 1950:116)

Bhargava viewed that government borrowing is also useful to combat against inflation because in this situation effective demand is more than the available supply of goods and services and here the government transfer the extra purchasing power from the hands of the people. Thus, a sensible debt policy can be used to check a depression or a boom. (Bhargava, 1956:191)

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

“These days the interest of investors is gradually fading away. Investors have been discouraged with the shares market running at a snail’s pace. There is no room for satisfaction for investors. Although the country has adopted liberal market policies to revive the economy, it refers to these obligations of state promises to pay the amount borrowed by the lender with the interest after a given period of time” (Braman, 1986)

Public debt is the legal obligation of the part of government to make interest of amortization of payment to holder of designated claims in accordance with a defined temporal schedule. It is created through the government borrowing from individual, co-operations, institutions and other government. It refers to rise by government within the country or

outside the country. Every government like individual has to borrow when its expenditure exceeds its revenue. The receipts from the sale of financial instruments by the government to individual or firm, in the private sector to release manpower and real resources and to finance the purpose of these resources or to make welfare payment or subsidies. (The new Palgrave, A dictionary of Economic, 1988)

Mrs. Rameshwori Pant has clearly emphasized about internal debt and economic stability. In her article title “Management of Internal Debt and Economic Stability”, she has concluded the private industrialists and traders would be hesitate and discouraged if the state is also to conduct simultaneously between the government and private sector. She also explains that in order to ensure existing in the market. In conclusion, she recommends the government not to borrow the capital from the public so that private investors will not lack the capital. (Samachar,1997,The Annual Economic Publication of Nepal Rastra Bank).

Public Debt plays an important part in the development of the capital market. Edward Naving observed that in the early stages of stock exchange market to public debt and government operation play fundamental role for the support and adequate flows of capital to the productive enterprises of the country. In the first instance, this likely to be done to a large degree through the medium of the public debt, with the development of trading facilities in securities the possibility of the issues of private securities directly to local institutional investors becomes a responsible one and the flow of capital will be stimulated and expanded.

Zhu, Ning (2002) in his article “The Local Bias of Individual Investors” investigates individual’s investors’ bias towards nearby companies. Various measurements show that individual investors exhibit significant bias towards the companies that are close to their residences. Our sample

individuals exhibit a stronger home bias than the mutual fund managers. Investors' holding foreign securities exhibit significantly weaker local bias than those not holding foreign securities, suggesting that international home bias and domestic home bias is correlated. Unlike institutional investors' choices, individual investors' local bias is less related to advantageous information. Investors with stronger local bias do not outperform those with weaker local bias. Information such as accounting number has less impact on the individual investors' local bias than on that of institutional investors. Instead, individual investors' local bias is negatively related to the advertising that advantageous information drives individual investors' local bias. Instead, they support that investors tend to invest in companies with which they are familiar even though such familiarity isn't particularly helpful to their equity investment. Behavioral theory on decision heuristics and the mechanism of advertising can explain part of puzzle.

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

Shiva Raj Shrestha (2061) on his article “Effective Domestic Debt Management in Nepal” stated that the government domestic debt is the debt that a government incurs through borrowing in its own currency from the residents of the country. The internal borrowing does not increase the real resources of the country. It is simply a transfer of purchasing power within the country over the same stock of real resources. An excessive government borrowing could have a number of bad effects.

- I. Excess borrowings can also increase interest.
- II. Excess borrowing from central bank to finance the deficit, stokes-up inflation.
- III. Excessive debt entails higher servicing costs on future generations who suffer higher taxation.
- IV. Excessive debt can affect credit ratings, which increase the cost of its future borrowing etc.

He also explained that the domestic debt management in Nepal involves interrelated functions; planning of financing requirement; policy formulation and preparation of issue calendar, issue management, managing secondary market delivery and reduction management, administration and accounting payment and settlement system & publicity. The debt manager should have an interest in developing market for government debt securities. The issuance of scripless securities, inflation of auctioning of long term government debt securities, implementation of market based pricing mechanism and issuance of varied securities like insurance bonds, pension bonds, provident fund bonds, municipalities bonds and other special bonds would be the major achievements for strengthening the debt market in Nepal.

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

Gyawali and Bajracharya (2004) on their article "Public Debt Management in Nepal" explains that the government borrows for financing the budgetary deficit. Deficit budget is estimated as a gap between expected revenue and foreign grants minus expected government expenditure. Thus,  $\text{Deficit} = \text{Expenditure} - (\text{Revenue} + \text{Foreign Grant})$ . He further explains that public borrowing is increasing in an alarming scale. It is high time that some more concerned efforts are taken and institutions be developed for managing the debt which can now be extend to provide sector borrowing from abroad.

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

A research was done by Radheshyam Pradhan in the topic “Stock market behavior in a small capital market: a case of Nepal”. The overall study of his research suggests that profitability, liquidity, leverage, assets turnover and interest coverage are related to dividend payouts. The study is based on pooled cross sectional data of 17 enterprises whose stocks are listed in stock exchange center and traded in the stock market.(Pradhan 2003).

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

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

Being a single stock exchange market NEPSE must focus on how to bring in house reform in house reform to educate investors and regulate and

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

"These evidences of the study would question the efficiency of Nepal stock exchange; however they are not necessarily embarrassments. This may be also due to market imperfections. The index used for this study encompasses companies, which trade during that particular day from the period (February 1, 1995 to January 31, 2004). Such a small sample period may mislead the findings of the study. In addition the effects of Maoist insurgency lasting for nine years that caused politically uncertainty and lack of confidence among the investors should be undertaken not only to confirm the results of the present study but also to investigate microstructure and operational procedure of Nepal stock exchange. Another fruitful area of research is to investigate whether reported anomalies are valid for individual shares or not. Further whether

a trading strategy based on these “seasonality’s” is profitable out of transaction costs or not should also be investigated” (KC and Joshi, 2004)

Nara Bahadur Thapa in his article ‘Some Issues in Domestic Debt Management in Nepal’ has stated that level and rate of growth in domestic debt is important especially in developing country like Nepal. The reason is that governments in developing countries tend to spend more than their revenue. They find less resistance in bridging the gap between their total spending and revenue through domestic borrowing regardless of productive or unproductive use of public debt. (Rastra Reen Khabar Patra, 2007, April)

### **2.2.2 Review of Previous Thesis**

There are few studies in Nepal which have looked into corporate stock price behaviour. The major studies are reviewed as follows:

Virju Prasad Sharma (1998) in his dissertation paper titled ‘Public Debt in Nepal’ in 1998 has dealt on the positive role of public borrowing for the sound economic growth and prosperity. He also suggested that the state should not disburse the debt unproductively. The rich people can get more benefit from public debt due to increasing trend in the issue of public debt. He clearly says the interest rate its development are the major benefit from the public debt. But if there increase in small saving, ownership of debt is defused and the problem of inequality in the distribution of wealth and income minimized.

Shrestha (1999) conducted research on “Stock Price Behavior in Nepal” with the objectives to examine the efficiency of stock market in Nepal, to examine the serial correlation successive daily price changes of the individual stocks, to determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in the stock market.

The finding of the study are when the log days increase, the mean value of serial correlation of coefficient is lower, that indicates that the past price changes may have low price to predict the future price changes in the long run. There exist no profitable trading rules to make greater profit that they would make under the naive buy and hold strategy in their speculation through the information of past price changes and Nepal stock market in not efficient in pricing shares, *Shrestha (1999)*

Mr. Daya Ram Sharma (2001) in his thesis “Public Debt System and Practice in Nepal” studies the specific objectives are:

- i) To overview the system and practice of public debt in Nepal.
- ii) To analyze the trend and structure of public debt in Nepal.
- iii) To understand the attitude of the investors towards the government securities.
- iv) To examine impacts of the public debt.
- v) To suggest the measures for reform in the debt financing economy of Nepal.

The study found that the interest of investors on government securities and their educational background is completely independent each other. Both educated and uneducated people are equally interested on government securities. The study also concluded that both poor and rich people are interested to government securities. These mean that government is efficacious to draw the attention of rich and poor, educated and uneducated people when the government sells its securities which are means of borrowing the loan internally. The study verifies the general statement that the people in urban area are more aware to the government securities.

Paudel (2001) had undertaken his study on the share price movement of the joint venture commercial banks in Nepal by using financial and

statically tools (Standard deviation, correlation, beta, t-test etc.) The major objectives of the study are to examine Nepal stock exchange and to judge whether the market shares of different banking indicators (book value per share and major financial ratio) explain the scenario why the shares of selected banks emerge as blue chips to the potential investors and to make a conclusion on the basis of financial ratios analysis. The finding of his study was market prices move randomly, the market value per share does not accommodate all the available historical information. The beta coefficient, which measures the riskiness of individual security in relative term, suggests that the stocks of joint venture commercial banks are less risky as compared to other average stocks traded in the stock exchange, *Paudel (2001)*.

Upadhyay carried out the research on ‘Share Price Behavior in Nepal.’ Under this study, he has concluded that the first order serial correlation coefficients for some equity shares are statistically significant. Similarly, the second order coefficients are also significant for some equity shares except first order. The empirical evidence pertaining to some equity shares indicates serial dependence. Thus, the available evidence suggests that the random walk hypothesis does not seem to fit the equity shares of Nepalese stock market. The hypothesis of “persistence” has been generally supported by the results, thereby not lending support to the random with hypothesis. The mean absolute value of the serial correlation coefficients is lower when the lag weeks are increased. So, the information of past price changes have low power to predict the future price changes for longer week. (Upadhaya, 2001).

Mr. Ram Prasad Paudel (2002) in his thesis “A study on government security practice in Nepal” studies the specific objectives are: (i) to analyze the trend and structure of government bond in Nepal (ii) to

examine the attitude of the investors towards the government securities (iii) To overview NG bonds issue system and practices (iv) To suggest the policy and procedures to reform debt management of Nepal. He concluded that Nepalese investors are attached towards government securities in comparison to other investment sectors. Most of the investors of Nepal are risk averter and they seek less risky investment. Different people are participating in government securities such as rich, poor, educated, uneducated, etc.

Mr. Indra Tribicram Pahari (2003) in his study finds that Market interest rate is significantly influenced by coupon rate of national saving certificate and development bond & market interest rate is adversely influenced by rate of treasury bill, there is positive relationship between inflation rate and government borrowing, there is positive relationship between government securities market and GDP, there is positive relationship between nominal interest with inflation rate, and with risk premium. Lastly he stated that government securities are unable to create as corporate debt securities.

Mr. Sandip Mohan Bhattarai (2003) in his study explains that Nepalese Debt Securities market is still at under-developing stage. Government debt securities' market is slightly at maturing stage as compared with corporate debt securities' market. Lack of public awareness, limited supply of quality bonds, investors increasing attraction towards common stock and also towards the banking sector's securities, difficult process of issuing debenture, insufficiency of legal provision and the infra-structure of capital market, dominant by credit oriented transactions, feeling of non-existence of debt market, lack of large business organization and a narrow area of government securities market are the specific problems. He further explains the prospectus of debt market are as investor's

attraction towards liquid assets like debt market are as investor's debenture of an potential issuance, attraction towards convertible debenture, declining interest rate on deposit of commercial banks, increasing trend of amount of government securities and the increasing trend of issuance of corporate debenture.

Mr. Narayan Prasad Phanti (2004) in his study suggested that to reduce the dedicatory budget the government should have a control on inflation, finance development expenditure and mobilize the internal resources in productive sector, public debt plays very significant role. There was also substantial increase in the internal debt over the years, which led to increase heavy dependency on internal loan. The total debt and debt servicing obligation are increasing rapidly in each years but debt servicing capacity and revenue is not increasing in the required rate.

Mr. Debendra Rana (2005) in his thesis "A study on government securities and its secondary market" studies the specific objectives are: (i) to determine the nature and size of government securities over the study period (ii) to analyze the ownership pattern of government securities. (iii) to examine the interest rate of government securities (iv) to overview the trading system of secondary market of government securities (v) to find out the problem of secondary market for government securities. In his study, he concluded that the market of government securities are in increasing trend but secondary market is not developed smoothly as primary market and major portion of G.B. are held by individual in recent year. Trend amount of marketable securities (i.e.) special bonds) are decreasing. Similarly market interest rate is decreasing while the coupon rate of government securities are not decreasing as decreased of market interest rate.

Khadka (2006) also carries out the research on ‘A study on the share price behavior.’ This study is focused on the analysis of the relation of MPS with different financial indicators and the level of risk associated with the common stock investment of the sample companies comprising commercial banks and finance companies. The general public investors do invest their scarce saving funds in the common stock of the public good returns in the future. The determination of MPS of any public companies should be in accordance with their financial performance. There is not a single financial indicator that has dominant role to determine MPS. The same financial indicator that has significant role in the fixation of MPS for one company is not significant for another company. The degree of interrelationship of MPS with different financial indicators varies from one company to another. There is no uniformity in the relationship of MPS with various financial indicators of the sampled companies. (Khadka, 2006).

Mainali (2008) undertook a study on the share price behavior of listed commercial banks with the major objectives as: to analyze the share price behavior of the commercial banks listed with NEPSE and to examine the risk involved in the common stock investment of the sampled commercial banks. His findings were that the past and present price changes can screen out some valuable information in forecasting future price changes and there exist a significant differences in the actual and expected numbers of runs for the series of daily closing price changes of the sampled commercial banks and today’s price change is dependent upon the information of yesterday’s price changes. (Mainali, 2008).

Poudel (2009) conducted a study on share price behavior of listed companies in Nepal. The study was conducted with the objectives to test the daily share price behavior of listed companies in Nepal. The sample

for the study comprised of 21 companies representing from each sector listed in Nepal Stock Exchange. This, study is based on the secondary data. Different statistical tools like serial correlation and run test were used. He concluded that NEPSE index showed a steady increase in the later month of the study period, which also shows the better performance of NEPSE. Stock market performance is more or less in a stable position in the capital market overall in the study period. The stock market performance is steadily increasing with the increase in the number of listed companies. The badly affected sectors were hotels, manufacturing & processing sectors due to different reasons. The NEPSE index showed a better performance during the study period. NEPSE index of commercial banks is in increasing trend as compared to the other sectors.

### **2.3 Research Gap**

There have been lots of articles published related to internal borrowing of government. Most of the researchers focused only on trend analysis and remaining others conducted only on secondary market of government securities but it have been found that no such research has been made in the behavior, stock price, securities, and its term structure of interest rate. Without analyzing behavior of stock price in Nepal. So this study had attempted to fill this research gap by analyzing behavior stock price in Nepal.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter refers to the overall research method from theoretical aspect to the collection and analysis of data. These researchers have been conducted by using appropriate statistical tools. The detail research methods are described in the following headings.

#### **3.1 Research Design**

In order to make any type of research a well-set research design is necessary to fulfil the objectives of the study. Generally, research design means definite procedure and technique, which guide to study and provide ways for research viability. It is arrangements for collection and analysis of data. To achieve the objectives of this study, historical, descriptive as well as analytic research design has been adopted. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate Determination of share price in Nepalese capital market.

Historical research is the critical investigation of events and experiences in the past. It addresses a present status of a phenomenon and examine the cumulative effects of past. It uses both Primary and secondary sources for the finding the authentic facts and past evidences.

Descriptive research includes survey and fact-findings inquiries of different kind. This method assumes that the researcher can only report what has happened or what is happening. A fact finding approach relative largely to the present and abstracting generalizations by the cross-sectional study of the current study is the descriptive research.

### **3.2 Population and Sample**

For the quality factors analysis i.e. primary sources, individual investors, stock brokers, and listed companies of Nepalese capital market including institutional from Nepalese capital market all be the population of the study. Different experts from investment, market intermediaries, stock brokers, academicians, bankers, researchers, bureaucrats and investors are also the part of population of the study. Under this study the population has been taken from the listed companies in NEPSE.

The judgment purposive sampling technique is taken for this study and five commercial banks are chosen. While choosing the samples only average items are considered and extreme items tried to omit. Only individual investors, stock brokers and listed banks in NEPSE are included in the focus group for effective and efficient data presentation and it will help to market share price in capital market.

**Table no.3.1**

#### **Listed Commercial Bank at the End of the FY 2010/11**

1.	Nepal Bank Limited
2.	Rastriya Banijya Bank
3.	Nabil Bank Limited
4.	Nepal Investment Bank
5.	Standard Chartered Bank
6.	Himalayan Bank Limited
7.	Nepal SBI Bank Limited
8.	Everest Bank Limited
9.	Bank of Kathmandu Limited
10.	Ncc bank Limited

11.	Lumbini Bank Limited
12.	NIC Bank Limited
13.	Machhapuchhre Bank Limited
14.	Kumari Bank Limited
15.	Laxmi Bank Limited
16.	Siddhartha Bank Limited
17.	Global Bank Limited
18.	Citizens Bank International Limited
19.	Prime Commercial Bank Limited
20.	Bank of Asia Nepal Limited
21.	Sunrise Bank Limited
22.	Grand Bank Nepal Limited
23.	DCBL Bank Limited
24.	NMB Bank Limited
25.	Kist Bank Limited
26.	Janata Bank Nepal Limited
27.	Mega Bank Nepal Limited
28.	Commerz and trust Bank Nepal Limited
29.	Civil Bank Limited
30.	Century Commercial Bank Limited
31.	Sanima Bank Limited
32.	Nepal Bangladesh Bank

From the above table following sampled Bank has been taken for analyzing the secondary data

1. Himalayan Bank Limited
2. Nepal Investment Bank
3. Standard Chartered Bank
4. Everest Bank Ltd

## 5. Siddhartha Bank Limited

### **3.3 Variables**

In this study, market price of the share is the dependent variable and other factors that affect to the share price in the market are the independent variables i.e. earning per shares (EPS), Dividend per shares (DPS), economic condition of the Nation, political situation, interest rate, etc.

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

The major sources of secondary data are the annual reports or AGM-reports, magazines, journals and website of the listed companies and other related materials, which show the relationship between variables e.g. earning, book value and share price. Annual report, SEBON annual report, publication of different authorities, newspaper and unpublished thesis report were the sources of secondary data.

### **3.5 Data Collection Techniques**

Data collection also known as the fieldwork is the implementation of research design. In this study, secondary data have been used. For the secondary data, annual reports of sampled companies are used. Annual reports, books, journals, magazines and website of the listed companies and other related materials were also reviewed to collect the data of the sampled company. The research problem is expressed in the form of interrogative sentences. In this study, facts, figures, knowledge and opinions have been collected through questionnaire schedule method. To reduce the time, cost researcher used in indirect method with the respondents.

### **3.6 Data Analysis Tools**

To obtain the above mentioned objectives, secondary data were collected from the annual report of the sampled companies, journals, published and

unpublished research book, report of NEPSE also etc. Then the financial and statistical tools are used as required by the study.

### **3.6.1 Financial tools**

The financial parameters help to measure the financial status of the organization. The parameter is found from financial statement and financial disclosure. Some of the financial variables, stated below, have been employed to analyze the market capitalization, market price of share, earning per share and dividend per share.

### **3.6.2 Market price of stock ( $P_t$ )**

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

### **3.6.3 Total Dividend ( $D_t$ )**

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

In case of stock dividend:

Total dividend for the year ( $D_t$ ) =  $C_t + \% \text{ of stock dividend} \times P_t - 1$

In case of right share issue at par

Total dividend for the year  $(D_t) = C_t + \% \text{ right share } (P_{t-1} - PV)$

### 3.6.4 Market index ( $I_t$ )

NEPSE index is the market index of all the securities listed in Nepal stock Exchange. Market indices are generally constructed to get the performance of the overall securities trade within a given time frame. Market index is used to calculate expected return on market. For the calculation of return on market, closing NEPSE index of the particular year is considered.

1. Earnings per Share (EPS): The earning per share (EPS) is the share of a stock on the earning of the company. Earnings per share are the position of the company's profit allocated to each outstanding share of common stock. EPS is generally considered to be the single most important variable in determining a share's price. It is calculated by dividing the profit available to the shareholders by the number of outstanding shares.

Mathematically,

$$(\text{EPS}) = \frac{\text{Net profit}}{\text{No. of stock outstanding}}$$

2. Dividend per share: The Dividend per Share (DPS) is the amount paid as dividend to the holder of one share of the stock. It is calculated as the net profit distributed to the shareholders divided by no of share outstanding.

Mathematically,

$$(\text{DPS}) = \frac{\text{Dividend available to ordinary shareholders}}{\text{No. of stock outstanding}}$$

3. Market Price per Share: The MPS is the amount in which a share of the stock is traded in the market. It is the prevailing or the actual price of the share paid in the market transaction.

Mathematically,

$$(\text{MPS}) = \frac{\text{Total market capitalization}}{\text{No.of stock outstanding}}$$

Book Value per Share (BPS):

The book value per share represents the real net worth per share. It is simple the ratio of net worth (Share capital plus retained earnings, i.e. ownership capital) and the number of existing shares.

$$\text{BPS} = \frac{\text{Networth}}{\text{No.of stock outstanding}}$$

### **3.6.5 Price Earnings Ratio:**

Price earning multiple is the relationship between earning per share and market price of the stock. Earnings per share shows the company's performance in the sense that how well the company has managed its material as well as human resources to satisfy the interest of stockholders. So, P/E ratio reflects price currently being paid by the market for each rupee of currently reported EPS.

$$\text{Price Earnings ratio} = \frac{\text{Market price per share}}{\text{Earning per share}}$$

### **3.6.6 Dividend Yield:**

Dividend yield shows the relationship between dividend per share and market price per share. The dividend yield is calculated by dividing the cash dividend per share by the market value per share.

$$\text{Dividend Yield} = \frac{\text{Dividend per share}}{\text{Market value per share}}$$

### 3.6.7 Earning yield:

The earning yield may be defined as the ratio of earning per share to the market value per ordinary share,

$$\text{Earning yield} = \frac{\text{Earning per share}}{\text{market value per share}}$$

### 3.6.8 Statistical tools

Markets return ( $R_m$ )

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

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

Expected return on market ( $\bar{R}_m$ )

Expected return on market is the future return expected by the market. It is calculated by dividing the sum of the market return of past year with number.

$$\bar{R}_m = \frac{\sum R_m}{N}$$

Yearly return on stock ( $R_j$ )

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

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

Expected return on stock ( $\bar{R}_j$ )

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

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

### 3.6.9 Standard Deviation:

Standard deviation is a statistical measure of the variability of a distribution of return around its mean. So the standard deviation measures the absolute dispersion. In other words, it is the square root of the variance and measures the unsystematic risk on stock investment. The greater the standard deviation greater will be the magnitude of the deviation of the values from the mean. Small standard deviation means a degree of uniformity of the observations as well as homogeneity of a series and vice versa. Mathematically, it can be presented below:

$$\text{standard deviation } (\sigma) = \sqrt{\frac{1}{N-1} \sum (R_j - \bar{R}_j)^2}$$

Where  $\sigma$ =standard deviation

The standard deviation is an absolute measure of dispersion but the coefficient of variation is a relative measure. To compare the variability between two or more series, CV is a more appropriate statistical tool. In other words, CV is the ratio of standard deviation of return to the mean of that distribution. It is a measure of relative risk. The higher the coefficient of variation, the higher the relative risk of the investment. Symbolically, it is presented below:

$$CV = \frac{\sigma}{R}$$

Where, CV= Coefficient of variation

$\sigma$  =Standard deviation and

R=Expected return

### 3.6.10 Correlation

It is a measure of the relationship between two assets. Its values are limited between the ranges of +1 and -1. Correlation and covariance are related by following equation.

$$\rho_{ij} = \frac{Cov_{ij}}{\sigma_i \sigma_j}$$

Where  $\sigma_i$  and  $\sigma_j$  are the standard deviations of return for assets i and j and  $\rho_{ij}$  is the correlation coefficient for assets i and j

### 3.6.11 Regression Analysis:

Correlation coefficient measures the degree of relationship between two variables where as the regression analysis is used to estimate the likely value of one variable from the now value of other variable. In regression analysis we establish. In regression analysis we establish a kind of average irreversible functional relationship between two variables. In other words, regression analysis is a mathematical measure of the average relationship between two or more variable in term original unit of data (Sthapit, 2004: pp 391).

The equation of regression line where the dependent variable y is determined by the independent variable x is given by:

$$Y = a + b x \dots\dots\dots (I)$$

Where,

a = Intercept

b = Slope of regression line (i.e. it measure the change in the value of y as a result of per unit change in value of x or regression coefficient of y on x)

### 3.6.12 Coefficient of determinants

The coefficient of determination gives the percentage variation in the dependent variable that is accounted by independent variables. In other words, the coefficient of determination gives the ratio of expected variance to the total variance. The coefficient of determination is given by the square of the correlation coefficient, i.e.  $r^2$ . So the coefficient of determination

$$r^2 = \frac{\text{Expected variance}}{\text{Total variance}}$$

### 3.6.13 Estimation of error

The error is estimated by the formula

$$S_{yx} = \sqrt{\frac{\sum Y^2 - a \sum Y - b \sum XY}{n-2}} \quad \text{Where } Y$$

is dependent variable and X is independent variable

## **CHAPTER FOUR**

### **PRESENTATION AND ANALYSIS OF DATA**

This Chapter is the main part of the whole study where the data collected from various sources are presented and analyzed in detail. The secondary collected from secondary sources like publication of NEPSE, annual report and SEBON and other related sources are presented and their interpretation and analysis is carried out in this section .The secondary data includes MPS and Dividend paid on the selected securities for various years. Besides it NEPSE index of various years is also taken for the study. Appropriate diagrams and tables are presented to make this analyse is more simple and understandable.

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

#### **4.1 Risk and return of selected Nepalese commercial Bank**

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

#### **4.2 Himalayan Bank Ltd.**

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

**Table No.4.1****MPS, Dividend per share of HBL**

FY	Market Price Per Share	Dividend per Share
06/07	1740	40
07/08	1980	45
08/09	1760	43.56
09/10	816	36.84
10/11	575	36.84

The closing market price of HBL is higher in the year 07/08 i.e. Rs. 1980 and minimum in the year 10/11 i.e. Rs. 575. The annual return expected return, Standard deviation  $\sigma$  & CV are calculated on the basis of above ground is shown in the table below.

**Table No.4.2****Yearly Return ( $R_j$ ), Realized Return ( $\bar{R}_j$ ) and Standard Deviation ( $\sigma_j$ ) of HBL**

Year	Closing Market Price ( $P_t$ )	Total Dividend ( $D_t$ )	Realized return $R_j = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$
06/07	1740	40	-
07/08	1980	45	0.1637
08/09	1760	43.66	-0.089
09/10	816	36.84	-0.515
10/11	575	36.84	-0.256
			$\sum R_{HBL} = -$ 0.6903

*Source: (Annual report of HBL)*

Realized Return ( $\bar{R}_j$ ) is calculated as below:  $\bar{R}_{HBL} = \frac{\sum R_{HBL}}{N} = \frac{-0.6903}{4} = -0.1725$

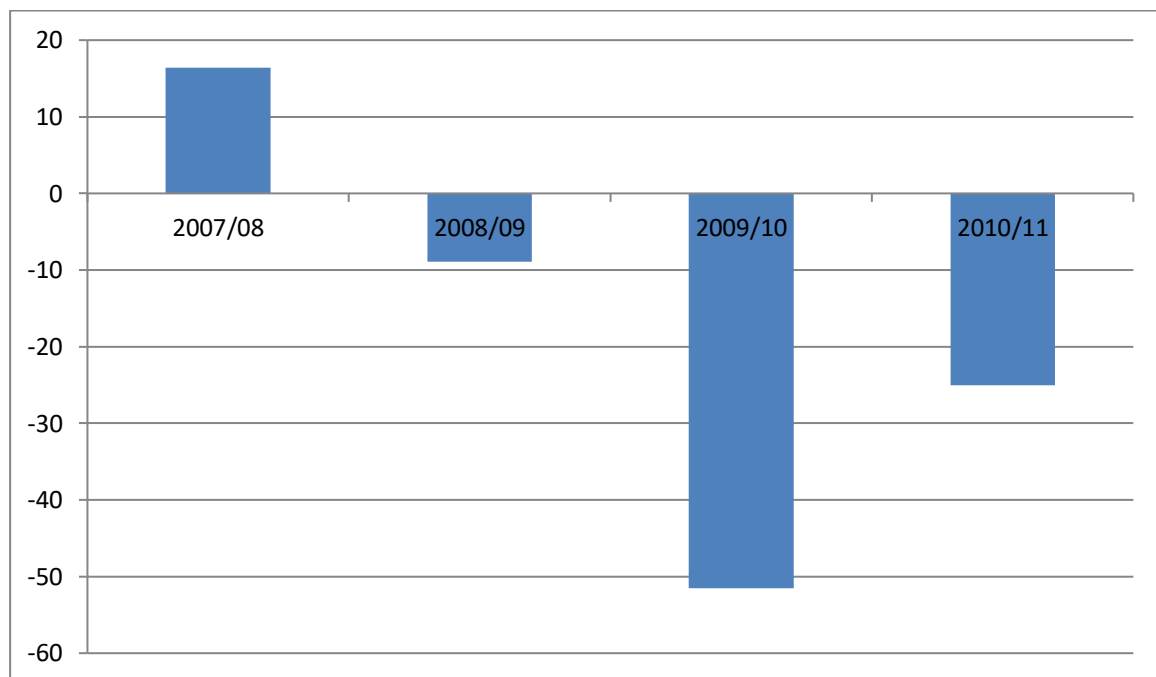
Standard Deviation ( $\sigma_{HBL}$ ) is calculated as below:

$$\sigma_{HBL} = \sqrt{\frac{(\sum R_{HBL} - R_{HBL})^2}{N}} = \sqrt{\frac{0.2432}{4}} = 0.2465$$

$$CV_{HBL} = \frac{\sigma_{HBL}}{\bar{R}_{HBL}} = \frac{0.2465}{-0.1725} = 1.428$$

**Figure 4.1**

**Yearly return on common stock of HBL**



The range of annual return on the common stock is negative return -0.515 percent lowest in the year 09/10 to highest 0.1637 percent in the year 07/08. The annual return is highly decreasing in the respected years. From the above data expected return is -0.1725 percent. The total risk of HBL i.e. Standard deviation is 0.2465 & the relative measure of dispersion based on Standard deviation i.e. CV is found to be 1.428

which means for earning one unit of return the investors has to beak 1.428 unit of risk.

### 4.3 Correlation and regression analysis of Himalayan Bank Ltd

Table 4.3 summarizes the financial Performance of HBL over last 5 years period and Table 4.4 shows the relationship (correlation) of EPS, DPS, BPS, P/E, E/Y and D/Y to mps along with the significance of such relationship at 95% significance level.

**Table No.4.3**

**Summary of the financial performance of HBL**

Year	MPS	BPS	DPS	EPS	P/E	D/Y	E/Y
2006/07	1740	264.74	40	60.66	28.68	2.299	3.486
2007/08	1980	247.95	45	62.74	31.558	2.27	3.169
2008/09	1760	256.52	43.56	61.90	28.43	2.475	3.517
2009/10	816	226.79	36.84	31.80	25.66	4.515	3.897
2010/11	575	199.77	36.84	44.66	12.875	6.407	7.767
Mean	1374.2	239.154	40.448	52.352	25.44	3.5932	4.3672
S.D	632.45	26.16	3.763	13.689	7.3279	1.833	1.9178
C.V	26.023	10.93	1.207	26.148	28.80	51.013	43.913

*Source: (Annual report of HBL)*

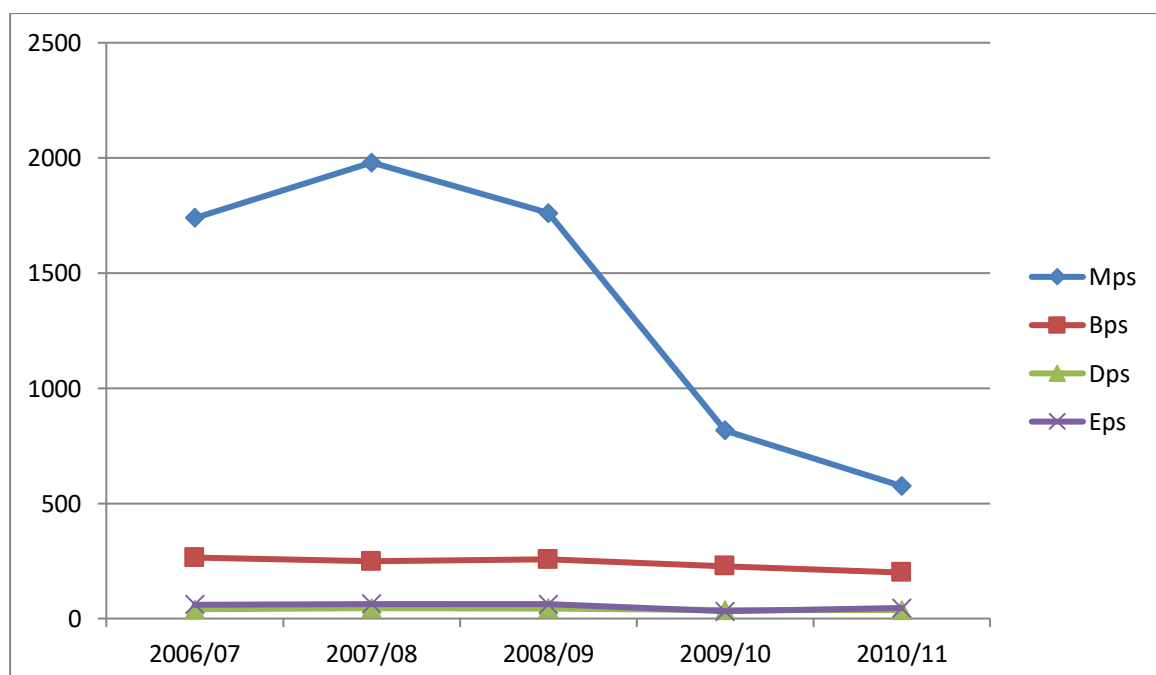
**Table No.4.4**

**Relationship of BPS, DPS, EPS, P/E, D/Y and E/Y with MPS of HBL**

Indicators	R	Squared r (coefficient of determinants)	Remarks
BPS	0.903	0.8154	Insignificant
DPS	0.913	0.8335	Insignificant
EPS	0.8846	0.7825	Insignificant
P/E	0.8612	0.7417	Insignificant
D/Y	-0.9636	0.9285	Insignificant
E/Y	-0.789	0.6225	Insignificant

**Figure No.4.2**

**The linear relations of BPS, DPS, EPS and Mps of HBL**



For HBL, it is found from the table BPS is decreasing while MPS, EPS and DPS have random variation. DPS and D/Y is volatile with 9.30% and 51.013% coefficient of variation (CV) respectively. 10.93% CV of BPS shows no risk over the last five years.

The simple correlation analysis shows the MPS of HBL is positively correlated with BPS, DPS, EPS and P / E and negatively correlated with E / Y and D / Y. The coefficient of determination shows that 81.54% of the changes in MPS are explained by BPS, 83.35% of the changes in MPS is explained by the DPS where as 78.25% of the changes in MPS is explained by EPS. The degrees of correlation are insignificant with most indicators i.e. BPS, DPS, EPS, P / E, E/ Y and D/Y with MPS at 95% significance level.

From the simple regression analysis, the regression equations are found (MPS being dependent variable) as:

MPS on EPS

$$\text{MPS} = 766.21 + 40.885 \text{ EPS}$$

The regression constant 766.21 implies that when EPS is zero, MPS is Rs. 766.21. The coefficient for EPS 40.885 implies that when EPS increases by Re.1, MPS also increases by Rs. 40.885 and vice versa. The simple correlation coefficient is 0.8846 with 340.30 s standard error of estimate.

MPS on DPS

$$\text{MPS} = 4826.48 + 153.30 \text{ DPS}$$

The regression constant 4826.48 implies than when DPS is zero, MPS is Rs. 4826.48. The coefficient for DPS 153.30 implies that when

DPS increases by Re.1, MPS also increases by Rs. 153.30 and vice versa. The simple correlation coefficient is 0.913 with 298.61 standard error of estimate.

#### MPS on BPS

$$\text{MPS} = 133370 + 563.46 \text{ BPS}$$

The regression constant 133370 implies that when BPS is zero MPS is Rs. 133370. The coefficient for BPS 563.46 implies that when BPS is increased by Re.1, MPS also increased by Rs. 563.46 and vice versa. The simple correlation coefficient is 0.903 with 3273.18 standard error of estimate.

#### MPS on P/E Ratio

$$\text{MPS} = 515.23 + 74.27 \text{ P/E}$$

The regression constant 515.23 implies that when P/E is zero MPS is Rs. 515.23. The coefficient for P/E 74.27, implies that when P/E is increased by Re.1, MPS also increases by Rs. 74.27 and vice versa. The simple correlation coefficient is 0.8612 with 371.46 standard error of estimate.

#### MPS on Dividend Yield (D/Y)

$$\text{MPS} = 2567 - 331.94 \text{ D/Y}$$

The regression constant 2567 implies that when D/Y is zero MPS is Rs. 2567. The coefficient for D/Y -331.94 implies that when D/Y is change by Re.1, MPS also change by Rs. 331.94 and vice versa. The simple correlation coefficient is 0.9636 with 196.47 standard error of estimate.

#### MPS on Earning Yield (E/Y)

$$\text{MPS} = 2490 - 255.4 \text{ E/Y}$$

The regression constant 2490 implies that when  $E / Y$  is zero MPS is Rs. 2490. The coefficient for  $E / Y - 255.4$ , implies that when  $E / Y$  is change by Re.1, MPS change by Rs. 255.4 and vice versa. The simple correlation coefficient is 0.789 with 454.13 standard error of estimate.

#### 4.4 Nepal Investment Bank Ltd. (NIB)

The market Price per Share of NIB, the Stock dividend and the total dividend calculated are presented in the table below:

**Table No.4.5**

**MPS, Dividend per share of NIB**

FY	Market Price Per Share	Dividend Per Share
06/07	1729	30
07/08	2450	40.83
08/09	1388	20
09/10	705	25
10/11	515	50

*Source: (Annual report of NIB)*

The Closing Market Price of NIB is higher in the year 07/08 i.e. Rs. 2450 and minimum in the year 10/11 i.e. Rs.515. The annual return, realized return, Standard deviation ( $\sigma$ ) and CV are calculated on the basis of above ground is shown in the table below.

**Table No.4.6**

**Yearly Return (R<sub>j</sub>), Realized Return ( $\bar{R}_j$ ) and Standard Deviation ( $\sigma_j$ )  
of NIB**

Year	Closing Market Price (P <sub>t</sub> )	Total Dividend (D <sub>t</sub> )	Realized return $R_j = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$
06/07	1729	30	-
07/08	2450	40.83	0.4406
08/09	1388	20	-0.425
09/10	705	25	-0.474
10/11	515	50	-0.1985
			$\sum R_{NIB} = -0.657$

Realized Return ( $\bar{R}_{NIB}$ ) is calculated as below:

$$\bar{R}_{NIB} = \frac{\sum R_{NIB}}{N} = \frac{-0.657}{4} = -0.164$$

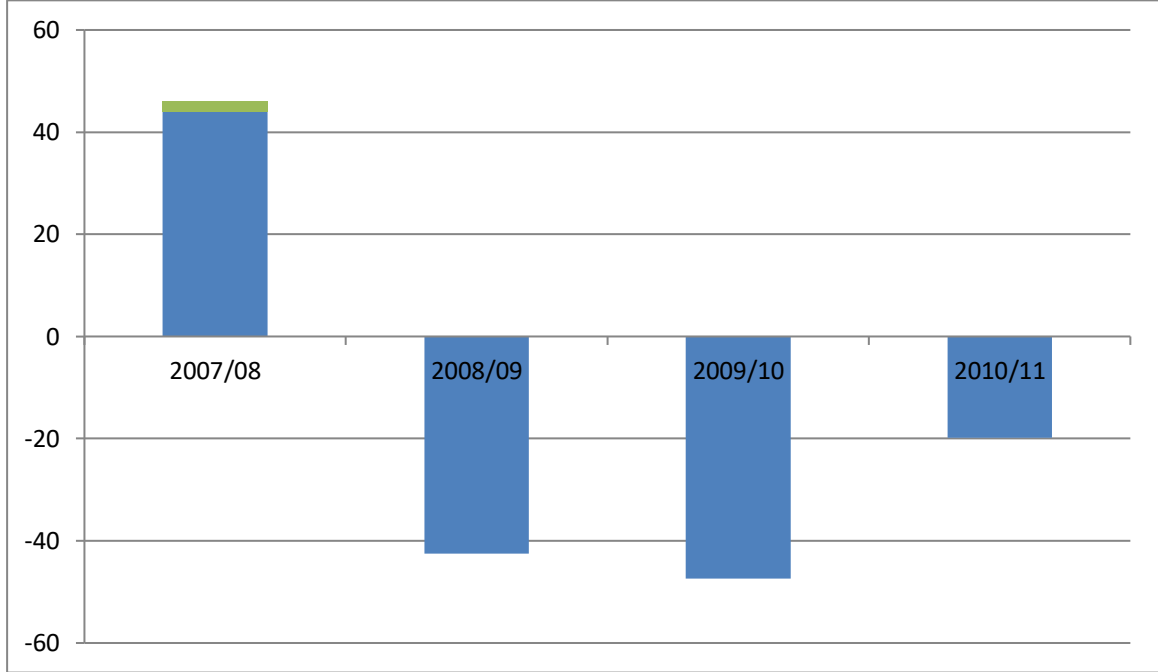
Standard Deviation ( $\sigma_{NIB}$ ) is calculated as below:

$$\sigma_{NIB} = \sqrt{\frac{(\sum R_{NIB} - R_{NIB})^2}{N-1}} = \sqrt{\frac{0.5308}{5-1}} = 0.3642$$

$$CV_{NIB} = \frac{\sigma_{NIB}}{\bar{R}_{NIB}} = \frac{0.3642}{-0.164} = 2.2207$$

**Figure No.4.3**

**Yearly Return on Common Stock of NIB**



The range of annual return on the common stock is negative return 0.474 percent lowest in the year 09/10 to highest 0.4406 in the year 07/08. The annual return is highly decreasing in the respected years. From the above data Realized return is -0.164. The total risk of HBL i.e. Standard deviation is 0.3642 and the relative measure of dispersion based on standard deviation i.e. CV is found to be 2.2207 which means for earning one unit of return the investors has to bear 2.2207 unit of risk.

**4.5 Correlation and regression analysis of Nepal Investment Bank Ltd**

Table 4.7 summarizes the financial Performance of NIBL over last 5 years period and Table 4.8 shows the relationship (correlation) of EPS, DPS, BPS, P/E, E/Y and D/Y to mps along with the significance of such relationship at 95% significance level.

**Table No.4.7****Summary of the financial performance of NIBL**

year	MPS	BPS	DPS	EPS	P/E	D/Y	E/Y
2006/07	1729	234	30	62.57	27.63	1.735	3.62
2007/08	2450	223	40.83	57.87	42.34	1.67	2.36
2008/09	1388	162	20	37.42	37.1	1.441	2.696
2009/10	705	190	25	52.55	13.42	3.55	7.453
2010/11	515	171	50	48.84	10.54	9.71	9.48
Mean	1357.4	196	33.166	51.85	26.206	3.6212	5.122
S.D	785.50	31.58	12.167	9.603	14.052	3.507	3.170
C.V	57.867	16.112	36.69	18.52	53.62	96.85	61.89s

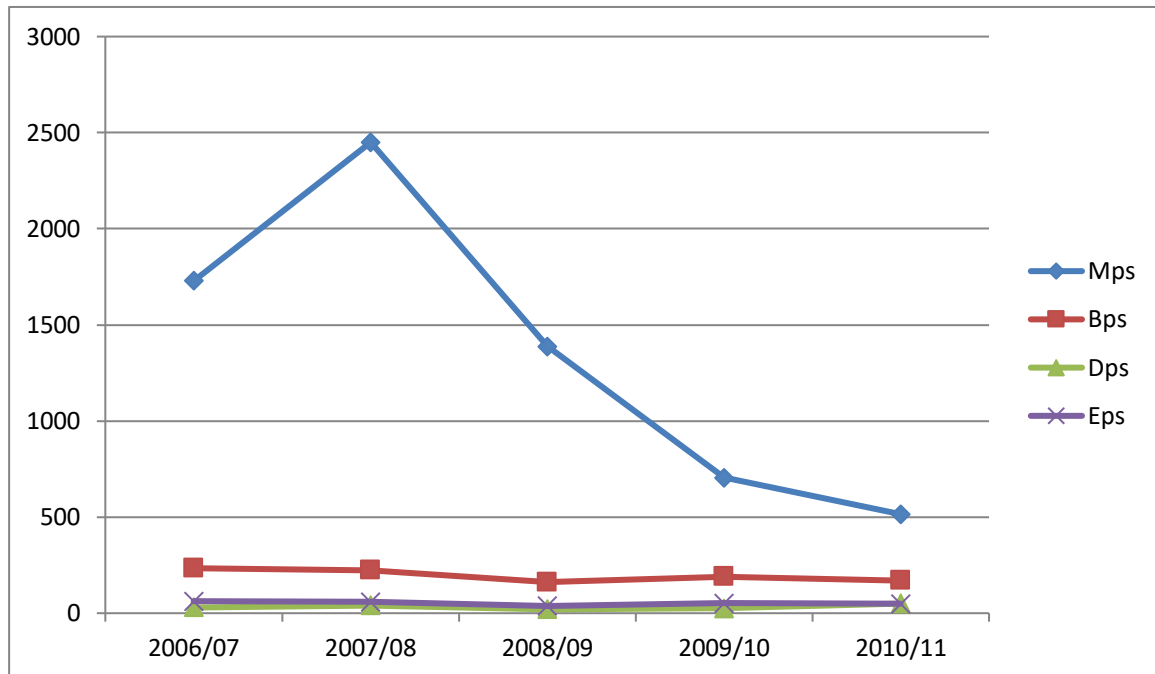
*Source: (Annual report of NIB)*

**Table no.4.8****Relations of BPS, DPS, EPS, P/E, D/Y and E/Y with MPS of NIBL**

Indicators	r	Squared r(coefficient of determinants)	Remarks
BPS	0.6807	0.4633	Insignificant
DPS	-0.0539	0.0029	Insignificant
EPS	0.4042	0.1634	Insignificant
P/E	0.9065	0.8217	Insignificant
D/Y	-0.724	0.524	Insignificant
E/Y	-0.887	0.786	Insignificant

**Figure No.4.4**

**The linear relations of Bps, Dps, Eps and Mps of NIB**



For NIB, it is found from the table BPS is decreasing and then increasing trend, MPS is increasing and decreasing trend, EPS are in decreasing trend and DPS in random trend. DPS and D/Y is volatile with 36.69% and 96.85% coefficient of variation (CV) respectively. 16.112% CV of BPS shows no risk over the last five years.

The simple correlation analysis shows the MPS of NIB is positively correlated with BPS , EPS and P / E and negatively correlated with DPS, E / Y and D / Y. The coefficient of determination shows that 46.33% of the changes in MPS are explained by BPS, 0.29% of the changes in MPS is explained by the DPS where as 18.34% of the changes in MPS is explained by EPS. The degrees of correlation are insignificant with most

indicators i.e. BPS, DPS, EPS, P / E, E/ Y and D/Y with MPS at 95% significance level.

From the simple regression analysis, the regression equations are found (MPS being dependent variable) as:

MPS on EPS

$$\text{MPS} = 357.3832 + 33.072 \text{ EPS}$$

The regression constant 357.3832 implies that when EPS is zero, MPS is Rs. 357.3832. The coefficient for EPS 33.072 implies that when EPS increases by Re.1, MPS also increases by Rs. 33.072 and vice versa. The simple correlation coefficient is 0.4042 with 829.57 standard error of estimate.

MPS on DPS

$$\text{MPS} = 1472.72 - 3.477 \text{ DPS}$$

The regression constant 1472.72 implies than when DPS is zero, MPS is Rs. 1472.72. The coefficient for DPS – 3.477 implies that when DPS change by Re.1, MPS also change by Rs. 3.477 and vice versa. The simple correlation coefficient is 0.0539 with 905.70 standard error of estimate.

MPS on BPS

$$\text{MPS} = 1960.88 + 16.93 \text{ BPS}$$

The regression constant 1960.88 implies that when BPS is zero MPS is Rs. 1960.88. The coefficient for BPS 16.93 implies that when BPS is increased by Re.1, MPS also increased by Rs. 16.93 and vice versa. The

simple correlation coefficient is 0.6807 with 6353.49 standard error of estimate.

#### MPS on P/E Ratio

$$\text{MPS} = 29.91 + 50.656 \text{ P/E}$$

The regression constant 29.91 implies that when P/E is zero MPS is Rs. 29.91. The coefficient for P/E 50.656 implies that when P/E is increased by Re.1, MPS also increases by Rs. 50.656 and vice versa. The simple correlation coefficient is 0.9065 with 383.10 standard error of estimate.

#### MPS on Dividend Yield (D/Y)

$$\text{MPS} = 1944.94 - 162.25 \text{ D/Y}$$

The regression constant 1944.94 implies that when D/Y is zero MPS is Rs. 1944.94. The coefficient for D/Y -162.25 implies that when D/Y is change by Re.1, MPS also change by Rs. 162.25 and vice versa. The simple correlation coefficient is 0.724 with 625.30 standard error of estimate.

#### MPS on Earning Yield (E/Y)

$$\text{MPS} = 2456.17 - 214.520 \text{ E/Y}$$

The regression constant 2456.17 implies that when E / Y is zero MPS is Rs. 2456.17. The coefficient for E / Y – 214.520, implies that when E / Y are changes by Re.1, MPS changes by Rs. 214.520 and vice versa. The simple correlation coefficient is 0.887 with 436.23s standard error of estimate.

### **4.6 Standard Chartered Bank**

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

**Table No 4.9****MPS and Dividend Per share of SCB**

FY	Market Price Per Share	Dividend per Share
06/07	5900	130
07/08	6830	130
08/09	6010	100
09/10	3279	70
10/11	1800	50

*Source: (Annual report of SCB)*

The closing market price of SCB is higher in the year 07/08 i.e. Rs. 6830 and minimum in the year 10/11 i.e. Rs. 1800. The annual return, Realized return, Standard deviation and coefficient of variation are calculated on the basis of above ground is shown in the table below.

**Table No.4.10****Yearly Return (R<sub>j</sub>), Realised Return ( $\bar{R}_j$ ) and Standard Deviation ( $\sigma_j$ ) of SCB**

Year	Closing Market Price (P <sub>t</sub> )	Total Dividend (D <sub>t</sub> )	Realised return $R_j = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$
06/07	5900	130	-
07/08	6830	130	0.1797
08/09	6010	100	-0.105
09/10	3279	70	-0.443
10/11	1800	50	-0.436
			$\sum R_{SCB} = -0.8043$

Realized Return ( $\overline{R}_{SCB}$ ) is calculated as below:

$$\overline{R}_{SCB} = \frac{\sum R_{SCB}}{N} = \frac{-0.8043}{4} = -0.2010$$

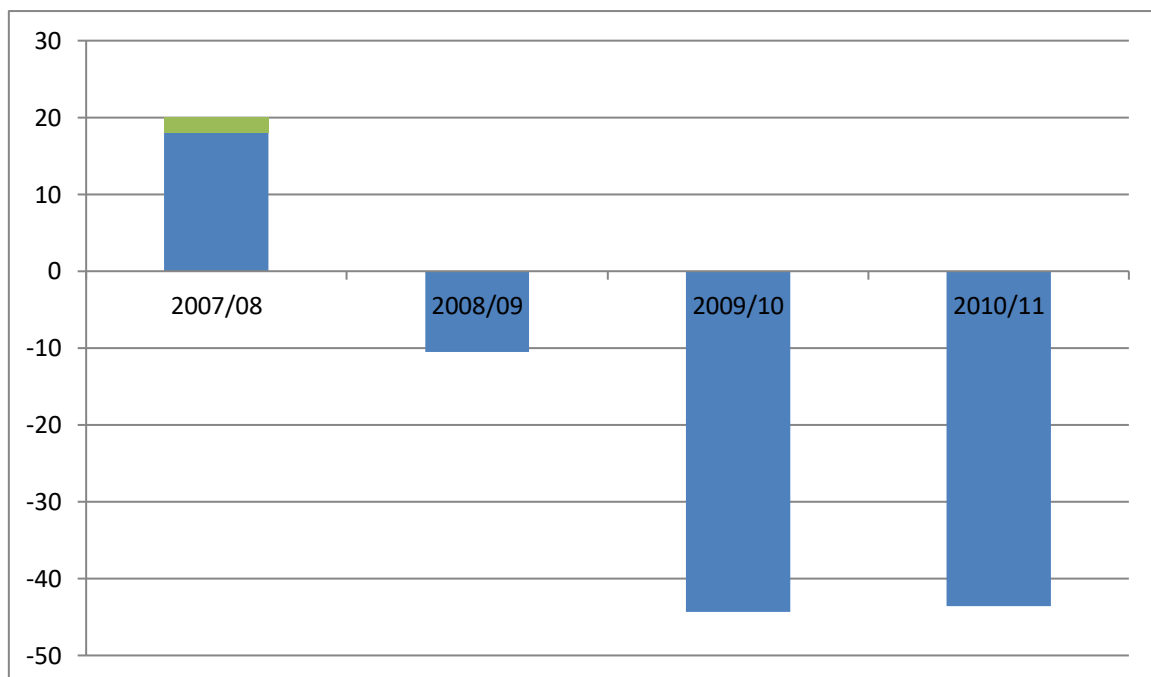
Standard Deviation ( $\sigma_{SCB}$ ) is calculated as below:

$$\sigma_{SCB} = \sqrt{\frac{(\sum R_{SCB} - \overline{R}_{SCB})^2}{N}} = \sqrt{\frac{0.2678}{4}} = 0.259$$

$$CV_{SCB} = \frac{\sigma_{SCB}}{\overline{R}_{SCB}} = \frac{0.259}{-0.2010} = 1.289$$

**Figure No.4.5**

**Yearly return on common stock of SCB**



The range of annual return on the common stock is negative return -0.443 percent lowest in the year 09/10 to highest 0.1797 percent in the year 07/08. The annual return is highly decreasing in the respected years.

From the above data Realized return is -0.2010 percent. The total risk of SCB i.e. Standard deviation is 0.259 & the relative measure of dispersion based on Standard deviation i.e. CV is found to be 1.289 which means for earning one unit of return the investors has to beak 1.289 unit of risk.

#### **4.7 Correlation and regression analysis of Standard chartered Bank Ltd.**

Table 4.11 summarizes the financial Performance of SCBL over last 5 years period and Table 4.12 shows the relationship (correlation) of EPS, DPS, BPS, P/E, E/Y and D/Y to mps along with the significance of such relationship at 95% significance level.

**Table 4.11 Summary of the Financial Performance of SCBL**

Year	MPS	BPS	DPS	EPS	P/E	D/Y	E/Y
2006/07	5900	512.12	130	167.37	35.25	2.20	2.837
2007/08	6830	401.52	130	131.92	51.77	1.90	1.93
2008/09	6010	327.53	100	109.99	54.64	1.66	1.83
2009/10	3279	240.95	70	77.65	42.23	2.135	2.368
2010/11	1800	228.41	50	69.51	25.895	2.78	3.86
Mean	4763.8	342.106	96	111.282	41.957	2.135	2.565
S.D	2127.3	118.12	35.78	40.154	11.834	0.418	0.82655
C.V	44.655	34.526	37.27	36.08	28.20	19.578	32.224

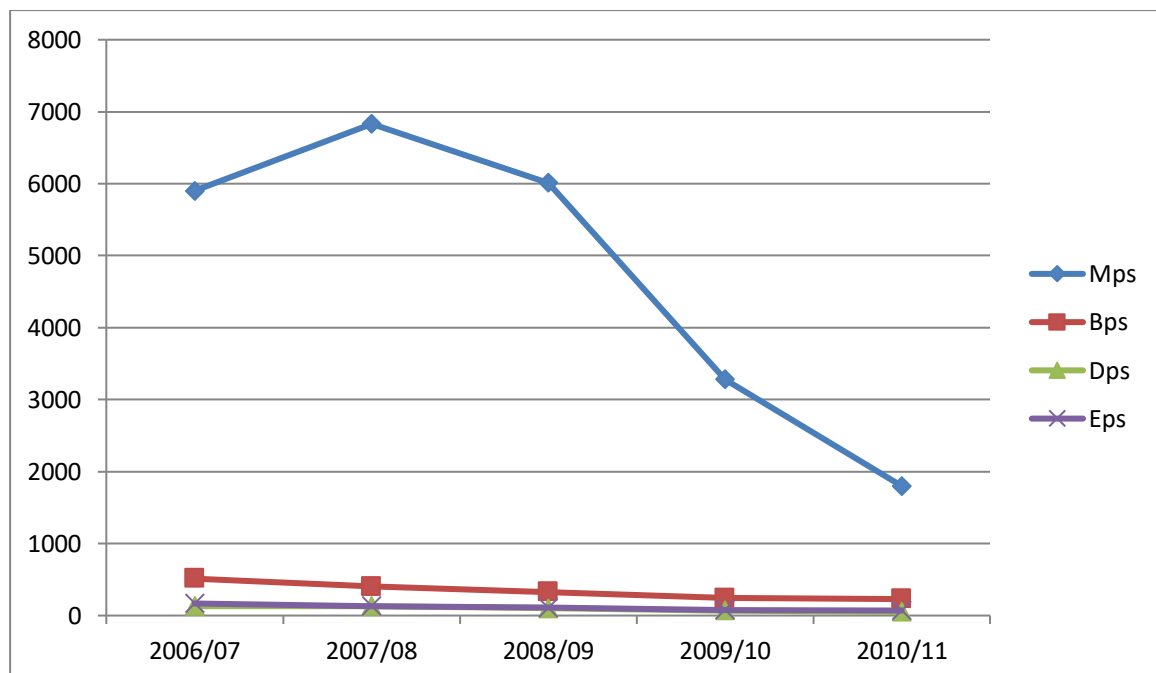
*(Source: Annual report of SCB)*

**Table: 4.12 Relationships of BPS, DPS, EPS, P / E, D / Y and E / Y  
with MPS of SCBL**

Indicators	r	Squared r (coefficient of determinants)	Remarks
Bps	0.780	0.6084	Insignificant
Dps	0.949	0.8999	Insignificant
Eps	0.815	0.6643	Insignificant
P/E	0.752	0.5649	Insignificant
D/Y	-0.629	0.3950	Insignificant
E/Y	-0.778	0.6037	Insignificant

**Figure No 4.6**

**The Linear relationship of DPS, BPS, EPS and MPS of SCBL**



For SCBL, it is found from the table BPS, MPS, EPS and DPS are in decreasing trend. DPS and D/Y is volatile with 37.268% and 19.578% coefficient of variation (CV) respectively. 34.526% CV of BPS shows no risk over the last five years.

The simple correlation analysis shows the MPS of SCBL is positively correlated with BPS, DPS, EPS and P / E and negatively correlated with E / Y and D / Y. The coefficient of determination shows that 60.84% of the changes in MPS are explained by BPS, 89.99% of the changes in MPS is explained by the DPS where as 66.43% of the changes in MPS is explained by EPS. The degrees of correlation are insignificant with most indicators i.e. BPS, DPS, EPS, P / E, E/ Y and D/Y with MPS at 95% significance level.

From the simple regression analysis, the regression equations are found (MPS being dependent variable) as:

MPS on EPS

$$\text{MPS} = 41.820 + 43.182 \text{ EPS}$$

The regression constant 41.820 implies that when EPS is zero, MPS is Rs. 41.820. The coefficient for EPS 43.182 implies that when EPS increases by Re.1, MPS also increases by Rs. 43.182 and vice versa. The simple correlation coefficient is .815 with 1423.112 standard error of estimate.

MPS on DPS

$$\text{MPS} = 651.3104 + 56.4074 \text{ DPS}$$

The regression constant 651.3104 implies than when DPS is zero, MPS is Rs. 651.3104. The coefficient for DPS 56.4074 implies that when

DPS increases by Re.1, MPS also increases by Rs. 56.4074 and vice versa. The simple correlation coefficient is 0.94866 with 776.98 standard error of estimate.

#### MPS on BPS

$$\text{MPS} = 4585.60 + 0.5209 \text{ BPS}$$

The regression constant 4585.60 implies that when BPS is zero MPS is Rs. 4585.60. The coefficient for BPS 0.5209 implies that when BPS is increased by Re.1, MPS also decreases by Rs. 0.5209 and vice versa. The simple correlation coefficient is 0.780 with 2428.507 standard error of estimate.

#### MPS on P/E Ratio

$$\text{MPS} = 902.895 + 135.059 \text{ P/E}$$

The regression constant 902.895 implies that when P/E is zero MPS is Rs. 902.895. The coefficient for P/E 135.059 implies that when P/E is increased by Re.1, MPS also increases by Rs. 135.059 and vice versa. The simple correlation coefficient is 0.7516 with 1620.99 standard error of estimate.

#### MPS on Dividend Yield (D/Y)

$$\text{MPS} = 13658.021 - 4165.911 \text{ D/Y}$$

The regression constant 13658.021 implies that when D/Y is zero MPS is Rs. 13658.021. The coefficient for D/Y -4165.911 implies that when D/Y is changes by Re.1, MPS also changes by Rs. 4165.911 and vice versa. The simple correlation coefficient is 0.6285 with 1409.13 standard error of estimate.

#### MPS on Earning Yield (E/Y)

$$\text{MPS} = 9896.583 - 2001.085 \text{ E/Y}$$

The regression constant 9896.583 implies that when E / Y is zero MPS is Rs. 9896.583. The coefficient for E / Y - 2001.085, implies that when E / Y are changes by Re.1, MPS changes by Rs. 2001.085 and vice versa. The simple correlation coefficient is 0.777 with 1545.62 standard error of estimate.

#### **4.8 Everest Bank**

The market price per share of EB, the Stock dividend and the total dividend calculated are presented in the table below.

**Table No.4.13**

**MPS, Dividend per share of EB**

FY	Market Price Per Share	Dividend per Share
06/07	2430	10
07/08	3132	20
08/09	2455	30
09/10	1630	30
10/11	1094	50

(Source: Annual Report of EB)

The closing market price of EB is higher in the year 07/08 i.e. Rs. 3132 and minimum in the year 10/11 i.e. Rs. 1094. The annual return Realized return, Standard deviation and coefficient of variance are calculated on the basis of above ground is shown in the table below.

**Table No.4.14**

**Yearly Return (R<sub>j</sub>), Realized Return ( $\bar{R}_j$ ) and Standard Deviation ( $\sigma_j$ )  
of EB**

Year	Closing Market Price (P <sub>t</sub> )	Total Dividend (D <sub>t</sub> )	Realized return $R_j = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$
06/07	2430	10	-
07/08	3132	20	0.297
08/09	2455	30	-0.207
09/10	1630	30	-0.324
10/11	1094	50	-0.298
			$\sum R_{EB} = -0.532$

Realized Return ( $\bar{R}_{EB}$ ) is calculated as below:

$$\bar{R}_{EB} = \frac{\sum R_{EB}}{N} = \frac{-0.532}{4} = -0.133$$

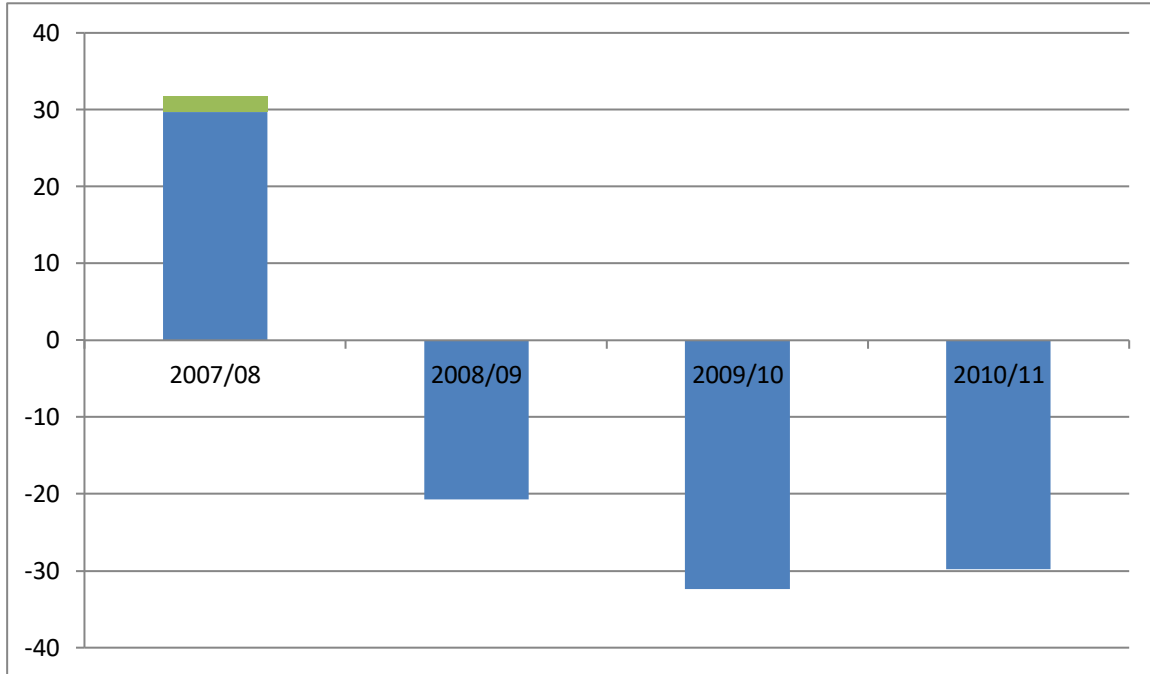
Standard Deviation ( $\sigma_{EB}$ ) is calculated as below:

$$\sigma_{EB} = \sqrt{\frac{(\sum R_{EB} - R_{EB})^2}{N}} = \sqrt{\frac{0.254082}{4}} = 0.2520$$

$$CV_{EB} = \frac{\sigma_{EB}}{\bar{R}_{EB}} = \frac{0.2520}{-0.133} = 1.895$$

**Figure No.4.7**

**Yearly return on common stock of Everest Bank**



The range of annual return on the common stock is negative return -0.324 percent lowest in the year 09/10 to highest 0.297 percent in the year 07/08. The annual return is highly decreasing in the respected years. From the above data Realized return is -0.133 percent. The total risk of EB i.e. Standard deviation is 0.2520 & the relative measure of dispersion based on Standard deviation i.e. CV is found to be 1.895 which means for earning one unit of return the investors has to beak 1.895 unit of risk.

**4.9 Correlation and regression analysis of Everest Bank Ltd**

Table 4.15 summarizes the financial Performance of EBL over last 5 years period and Table 4.16 shows the relationship (correlation) of EPS, DPS, BPS, P/E, E/Y and D/Y to mps along with the significance of such relationship at 95% significance level.

**Table No.4.15****Summary of the financial performance of EBL**

year	MPS	BPS	DPS	EPS	P/E	D/Y	E/Y
2006/07	2430	280.82	10	78.42	30.99	0.4115	3.227
2007/08	3132	321.77	20	91.82	34.11	0.639	2.932
2008/09	2455	345.22	30	99.99	24.55	1.222	4.073
2009/10	1630	331.99	30	100.16	16.27	1.840	6.145
2010/11	1094	277.909	50	83.18	13.15	4.570	7.603
Mean	2148.2	311.542	28	90.714	23.814	1.7365	4.796
Standard Deviation	793.93	30.545	14.832	9.8030	9.065	1.6782	2.0098
C.V.	36.958	9.8045	52.971	10.806	38.066	96.643	41.906

(Source: Annual Report of EBL)

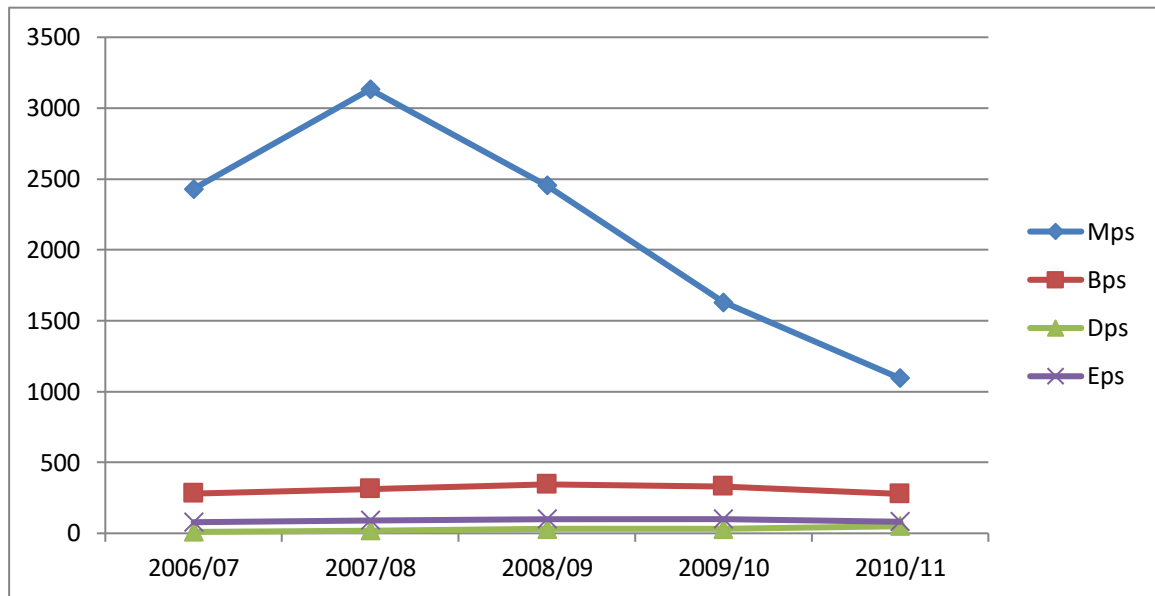
**Table No.16****Relationship of BPS, DPS, EPS, P/E, D/Y and E/Y with Mps of EBL.**

Indicators	r	Squared r (coefficient of determinants)	Remarks
BPS	0.3773	0.1424	Insignificant
DPS	-0.776	0.6022	Insignificant
EPS	0.113	0.0128	Insignificant
P/E	0.956	0.9139	Insignificant

D/Y	-0.873	0.762	Insignificant
E/Y	-0.964	0.929	Insignificant

**Figure no.4.8**

**The Linear relationship of DPS, BPS, EPS and MPS of Everest Banks**



For Everest Bank, it is found from the table that BPS is increasing and then decreasing, MPS is decreasing, EPS is increasing and DPS is increasing and then becomes constant and again increasing trend. DPS and D/Y is volatile with 52.971% and 96.643% coefficient of variation (CV) respectively. 9.8045% CV of BPS shows no risk over the last five years.

The simple correlation analysis shows the MPS of EB is positively correlated with BPS, P/E , EPS and negatively correlated with DPS E / Y and D / Y. The coefficient of determination shows that 14.24% of the changes in MPS are explained by BPS, 60.22% of the changes in MPS

are explained by the DPS where as 1.28% of the changes in MPS is explained by EPS. The degrees of correlation are insignificant with most indicators i.e. BPS, DPS, EPS, P / E, E/ Y and D/Y with MPS at 95% significance level.

From the simple regression analysis, the regression equations are found (MPS being dependent variable) as:

MPS on EPS

$$\text{MPS} = 1318.239 + 9.1492 \text{ EPS}$$

The regression constant 1318.239 implies that when EPS is zero, MPS is Rs. 1318.239. The coefficient for EPS 9.1492 implies that when EPS increases by Re.1, MPS also increases by Rs. 9.1492 and vice versa. The simple correlation coefficient is 0.113 with 910.88 standard error of estimate.

MPS on DPS

$$\text{MPS} = 3311.409 - 41.543 \text{ DPS}$$

The regression constant 3311.409 implies than when DPS is zero, MPS is Rs. 3311.409. The coefficient for DPS -41.543 implies that when DPS changes by Re.1, MPS also changes by Rs. 41.543 and vice versa. The simple correlation coefficient is 0.776 with 1350.05 standard error of estimate.

MPS on BPS

$$\text{MPS} = 905.568 + 9.80214 \text{ BPS}$$

The regression constant 905.568 implies that when BPS is zero MPS is Rs. 905.568. The coefficient for BPS 9.80214 implies that when BPS is increased by Re.1, MPS also increased by Rs. 9.80214 and vice versa.

The simple correlation coefficient is 0.3773 with 849.0 standard error of estimate.

#### MPS on P/E Ratio

$$\text{MPS} = 153.636 + 83.755 \text{ P/E}$$

The regression constant 153.636 implies that when P/E is zero MPS is Rs. 153.636. The coefficient for P/E 83.755 implies that when P/E is increased by Re.1, MPS also increases by Rs. 83.755 and vice versa. The simple correlation coefficient is 0.956 with 268.24 standard error of estimate.

#### MPS on Dividend Yield (D/Y)

$$\text{MPS} = 2562.903 - 412.967 \text{ D/Y}$$

The regression constant 2562.903 implies that when D/Y is zero MPS is Rs. 2562.903. The coefficient for D/Y -412.967 implies that when D/Y is changes by Re.1, MPS also changes by Rs. 412.967 and vice versa. The simple correlation coefficient is 0.873 with 1132.62 standard error of estimate.

#### MPS on Earning Yield (E/Y)

$$\text{MPS} = 3975.45 - 380.994 \text{ E/Y}$$

The regression constant 3975.45 implies that when E / Y is zero MPS is Rs. 3975.45. The coefficient for E / Y - 380.994, implies that when E / Y is changes by Re.1, MPS changes by Rs. 380.994 and vice versa. The simple correlation coefficient is 0.964 with 242.11s standard error of estimate.

### **4.10 Siddhartha Bank**

The market price per share, the Stock dividend and the total dividend of SB calculated are presented in the table below.

**Table No.4.17****MPS, Dividend per share of SB**

FY	Market Price Per Share	Dividend per Share
06/07	778	15.79
07/08	1090	15.79
08/09	1000	15.79
09/10	444	10.03
10/11	270	15.79

(Source: Annual report of SB)

The closing market price of SB is higher in the year 07/08 i.e. Rs. 1090 and minimum in the year 10/11 i.e. Rs. 270. The annual return, Realized return, Standard deviation ( $\sigma$ ) and coefficient of variance (CV) are calculated on the basis of above ground is shown in the table below.

**Table No.4.18**

**Yearly Return ( $R_j$ ), Realised Return ( $\bar{R}_j$ ) and Standard Deviation ( $\sigma_j$ )  
of SB**

Year	Closing Market Price ( $P_t$ )	Total Dividend ( $D_t$ )	Realised return $R_j = \frac{(P_t - P_{t-1}) + D_t}{P_{t-1}}$
06/07	778	15.79	-
07/08	1090	15.79	0.4213
08/09	1000	15.79	-0.068
09/10	444	10.03	-0.546
10/11	270	15.79	-0.356

			$\sum R_{SB} = -0.5487$
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Realised Return ( $\overline{R}_{SB}$ ) is calculated as below:

$$\overline{R}_{SB} = \frac{\sum R_{SB}}{N} = \frac{-0.5487}{4} = -0.137$$

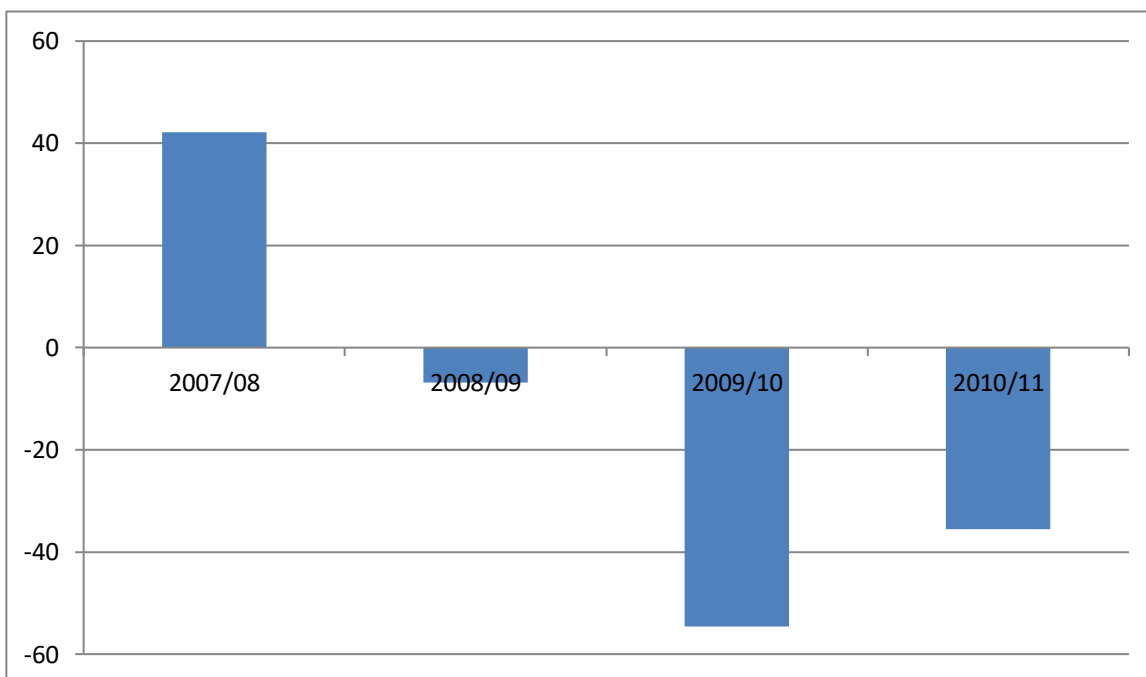
Standard Deviation ( $\sigma_{SB}$ ) is calculated as below:

$$\sigma_{SB} = \sqrt{\frac{(\sum R_{SB} - \overline{R}_{SB})^2}{N}} = \sqrt{\frac{0.5318}{4}} = 0.3646$$

$$CV_{SB} = \frac{\sigma_{SB}}{\overline{R}_{SB}} = \frac{0.3646}{-0.137} = 2.6613$$

**Figure no.4.9**

**Yearly return on common stock of Siddhartha Bank**



The range of annual return on the common stock is negative return -0.546 percent lowest in the year 09/10 to highest 0.4213 percent in the year 07/08. The annual return is highly decreasing in the respected years.

From the above data Realized return is -0.137 percent. The total risk of SB i.e. Standard deviation is 0.3646 & the relative measure of dispersion based on Standard deviation i.e. CV is found to be 2.6613 which means for earning one unit of return the investors has to beak 2.6613 unit of risk.

#### **4.11 Correlation and regression analysis of Siddhartha Bank Ltd**

Table 4.19 summarizes the financial Performance of SBL over last 5 years period and Table 4.20 shows the relationship (correlation) of EPS, DPS, BPS, P/E, E/Y and D/Y to mps along with the significance of such relationship at 95% significance level.

**Table No.4.19**

#### **Summary of the Financial performance of SBL**

Year	MPS	BPS	DPS	EPS	P/E	D/Y	E/Y
2006/07	778	132.28	15.79	15.88	48.992	2.03	2.04
2007/08	1090	129.027	15.79	17.29	63.042	1.449	1.586
2008/09	1000	134.293	15.79	22.89	43.687	1.579	2.289
2009/10	444	146.438	10.03	21.99	20.191	2.26	4.953
2010/11	270	126.558	15.79	19.82	13.623	5.848	7.341
Mean	716.4	133.7192	14.638	19.574	37.907	2.6332	3.6418
S.D	352.59	7.705	2.576	2.989	20.56	1.827	2.451
C.V.	49.22	5.76	17.598	15.27	54.24	69.38	67.302

(Source: Annual report of SBL)

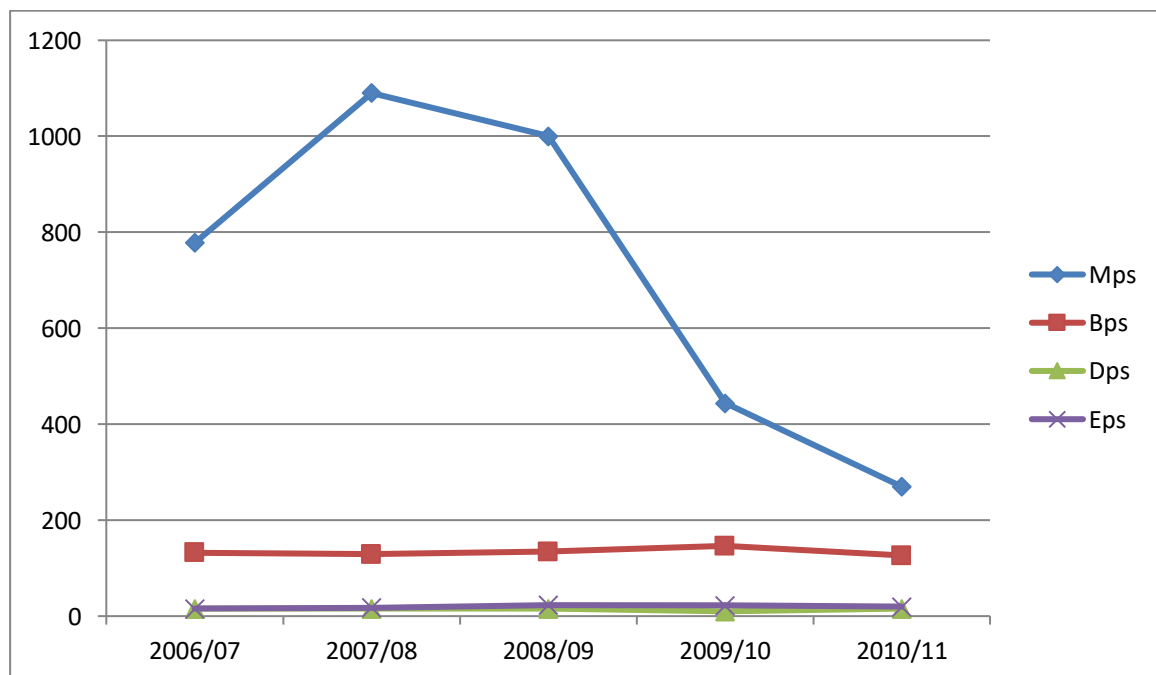
**Table No.4.20**

**Relationship of BPS, DPS, EPS, P/E, D/Y and E/Y with MPS of SBL**

Indicators	Coefficients of correlation (r)	Squared (r)	Remarks
BPS	-0.179	0.032041	Insignificant
DPS	0.432	0.186624	Insignificant
EPS	-0.2154	0.04639	Insignificant
P/E	0.9439	0.890	Insignificant
D/Y	-0.8197	0.6719	Insignificant
E/Y	-0.9428	0.889	Insignificant

**Figure no.4.6.2**

**The Liner relationship of DPS, BPS, EPS and MPS of SBL**



For SBL, it is found from the table BPS is random, MPS is increasing and then decreasing, EPS is increasing and decreasing are in decreasing trend. DPS and D/Y is volatile with 17.598% and 69.38% coefficient of variation (CV) respectively. 5.76% CV of BPS shows no risk over the last five years.

The simple correlation analysis shows the MPS of SBL is positively correlated with DPS, and P / E and negatively correlated with BPS, EPS, E / Y and D / Y. The coefficient of determination shows that 3.2041% of the changes in MPS are explained by BPS, 18.6624% of the changes in MPS is explained by the DPS where as 4.639% of the changes in MPS is explained by EPS. The degrees of correlation are insignificant with most indicators i.e. BPS, DPS, EPS, P / E, E/ Y and D/Y with MPS at 95% significance level.

From the simple regression analysis, the regression equations are found (MPS being dependent variable) as:

MPS on EPS

$$\text{MPS} = 1213.634 - 25.4028 \text{ EPS}$$

The regression constant 1213.634 implies that when EPS is zero, MPS is Rs. 1213.634. The coefficient for EPS – 25.4028 implies that when EPS changes by Re.1, MPS also changes by Rs. 25.4028 and vice versa. The simple correlation coefficient is 0.2154 with 397.58 standard error of estimate.

MPS on DPS

$$\text{MPS} = 148.983 + 59.119 \text{ DPS}$$

The regression constant 148.983 implies than when DPS is zero, MPS is Rs. 148.983. The coefficient for DPS 59.119 implies that when DPS increases by Re.1, MPS also increases by Rs. 59.119 and vice versa.

The simple correlation coefficient is 0.432 with 367.20 standard error of estimate.

#### MPS on BPS

$$\text{MPS} = 1740.973 - 7.6626 \text{ BPS}$$

The regression constant 1740.973 implies that when BPS is zero MPS is Rs. 1740.973. The coefficient for BPS – 7.6626, implies that when BPS is changes by Re.1, MPS also changes by Rs. 7.6626 and vice versa. The simple correlation coefficient is 0.179 with 401.1 standard error of estimate.

#### MPS on P/E Ratio

$$\text{MPS} = 101.5395 + 16.220 \text{ P/E}$$

The regression constant 101.5395 implies that when P/E is zero MPS is Rs. 101.5395. The coefficient for P/E 16.220 implies that when P/E is increased by Re.1, MPS also increases by Rs. 16.220 and vice versa. The simple correlation coefficient is 0.9439 with 135.16 standard error of estimate.

#### MPS on Dividend Yield (D/Y)

$$\text{MPS} = 1132.941 - 158.188 \text{ D/Y}$$

The regression constant 1132.941 implies that when D/Y is zero MPS is Rs. 1132.941. The coefficient for D/Y -158.188 implies that when D/Y is changes by Re.1, MPS also changes by Rs. 158.188 and vice versa. The simple correlation coefficient is 0.8197 with 233.22 standard error of estimate.

#### MPS on Earning Yield (E/Y)

$$\text{MPS} = 1210.411 - 135.650 \text{ E/Y}$$

The regression constant 1210.411 implies that when  $E / Y$  is zero MPS is Rs. 1210.411. The coefficient for  $E / Y - 135.650$ , implies that when  $E / Y$  is changes by Re.1, MPS changes by Rs. 135.650 and vice versa. The simple correlation coefficient is 0.9428 with 135.66 standard error of estimate.

**Table No.4.21**

**Realized return, standard deviation and coefficient of variance of selected companies**

Securities	Realized return	Standard deviation	Coefficient of variance
HBL	-0.1725	0.2465	1.428
NIB	-0.164	0.3642	2.22
SCB	-0.2010	0.259	1.289
EB	-0.133	0.2520	1.895
SB	-0.137	0.3646	2.6613

From the study the Realized return of Everest bank has minimum negative value and that of standard chartered Bank is maximum negative value .From the return point of view, investors should invest their money to buy securities of EB.SCB has low coefficient of variance comparing to other sample companies so from the risk point of view they go for SCB.

#### **4.12 Findings**

1. The MPS and BPS of Himalayan Banks are in decreasing trend for the study period. The average return of the bank is 17.25% for the given period with standard deviation of 24.65%. The C.V. is found to be 1.428. DPS, EPS and P/E are increasing and then decreasing while D/Y and E/Y are decreasing and increasing for study period.

2. The MPS and DPS of Nepal investment Banks are increasing and then decreasing trend for the study period. The average return of the bank is 16.4% for the given period with standard deviation of 36.42%. The C.V. is found to be 2.22. BPS is decreasing .EPS, D/Y and E/Y are decreasing and increasing while P/E is increasing and then decreasing for study period.

3. The MPS of Standard chartered Banks is increasing and then decreasing while DPS is decreasing for the study period. The average return of the bank is 20.10% for the given period with standard deviation of 25.9%. The C.V. is found to be 1.289. BPS and EPS are in decreasing trend. P/E is increasing and then decreasing while D/Y and E/Y are decreasing and increasing for study period

4. The MPS is decreasing while BPS of Everest Banks is increasing and then decreasing for the study period. The average return of the bank is 13.3% for the given period with standard deviation of 25.20%. The C.V. is found to be 1.895. DPS, EPS and D/Y are increasing and P/E is increasing and then decreasing while E/Y is decreasing and increasing for study period.

5. The MPS is increasing and then decreasing while DPS of Siddhartha Bank is almost constant trend for the study period. The average return of the bank is 13.7% for the given period with standard deviation of 36.40%.

The C.V. is found to be 2.6613. BPS is decreasing initially and then found in increasing trend .EPS and P/E are increasing and then decreasing while D/Y and E/Y are decreasing and increasing for study period.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

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

#### 5.1 Summary

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

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

The second chapter is review of literature. The review is done on the topic stock price behavior in Nepal. Review of literature is conducted

separated through review of article, books, journals, and dissertation company prospectus etc. In this chapter the major terms as well as tools has been described briefly. Similarly review of different research, articles and journals are also presented in the chapter.

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

In the fourth chapter, different data collected has been presented separately. This is the main body of the research which gave the different output to fulfill the objective of the research. To fulfill such objective, I have collected secondary data and analyze it in my best knowledge. I have gathered secondary data from current annual report of SEBON. It is risk and return of different selected banks. The collected data has been analyzed and presented by using different financial and statistical tools in the same chapter. Further, overall return of market is computed on the basis of closing NEPSE index. Side by side the comparison of individual stock return with market return is presented in the same chapter.

The study was mainly secondary data have also been used to full fill the objectives of this research. At the end of the chapter, some of the major findings (MPS, DPS, BPS, EPS, E/Y, D/Y and P/E) from secondary data are summarized and presented.

## **5.2 Conclusion**

The awareness of investors about the company in which they are investing is not satisfactory as they give more emphasis on banking sector for investment. Investing without knowledge about capital structure, founder and management and future plan of the company may lead the investment towards the wrong way and there will be greater probability of suffering loss. There is high chance of exploitations of the investors by the market intermediaries, as the awareness of investors about the rules and regulations on the behalf of them is not satisfactory. Due to the high degree of dissatisfaction to the rules and regulations among investors, it is concluded that the existing rules and regulations are not appropriate and in favor of investors.

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

Since both the quality of information available to the investors and their rationally is low, they have very little knowledge of trading procedures, price formation mechanism and risk diversification. The lack of investor's education training and research has made capital market least prioritized sector of the state. Most of the investors in Nepalese capital market do not believe on statement published on prospectus by the company before going to public .Despite this fact they put their

application for higher price in future. There is prevalent belief that buying share is a sure shot way of making profit. They don't think the decrement of share price from its par value. The rumor and whim is highly responsible in influencing the decision of the investors in share investment. Rather than analyzing to find out whether the company is worthwhile or not, they run behind the rumors and whim of the market.

Based on the above summary and the findings of this research conclude that there is a gap between the theory and practice of investment in Nepalese stock market due to the lack of proper analysis of stock.

Nepalese investors have not adequate education about the capital market. They do not have good knowledge and information to analyze the scenario and to forecast share price. Perhaps due to this reason, stock price in NEPSE show rather irrational behaviour. Creation of investing opportunities in NEPSE is very poor due to the traditional stock trading system and lack of stockbrokers' professionalism.

In NEPSE, DPS, BPS, EPS and P/E individually do not have consistent relationship with the market price of share, among the listed companies. The pricing behaviour varies from one company to another. But EPS, DPS, BPS and P/E jointly have significant effect in market price of shares. There may be other major factors affecting share price significantly.

According to the respondents of the survey, companies' performance such as earnings, dividend, book value, risk of the company and environmental factors such as instability of government, strikes, peace process, national economy and policy-change by national bank are the major factors affecting the share price in NEPSE. Cost of equity, market liquidity, stock dividend, global economy and change in management do not significantly affect the share price in NEPSE.

There is lack of proper laws and policies regarding the capital market. Shareholders are feeling unsecured to invest in security market due to poor regulatory mechanism to protect shareholders interests. The implementation of existing laws is very weak.

Listed companies do not provide sufficient information (financial as well as non-financial) to their shareholders and they are not able to act according to the shareholders' desire.

### **5.3 Recommendations**

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

The investor should be clear of their motive before investing in the stocks. Most of the Nepalese investors are not well known about capital market due to the lack of education and information to analyze companies' performance and forecast price. So they are recommended to foster their frontier of knowledge to protect them from loosing. They hesitate to demand adequate information from the listed companies and though cheated, accept whatever the management of the companies decides. They are suggested to raise their voices and complain about such misconducts to SEBON and Ministry of Finance.

The lack of knowledge, experience and inadequate information on the part of corporate management, bankers, financial intermediaries, regulators' and government officers has lead to an imperfect stock market. Financial consultancy, research institutions and credit rating agency

should be established to address the investors and institutional need for the professional stock analysis and stock rating services.

The stockbrokers have a great role and responsibility to develop capital market opportunities. To promote competitive and healthy share market and to check domination and undue speculation it is important to have adequate market intermediaries in the stock market and they should follow the market ethics and trade practically. For the development of capital market they are suggested to provide rational and adequate advices to their clients/investors and upgrade their professionalism. They have to change themselves according to the dynamic environment of the capital market.

Listed companies are suggested to disclose timely and frequently information (financial as well as non-financial) without manipulation to shareholders by organizing frequent interaction programs with shareholders. They should conduct their AGM and audit regularly within prescribed time period. They are suggested to implement accounting and auditing standards set by Accounting Standard Board and Nepal Auditing Board to enhance investors.

As an apex body of capital market, SEBON and NEPSE are suggested to monitor and supervise listed companies performances and to develop reward-punishment system. They are suggested to disclose available information to investors and brokers timely and transparently. NEPSE is suggested for privatization, decentralization, modernization and also change the current trading system into online or internet based trading system. The license to the brokers should be given and renewed based on selling specified eligibility criteria (code of conduct, experience etc.) and brokers should be professionalized. Proper rules and regulations regarding the listed companies should be formed and duly implemented.

The researcher suggests to the government to formulate and duly implement effective laws and policies regarding capital market with compulsory participation of shareholder in various policy-making boards and organizational committees and to promote shareholders' organization with high priority. Since the shareholders and investors have less knowledge of capital market, educational packages to the potential investors and shareholder should be provided and an investors' protestation should be established. The monitoring and supervision of listed companies' financial as well as non-financial performance should be strengthened. Government is further suggested to initiate development projects by raising funds from capital market. Following recommendations are presented topic wise

#### **5.4 Confidence of potential investors**

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

#### **5.5 Attract the investors**

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

#### **5.6 Investor's investment decision making**

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

### **5.7 Investors Awareness**

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

### **5.8 Effective policy to reduce the exploitation**

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

### **5.9 Financial performance**

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

### **5.10 Suitable polices**

To protect investors interest on capital market, the government should promulgate the suitable polices. The amendment of concerned act and its regulations should be made.

### **5.11 Professionalism**

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

### **5.12 Investor's Consultation**

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

### **5.13 To initiate different programs**

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

### **5.14 To examine the company's performances**

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

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**Appendix**  
**Nepal Investment Bank**  
**Calculation of coefficient of correlation MPS, DPS and EPS**

EPS	DPS	R <sub>M</sub> - E(r <sub>M</sub> )	R <sub>E</sub> - E(r <sub>E</sub> )	r <sub>D</sub> - E(r <sub>D</sub> )	R <sub>M</sub> -E(r <sub>M</sub> ) <sup>2</sup>	R <sub>E</sub> -E(r <sub>E</sub> ) <sup>2</sup>	r <sub>D</sub> - E(r <sub>D</sub> ) <sup>2</sup>	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> -E(r <sub>E</sub> )]	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
62.57	30	371.6	10.72	-3.17	138086.56	114.92	10.85	3983.552	-1177.97
57.87	40.83	1092.6	6.02	7.66	1193774.76	36.24	58.68	6577.452	8369.32
37.42	20	30.6	-11.43	-13.17	936.36	208.22	173.45	-441.56	-403.0
52.55	25	-652.4	6.7	-8.17	425625.76	0.49	66.75	-456.68	5330.12
48.84	50	-842.4	-3.01	16.83	709637.76	9.0601	283.25	2535.62	-14177.6
259.25	165.83				2468061.2	368.9301	592.18	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> -E(r <sub>E</sub> )]	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
								12198.38	-2059.13

$$E(r_M) = \frac{6787}{5} = 1357.4 \quad \sigma_M = \sqrt{\frac{2468061.2}{5}} = 702.575$$

$$E(r_E) = \frac{259.25}{5} = 51.85 \quad \sigma_E = \sqrt{\frac{368.9301}{5}} = 8.59$$

$$E(r_D) = \frac{165.83}{5} = 33.17 \quad \sigma_D = \sqrt{\frac{592.18}{5}} = 10.883$$

$$COV_{ME} = \frac{12198.38}{5} = 2439.68$$

$$COV_{MD} = \frac{-2059.13}{5} = -411.83$$

$$COV_{ED} = \frac{145.79}{5} = 29.158$$

$$\rho_{ME} = \frac{COV_{ME}}{\sigma_M \sigma_E} = \frac{2439.68}{702.575 \times 8.59} = 0.4042$$

$$\rho_{MD} = \frac{COV_{MD}}{\sigma_M \sigma_D} = \frac{-411.83}{702.575 \times 8.59} = 0.0539$$

$$\rho_{ED} = \frac{COV_{ED}}{\sigma_E \sigma_D} = \frac{29.158}{702.575 \times 8.59} = 0.312$$

### Everest Bank

#### Calculation of coefficient of correlation MPS, DPS and EPS

EPS	DPS	R <sub>M</sub> - E(r <sub>M</sub> )	R <sub>E</sub> - E(r <sub>E</sub> )	r <sub>D</sub> - E(r <sub>D</sub> )	R <sub>M</sub> -E(r <sub>M</sub> ) <sup>2</sup>	R <sub>E</sub> - E(r <sub>E</sub> ) <sup>2</sup>	r <sub>D</sub> - E(r <sub>D</sub> ) <sup>2</sup>	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> -E(r <sub>E</sub> )]	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]	[R <sub>E</sub> -E(r <sub>E</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
78.42	10	281.8	-12.294	-18	79411.24	151.14	324	-3464.45	-5072.4	216.81
91.82	20	983.8	1.106	-8	967862.44	1.223	64	1088.1	-7870.4	63.96
99.99	30	306.8	9.276	2	94126.24	86.044	4	2845.88	613.6	16.00
100.16	30	-518.2	9.446	2	268531.24	89.23	4	-4895	-1036.4	16.00
83.18	50	-1054.2	-7.534	22	1111337.64	56.761	484	7942.34	-23192.4	1032.04
453.57	140				2521268.8	384.398	880	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> -E(r <sub>E</sub> )]	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]	∑[R <sub>E</sub> -E(r <sub>E</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
								3516.87	-36558	800.00

$$E(r_M) = \frac{10741}{5} = 2148.2 \quad \sigma_M = \sqrt{\frac{2521268.8}{5}} = 710.11$$

$$E(r_E) = \frac{453.57}{5} = 90.714 \quad \sigma_E = \sqrt{\frac{384.398}{5}} = 8.768$$

$$E(r_D) = \frac{140}{5} = 28 \quad \sigma_D = \sqrt{\frac{880}{5}} = 13.266$$

$$COV_{ME} = \frac{3516.87}{5} = 703.374$$

$$COV_{MD} = \frac{-36558}{5} = -7311.6$$

$$COV_{ED} = \frac{84.14}{5} = 16.828$$

$$\rho_{ME} = \frac{COV_{ME}}{\sigma_M \sigma_E} = \frac{703.374}{710.11 \times 8.768} = 0.113$$

$$\rho_{MD} = \frac{COV_{MD}}{\sigma_M \sigma_D} = \frac{-7311.6}{710.11 \times 13.266} = -0.776$$

$$\rho_{ED} = \frac{COV_{ED}}{\sigma_E \sigma_D} = \frac{16.828}{8.768 \times 13.266} = 0.1447$$

### Siddhartha Bank

#### Calculation of coefficient of correlation MPS, DPS and EPS

EPS	DPS	R <sub>M</sub> - E(r <sub>M</sub> )	R <sub>E</sub> - E(r <sub>E</sub> )	r <sub>D</sub> - E(r <sub>D</sub> )	R <sub>M</sub> -E(r <sub>M</sub> ) <sup>2</sup>	R <sub>E</sub> - E(r <sub>E</sub> ) <sup>2</sup>	r <sub>D</sub> - E(r <sub>D</sub> ) <sup>2</sup>	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> - E(r <sub>E</sub> )]	[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
15.88	15.79	61.6	-3.694	1.152	3794.56	13.646	1.327	-227.5504	70.9632
17.29	15.79	373.6	-2.284	1.152	139576.96	5.217	1.327	-853.3024	430.3872
22.89	15.79	283.6	3.316	1.152	80428.96	10.996	1.327	-940.4176	326.7072
21.99	10.03	-272.4	2.416	-4.608	74201.76	5.837	21.234	-658.1184	1255.2192
19.82	15.79	-446.4	0.246	1.152	199272.96	0.061	1.327	-109.8144	-514.2528
97.87	73.19				497275.2	35.757	26.542	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>E</sub> -E(r <sub>E</sub> )]	∑[R <sub>M</sub> -E(r <sub>M</sub> ) r <sub>D</sub> -E(r <sub>D</sub> )]
								-908.368	1569.024

$$E(r_M) = \frac{3582}{5} = 716.4 \quad \sigma_M = \sqrt{\frac{497275.2}{5}} = 315.36$$

$$E(r_E) = \frac{97.87}{5} = 19.574 \quad \sigma_E = \sqrt{\frac{35.757}{5}} = 2.6742$$

$$E(r_D) = \frac{73.19}{5} = 14.638 \quad \sigma_D = \sqrt{\frac{26.542}{5}} = 2.304$$

$$COV_{ME} = \frac{-908.368}{5} = -181.6736$$

$$COV_{MD} = \frac{1569.024}{5} = 313.8048$$

$$COV_{ED} = \frac{-13.9163}{5} = -2.7833$$

$$\rho_{ME} = \frac{COV_{ME}}{\sigma_M \sigma_E} = \frac{-181.6736}{315.36 \times 2.6742} = -0.2154$$

$$\rho_{MD} = \frac{COV_{MD}}{\sigma_M \sigma_D} = \frac{313.8048}{315.36 \times 2.304} = 0.432$$

$$\rho_{ED} = \frac{COV_{ED}}{\sigma_E \sigma_D} = \frac{-2.7833}{2.304 \times 2.6742} = -0.4517$$

## Himalayan Bank

### Calculation of coefficient of correlation MPS, DPS and EPS

Year	MPS	EPS	DPS	$R_M - E(r_M)$	$R_E - E(r_E)$	$r_D - E(r_D)$	$R_M - E(r_M)^2$	$R_E - E(r_E)^2$	$r_D - E(r_D)^2$
06/07	1740	60.66	40	365.8	8.308	-0.448	133809.64	69.023	0.2007
07/08	1980	62.74	45	605.8	10.388	4.552	366993.64	107.911	20.721
08/09	1760	61.90	43.56	385.8	9.548	3.112	148841.64	91.164	9.685
09/10	816	31.80	36.84	-558.2	-20.55	-3.608	311587.24	422.38	13.018
10/11	575	44.66	36.84	-799.2	-7.692	-3.608	638720.64	59.167	13.017
	6871	261.76	202.24				1599952.8	749.645	56.6417

$$E(r_M) = \frac{6871}{5} = 1374.2 \quad \sigma_M = \sqrt{\frac{1599952.8}{5}} = 565.68$$

$$E(r_E) = \frac{261.76}{5} = 52.352 \quad \sigma_E = \sqrt{\frac{749.645}{5}} = 12.245$$

$$E(r_D) = \frac{202.24}{5} = 40.448 \quad \sigma_D = \sqrt{\frac{56.6417}{5}} = 3.366$$

$$COV_{ME} = \frac{30635.32}{5} = 6127.064$$

$$COV_{MD} = \frac{8691.832}{5} = 1738.3664$$

$$COV_{ED} = \frac{175.182}{5} = 35.0364$$

$$\rho_{ME} = \frac{COV_{ME}}{\sigma_M \sigma_E} = \frac{6127.064}{565.68 \times 12.245} = 0.8846$$

$$\rho_{MD} = \frac{COV_{MD}}{\sigma_M \sigma_D} = \frac{1738.3664}{565.68 \times 3.366} = 0.913$$

$$\rho_{ED} = \frac{COV_{ED}}{\sigma_E \sigma_D} = \frac{35.0364}{12.245 \times 3.366} = 0.850$$

### Standard Charter Bank

#### Calculation of coefficient of correlation MPS, DPS and EPS

Year	MPS	EPS	DPS	$R_M - E(r_M)$	$R_E - E(r_E)$	$r_D - E(r_D)$	$R_M - E(r_M)^2$	$R_E - E(r_E)^2$	$r_D - E(r_D)^2$
06/07	5900	167.37	130	1136.2	56.082	34	1290950.44	3145.191	1156
07/08	6830	131.92	130	2066.2	20.632	34	4269182.44	425.679	1156
08/09	6010	109.99	100	1246.2	-1.298	4	1553014.44	1.685	16
09/10	3279	77.65	70	-1484.8	-33.63	-26	2204631.04	1131.52	676
10/11	1800	69.51	50	-2963.8	-41.77	-46	8784110.44	1745.40	2116

	23819	556.44	480				18101888.8	6449.475	5120

$$E(r_M) = \frac{23819}{5} = 4763.8 \quad \sigma_M = \sqrt{\frac{18101888.8}{5}} = 1902.73$$

$$E(r_E) = \frac{556.44}{5} = 111.288 \quad \sigma_E = \sqrt{\frac{6449.475}{5}} = 35.915$$

$$E(r_D) = \frac{480}{5} = 96 \quad \sigma_D = \sqrt{\frac{5120}{5}} = 32$$

$$COV_{ME} = \frac{278500}{5} = 55700$$

$$COV_{MD} = \frac{288806}{5} = 57761.2$$

$$COV_{ED} = \frac{5399.46}{5} = 1079.892$$

$$\rho_{ME} = \frac{COV_{ME}}{\sigma_M \sigma_E} = \frac{55700}{1902.73 \times 35.915} = 0.8151$$

$$\rho_{MD} = \frac{COV_{MD}}{\sigma_M \sigma_D} = \frac{57761.2}{1902.73 \times 32} = 0.94866$$

$$\rho_{ED} = \frac{COV_{ED}}{\sigma_E \sigma_D} = \frac{1079.892}{35.915 \times 32} = 0.9396$$