# CHAPTER I <br> INTRODUCTION 

### 1.1 Historical Background

History indicates that much time and effort have been devoted in the field of research, investigate the movement. The concept of capital market is neither very old nor very complex in the context of Nepal. It is still in the beginning stages and different effort have been made for development of the capital market since 1936 to till now. In Nepal, the first public issue of ordinary shares of company took place more than seventy years back with the public issue of Biratnagar Jute Mills and Nepal Bank Ltd. in 1937. But the development of the capital market started in 1976 after the establishment of Securities Exchange Center. When the government started SEC (Security Exchange Center) to provide and develop market for securities, both the government bond and the corporate securities SEC used to manage and operate primary and secondary market of long term government securities and corporate securities.

The objective of regulating security transactions and protecting interest of investors, Security Exchange Act 1983 was enacted in 1984. The act provided some legal and institutional basis for the securities market development. This act was amended in May 26, 1993 A.D. with an objectives of operating effective and efficient primary market and also to operate secondary market in an organize way through licenses member. Everyone is looking more hopeful till now but it does not take any concrete step for the protection of the investors especially in practice however it has exposed its positive vision towards the investors.

After restoration of democracy in Nepal, the government has made and included the plan and policy for development of capital market while formulating the Eight plan in 1992-1997. The first amendment of the Securities Exchange Act 1983 was done in 1992 and subsequently Securities Exchange Regulation, 1993 has come. The second amendment to the Securities Exchange Act, 1983 has been done in 1996. Since the establishment of SEBO/N, it has been concentrated its all efforts on improving the legal and statutory frameworks which are the bases for the healthy development of the capital market in Nepal.

The SEBO also does various function like as, to advise the Nepal government on the issued related to the development of capital markets and protection of the investors interest, and to conduct research and studies along the area of capital market. The establishment of the specialized firm as NEPSE proved that to be a strong step towards the liberalization of the economy and a milestone in the way of economic development of the Nepal. NEPSE has listed 125 public companies till now. In this way, secondary market is operated.

### 1.2 Statement of the Problem

The concept of the capital marketing in Nepal is not very old. It is still in beginning stages. So,
different effort has been made for the development of capital market. Nepalese capital market deals with traditional securities i.e. common stock, preferred stock and Debenture. Nepalese capital market did not launch financial derivation i.e. warrant, convertibles, option and rights. Only few companies issued the preferred stock and debenture. But the financial derivative are not develop yet.

The capital market has been affected by various economic and non-economic factor, Even after 13 years of establishment of SEBO, there seems to be very slow growth rate, low trading volume of share due to lack of adequate and professional brokers, limited movement of share prices, limited information available to the investors etc.

In the present situation, the main question face by investor in share market can be as follows:
a) Does the different factors i.e. EPS, DPS, PE ratio, affect Market price of share?
b) How the external environment discouraged investors ?
c) What is the impact of lack of co-ordinating the regularly bodies like NRB, SEBO, NEPSE ?
d) How long complex process of transaction has affected on share capital Market?
e) How extend the investor are awareness on investing on share market

The investors are also tended to rely on the explanatory information and do not show interest on the statistical data and technical analysis. Since, the sufficient information of financial position and performance of the listed companies has not been disseminated to the general public, the healthy and dynamism of stock market suffers due to the lack of transparency. Because transparency is the one of the main element of the corporate governance is a set of rules and incentives by which management of a company is directed and controlled, so as to maximize profits and the value of company.

In recent years people are very interested and attracted towards share investments. In such context, the professional and adequate brokers role is one of the main sources for making aware to the shareholders in securities trading. Buyers and sellers have greater influence in the determination of share price through their respective brokers, it is not guaranteed that the price is determined fairly and competitively. But in Nepal registered brokers are not professional, adequate, and qualified to provide various services to the transaction of the share market in the countries. Mostly investors never invest in securities by doing technical analysis in Nepalese capital market.

Concerning the above problem in mind, this study tried to study the determining factors affecting in share prices in Nepalese capital market.

### 1.3 Objectives of the Study

The role of the security market is vital in the economic development of a country. It provides a medium to mobilize financial resources from the non productive sector to the productive sector. The main
objectives of the study is to examine and analyze the factors affecting in the determination of share price in Nepalese capital market the specific objectives are as follows:

1. To analyze the major factors affecting in the determination of share price in Nepalese capital market.
2. To analyze the effect of EPS and DPS on the market price of share (IMPS).
3. To analyze the role play by major variables significant to stock price movement.
4. To analyze the awareness of the investors investing in share capital market.

### 1.4 Significance of the Study

In recent years, people are attracted towards share investment in banking sector mostly for the purpose of getting remarkable return in both the form of dividend as well as capital gains. In Nepal due to the lack of enough knowledge people loose their return, so that clear concept about return should be established to create the investment environment in capital market. The study is helpful for public while choosing the securities. This is also helpful to policy maker to formulate appropriate investment policy.

Beside these, this study will be important for the following group and individual.

1. The research is very useful for the university students who are interested to know the stock price trend, volume of stock traded, role of listing companies and investor's awareness toward the share market.
2. It covers the partial fulfillment of the requirement of MBS, T.U.
3. This study helps to provide literature for further researchers.
4. This study also helps to the stock investment consultants and market makers.
5. This study also helps the shareholders management and policy makers.

### 1.5 Scope of the Study

There are many challenges for research worker to get appropriate result from the research. This study has limited scope, as only some samples of the listed companies will be taken for study. The study areas will be very specific. It mainly covered on determining factors of share price in Nepalese capital markets. This study is dependent on both the primary and secondary data published from the related company, regulating authorities market intermediaries, legal experts and some individual investors. So accurate and reliable data may not be obtained.

### 1.6 Limitation of the Study

While considering the research, numbers of limitations are occurred. The limitation of the study is as follows:

1. The research is limited, as it is prepared in partial fulfillment of the requirement of the master degree. (MBS).
2. The research is full based on the students personal resources and should take no more than few months for the completion. So, time and financial factors are also one of the very important limits.
3. Lack of manpower is one of the drawbacks during the research as only one person is full responsible for research process.
4. The study is totally focused on the determination of share price in Nepalese capital market.
5. The study is also made on common stock.
6. For the evaluation of qualitative factors, individual investors, stock brokers and listed companies are selected.

### 1.7 Organization of the Study

Organization of the study provides the path to solve research problem in systematic manner to achieve the basis objectives of research. To bring out appropriate result following organization is to be made the study has been organized into the following five chapters.

Chapter One : Introduction
Chapter Two : Review of Literature
Chapter Three : Research Methodology
Chapter Four: Data Analysis and Presentation
Chapter Five : Summary, Conclusions and Recommendations

## Chapter One : Introduction

The first chapter 'Introduction' deals with subject matter of the study. This chapter considers introduction of capital market, historical background, statement of the problem, focus of the study, significant of the study, scope and limitation of the study and organization of the study.

## Chapter Two : Review of Literature

Chapter two includes a discussion on the theoretical framework and review of the major empirical works. Review of the literatures in the field of the study being conducted through various books journals, unpublished dissertation which provides the theories of the related topics.

## Chapter Three : Research Methodology

Chapter three describes the research methodology employed in thestudy. This chapter deals with research design, nature and sources of data, population and sample of the data, population and sample of the listed companies and tools and techniques used in analysis of the data.

## Chapter Four : Data Analysis and Presentation

Chapter four is the main body of the research work, hence this chapter should give more emphasis and higher place in significance. This chapter includes the data presentation, analysis, interpretation and scoring the empirical findings out of the study. So, this chapter always attempts to analyze and evaluate data with the help of analytical tools and interpret the obtaining results.

## Chapter Five : Summary, Conclusions and Recommendations

Chapter five indicates summary, conclusion and recommendations the study. This chapter tries to sum up the results obtained from the analysis and it also recommends the several useful suggestion for various parties likewise investors, government, further researcher, financial managers and companies etc.

## CHAPTER II

## REVIEW OF LITERATURE

For this study prospectus, articles, and memorandum of the selected sampled of listed companies are also considered, reference and reviewed. For studying the 'Determinants of share price in Nepalese capital market' various available books in investment analysis and management, capital structure management and other financial sectors has given idea about the study.

### 2.1 Conceptual Framework

In the context of Nepal, the development of capital market and its regulatory system is not so old. The development of capital market is in increasing order in Nepal. The government has been trying to improve the capital market and its expansion.

Today, most of the developed countries like as china, Japan, Malaysia, Korea, Singapore etc. are boosting their economic activities by the help of their investment sectors. This is the age of globalization. So, most of the line investment sectors are influence by happening any event in one corner of the world brings the great changes in the whole world's share market. So, there are many causes where the intrinsic value of a security can not be exactly determined. Most of the securities value move randomly around their intrinsic value. If buyers and sellers of securities have received all information about stock and also accurately measured various internal and external factors like economic, political, legal and company's specific factors such as financial indicators (EPS, DPS etc.) effect in the determination of the market share price. On the other hand, earning prospects of the company determines the value of the share which is related to the internal as well as external factors. To determine the accurate price of share, new information should be known to the market participants such as dependent factors to determine the share price, new technology that can be used to know about the different price of the share of the other competitive companies etc.

In the context of Nepal, a long time bearish securities market was turned bullish in the fiscal year 2004/05. All the statistics were showed an increase over the previous fiscal year 2003/04. One the major reasons for the upturn may be the causes of changing political environment that was boosted the investors confidence and security in the investment but yet there was a doubt in the continuing of the confidence. The eight sectors in which the listed companies was classified the turnover of the commercial banks was remained the highest but the role of change in other sectors.

As the capital markets size is going to increase gradually. The present system of the capital market will not be able to cope with increasing market size in the following days. So, many Nepali stock holders used to say that the present system needs to be changed the capital market has been increased by many folds existing "open out cry" system can not manage effectively and successfully with increasing size of the market. So the present system needs to be changed into modern electronic system and to make the more economy a dynamic one all the sectors should perform well. In other words, the financial
market should be well operated and managed to complete with the other security market in the world.

### 2.1.1 Common Stocks

Common stocks represent ownership interest in the corporation and the major of stock held by the public also. It is a source of long-term financing. Common stock certificates are legal documents that evidence ownership for equity in a company that organized as a corporation. They are also marketable financial instruments. Common stock is a share of ownership in a company that can be easily sold. Small and obscure company not trade frequently. But most of the higher/larger companies or corporate can issues common stock as well as traded daily creating an opportunity to buy or sell share.
"Common stockholders of a corporation are its residual owners, have a right to claims on income and assets after creditors and preferred stockholders have been paid in full. As a result, a stock holders return on investment is less certain than the return to a lender or to a preferred stockholder. On the other hand, the return to common stockholder is not bounded on the upside, as are returns to the others. A share of stock can be authorized either with or without per value. The per value of stock is merely a stated figure in the corporate charter and is of little economic significance. A company should not issue stock at a price less than its par value, because stock holders who bought stock for less than par value" (Van Horne, 1997: 8).

Similarly, common stock represents ownership in a publicity traded company and carries certain rights and privileges, including voting rights for board of directors and sharing of profit and dividends. Common stock represents equity of an ownership position in corporation. It is a residual claim. In the sense that creditors and preferred stock holders must be paid as scheduled before common stockholders can received any payments. In bankruptcy common stock holders are principle entitled to any value remaining after all other claims have been satisfied.

The prime motive for buying stock is to sell it subsequently at a higher price. In many cases dividend will be expected also from buying of stock. Dividends and price changes are the principal ingredient in what investors regards as return or yield. The investor goals are usually expressed in terms of return sets theoretical and practical dimensions of how securities prices are determined and the manner in which returns are measured. The strong relation between economic activities and securities prices requires that the investors forecast the direction and degree of change in economic activities. So, investors must examine and analysis factors that affect earning, dividends and the stock prices of the listed companies.

At the end, stock is the ownership interest of a corporation. Each share of stock is a fraction of the rights and privileges that belongs to the owners of a business. A stock certificates is proof of that fractional ownership, it is visible evidence, a certificate of title, to part of the company. The ownership of firms stock has typically been represented by a single certificate, with the number of shares held by it. Such a stock certificate is usually registered, with the name, address, and holding of the investor included on the corporation's books. Dividends, payments, voting, malarial, annual and quarterly
reports and other mailing are then sent directly to the investor, taking into account the size of his and her holdings. Shares of stock held by an investor may be transferred to a new owner with the assistance of either the issuing corporation or more commonly its designated transfer agent. This agent will cancel the old stock certificate and issue a new one in its place, made out to the new owner (Sharpe; 1998: 501).

## Value of Common Stock

There are mainly three types of value of the common stock, which are given below.

## (a) Face Value

The face value of the stock is mentioned in article of association and memorandum book of the company. The face value does not change. Until there is a stock split or other such initiative by the board of directors. The par value of new issue is always Rs.100, as directed by the company act, 1993. When a corporation is first chattered it is authorized to issue upto a stated number of shares of common stock each of which will often carry a specified par value. Legally a corporation may be precluded from making payments to common stockholders if doing so would reduce the balance, the balance sheet value of stockholder's equity below the amount represented by the par value of outstanding stock. For this par value is typically low relative to the price which the stock is initially sold (Sharpe; 1998: 501).

## b) Book Value

Book value represents the assets value per share after entire obligation of the corporation is met. Book value can be calculated by the following.

$$
\text { Book value }=\frac{\text { Total Common Equity }}{\text { Number of Share Outstanding }}
$$

Here, total common equity is on the company balance sheet. In other words, the sum of the cumulative retained earnings and other entries such as "common stock" and capital contributed in excess of parvalue " under the stockholders equity is the book value of the equity. The book value per share is obtained by dividing the book value of the equity by the number of share outstanding (Sharpe; 1998:506).

## Market Value

Market value of the common stock is based on the market forces such as demand and supply. So, this value is determined by the demand and supply factors and reflects the negotiation between investor and seller for the transaction. The market value of the share is influenced by various internal and external factors like economic and industry condition, expected earnings and dividends, speculations and other signaling effects like major events inside the country, governments stability etc.

### 2.1.2 Financial Market

The financial market is still in infancy in Nepal. Financial market is defined as a mechanism for trading the financial assets or claims "Financial markets provide a forming which suppliers of funds and demanders of loans and investment can transact business directly" ( Gitman; 1998:30). The financial market can be divided into two form. Money market and the capital market.

## Money Market

Money market is defined as short-term financial market. So money market is the act of supplying shortterm debt or working capital needed for business, industries or other sectors etc. In general, money market trades various bills, papers like as government treasury bill, commercial papers, short, term bonds and debentures and promissory notes. "The money market is created by a financial relationship between supplier and demand markers of short-term funds, which has maturities of one year or less". Therefore, a money market brings together the supplier and demanded of short-term liquid funds. Further, the money market instruments, sometimes are also called cash equivalents of just cash.

## Capital Market

Capital market proved to be one of the important segments of the economy since it facilitates and provides better institutional arrangements for the borrowing and lending of long-term funds. So capital market is the general barometer that measure the proper collection and chanalization of savings for investments in productive and income generating assets. Although capital market is the mechanism designed to facilities the exchanges of financial assets by orders buyers and sellers of securities together. Similarly, capital market plays a crucial role in mobilization a constant flow of saving and changing these financial resources for expanding productive capacity in the countries. In other words, capital market mobilizes the market flows. Capital to invest on the corporate sectors by the means of securities. Then, the capital market is also a financial relationship created by a number of financial institutions and arrangement that allows the suppliers and demands of long-term funds, the funds with the maturities of more than one year to make transactions. In the capital market different types of the financial securities are traded, like as ordinary and preference stores, treasury bills and debentures. In broad sense, capital market can be classified into two types of markets which are described below.

## (a) Securities Market

Under the securities market, all types of securities such as share, debenture and bond are traded by the government and reputed organizations. There are also six types of markets under the secures market, named by stock market, bond market, business series market, government securities market, primary market and secondary market. The secures market is a broad term embracing a number of markets in which securities are bought and sold. Securities market includes how an indivdual investors goes about the business of placing any order to buy or sell, how the order is executed, the process of setting the payment and transfer costs and one hope the payment of federal personal income taxes on the profit from the transactions. (Fisher and Jordan; 1992: 16). These securities market can also be classified into two parts.

## (i) Primary Market

The new securities are issued by the company to trade in the capital market. here, the securities of large business firms issued for the first time brought and sold. In order words, the original issuance of the
financial instruments of a company is traded in the primary market and the company should sell its approved share through the authorized issue and sales agent. The company has to register its shares in the SEBO to get the legal authority to the issuance of the shares. Primary market provides an important allocate function by channeling the funds to those who can make the best use of them presumably, the most productive. Further described on the issues of such securities may directly sell through private placement without underwriting to the investors. Besides, the securities may be sold after being made understanding by the institution like investment banking. The issue company collects amount and invest in the productive sector to earn the profit. In the primary market, price of stocks always is in par value so there is no problem of share price determined.

Secondary market provides the liquidity and marketability opportunity to the stock market. Stock are traded second time in the agreement of buyer and seller in the stock market. Stock market may be either OTC (Ove-The Counter) market and registered stock market. Usually, those buying the securities for the first time went to see the securities within a short period. The secondary market also can be subdivided into OTC market and registered stock market.

An active secondary market is therefore a necessary condition for an effective primary market, as to investor wants to feel locked into an investment, "If the owner of 100 shares sells his/her stocks, the trade is said to have occurred in the secondary market. Thus the market for outstanding shares in the secondary market, the company receives no new money when sales occur in this market." ( Frightiman, Loui's, Grapenski and . Enrhadt; 1998:327).

## OTC Market

The full form of OTC market is over-the counter market. The market where the not listed securities of the companies in the stock exchange are traded is known as 'over-the counter market. It's an intangible market for the purchases and sellers of securities or it is not a formal exchange like organized stock exchanges. It neither requires membership for trading of securities nor listing of securities are necessary in the OTC market. A sophisticated telecommunication network times active traders in this market. Then at which securities are traded "over the counter are determined by competitive bids and negotiate OTC. National association of securities dealers automation quotation system is an example of an OTC market. OTC market is the computer linked network for the trading of OTC securities, initiated in 1971. It provides immediate information on a computer linked system of bid asked prices for stock offered by various dealers. The bid price is that at which a dealer is willing to purchase a security and asked price is that at which the dealer is willing to sell a security (Bhattarai; 2055BS).

## Registered Stock Market

Registered stock market is formally registered in the government agency i.e. Nepal Stock Exchange (NEPSE) in Nepalese Securities Market. Here, transactions of only listed companies are made. Majesty's government, under a programme is initiated to form capital market, converted secures exchange center into Nepal stock exchange in 1993 and NEPSE is a non-profit organization operating under securities exchange act 1983. Similarly, NEPSE opened its trading floor on $13^{\text {th }}$ January 1994 and Nepal Government, Nepal Rastra Bank, Nepal Industrial Development Corporation (NIDC) and other members are the shareholders of the NEPSE (Bhattarai; 2055 BS).

## b) Non-Securities Market

Non-securities market is that type of capital market where financial transactions are carried out between the lender and borrower for a longer period without issuing securities in the form of shares,
debentures and bonds. Financial transactions between the lending institution such as development banks and the business house or individuals, between the contractual saving institutions and individuals or business houses etc. come under non-securities market.

### 2.1.3 Relationship between Primary and Secondary Market

There is a symbolic relationship between the primary market and secondary market. The primary market creates long-term securities. While the secondary market provides liquidity through marketability of these institutions. New issue of share activity in the primary market adds depth to the secondary market by enlarging the supply instruments for trading and investment n the secondary market. Therefore, stock prices in turns are influences by the large size and bouncing of New Issues. Besides Primary and secondary market both are indispensable ingredients of the capital market and is the basis to meet the financial requirements of corporate bodies. Although Regulatory System of both primary and secondary market is inter-related by legal provisions also.

Most of the investors are wise to invest their saving funds in stocks with the expectation of future cash inflow as dividends and maximization of value of their holdings in the market. The dividends and value of the firm are linked with the earnings power of the firms, which ultimately affects the market price of shares. So brief discussion have been presented in the following paragraphs.

## Earning Per Share (EPS)

According earnings that represent the different between revenue and expenses including the expenses associated with non-equity source of funds (such as interest to debt, dividend to preferred share is also known as total earnings available for common stock. If this portion of income is divided by number of outstanding shares, we get earnings per share (Sharpe, Alexander and Bailey; 2001: 12.622).

## Retained Earnings

The balance sheet account which indicates the total amount of earnings the firm has not paid out as dividends thought its history, these comings have been reinvested in the firm.

## Dividend Per Share (DPS)

"The percentage of earning the firm pays in cash to its shareholders is known as dividend. The dividends, of course, reduce the amount of earnings retained in the firm and affect the total amount of earnings retained in the firm and affect the total amount of internal financing". (Van Horne; 2000: 305).
"Nothing is more important than dividends to stockholders. They buy shares of firm with the hope of sharing profits earned by firms. The sold Mohre of Stockholder is to receive return on their investment: nothing pleases them more than knowing the firm's earning and more profits mean more dividends coming in". (Pradhan; 1996: 375-376).

## Market Price Per Share (MPS)

"The market price of any asset, indeed, depends on the future earning power of the assets are the value of an assets depends on the future cash flows that the asset in expected to generate". (Pahariv;1996: 20).
"Once the shares issued in the primary market are listed in the stock exchange, investors are able to buy and sell the shares through brokerage firm. Generally, the price of shares are determined by demand and supply preferences. Due to the market imperfection and uncertainty shareholder may give a higher value to the near dividends and uncertainty, shareholders may give a higher value to the near dividends and capital gains. Thus, payment of dividend may significantly affect the market price of shares. Higher dividends increase the value of shares and low dividends reduce the value." (Pandey;1995: 631).
"The price of firms stock reflects expectation about its future earnings and dividends". (Western and Copeland; 1992: 111).

### 2.1.4 Common Stock Valuation

Common stock represents equity or an ownership position in a corporation. It is a residual claim, in the sense that creditors and preferred stock holders must be paid as scheduled before common stockholders can receive any payment. In bankruptcy, stockholders are in principle entitled to any value remaining after all other claimants have been satisfied. Hence, common stock is a legal representation of the right to receive perspective future benefit under stated condition.

Common stockholders are entitled to short certificate, which in fact represents ownership position. In
other words, a single certificate has typically represented the ownership of a firm's stock with the number of shares held by the particular investors noted on it. Such a stock certificate is usually registered with the books. Dividend payments, voting materials, annual and quarterly reports and other mailing are set directly to the investors taking into account the size of his or her holding.

A short of a common stock can be authorized either with or without par value. The par value of a stock is merely a stated figure in the corporate chapter and is of little economic significance. A company should not issue stock at a price less than par value because stockholders who bought stock for less than value would be liable to creditors the difference between the below par price they paid and the par value.
"The common stock holders expect to be rewarded through periodic cash dividend and an increasing or at least non declining share value. Like current owners; prospective owners and security analysis frequently estimate the firm's value. They purchase the stock where they believe that's under valued and true value is greater than it's market price. They sell the stock when they feel that it is overvalued that its market price is greater than its true value". (Gitman;2001: 299).

### 2.1.5 Market Efficiency

Economically, rational buyers and sellers use their assessment of an assets risk and return to determine its value. Toa buyer, the asset's value represents the minimum price that he or she would pay the acquire it: a seller views the asset's value as a maximum sale price. In competitive markets with many active participants, such as the New York Stock Exchange, the interaction of many buyers and sellers result in an equilibrium price-the market value for each security. This price reflects the collective actions of buyers and sellers based on all available information. Buyers and sellers are assumed to immediately digest new information as it becomes available and through their purchase and sales activities to quickly create a new market equilibrium price (Gitman; 2001: 224).

### 2.1.6 The Role of Securities Exchange

Securities exchanges create continuous liquid markets. They also create the efficient markets that allocate funds to their most productive uses. This is especially true for securities that are actively traded on major exchanges, when the competition among wealth maximizing invested determine and publicize prices that are believed to be close to their value. The price of an individual security is determined by the demand for and supply of the security. The competitive market created by the major securities exchange provides a forum in which share price is continuously adjusted to changing demand and supply (G.T. Man L.J.; 2001: 53).

### 2.1.7 Market Adjustment to New Information

"A given level of risk, investors require a specified periodic return the required rate of return (R), which can be estimated by using beta and CAPM. At each point of time, investors estimate the expected return, R-bar the return that is expected to be earned on a given asset each period over an
infinite time horizon". (Gitman;2001: 300).

### 2.1.8 NEPSE Index

"NEPSE index is an indicator of market capitalization of securities traded on NEPSE. NEPSE opened its trading floor on $13^{\text {th }}$ January 1994 and started to calculate index, as NEPSE index since $12^{\text {th }}$ February 1994. NEPSE is calculating the index on market value weight base and total market value of $12^{\text {th }}$ February, 1994 has been taken as base value. The arbitrary index value for the base period has been assumed to be 100 . It consider all the stocks listed in the exchange and their closing price to calculate index. Therefore, the population has been taken as a sampled and index represents all sector's all stock. So NEPSE index is the only index in "Nepalese Capital Market". (Bhattarai; 2055 BS).

### 2.2 The Relevant Theories and Approaches

### 2.2.1 Stock Valuation Some Valuation Convention

"According to the fundamental principle of valuation, in a perfectly efficient market. All securities in an equivalent risk class should be priced to yield the some rate of return. The rate of return can be used to determined the value of the similar risk class securities. The value of the similar risk class securities. The value can be calculated by using the discount rate is called the intrinsic value and dividend and earnings are considered independent variables to the value of the stock. The value of stock depends on the discount rate, earnings dividend etc". (Bhattarai; 2005).

### 2.2.2 The Basic Stock Valuation Equation

"The value of share of common stock is equal to the present value of all future dividends, it is expected to provide over an infinite time horizon. Although a stockholder can earn capital gains by selling stock at a price above that originally paid, what is really sold is the right to all future dividend what about stocks that are not expected to pay dividends in that are not expected to pay dividends in the foreseeable future ? Such stocks have a value attributable to a distant dividend expected to result from sale of the company liquidation of its assets. Therefore, from a valuation view point, only dividends are relevance". (Gitman;2001: 302).

The basic objective of valuation is to identify the mis-priced stock to create an efficient portfolio. A general mode equation to identity the value of stock is as follows:
$\mathrm{P}_{0}=\frac{\mathrm{d}_{1}}{(1+\mathrm{k})^{1}}+\frac{\mathrm{d}_{2}}{(1+\mathrm{k})^{2}}+\frac{\mathrm{d}_{3}}{(1+\mathrm{k})^{3}}+\ldots \ldots \ldots \ldots \ldots . . \frac{\mathrm{d}_{\infty}}{(1+\mathrm{k})^{\infty}}$
$\mathrm{P}_{0}=$ Value of stock at time 0.
$\mathrm{d}=$ Expected dividend per share.
$\mathrm{k}=$ Discount rate or required rate of return on stock.

The above presented model is a general model but to calculate the value of the common stock other different growth model are used as follows:

## Zero Growth Model

The simplest approach to dividend valuation, the zero-growth model, assumes a constant, non growing dividend stream. Further, under the zero growth model, it is assumed that the dividend per share in the past will continue forever in the future also. The dividend paid last year, do will also be paid over the next year $D_{1}$, and the year after that $D_{2}$ and the year after that $D_{3}$ and so on that is
$\mathrm{D}_{0} \quad=\mathrm{D}_{1}=\mathrm{D}_{2}=\mathrm{D}_{3}=\mathrm{D}_{\infty}$

$$
\begin{aligned}
\mathrm{P}_{0} \quad & =\mathrm{D}_{1} \times \sum_{\mathrm{t}=1}^{\infty} \frac{1}{(1+\mathrm{ke})^{\mathrm{t}}} \\
& =\mathrm{D}_{1} \times\left(\text { PVIFAK }_{\mathrm{e}, \mathrm{i}, \infty}\right) \\
& =\mathrm{D} . \times \frac{1}{\mathrm{k}_{\mathrm{e}}} \\
& =\frac{\mathrm{D}^{\prime}}{\mathrm{ke}^{\prime}}
\end{aligned}
$$

Note: In terms of the notation already introduced.

## Constant Growth Valuation Model

This model assumes that the dividend will grow at a constant role forever in the future. If the past year dividend was $\mathrm{D}_{0}$ and the coming dividend will grow at a constant rate ' g ' then the dividend would be $D_{1}$. i.e. $D_{0}(1+y)$. This model also assumes that the required rate of return $\left(k_{e}\right)$ is greater than the dividend growth rate. The equation can be written as follows:
$P_{0}=\frac{\operatorname{Dox}(1+\mathrm{g})^{1}}{(1+\mathrm{ke})^{1}}+\frac{\operatorname{Dox}(1+\mathrm{g})^{2}}{(1+\mathrm{ke})^{2}}+\ldots . \frac{\operatorname{Dox}(1+\mathrm{g})^{\infty}}{(1+\mathrm{ke})^{\infty}}$
$P_{0}=\frac{D_{1}}{(\mathrm{ke}-9)}=\frac{\operatorname{Dox}(1+\mathrm{g})}{(\mathrm{ke}-\mathrm{g})}$

Note: $D_{1}=D_{0}(1+9)$

The constant growth model in equation is commonly called the common model. A common name of the constant model is widely cited in dividend valuation. (Gitman; 2001: 304).

## Variable Growth Model

This model is also known as multiple growth mode, super-normal growth model or non-constant growth model etc. The variable growth model assumes that the dividend of the stock will grow at a constant rate after a certain period of time. Further, the zero and constant growth common stock models do not allow for any shift in expected growth rates. Because future growth rates might shift up or down due to changing expectations. It is useful to consider a variables, growth model that allows for a change in dividend growth rate. Let, $9^{1}$ equal the initial growth rate and $9^{2}$ equal the subsequent growth rates occurs at the end of year N , we can use the following four step procedure to determine the value of a share of stock. There are four steps to calculate the value of the stock under this model which are given below.

## Step 1

Find the value of the cash dividends at the end of each year, of during initial growth period years 1 through N . This step may require adjusting the most recent dividend. $\mathrm{D} 0_{1}$ using the initial growth rate, $\mathrm{g}_{1}$, to calculate the dividend amount for each year. Therefore, for the frist N years

$$
\mathrm{D}_{\mathrm{t}}=\mathrm{D}_{0} \times(1+\mathrm{g})^{\mathrm{t}}=\mathrm{D}_{0} \times \mathrm{PVIF}_{\mathrm{gi}}
$$

## Step 2

Find the present value of the dividend expected during the initial growth period. By using the notation this value can obtained as follows:

$$
\sum_{t=1}^{N} \frac{D_{0} \times(1+g)^{1}}{(a+k e)^{t}}=\sum_{t=1}^{N} \frac{D_{1}}{(a+k e)^{t}}=\sum_{t=1}^{N}\left(D_{t} \times \text { PVIFAK }_{e t}\right)
$$

## Step 3

Find the value of the stock at the end of the initial growth period.

$$
P_{n}=\frac{D_{n+1}}{K e-9_{2}}
$$

Which is the present value of the all dividend expected from year $\mathrm{N}+1$ to infinity-assuming a constant dividends growth rate, ge. The value is found by applying the constant growth model to the dividends expected from year $\mathrm{N}+1+$. The present value of $\mathrm{P}_{\mathrm{n}}$ would represent the value today of all dividends that are expected to be would received from year $\mathrm{N}+1$ to infinity.

This value can be calculated by:

$$
\frac{1}{(1+\mathrm{ke})^{\mathrm{N}}} \times \frac{\mathrm{D}_{\mathrm{N}+1}}{\mathrm{ke}-\mathrm{g}^{2}}=\mathrm{PVIFK}_{\mathrm{e}, \mathrm{i}, \mathrm{~N}} \times \mathrm{P}_{0} .
$$

## Step 4

Add the present value components found in step 2 and step 3 to find the value of the stock $\mathrm{P}_{9}$ given in the following equation.

$$
P_{0}=\sum_{t=1}^{N} \frac{D_{0} \times(1+g)^{t}}{(1+k e)^{t}}+\left[\frac{1}{(1+k e)^{N}} \times \frac{D_{N+1}}{k e-g_{2}}\right]
$$

or
$\mathrm{p}_{0}=\quad \mathrm{PV}$ of dividends during initial growth period +PV of price of stock at end of initial growth period (Source: Gitman, C.J., 2001, p. 305).

### 2.2.3 Relationship between Earnings and Stock Prices

Price of Stock is the function of numerous factors. Numerous factors determine the value of stock. Among these, earnings the one. So we determine the value of stock on the basis of dividend in the dividend discount model. Dividends ultimately come from earnings. Therefore earnings or dividends are the independent factor to calculate the value of the stock. In this way, the relationship between earnings and stock prices can be described by following way.

## Forecasted Earnings, Actual Earning and Stock Prices

Different research results show that the stock that had the largest gains price, experienced the greatest
increases in their earnings. There is a relationship between the percentage change in the stock prices and their actual earnings but it is impossible to discern a meaningful relationship between the forecasted earnings and the stock price changes. The main reasons behind not being the relationship between the forecasted earnings and stock price are first, they all are biased, and second of does not seem to have any impact on the stock prices changes in Earnings Effect Stock Prices.

Earnings must have an effect on the stock price but professor Laten and Jones doubted that investor's expectations about the future earning prospect had no effect on stock prices. They further suggest that the surprisingly good or surprisingly bad changes in earnings should have a significant impact on the stock prices.

### 2.2.4 Behaviour of Stock Market Prices

Securities prices are the function of various factors, which is already described. If there is changed in any factor that affect the prices of the securities. So, it can be said that the securities. So, it can be said that the securities prices fluctuate and it is not for a short period but for over a century. Holbrook articulated the notion that securities prices fluctuated around their intrinsic values. Over the decades many financial economists have developed and suggested many models and theories to describe the behaviour of stock prices. Prof. Eugene Fama published an empirical study in 1965 that analyzed the stock price movements of all the stock that make up the Dow Jones Industrial Average. Fama also investigated daily price changes for 30 stocks over a 5 years period. It could not have been done without an electronic data base and a computer. Fama analyzed the differences between the natural logarithms of the stocks price, because those differences are the continuously compounded rate of price changes.

$$
\mathrm{P}_{\mathrm{i}, \mathrm{t}}=\operatorname{In}\left(1+\mathrm{r}_{\mathrm{i}, \mathrm{t}}\right)=\operatorname{In} \mathrm{P}_{\mathrm{i}, \mathrm{t}}-\operatorname{In} \mathrm{P}_{\mathrm{i}}, \mathrm{t}_{-1}
$$

Fama, like many other researchers studies rate of price changed instead of the raw stock prices because the average role of price changes for most stocks does not change from year to year of it is measured over the representative sample period. In contrast, the price of the typical common stock increases about $6 \%$ per year. It is easier to make comparisons between average rates of change since the typical stock's average rate of price change remain constant. Although, Fama's study was designed to measure the degree of randomness with which stock prices fluctuated. He thought that financial information arrived randomly and, assuming that prices responded efficiently to the new information, the prices should fluctuate randomly too. Fama delineated three levels of the market efficiency.

Level 1 : The first level is the weakly efficient market hypothesis. The weakly efficient hypothesis stipulated that historical price and volume data for securities contain no information which can be sued to earn a training profit above what could be attained with a native buy and hold investment strategy. This hypothesis suggests that technical analysis is well recorded but worthless.

Level 2 : The second level of the market efficiency is the semi-strong efficient market hypothesis. This
semi strong EMH specified that markets are efficient enough for prices to reflect all publicly available information. Consequently, only those insiders who have access to available information could earn a profit larger than what could be earned by suing a native buy and hold strategy in a semi-strong efficient market.

Level 3 : The third level of the market efficiency is the strong efficient market hypothesis; it claims that no one can earn a profit larger than what could be earned with a native buy and hold strategy by trading on short-term securities price movements. Securities markets can be strongly efficient of the rates of stock price changes are independent random variables and none of the market participants use inside information (Fransis; 1991: 543).

These three levels of the market efficiency which described above are not significant to each other but they are serially higher order in degree of market efficiency. If the market is semistrong efficient, it must be efficient in the weak sense also because the past prices data is one form of published information, which must have been impounded in the price. If the market is not efficient in the weak sense, the past prices information could be used to predict the future prices to exploit abnormal profit. It implies that information contained in past prices has not been reflected fully into the current prices. Similarly, for the market to be strongly efficient it must also be efficient at the semi-strong and weak levels, otherwise prices are not reflecting all relevant information. This literature is the brief description about the theories of stock market prices.

### 2.2.5 Theories of Stock Price Movement

Generally, stock price movement refers the fluctuation of the stock price in the secondary capital market, i.e. market value is more than book value, market value is less than book value due to the different internal and external causes. Therefore there is necessary to study the other external factors of foreign country due to the globalization, liberalization and rapid growth of new technology, all the world has become within a boundary. So effect of one areas movement automatically i.e. upon others.
"The prices of securities are typically very sensitive response to the events, both real and imagined that east light into the murky future" (Poul H. Cootneer; 1964).

Though all factors rose to the observed movement of share prices. It would be very hard to find a completely accepted price formation theory. In the context of share price fluctuation in the stock market, there are three theories concerning stock price movement. Which are given below:

1. Technical analysis theories of stock price movement.
2. Fundamental analysis theories of stock price movement.
3. Efficient market theories of stock price movement.

## 1. Technical Analysis Theories

Technical analysis is one of the most important theory of share price determination and interpretation
of the stocks and it includes the study of price and value of stocks to forecast future movements. Technical analysis is also based on the widely accepted premise that securities price are determined by the demand and supply of securities. A technical analysis or a technician, is a security analysis who believes it is not productive to work through all the fundamental facts about the issuing corporation the company earnings, its products, forthcomings legislation that might affect the firm. Instead technical analysis believe that these innumerable fundamental facts are summarized and presented by the market prices of the security. Technical analysis focus most of their attention on charts of security market prices and on related summary statistics about transactions. As a result, technical analysis are sometimes called chortists. Most technical analysis prepare and study charts of various financial variables in order to make forecasts about security prices but an increasing number use quantitative rather than graphical tools. The tools of technical analysis are therefore designed to measure the certain aspects of demand and supply. Typically, technical analysis record historical financial data on charts, study these charts in search of patterns that they find meaningful and endeavour to use the patterns to predict futures, prices. These charts are useful to analyze the single security, the market index etc.

The methodology of technical analysis resets upon the assumption that history tends to repeat itself in the stock exchange. If a certain pattern of activity has in the past produced certain results nine times out of ten, one can assume a strong likelihood of the same outcome whenever this pattern appears in the future. It should be emphasized, however, that a large part of the methodology of technical analysis lacks a strictly logical expectations (Sharpe).
"The technical believes the forces of supply and demand are reflected in pattern of price and volume of trading. By examination of these patterns, be predicts whether prices are moving higher or lower, and even by how much" (Fisher and Jordan; 2000: 510).
"A highly specialized form of market analysis is practiced by technical analysis. They try to predict future stock prices just as we might the mirror is the sum as the above pattern". (Burton G. Malkies; 1981).

## Basic Assumption of Technical Analysis

The basic assumptions of technical analysis as follows:

- Market value is determined by the interaction of supply and demand.
- Supply and demand are governed by numerous factors, both rational and irrational.
- Security prices tend to move in trends that persist for an appreciable length of time, despite minor fluctuations in the market.
- Changes in a trend are caused by the shifts in supply and demand.
- $\quad$ Shifts in supply and demand, no matter why they occur, can be detected sooner or later in charts of market transactions.
- $\quad$ Some chart pattern tend to repeat themselves.

Although, the existence of technical analysis in Nepal may be still doubtful. This was revealed in our conservation with the stockholders form Nepal Stock Exchange (NEPSE) limited and some institutional and individual investors.

## Market Prices of Share as the Output of the Interaction between the Demand and Supply

"The share price is determined in the floor by the interaction of market forces like demand and supply. The price determined by the point of equilibrium between supply and demand, the shifting of this balance results in incessant adjusting of price in search of the ever-changing new equilibrium. Then market price moves upward and downward. There are many factors that affect the price then the results of that stock price fluctuation the major affecting factors are economic, non-economic and market factors.

Under the economic factors, one basis for the determination of share prices is dividends. Dividend are strongly influence by the earning power of the enterprises. There is a very close relationship or correlation between the corporate earnings and dividends. Earning power in turns, is strongly influenced by interest rates. In this way, the most fundamental factor in stock price fluctuations lies in changes in corporate earnings, which to together with interest rates and business cycle trend contribute to making up the economic factors influencing stock price. The next factors which affects the stock price determination is non-economic factors. This factors consists the changes in political conditions, such as war or administrative changes, changes in the weather and other natural conditions, and changes in cultural conditions. Such as technological advance and like. The last factors which affect the determination of share price is the market factors, or internal factors of the market. Market factors consist of the tone of the market and supply demand relations, may be cited as the third category that influences the stock prices. The tone of the market is a form of over-estimating the intrinsic value of stock. When stock price is high because of business property while under estimating its value at the time of market decline. The relationship of supply-demand are reflected directly in then volume of transactions, but there is also considerable effect from the actions of institutional investors, margin transactions, etc. Although margin transactions increase purchases when stock price is going up once the price begins to fall they become at selling factor and accelerate price decline. The practice of margin in finance has not been influenced, so far, in Nepal". (Sharma; 1996).

According to Doodha, "Stocks and shares mostly traded in the securities market are one of the assets into which money can be invested. The investment further is more attractive to a majority of individuals because it is also liquid in character. But what is the most influencing factor in determining the price of the stock is interaction forces of demand and supply" (Doodha; 1962: 10).

In relation to the interacting forces of demand and supply, a cerman opines that, "the price of a given stock is determined exclusively by the two forces demand and supply, converting one such stock at a given time that the prices and volumes of its past transaction are meaningful indication of profitable relationship of future supply and demand pressure, it is likely to encounter in the market that such relationship is the most important element determining the probable direction of price movement (Acerman; 1980: 10).

## 2. Fundamental Analysis Theories

Simply, the fundamental analysis theories refer the formula and principle. According to the technical analysis, the fundamental analysis is idealist part of analysis. So it is not prefect and market principle of analysis of stock price movement. Fundamental analysis theory also claims that at any point of time and individual stock has on intrinsic. Value which is equal to the present value of the future cash flows from the security discounted of appropriate risk adjusted discount rate. "the value of the common stock is simply the present value of all the income which the owner of the share will receive." (Fransis; 1986 : 398). And the actual price should reflect the intrinsic value of the stock i.e. good anticipation of cash flows and capitalization rates corresponding to future time period. But in practice, first it is not known in a advance what a stock's income will be far a particular stock. So, fundamentalists attempt to reach best estimates of the intrinsic value of share bye studying company's sales, profits, dividends management competency and numerous other economic and industrial factors which determine its future income and prospect of the business opportunities. Fundamental analysis delve into company earnings, their management, economic outlook, firms competition, market condition and many other factors (Franscis; 1986: 425).

Fundamental analysis theory also involve analysis of different6 factors such as economic factor, industrial factor, governmental policy, firms financial statement, its competitors and pertinent company information like product demand, earnings, dividends and management in order to calculate on intrinsic value for firms securities.

The analyst who believes on fundamental facts to determine the intrinsic value of stock is popularly known as fundamental analysts or fundamentalists.

Since the world of uncertainty, the anticipation of the values can not be known exactly, there will be disagreement on the opinion about the estimation among the market participants. Then the actual prices of fluctuate closely around the 'economic value' of share because to for from the true value is profitable for the participants and they did not miss to exploit the situation. Over the time, with the continuous generation of new information related to company's earning prospect, the intrinsic value also changes. As a result, prices of the stock adjust to new intrinsic value. The actual price of the security therefore is considered to be a function of a set of anticipation. "Price changes as anticipation change which in turn change as a result of new information" (Bhatta; 1983). When the stocks are prices over or under, the value of the stock recommend of sales or purchase is know as, "After extensive analysis, the investor derives an estimated of the intrinsic value of the security, which is then compared to its market price, if
the value exceeds the market price, the security should be acquired and vice versa.
"Fundamental analysis uses different models like, 'Top-Down versus, Bottom-up forecasting, probabilistic forecasting, econometric models, financial statement analysis etc. to estimate the value of security" (Sharpe, Alexander and Bailey; 2001: 850-850). Therefore, the fundamental analyst reaches and investment decision on the basis of these analytical tools.

## 3. Efficient Market Theories

Efficient market theory refers the optimum price of the stock in the competition market. Where price of stock neither over-valued nor undervalued in the market. In 1990, a French mathematical Louis Bachelier write a scientific paper suggesting that day to day security price fluctuation were random walk theory" (Paul H. Cootner; 1962). The term efficiency also may be defined in various ways allocative efficiency. perational efficiency, and information's efficiency. When the finance literature speaks of market efficiency, it is generally speaking exclusively about informational efficiency in pricing the stock. A market is said to be informational efficient if the current market price in stantaneouly and fully reflects all relevant available information. An efficient market is one where shares are always correctly priced and where it is not possible to out perform the market consistently.

In an efficient market only price changes that would occur are those which result from new information. "An initial and very important premise of an efficient market is that there are large numbers of knowledgeable and profit maximizing independence buyers and sellers, new information is generated randomly and the investors adjust the information rapidly." (Deilly; 1986: 160). Therefore, market efficient is used available information is in setting price. The following are the requirements for securities market to be an efficient market.

1. Prices must be efficient so that new inventions and better products will cause a firm's securities price to rise and cause investors to want invest.
2. Information must be discussed freely and quickly across the national so all investors can read to new information.
3. Transactions cost such as sales commissions on securities are ignored.
4. Taxes are assumed to have no noticeable effect on investment policy.
5. Every investor is allowed to borrow or lend at the same rate.
6. Investors must be rational and able to recognize efficient assets so that they will want to invest money where it give high want to invest money where it give high returns (Bhalla; 1983: 309).

This constitutes the world of the efficient market theory or more popularly the capital assets pricing model.
"It would be clearly an odd interpretation of efficiency if a doubling in price, the price of a share were regarded as an efficient reaction to new information, simply because the movement was instaneous, if the information in fact warranted a substantial reduction in price" (Kene; 1933: 9).
"Market efficiency refers to the ability of financial assets to quickly adjust and reflect all information that is relevant to value in its price". (Francis; 1986: 4).

Therefore, it assumes that any given time, the market correctly prices all securities. The result or so the theory advocates, is that securities can not be over priced or under priced for a long enough period to profit there from. Although, efficient market theory is in completely at variance with technical and fundamental analysis theory. A number of empirical researches have been done on varied set of data for different time periods to test the random walk efficient model for describing share price behaviour.

Though the subject of market efficiency has been much concerned area of the study for the academicians and researchers in recent times. The advocates of the efficient market theory are matched by an equally eloquent opposing camp which argues that the stock market is neither competitive nor efficient. The critics content that one or more of the following factors cast their shadow over the efficiency and competitiveness of the stock markets.
i) Information Inadequacy : Information is neither freely available nor rapidly freely available nor rapidly transmitted to all the participants in the stock market. In addition, there is a calculated attempt to many companies to circulate "misinformation".
ii) Limited Information Processing Capabilities : Human information processing capabilities are sharply limited. As Nobel Laureate Herbert Simon observed, "Every human organism lives in an environment which generates millions of new bits of information every second, but the bottleneck of perceptual apparatus certainly does not admit more than a thousand bits per second and possible mush less.
iii) Irrational Behaviours : In theory, it is generally assumed that investor rationality will ensure a close correspondence between market prices and intrinsic value. In practice this may not be true. As J.M. Keynes argued in point of fact all sorts of consideration enter into the market valuations which are in no way relevant to the prospective yield. L.C. Gupta made a similar observation. "Our findings suggest that the markets evaluation process work haphazardly almost like a blind man firing a gun. The market seems to function largely on a 'hir-or-miss' basis rather than on the basis of informed beliefs about the long-term prospects of individual enterprises" (Gupta; 1981: 20).
iv) Monopolistic Influence : In theory, the market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over price. In practice powerful institutions and big operators wield great influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.

Finally, due to the above challenges posed by the critics of efficient market theory, there are many factors to point the finger at its reality, validity and authenticity. This appears to be true like relatively less developed capital market of Nepal. Nepalese capital market is get to be efficient in terms of information as well as operations.

### 2.3 Review of Related Studies

### 2.3.1 A Review of Major Studies in Nepal

Manandhar, 2006, expressed in his articles published in "The Boss" that Market prices of any share are ultimately governed by the demand and supply of shares. And fundamentally markets should have been guided by potential income of the company, dividend distribution and financial net worth. But share market now here has been found to be guided only by the these fundamental factors. Everywhere some sort of speculative elements will be there. So, this speculative element in the share market sometimes drives up the share market price and sometimes drives it down.

Pradhan, (1992), has studied on "Stock market behaviour in Nepal" which has conducted by collecting the data of 17 enterprises. The major objectives of the study are given below.
i) To assess the stock market behaviour in Nepal.
ii) To examine the relationship of market equity, market value and book value, price earnings and dividend with liquidity profitability, leverage, assets turnover and interest coverage.

The major findings of the study area

- The higher the earning on stocks, the larger the ratio of dividend per share to market price per share.
- Stocks with larger ratio of GPS to MPS have lower leverage ratios.
- Positive relationship between dividend payout and profitability, turnover ratio, liquidity and interest coverae.
- DPS and MPS are positively correlated.

Later in 1994, he also studied stock market behaviour in Nepal and concluded that the ratio of dividend per share to market price per share is positively correlated. He further concluded that large stocks have large P/E ratios, large ratios of market value to book of equity and smaller dividends. Price earning ratios and dividend ratio are more variable for smaller stocks where as market value to book value of equity is more variable for large stocks. Large stocks also have lower liquidity, higher leverage lower profitability, lower assts turnover interest coverage stocks. Smaller dividends, lower profitability, lower assets turnover and lower interest coverage for large stocks. Stock with the large market value to book value of equity large price earning ratios, and lower dividends. Price earning ratios are more variable for stocks with large market value to book value ratios and dividends ratios are more variable for stocks with smaller market value to book value. Stock with large market value to book ratios have lower liquidity, higher leverage, lower earnings. Lower turnover and lower interest coverage. However,
liquidity and leverage are more variable for stocks with larger market value to book value ratios while earnings assets turnover and interest coverage are more variable for stocks with smaller market value to book value ratios. Similarly, stocks with large PE ratios have large market value to book value of equity and smaller dividends ratios. However, their ratios of market value to book of equity and dividends are more variable for smaller stocks that for large stocks. Stocks with large PE ratios have lower liquidity, higher leverage, lower profitability, lower assets turnover, and lower interest coverage. However liquidity, leverage, earning turnover, and interest coverage are all more variable for stock with smaller PE ratio are compared to large out. Stocks paying higher dividends have higher liquidity, lower leverage, higher earning, and higher turnover and the higher coverage. However liquidity and leverage ratios are more variable for the stocks paying lower dividend while earnings, assets turnover and interest coverage is more variable for the stocks higher dividends.

Shrestha, (2004), in his artical 'A Journal of Management and Development Review",has expressed that capital market proved to be one of the important segments of the economy since it facilitate and provides better institutional arrangements for the borrowing and lending of long-term funds. Capital market is the general barometer that measures the proper collection and channelization of savings for investment in productive and income generating assets. The allocative-efficiency in the use funds is the basis for measuring the performance of capital market in Nepal. But what mater crucial is the effective regulation of security market. However, experience in the number of advanced and developing countries shows that regulation of securities market become a felt necessity as a result of manipulative practices and dishonest security dealing. He further describes even in our country. The Get-Quick-Rich traders in securities market turned logical idea into a noxious growth. And there is playing on public money by public limited companies by issuing with rosy prospectus mislead investors in the absence of appropriate control and supervision through strong enforcement of the regulation. In the last few years, there has been a remarkable experience of stock market boom and bust cycles in Nepal's growing small stock market transactions (Five Year Strategic Plan, 1998-2002, SEBO/N, 1998). Five years performance review from 1993-98 shows that the initial phase of development of SEBON/N a securities market regular and developer with the restructuring of NEPSE as a sole market operator.

At the same time, the irrational behaviour of the investors in short market together with the operation non-professionally oriented brokers are responsible for having the birth of small Harsh Mehta in Nepal's stock market in the absence of effective regulation, monitoring and supervision of the stock market activities. The imperfect characters of the market with the poor performance of the most of manufacturing companies that consist of more than $50 \%$ of the listed companies and also some trading companies have undermined. The confidence of investors in stock market. The influence of mass psychology despite having universal madness of crowds laid down by theory of speculation also operates in Nepal. Despite these issues, SEBO/N is trying to insist through regulation to help investors behave rationally at least among those who actively participate in capital market. Efforts are going to make the information freely and widely available to market participants at the right time without delays and encible investors to be both price makers and price takers as well as avoid emotions on the part of investors to response to the new information that may come in the market. At the same time, investors
have to think that any price change today is independent of the price that has been maintained yesterday on the assumption that prices move at random fashion. This is in consonance to the random walk hypothetical developed through empirical study and finding by eminent finance professor (Famu; 1965).

At last he suggested that in order to make the impact of regulation meaningful and purposeful, many improvements are required. Further although some measures taken are appreciable. The empowerment of $\mathrm{SEBO} / \mathrm{N}$ is required to make the enforcement of regulation, supervision and monitoring of the capital activities in the country. The news securities act, 2000 approved by Ministry of Finance has empowered the existing SEBO/N to monitor and supervise the capital market activities according to specified prudential norms.

### 2.3.2 Review of Master's Thesis

We can easily find numerous studies conducted for the partial fulfillment of Master's Degree. But we can't review all the studies. So, some of them, which studies are relevant to this study are reviewed in the following way.

In 1990, Mr. Surya Chandra Shrestha conducted as study entitle, "A Study on Stock Price Behaviour in Nepal" with the following main objectives:
i) To examine the efficiency of the stock market of Nepal.
ii) To examine the serial correlation of successive daily price changes of the individual stocks.
iii) To determine whether the sequence of price changes are consistent with the changes of the series of random number expected under the independent Bernoulli process.
iv) To determine the efficiency of the stock market through the through the theoretical model of efficient market hypothesis in the stock markets.

The major findings of this study are given below and serial correlation and run test are the basis of this findings.
i) The price changes of the post and present can be very helpful to forecast future price changes. Therefore, there exists the sufficient amount of opportunities for the sophisticated investors.
ii) When long days stock price increase that mean value of serial correlation of co-efficient is lower, that indicates that the past price changes may have low power to predict the future price changes in the long run.
iii) The price changes in the present and future stock market may not be independent of the price changes in the past and present respectively. native-day and hold strategy in their speculation through the information on past price changes.
v) NEPSE is not efficient in pricing shares.

Ms. Sangita Gautam conducted the study entitle "A Study on Stock Market behaviour in Nepal". She concluded that political instability and other laws related issues are the prominent factors for the underdeveloped of the security market in Nepal. She also further concludes that the stock brokers and stock market are not being much active to create investment environment in stock market. Lack of the capital market may be one of the reasons for determination of share price by excessive speculation, lack of effective laws and effective implication of the existing laws are the contributing factors or elements for the less development of the capital market. The poor regulatory system and supervision of SEBO/Nepal and NEPSE is the another responsible factor of her study. Finally, she has concluded that poor governance, political, instability, lack of strict and favourable policy to follow in practice, lack of commitment to implement the policy, lack of awareness of investors are affecting the overall stock market in Nepal.

In 2005, Mis Pramila Subedi conduct the study on 'A Study on Stock Price Behavioujr in Nepal", assumed that financial institutions role has been very crucial institutions role has been very crucial in the overall economic development of the country. After initiation of the liberal economic policies, the financial and banking sector have been strengthening and extending their services significantly, so as to contribute massively in the economic development of the country. The NEPSE and commercial banks have to play enormous role with respect to the capital formation and its effective development for the economic development of the country.

The study is focused on the determinants of stock price in NEPSE. The objectives of the research area:

1. Presentation and analysis of quantitative factors in stock market.
2. To assess the effect and efficient quantitative factors in the opinion of A Grade Companies listed in NEPSE.
3. To outline the possible implications and also suggest for the betterment of the stock market.

The major findings of this study are presented below.

1. Nepalese investors have not adequate knowledge and analyze the scenario and to forecast share price.
2. In NEPSE, DPS, BPS and EPS individually do not have consistent relationship with the market price of share. There are other major factor affecting the share price significantly.
3. Commercial banking sector has dominated the overall performance of NEPSE. So financial intermediaries are strong but their ultimate investment is suffering.
4. There is deficiency of proper laws and policies regarding the capital market.
5. There is not transparent information of company listed companies.
6. Since NEPSE is an increasing trend, in spite of unfavourable environment for investment. Nepalese citizens have a huge amount of scattered fund remained idle, which can be used in the industrial development through capital market to accelerate the economic growth of the nation.

In 2007, Resham Kumar Khatri conduct the study on 'A Study on Determinants of Share Price in Nepalese Capital Market" assumed that the market price of share is influenced with the changes in EPS, DPS and BPS. To determine the magnitude of the independent variables to the dependent variable, simple and multiple regression analysis were made and magnitude was identified after determining the regression equation.
i) In NEPSE, there are controversial results that the share price in NEPSE is not significantly affected by the dividend book value and earnings per share there might be other factors that played significant role to determine the stock price in Nepal.
ii) The MPS has not been significant effected in the context of Nepal by interest role, retention ratio, stock dividend, cost of equity, tax role, value of US\$ and gold price, global economy, market liquidity, seasonal day the week. Size and change in management where as these factors have simply effects in stock pricing.

In this way, Nepalese investors have not adequate knowledge and education about the capital market. Due to this reason, share price in NEPSE shows irrational behaviour. In NEPSE, EPS, DPS and BPS, individually do not have consistent relationship with the market price of share. Listed companies are not providing necessary information to the shareholders i.e. they are not transparent which leads to create inconsistence result and behaviours in share price of NEPSE. Political instability, strike demonstrating, civil wars affect the national economy and ultimately they play major role to the share price. There is lack of adequate laws regulation to regulate the capital market in efficient way.

## Research Gap

Thus, very few studies have been done in the field of determinants of share price in capital market. Share price is the crucial phenomenon in the stock market so those studies need updating and there is an increasing trend in the common stock investment. One new attractive aspect of this study may be that it has attempted to understand how the investors view towards on determination of share price by making different question related to the share price. Although, different authors studied the share price behaviour, determinants of share price and concluded also differently. However, the results of the study
largely depend on the sample size and the methodology used. But no. of the authors have studied systematically about the "Determination of Share Price in Capital Market". Therefore, I am also interested in this topic and tried to fulfill the GAP of the previous studies.

## CHAPTER III <br> RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter contains the research design, variables sample size, sample selection procedure, data collection procedure and data processing tools and techniques.

### 3.2 Research Design

The research design includes specification of the method of the purposed study and detailed plan for carrying out the study with various empirical data for analysis of the problem. Research Design is a plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances. It describes the general framework for collection, analysis and evaluation of identifying data. In detail research design has two purposes.
i) To answer the research question or test the relationship.
ii) To control the variance.

To achieve the objectives of this study, historical, descriptive as well as analytical research design has been adopted. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate determinants 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 the 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 has no control over the variables or researcher can only report what has happened or what is happening. A fact finding approach relative largely to the present and abstracting generalization by the cross-sectional study of the current study is the descriptive research.

### 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 share (EPS), Dividend Per Share (DPS) economic condition of the Nation, political situation, interest rate, tax etc.

### 3.4 Population

For the qualitative factors analysis i.e. primary sources, individual investors, stock brokers and listed companies of Nepalese capital market including institutional from Nepalese capital market all are the
taken as 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 is taken the listed companies in NEPSE.

### 3.5 Sample

To arrive at logical inferences, three major sectors of the stock market are taken under consideration. They are
i) Commercial banking sector.
ii) Development banking sector
iii) Finance companies

This study has taken banking sectors i.e. commercial bank, development bank and the study of finance companies. So, three wings of banking and finance companies have been focused in this study. However, there are others sectors as well but due to the low volume and amount of share transaction and insufficient data of other sector i.e. manufacturing sector, service sector, insurance companies, hydropower sectors and other have been ignored, further more, the sample procedure also consider financial status, Size and market volume of listed companies. The sample will be taken using stratified random sampling method as follows:

Table 3.1
Listed Companies and Proportion

| S.N. | Sector | Total <br> number of <br> company <br> listed | Percent | Number of <br> sample <br> company | Percentage | Sample |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Commercial bank | 17 | 11.97 | 5 | 38.46 | HBL, <br> NABIL, <br> NIBL, <br> NSBL, <br> SCBNL |
| 2 | Development <br> bank | 23 | 16.20 | 3 | 23.07 | DCBL, <br> SDBL, <br> NUBL |
| 3 | Finance company | 55 | 38.73 | 5 | 38.46 |  <br> MFL, NSM <br> $\& ~ F L, ~ P F L, ~$ |
| UF \& CML |  |  |  |  |  |  |$|$

Source: SEBO/N, Annual Report of 2007/2008.

For the research work, only 13 companies stated above, has been taken as sample companies out of total population. Out of them, 5 from commercial banks, 3 from Development Banks and rest 5 from Finance Companies. Due to the high volume of share transactions and business volume as well as more contribution to the economy, such companies are taken on the basis of size, maturity and share transaction. Considering the study period of 2000/01 - 2007/08 useful data could be obtained for banking and finance sectors as indicated below.

Table 3.2
No. of Sample Observation Companies

| S.N. | Name | Observations years | Number of observation |
| :---: | :--- | :---: | :---: |
| 1 | HBL | $2000 / 01-2007 / 08$ | 8 |
| 2 | NABIL | $2000 / 01-2007 / 08$ | 8 |
| 3 | NIBL | $2000 / 01-2007 / 08$ | 8 |
| 4 | NSBI | $2000 / 01-2007 / 08$ | 8 |
| 5 | SCBNL | $2000 / 01-2007 / 08$ | 8 |
|  |  | $2000 / 01-2007 / 08$ | 8 |
| 1 | DCBL | $2000 / 01-2007 / 08$ | 8 |
| 2 | SDB | $2000 / 01-2007 / 08$ | 8 |
| 3 | NUBL | $2000 / 01-2007 / 08$ | 8 |
|  |  | $2000 / 01-2007 / 08$ | 8 |
| 1 | CIT | $2000 / 01-2007 / 08$ | 8 |
| 2 | NH \& MFL | $2000 / 01-2007 / 08$ | 8 |
| 3 | NSM \& FL | $2000 / 01-2007 / 08$ | 8 |
| 4 | PFL |  | 8 |
| 5 | UF |  | 8 |

The study is based on primary sources of data as well as secondary sources of data. The required primary data have been collected from concerned respondents (i.e. share experts/analysts, general investor, other-Lechives, students brokers, stockholders) and secondary data from financial statements of listed companies which were located at www.nepalstock.com, books, 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, SEBO/N annual report, publication of different authorities, newspaper and unpublished thesis report were the sources of secondary data. To find out the major factors which affect the share price, the questionnaire was applied to the general investors, stock brokers and listed companies to collect the facts, knowledge and opinions regarding the fluctuation of share price in Nepal. The respondents have shared their ideas and feelings through questionnaire.

### 3.7 Data Collection Techniques

Data collection also known as the field work which is the implementation of research design. In this study, both primary and secondary data have been used. For the primary data collection, the questionnaire method is adopted to collected the data form the three different respondent groups of Nepalese capital market. 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. A systematic process directed towards investigating problems, practices and view on existing issues is the beauty of the good researcher. 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 direct method with the respondents.

### 3.8 Data Analysis Tools

To obtain the above mentioned objectives, the primary and secondary data were collected from the respondents groups with asking some questions concerning the market price of share and the annual report of the sampled companies, journals, published and unpublished research book, report of NEPSE, SEBON etc. the statistical and financial tools are used as required by the study.

### 3.8.1 Statistical Tools

Data collection from secondary sources of data were analyzed by using the analytical tools like correlation and regression analysis, mean, trend analysis etc. Then the following statistical tool are taken, which are given below.

## a) Mean (Average)

An average is a single value or observation related from a group of value or observations to represent
them. i.e. a value is supposed to stand for whole group. There are also different types averages like arithmetic mean, weighted mean, geometric mean, harmonic mean, median and mode are the major types of averages. The widely and popular used mean is arithmetic mean. The value of arithmetic mean can be calculated by adding together all the items and dividing this total by the number of items. Mathematically, it can be presented below.

Arithmetic Mean $(\mathrm{AM})=\frac{\Sigma \mathrm{X}}{\mathrm{N}}$

$$
\text { or, } \overline{\mathrm{X}}=\frac{\Sigma \mathrm{X}}{\mathrm{~N}}
$$

Where,

$$
\begin{aligned}
& \overline{\mathrm{X}}=\text { Arithmetic mean. } \\
& \Sigma \mathrm{X}=\text { Sum of all the values of variables } \mathrm{x} . \\
& \mathrm{n}=\text { Number of observations }
\end{aligned}
$$

## b) 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 measure the unsystematic risk on stock investment. Than, the greater the standard deviation greater will be 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 viceversa.

Mathematically,

$$
\text { Standard Deviation }(\sigma)=\sqrt{\frac{\sum(X-\bar{X})^{2}}{n-1}}
$$

## c) Coefficient Variance (C.V.)

The standard deviation is absolute measures of dispersion but the co-efficient of variance is a relative measure. To compare the variability between two or more series. CV is more appropriate statistical tool. In other word, C.V. 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

$$
\text { C.V. }=\frac{\sigma(\%)}{\overline{\mathrm{R}}(\%)}
$$

d) Correlation Coefficient (r)

One of the widely used statistical tools of calculating the correlation coefficient between two variables is Karl Pearson's correlation coefficient. It is also know as Pearson's coefficient. It is a statistical tool for measuring the intensity or magnitude of linear relationship between the two variables series. Pearsonian correlation coefficient between two variables series X and Y , usually denoted by " $\mathrm{r}(\mathrm{x}, \mathrm{y})$ " $\mathrm{r}_{\mathrm{xy}}$ or simply 'r' can be expressed as.

$$
r=\frac{n \Sigma x y-\Sigma x \cdot \Sigma y}{\sqrt{\left\{n \Sigma x y^{2}-(\Sigma x)^{2} \times\left\{n \Sigma y^{2}-(\Sigma y)^{2}\right\}\right.}}
$$

Where,
$\mathrm{N}=$ No. of observation in series X and Y
$\Sigma \mathrm{x}=$ Sum of observations in series X
$\Sigma \mathrm{y}=$ Sum of observations in series Y
$\Sigma \mathrm{x}^{2}=$ Sum of squared deviations in series X
$\Sigma \mathrm{y}^{2}=$ Sum of squared deviations in series Y
$\Sigma \mathrm{xy}=$ Sum of product of observation in series X and Y

The value of correlation co-efficient ' r ' lies between $\pm 1$ i.e. $-1 \leq r \leq 1$. If $r=1$ there is perfect positive relationship and if $r=-1$, there is perfect negative relation or if $r=0$ then there is no relation at all.

## Covariance

Mathematically, covariance between two variables is calculated by following formula:

$$
\operatorname{Cov}_{\mathrm{xy}}=\frac{\sum(\mathrm{x}-\overline{\mathrm{x}})(\mathrm{y}-\overline{\mathrm{y}})}{\mathrm{n}}
$$

e) Simple Regression Equation

Regression analysis is also the techniques of studying how the variations is one series are related to variations in other series. Regressions analysis shows that how the variables are related. Thus, regression is the estimation of unknown values or prediction of one variables from known values of other variables. So, regression analysis is a mathematical measure of the average relationship between two or more variables in terms of the original units of the data. The regression analysis confined to the study of only two variables at a time is called simple regression. in this study, the following regression line are taken as a statistical tool.

## Regression Equation of Y on X

$$
\begin{align*}
& y=a+b x \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . ~ \\
& \Sigma y=n a+b \Sigma x \ldots \ldots . . . . . . . . . . . . . . . . . ~  \tag{i}\\
& \Sigma x y=a \Sigma x t+b \Sigma x^{2} \ldots \ldots . . . . . . . . . . . . ~ \tag{ii}
\end{align*}
$$

## Multiple Regression Equation

The multiple regression equation describes the average relationship between one dependent variable and two or more independent variables and this relationship is very much useful for estimating the dependent variables. The multiple regression equation of $x_{1}$ on $x_{2}$ and $x_{3}$ is given below.

$$
\begin{align*}
& \mathrm{x}_{1}=\mathrm{a}_{1}+\mathrm{b}_{1} \mathrm{x}_{2}+\mathrm{b}_{3} \mathrm{x}_{3} \\
& \Sigma \mathrm{x}_{1}=\mathrm{na}_{1}+\mathrm{b}_{1} \Sigma \mathrm{x}_{2}+\mathrm{b}_{2} \Sigma \mathrm{x}_{3}  \tag{ii}\\
& \Sigma \mathrm{x}_{1} \mathrm{x}_{2}=\mathrm{a}_{1} \Sigma \mathrm{x}_{2}+\mathrm{b} \Sigma \mathrm{x}^{2}{ }_{2}+\mathrm{b}_{2} \Sigma \mathrm{x}_{2} \mathrm{x}  \tag{iii}\\
& \Sigma \mathrm{x}_{1} \mathrm{x}_{3}=\mathrm{a}_{1} \Sigma \mathrm{x}_{3}+\mathrm{b}_{1} \Sigma \mathrm{x}_{2} \mathrm{x}_{3}+\mathrm{b}_{2} \Sigma \mathrm{x}_{3}^{2} . \tag{iv}
\end{align*}
$$

Where,
$\mathrm{x}_{1}=$ dependent variable
$\mathrm{x}_{2}$ and $\mathrm{x}_{3}=$ Independent variable
$a_{2}=$ Value of $x_{1}$ when $x_{2}$ and $x_{3}$ equal to zero
$\mathrm{b}_{1}=$ Partial regression co-efficient of $\mathrm{x}_{1}$ on $\mathrm{x}_{2}$ when $\mathrm{x}_{3}$ is constant
$\mathrm{N}=$ Number of observations taking in the calculations.

### 3.8.2 Financial Tools

To conclude about findings, some financial tools have been used in this study. The major financial
tools are as follows:

## a) Beta Coefficient

Beta is considered as a measure of undiversified risk. It measured the systematic risk of a company's stock. It assumes that total market is equal to 1 . Beta indicates the risk association with the company's stock in comparison with the market risk. If the beta is positive, it indicates that the company's risk and return rends to move positively with the market risk, and return with calculated percentage. Similarly, if beta is negative, it indicates that the company's risk and return tends to move negatively with the market risk and return with calculated percentage. The beta is denoted by $\beta$.

$$
\beta=\frac{\operatorname{Cov}(\mathrm{Rj}, \mathrm{Rm})}{\sigma_{\mathrm{m}}^{2}}
$$

Where,
$\beta_{j}=$ Beta coefficient
$\operatorname{Cov}\left(R_{j}, R_{m}\right)=$ Covariance between $R_{j}$ and $R_{m}$
$\sigma^{2} m=$ Variance of market return

## Market Price Per Share (MPS)

The market price is the amount in which a share of the stock is traded in the market. Records of high, low and closing prices are studied for the purpose of this study. Since, the calculation of real average price is constrained by lack of adequate information regarding volume and price of each transaction throughout the year, the closing price has been used as market price of share.

## Mathematically,

$$
\text { MPS }=\frac{\text { Total Market Capitalization }}{\text { No. of Outstanding Shares }}
$$

## Dividend

Both cash and stock dividend i.e. bonus share declared by each company have taken into account for the purpose of this study. Total amount dividend can be calculated as follows:

Total amount of dividend $=\quad$ Cash dividend $+($ stock dividend $\% \times$ Net
years MPS)

In case of dividend declared is capitalized in paid-up value,

Total dividend amount $=$ Cash dividend $+($ Capitalized $\% \times$ paid up value/share of preceding year)

## Dividend Per Share (DPS)

The dividend per share is the amount paid as dividend to the shareholder of the stock.

Mathematically,

$$
\text { DPS }=\frac{\text { Total Dividend Paid }}{\text { No. of Outstanding Shares }}
$$

## Earning Per Share (EPS)

The Earning Per Share (EPS) is the share of a stock on the earning of the company during the period.

Mathematically,

$$
\text { EPS }=\frac{\text { Total Earning of Company }}{\text { No. of Outstanding Shares }}
$$

## a) Return on Common Stock Investment

Return in the income received an investment plus any change in market price usually expressed as a percent of the beginning market price of the investment.

Mathematically,

$$
\mathrm{R}=\frac{\mathrm{P}_{\mathrm{t}}-\mathrm{P}_{\mathrm{t}-1}+\mathrm{D}_{\mathrm{t}}}{\mathrm{P}_{\mathrm{t}-1}}
$$

Where,
$R=$ Return on investment
$P_{t}=$ The share price at time $t$.
$P_{t-1}=$ The beginning share price at time $t-1$
$D_{t}=$ Cash dividend at the end of time $t$

Expected Return on Common Stock
Mathematically,

$$
\overline{\mathrm{R}}=\frac{\Sigma \mathrm{R}}{\mathrm{~N}}
$$

Where,

$$
\begin{aligned}
& \overline{\mathrm{R}}=\text { Expected return of stock } \\
& \Sigma \mathrm{R}=\text { Sum of return on stock } \\
& \mathrm{N}=\text { Number of years }
\end{aligned}
$$

## Required Rate of Return ( $\mathbf{K}_{\mathrm{e}}$ )

Required rate of return is calculated as the risk free rate plus the risk premium on the risk of the
particular stock.

Total risk contains two parts
(i) Diversifiable or unsystematic risk and (ii) Non-diversifiable risk or systematic risk. Under the assumption of CAPM, investors are not compensated for total risk, rather they are compensated in the market for facing the systematic risk.

According to CAPM model, the required rate of return an any stock is equal to the risk free rate plus market risk premium times stock beta. However, it is not possible to calculate the annual beta of the stocks return of any individual company. Therefore, average beta coefficient of the observation period will be taken as the stock's beta. The formula of calculating the required return is given as below.

$$
\begin{aligned}
K_{e} & =R_{f}+\left(\bar{R}_{m}-R_{f}\right) \times B_{j} . \\
\text { Where, } K e & =\text { Required rate of return on stock } j \\
R_{f} & =\text { Risk free rate of return } \\
\bar{R} m & =\text { Market return or average return. } \\
B_{j} & =\text { Beta co-efficient of stock } j .
\end{aligned}
$$

## Market Returns ( $\overline{\mathrm{R}} \mathbf{m}$ )

Market return is the average return of the stocks of all companies in an industry. For this research purpose, market return will be calculated by dividing the difference of this year's market index and previous market index by previous year's market index.

$$
\overline{\mathrm{R}} \mathrm{~m}=\frac{\text { This year's market index }- \text { Last year's market index }}{\text { Last year's market index }}
$$

## Retention Ratio

It is the ratio, which shows the portion of net to be retained by the firm. Profit will be retained for various purposes. However, it must generate returns at least equal to ROE.

$$
\text { Retention ratio }=1-\frac{\mathrm{DPS}}{\mathrm{EPS}}
$$

## Return on Equity (ROE)

The return of shareholders equity is net profit after tax dividend by shareholder's equity. It indicates how well the firm has used the resources of owners.

$$
\text { Return on equity }=\frac{\text { Net profit }}{\text { Shareholder's equity }}
$$

This also reflects the rate of return at which the firm can actually plough its retained earnings.

### 3.8.3 Methods of Data Collection

For presenting the collecting data and information the different kinds of analytical and descriptive tools and technique in logical manner have been applied commonly, the collected data and information are presented in the simple spreadsheets which produced from excel and easy to understand. It is assumed that tables, charts, figures and diagram to represent the information of study could be more effective an informative to understand.

### 3.8.4 Profile of the Sample Company

## (a) Commercial Bank

## Himalayan Bank Limited

Himalayan Bank Limited is a joint venture bank with Habib Bank Ltd. of Pakistan, was established in 1992 under the company Act, 1964 this is the first joint venture bank managed by Nepali Chief Executive. The operation of the banks started from 1993 February.

The main objective of the bank is to provide modern banking facilities like Tele Banking to the businessman, industrialists and other professionals and to provide loans an agriculture, commerce and industrial sector. At present, the bank has is branches working around country.

## Nabil Bank Limited

Nabil Bank Ltd. is the first joint venture commercial bank incorporate in 1984 A.D. in Nepal. Initially, Dubai Bank Ltd. (DBL) invested $50 \%$ of equity shares of Nabil. The shares owned by DBL were transformed to Emirates Bank International Ltd. (EBIL), Dubai. Later, on EBIL sold it's entire stock to national Bank Ltd., Bangladesh (NBL). NBLB is managing the bank accordance with technical services agreement signed between NBLB and the bank on June 1995. At present, 17 branches are in operation in Nepal. Authorized capital and paid up capital of in NEPSE in Mangsir 9, 2042 B.S. (1968 A.D.).

## Nepal Investment Bank Limited

Nepal Investment Bank Limited (NIBL), previously Nepal Indosuez Bank Ltd. The second joint venture bank in Nepal was established in 1986 as a Joint Venture between Nepalese and French Partners. The French Partner (Holding 50\% of the capital) was credit Agricole Indosuez, a subsidiciary of one the largest banking groups in the world. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, in April 2002, acquired $50 \%$ of the holdings of credit Agricole Indosuez in Nepal Indosuez Bank. The shareholding structure comprises of

- A group of companies holding $50 \%$ of the capital.
- Rastriya Banijya Bank holding $15 \%$ of the capital.
- Rastriya Beema Sansthan holding $15 \%$ of the capital.
- The general public holding $20 \%$ of the capital.


## Nepal SBI Bank Limited (NSBI)

Nepal SBI Bank Limited, was registered under the company Act, 1964 in 1993. This is the joint venture of State Bank of India and Nepali promoters the bank is managed by state bank of India under the Joint Venture and technical services agreement signed between it and Nepali promoters viz. Employees Provident Fund and Agriculture Development Bank, Nepal. The State Bank of India is holding its $50 \%$ equity. The bank started its banking operation on $8^{\text {th }}$ July 1993.

## Standard Chartered Bank Nepal Limited (SCBNL)

The bank was originally established as a joint venture of Grindlays Bank PLC, London and Nepal Bank Limited in 1985 with the shareholding ratio of ANZ, Grindlays Bank Limited, 50\%, Nepal Bank $33.33 \%$, and the General Public $16.66 \%$. Along with the change of ownership to Standard Chartered, the banking area of SCBNI, saw the rise of a new drawn changing the general image of the bank. With this acquisition, Standard Chartered Bank now owns $50 \%$ shares of Nepal Grindlays Bank Limited (NGBL) previously owned by ANZ Grindlays. The name of the bank change to Standard Chartered Bank Nepal Limited. With the mission statement, "To be the leading international bank in out principal markets", the bank operate through 11 branches, spread throughout Nepal and focuses mainly on corporate, consumer and commercial banking, providing services for international firms, as well.

## Development Credit Bank Ltd.

Development Credit Bank Ltd. has deep roots in India. Since its inception in 1930. A new generation private sector bank, DCB is the preferred banking services provider across 80 state of the art branches across 10 states and two union territories. It's promoter the Aga Khan Fund for Economic Development (AKFED) holds over $26 \%$ slakes. AKFED is an international development agency dedicated to promoting entrepreneurship and building economically sound enterprises in the developing world. The fund is active in 16 countries in the developing world.

## Nirdhan Utthan Bank Limited

Nirdan Utthan Bank Limited, "The bank for upliftment of the poor" is a micro-finance bank establish in November 1998 under company Act of Nepal 1997 (now company Act 2006). It started its formal operation from July 1999. It provides microfinance services such as loans, deposits, micro-insurance and Remittance Service to poor families of Nepal. Though, legally established as company in 1998, the operation of NUBL is a continuation of microfinance services provided by an NGO called "NIRDHAN" which providing microfinance services, since March 1993. NIRDHAN, as an NGO has a limited resources and capacity to satisfy unmet demand of poor people in different port of country. This
results the establishment of Nirdhan Utthan Bank Limited, NIRDHAN being a lead promoter In July 1999, NIRDHAN transferred all microfinance operations to Nirdhan Utthan Bank Limited.

## Siddhartha Development Bank

Siddhartha Development Bank Limited (SDBL) is the first development bank of western region of Nepal established formally in the year 2056 which commenced operation on $11^{\text {th }}$ Ashad, 2057. The bank has been established solely with the aim of getting exclusive confidence of Nepalese market by rendering global standards of services through professional and quality management SDBL has been promoted as a dedicated bank with a primary focus in the development of industrial, trade and commercial in Nepal. Beside debt financing the bank also offers assistance to the clean and renewable energy projects by way of private equity and advisory and consulting services. The bank offers a complete suit of banking products and services including transaction banking, business banking project finance, corporate banking and consumer banking.

## Citizen Investment Trust

Citizen Investment Trust (Nagarik Lagani Kosh) was incorporated in Chaitra 4, 2047 B.S. under the citizen Investment Trust Act, 1990. CIT formally started its activities since Magh 1, 2048 B.S. The Trust has been functioning on the basis of the citizen Investment Trust Management By Law 1991 which was prepared under the citizen Investment Trust Act, 1990. It is only an organization which is actively being operated as an "Investment Trust" through out the kingdom of Nepal. A pioneer intuition in carrying out the unit trust schemes and various kinds of voluntary retirement schemes (Pension funds, Gratuity fund etc.) on the basis of fully funded and individual account.

CIT was established in order to expand investment opportunities by encouraging general public to save capital and to bring dynamism in the development of capital market in the country.

## People's Finance Limited

People's finance limited was established in 2049 B.S. under the company Act 2021 (which is now regulated by Bank and financial Institution Act 2063) with a view and prime motive of extending professionalized and efficient financing services to various segments of the society. The corporate office of the company is located at Tripureshwor Kathmandu Metropolitan city.

## Nepal Housing \& Merchant Finance Limited (NHMFL)

Nepal Housing and Merchant Finance Company Limited was established in June, 1994. The company was established under the company Act, 1964 to operate under the finance company act. The objective of the company is to mobilize financial resources to be channelised mostly to the housing sector and to provide mostly intermediate credit's for hire/purchase activities.

## Universal Finance Limited

Universal Finance Ltd. (Bittiya Sanstha) is one of the leading finance companies promoted by the professionals in the field of banking, finance, business, administration, project management, and engineering and information technology. It was incorporated under the finance companies act 2042. And has been operating under the license no. B.Ka. 182052 issued by Nepal Rastra Bank since 2052. The company had issued 150,000 shares to the public on 2052-11-16 (28-02-1996). Including the promoters, presently the company has 2293 shareholders.

# CHAPTER IV <br> DATA PRESENTATION AND ANALYSIS 

### 4.1 Introduction

This chapter, data analysis and interpretation is major part of the study. In this part, the analytical exploration and manipulation of data has been attempted within the frame of the research methodology and then analyzed data are presented with appropriate form like tables groups and diagrams. In this chapter, relevant and available data of thirteen (13) listed companies, which had been taken as sample from the categorized sectors by NEPSE and an attempt has been made to study the "Determinants of Share Price in Nepalese Capital Market". All the primary and secondary data or information are presented and processed in such a way that the result can be used for measurement and evaluate the appropriate relationship between them. Similarly, different types of analysis have been attempted to give a wide exposure of available tools for the analysis of the determinants of share price like, correlation coefficient between MPS and EPS, MPS and DPS which are the major factors to determine the market share price.

Firstly, in this chapter the study has been centralized on the secondary data to measure the intrinsic relationship of dependent variable MPS with independent variables EPS and DPS etc. that can be merely related with the internal performance of individual company. Secondly, primary data were collected and presented to evaluate the qualitative factors of market price of share basically focuses in the areas of investor's stock brokers and listed companies opinions. Under this chapter the statistical tools like the correlation coefficient, co-efficient of variation, standard deviation have been applied and presented including the charts and diagrams wherever, it is appropriate to draw the understandable and effective presentation.

### 4.2 Analysis of Financial Indicators of Commercial Banks

In Nepal, there are altogether 17 listed commercial banks. The banking sector is dominant sector in stock market. Investor wants to invest in bank's more than other sector. It is said that almost $80 \%$ of a transaction in stock market accounts for banking sector. Their market price of share is far higher than other sector. They regularly paid dividend to investors. People believe in their services and the jobs of these private and joint venture commercial banks are perceived as better than other jobs.

### 4.3 Presentation and Analysis of Secondary Data

This part of the study provides analysis and interpretation of secondary data provided by the NEPSE, SEBO/N and the required companies. Price, earning and dividend in the NEPSE index has been analyzed. Similarly, the signaling factors like as major events happening in the world and political instability in the country also affect the NEPSE indeed. The first section of this part analyzes the market sensitivity with the help of correlation coefficient, regression and beta coefficient for doing
presentation and analysis of secondary data different statistical and financial tools are used.

### 4.4 Relationship of MPS with Earning Price Per Share (EPS) and Dividend Per Share (DPS)

This study is assumed that the MPS might be affected by changing of EPS and DPS in the Nepalese capital market. So, the market price of a company will be higher than other company if the company declares and distribute the dividend to their stockholders at the right time. Similarly, if net worth and EPS of the company increases the market price per share of that company also will be increased. In this way, EPS and DPS are the main determining factors for market price of the share. Therefore, to know the degree of relationship of MPS with EPS and DPS, here MPS is taken as dependent variable and other remaining factors like EPS and DPS are taken as the independent variables. The effects of EPS and DPS to the MPS are tested in all company taken as sampled. The simple correlation and coefficient of determination are calculated for knowing the relationship of MPS with EPS and DPS. To determine the magnitude of the effect of the independent variable to the dependent variables, simple regression analysis are made and then magnitude is identified

### 4.4.1 Regression and Correlation Analysis of Himalayan Bank Ltd.

Table 4.1
Synopsis of Performance Indicators of Himalayan Bank Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 1500 | 93.56 | 27.5 |
| $2001 / 02$ | 1000 | 60.26 | 25 |
| $2002 / 03$ | 836 | 49.54 | 1.32 |
| $2003 / 04$ | 840 | 49.05 | 0 |
| $2004 / 05$ | 920 | 47.91 | 11.53 |
| $2005 / 06$ | 1100 | 59.24 | 30 |
| $2006 / 07$ | 1760 | 60.66 | 15 |
| $2007 / 08$ | 1980 | 62.74 | 25 |
| Sum | 9936 | 482.96 | 135.40 |
| Mean | 1242 | 60.37 | 16.93 |
| S.D. | 416.60 | 13.74 | 11.04 |
| C.V. | 0.3334 | 0.2276 | 0.6521 |

Source: Appendix - I (a)

Table 4.2
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.5158 | 0.2660 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.5092 | 0.2593 |

Source: Appendix - I (a)

The table 4.1 and 4.2 shows the relationship of MPS with DPS and EPS over the view of last eight year data.

Where
$r=$ Correlation co-efficient
$\mathrm{x}_{1}, \mathrm{X}_{2}=$ Correlation coefficient of MPS and EPS
$\mathrm{x}_{1}, \mathrm{X}_{3}=$ Correlation coefficient of MPS and DPS
$r^{2}=$ Co-efficient of determination
S.D. $=$ Co-efficient of variation

Average $=$ Mean (i.e. Arithmetic Mean)

The co-efficient of variation C.V. indicates that the fluctuation occurs in the variables during the period of observations. So, the higher C.V. indicates the higher volatile and lower C.V. indicates the lower volatile. Therefore, the CV of MPS is $33.36 \%$. It means MPS is less volatile, comparing to DPS i.e. $65.21 \%$ but MPS is more volatile comparing to the EPS i.e. $22.76 \%$. Therefore,

EPS < MPS < DPS
$22.76 \%<33.36 \%<65.21 \%$

Here, the CV of DPS is higher than other variables like MPS and EPS. So, DPS of the Himalayan Bank Ltd. is maximum volatile than independent variable like EPS. The simple correlation coefficient shows the relationship between one dependent variable and other two independent variable. The above table shows, MPS is positively correlated with DPS and EPS. It mean if the change in DPS and EPS, the MPS also move in same direction. But the magnitude of correlation of MPS with EPS and DPS are $26.60 \%$ and $25.91 \%$ respectively. The coefficient of determination show $26.60 \%$ change in MPS is elaborated by EPS and $25.91 \%$ change in MPS is explained by DPS. At last it is concluded that the MPS is more positively correlated with DPS and EPS.

Figure 4.1

## The Linear Relationship of MPS with EPS and DPS

The best line of fit is derived from the simple regression analysis based on MPS being dependent variables.

```
MPS on EPS
MPS = 297.632 + 15.643 EPS
```

The constant of regression equation is 297.632, it implied that when EPS is zero then MPS becomes 297.632. The regression constant coefficient of EPS is 15.643 , it implied that when EPS of Himalayan Bank Ltd. increases by Re 1. Then MPS also increase by 15.643 and vice-verses.

MPS on DPS
MPS $=1241.135+0.0511$ DPS

The regression constant co-efficient a is 1241.135 , it implies that when DPS is zero, then MQS become 1241.135. The constant coefficient of DPS is 0.0511 , it means when DPS increase by Rs.1, then MPS increase by 0.0511 and vice-versa.

MPS on EPS and DPS
MPS $=461.117+9.734$ EPS + 11.418 DPS

The above presented multiple regression equation describes that the constant coefficient ' a ', is 461.117, it shows that if EPS and DPS are zero then MPS becomes Rs.461.117. The value of constant coefficient 461.117 has economic interpretation since it lies in the range of observed data.

The coefficient of EPS is 9.334, it implies that when one percent change in EPS then MPS also increase by 9.734 while DPS remaining constant .

Similarly, the coefficient of DPS is 1.4174 , it implies that when one percent change, in DPS the MPS
also increase by 1.414 while EPS keeping constant.

### 4.4.2 Correlation and Regression Analysis of NABIL Bank Limited

Table 4.3
Synopsis of Performance Indicators of Nabil Bank Limited

| Year | MPS (X $\left.\mathrm{X}_{1}\right)$ | EPS (X2) | DPS (X3) |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 1500 | 59.26 | 40 |
| $2001 / 02$ | 735 | 55.25 | 30 |
| $2002 / 03$ | 735 | 84.66 | 50 |
| $2003 / 04$ | 1000 | 92.61 | 65 |
| $2004 / 05$ | 1505 | 105.49 | 70 |
| $2005 / 06$ | 2240 | 129.21 | 85 |
| $2006 / 07$ | 5050 | 137.08 | 140 |
| $2007 / 08$ | 5275 | 108.31 | 100 |
| Sum | 18040 | 771.87 | 580 |
| Mean | 2255 | 96.484 | 72.5 |
| S.D. | 1741.44 | 27.794 | 33.354 |
| C.V. | 0.7723 | 0.2877 | 0.4606 |

Source: Appendix - I (b)

Table 4.4
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.6560 | 0.4303 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.8741 | 0.7641 |

Source: Appendix - I (b)

MPS, EPS and DPS are taken as the major performance indicators of NABIL Bank Ltd. The above tables shows that there is fluctuation in MPS during the observed period. The low market price was Rs. 735 in 2001/02 and 2002/03. But highest price of stock is Rs. 5275 in year 2007/08. The coefficient of variation indicates the realities in the variables during the period of observations. So higher CV indicates the higher volatile and lower CV indicates the lower volatile. Therefore, C.V. of EPS is $28.77 \%$ which has lower C.V. than other remaining variables. It means EPS is less volatile. But C.V. of MPS and DPS is $77.23 \%$ and $46.06 \%$ respectively. Thus, the C.V. of MPS of NABIL Bank Ltd. is higher than other variables, that mean MPS is maximum volatile. The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variable. The above table shows MPS is positively correlated with EPS and DPS. The meaning of that is if the changed in EPS and DPS, the MPs also move in same direction. But the magnitude of correlation of MPS with EPS and DPS are $43.03 \%$ and $76.41 \%$ respectively. The coefficient of determination shows that $43.03 \%$ change in MPS is elaborated by EPS and $76.41 \%$ change in MPS is elaborated by DPS. At last, it is concluded that the MPS is more positively correlated with DPS than EPS.

Figure 4.2
The Linear Relationship of MPS with EPS and DPS

The best line of fit is derived from the simple regression analysis based on MPS being dependent variables.

```
MPS on EPS
MPS = -1734.314 + 41.347 EPS
```

The regression constant coefficient 'a' is -1734.314 , it implies that when EPS is zero, MPS becomes 17.34.314. The coefficient of EPS is 41.347. The coefficient of EPS is 41.347 it implies that. When EPS increase by Re 1. MPS increase by 41.347 and vice-versa.

```
MPS on DPS
MPS = -1053.538 + 45.635 DPS
```

The regression constant coefficient 'a' is -1053.538 , it implies that when DPS is zero, MPS becomes 1053.538. The coefficient of DPS is 45.635 . It implies that when DPS increase by Re 1 , MPs increase by 45.635 and vice versa.

MPS on EPS and DPS
MPS $=832.712-45.093$ EPS +79.629 DPS

The above presented multiple regression equation describes that the constant coefficient $\mathrm{a}_{1}$ is 832.712 , it shows that if EPS and DPS are zero than MPs becomes 832.712. The value of constant coefficient 832.712 has no any economic interpretation since it lies far from the observed data.

The coefficient of independent variables like EPS and DPS, show that there is marginal relationship between these variables and MPS

The coefficient EPS is -45.093 , it implies that when one percent change in EPS then MPS decrease by 45.093 while DPS remaining constant.

Similarly, the coefficient of DPS is 79.629 , it implies that when one percent change in DPS then MPS also increase by 79.629 taking EPS as a constant.

### 4.4.3 Correlation and Regression Analysis of Nepal Investment Bank Ltd.

Table 4.5
Synopsis of Performance Indicators of Nepal Investment Bank Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS (X3) |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 1150 | 33.17 | 0 |
| $2001 / 02$ | 760 | 33.59 | 0 |
| $2002 / 03$ | 795 | 39.56 | 20 |
| $2003 / 04$ | 940 | 51.70 | 15 |
| $2004 / 05$ | 800 | 39.50 | 12.5 |
| $2005 / 06$ | 1260 | 59.35 | 20 |
| $2006 / 07$ | 1729 | 62.57 | 5 |
| $2007 / 08$ | 2450 | 57.87 | 7.5 |
| Sum | 9884 | 377.31 | 80 |
| Mean | 1235.5 | 47.16 | 10 |
| S.D. | 550.41 | 11.28 | 7.6 |
| C.V. | 0.445 | 0.2392 | 0.76 |

Source: Appendix - I (c)
Table 4.6
Relationship of MPS with EPS and DPS

| Variable | R | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.62826 | 0.4659 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.1977 | 0.0391 |

Source: Appendix - I (c)

MPS, DPS and EPS are taken as the major performance indicators of Nepal Investment Bank Ltd. The above table shows that there is fluctuation in MPS during the observed period. The minimum MPS of Investment Bank Ltd. is Rs. 760 in Fiscal year 2001/02 and higher MPS is Rs. 1729 in fiscal year 2007/08. It means fluctuated. The coefficient of variation indicates the realities in the variables during the period of observation. So, higher C.V. indicates the higher volatile and lower CV indicates the lower volatile. Therefore, CV of EPS is $23.92 \%$ which has lower CV than other remaining variables. It mean EPS is less volatile. But the C.V. of MPs and DPS are $44.55 \%$ and $76 \%$ respectively. In this way C.V. of DPS is higher than other variables like MPS and EPS. It mean DPS of Nepal Investment Bank Ltd. is maximum volatile. The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. The above table shows that MPS of Nepal Investment Bank is positive correlated with EPS. That mean if the changed in EPS, move the MPS also move in same direction. But the magnitude of correlation of MPS with EPS is $46.54 \%$. But the MPS is negative correlated with DPS. The meaning of that, if the value of DPS changed then the value of MPS
is in opposite direction. If DPS is increase the MPS is decreases. The magnitude of correlation of MPS with EPS and DPS are $68.26 \%$ and $19.77 \%$ respectively. The coefficient of determination shows that $46.59 \%$ of the change in MPS is described by EPS and $3.91 \%$ change in MPS is described by DPS. It seems and concluded that the effect of independent variables to dependent variables has significant figure with MPS is positively correlated with EPS but insignificant figure with negatively correlated with DPS.

The linear relationship of MPS with DPS and EPS can be presented in following figure.

Figure 4.3
The Linear Relationship of MPS with EPS and DPS

The best line of fit is derived from the simple regression analysis based on MPS being dependent variables

MPS on EPS
MPS $=-335.713+33.314$ EPS

The regression constant coefficient 'a' is -335.713, it implies that when EPS is zero, MPS becomes 335.713. The coefficient of EPS is 33.314, it implies that when EPS increase by Re 1. MPS increase by 33.314 and vice-versa.

MPS on DPS
MPS $=1379.28-14.378$ DPS

The regression constant coefficient 'a' is -335.713, it implies that when EPS is zero, MPS becomes 335.713. The coefficient of EPS is 33.314 , it implies that when EPS increase by Re 1 , MPs increase by 33.314 and vice versa.

MPS on EPS and DPS

$$
\text { MPS }=1379.28-14.378 \text { DPS }
$$

The regression constant coefficient 'a' is 1379.28, it implies that when DPS is zero, MPS becomes Rs.1379.28. The coefficient of DPS is -14.378 , if implied that when DPS is decreased by Re 1 , then MPs decrease by Rs14.378 and vice-versa.

MPS on DPS and EPS
MPS $=-344.174+40.651$ EPS -33.758 DPS

The above presented multiple regression equation describes that the constant coefficient ${ }^{\prime} \mathrm{O}_{1}$ ' is 344.174, it shows that if EPS and DPS are zero then MPS becomes -344.174. The value of constant coefficient -344.174 has no economic interpretation since it lies far from the range of observed data.

The coefficient of independent variable like EPS and DPS shows that there is marginal relationship between these variables and MPS.

The coefficient of EPS is 40.651 , it implies that when one percent change in EPS then MPS increases by 40.651 while DPS keeping constant.

Similarly, the coefficient of DPS is $-33.75 \%$, it implies that when one percent change in DPS then MPS also decreases by $-33.75 \%$ while EPS remaining constant.

### 4.4.4 Correlation and Regression Analysis of Nepal SBI Bank Ltd.

Table 4.7
Synopsis of Performance Indicators of Himalayan Bank Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 1500 | 8.69 | 0 |
| $2001 / 02$ | 401 | 9.61 | 0 |
| $2002 / 03$ | 255 | 11.47 | 8 |
| $2003 / 04$ | 307 | 14.25 | 0 |
| $2004 / 05$ | 335 | 13.29 | 0 |
| $2005 / 06$ | 612 | 18.27 | 5 |
| $2006 / 07$ | 1176 | 39.55 | 12.59 |
| $2007 / 08$ | 1511 | 28.33 | 0 |
| Sum | 6097 | 143.26 | 25.59 |
| Mean | 762.13 | 17.91 | 12.80 |
| S.D. | 509.44 | 9.991 | 4.550 |
| C.V. | 0.6684 | 0.5578 | 0.3555 |

Source: Appendix - I (d)
Table 4.8
Relationship of MPS with EPS and DPS

| Variable | R | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{X}_{2}$ | 0.4844 | 0.2346 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.02173 | 0.00047 |

Source: Appendix - I (d)

MPS, DPS and EPS are taken as the major performance indictors of Nepal SBI Bank Ltd. The coefficient of variation, CV indicates that the volatility of the performance indicators during the period of time. The higher C.V. indicators the higher volatility. So, CV of MPS, DPS and EPS are 66.84\%, $55.78 \%$ and $35.55 \%$ respectively. But, the CV of DPS is lower than other two indicator MPS and EPS are $66.84 \%, 55.78 \%$ and $35.55 \%$ respectively. But, the CV of DPS is lower than other two indicator MPS and EPS. Therefore, DPS is less volatile. Similarly, CV of MPS is $66.84 \%$ indicate higher volatile than two indicators EPS and DPS. The simple correlation coefficient shows that the relationship between one dependent variable and other independent. From the above table it seems that MPS is positively correlated with EPS and DPS are $48.44 \%$ and $2.17 \%$ respectively. It means magnitude of correlation of MPS with DPS is less than EPS due to its higher magnitude of correlation. The coefficient of determination shows that $23.46 \%$ and change in MPS is describe by EPS and $0.647 \%$ change MPS is described by DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure.
Figure 4.4
The Linear Relationship of MPS with EPS and DPS

The above line of fit is derived from the simple regression analysis based on MRS being dependent variable

```
MPS on EPS
MPS = 319.831 + 24.696 EPS
```

The constant of regression equation is 319.831 , it implies that when EPS is equal to zero then MPS remains and 319.831. The coefficient of EPS is 24.699 , it implies that when EPS increase by Rs.1, the MPS increase by Rs. 24.699 and vice-versa.

```
MPS on DPS
MPS = 754.342 + 2.433 DPS
```

The constant of regression equation is 754.342 , it implies that when DPS is equal to zero then MPS is 754.342. The coefficient of DPS is 2.433 ; it implied that when DPS increase by Rs.1, then MPS increases by Rs.2.433 and vice-versa

$$
\begin{aligned}
& \text { MPS on EPS and DPS } \\
& \text { MPS }=236.203+37.948 \text { EPS }-48.027 \text { DPS }
\end{aligned}
$$

The above presented multiple regression equation describe that the constant coefficient a, is 236.203 , it shows that if DPS and EPS is zero, then MPS becomes Rs.236.203. The value of constant coefficient has not economic interpretation since it lies far from the observed data.

The coefficient of independent variables like EPS and DPS shows that there is marginal relationship between these variables and MPS.

The coefficient of EPS is 37.948, it implies that when one percentage change in EPS then MPS increase by 37.948 while DPS keeping constant.

Similarly, the coefficient of DPS is -48.027 it implies that when one \% change in DPS then MPS decrease by 48.027 while EPS remaining constant

### 4.4.5 Correlation and Regression Analysis of Standard Chartered Bank Ltd. (SCBNL)

Table 4.9
Synopsis of Performance Indicators of Standard Chartered Bank Nepal Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 2144 | 126.88 | 100 |
| $2001 / 02$ | 1550 | 141.13 | 100 |
| $2002 / 03$ | 1640 | 149.3 | 110 |
| $2003 / 04$ | 1745 | 143.55 | 110 |
| $2004 / 05$ | 2345 | 143.14 | 120 |
| $2005 / 06$ | 3775 | 175.04 | 130 |
| $2006 / 07$ | 5900 | 167.37 | 80 |
| $2007 / 08$ | 6830 | 131.92 | 80 |
| Sum | 25929 | 1178.3 | 830 |
| Mean | 3241.125 | 147.2875 | 103.75 |
| S.D. | 3143.78 | 130.297 | 101.902 |
| C.V. | 0.9699 | 0.8846 | 0.9822 |

Source: Appendix - I (e)
Table 4.10
Relationship of MPS with EPS and DPS

| Variable | R | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.2180 | 0.0475 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.6171 | 0.3808 |

Source: Appendix - I (e)

MPS, EPS and DPS are taken as the major performance indicators of Standard Chartered Bank Nepal Ltd. The coefficient of variation indicates the fluctuation of indicators (variables) during the period of time. The higher CV indicates the higher volatility and lower CV indicates, the lower volatility. So, CV of MPS, EPS and DPS are $96.99 \%, 88.46 \%$ and $98.22 \%$ respectively. But the CV of EPS is lower than other two indicator MPS and DPS. Therefore, EPS is less volatile. Similarly, CV of DPS is $98.22 \%$ which is higher than other variables, therefore DPS is more volatile. The simple correlation coefficient shows that relationship between one dependent variable with other independent variables. From the above, it seems that MPS is positively correlated with EPS, but negatively with DPS. The meaning of that, if the change occur in EPS, then MPS also change in the same direction. But the MPS change in the opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS is $21.80 \%$ and $-61.71 \%$ respectively. It means the magnitude of correlation of MPS with EPS in higher and positive. So, MPS is significantly correlated with EPS. The coefficient of determination shows that $4.75 \%$ and $38.08 \%$ described by EPS and DPS is change in MPS.

The best line of fit derived from simple regression analysis based on MPS being dependent variable.

MPS on EPS
MPS $=-787.680+27.353$ EPS

The regression constant coefficient 'a' is -787.680 , it implies that when EPS is zero, MPS become 787.680. The coefficient of EPS is 27.353 , it implies that when EPS increase by Rs. 1 MPS increases by Rs.27.353 and vice-versa.

MPS on DPS
MPS $=10726.954-72.153$ DPS

The constant of regression equation is 10726.954 , it implies that when DPS is equal to zero then MPS remains 10726.954. The coefficient of DPS is -72.153 ; it implies that when DPS increases by Rs.1, them MPS decrease by Rs. 72.153 and vice-versa.

$$
\begin{aligned}
& \text { MPS on EPS and DPS } \\
& \text { MPS }=4033.669+57.191 \text { EPS }-88.832 \text { DPS }
\end{aligned}
$$

The above presented multiple regression equation describes that the constant coefficient 'a' is 4033.669 , it shows that if EPS and DPS are zero; then MPS become 4033.669. The value of constant coefficient has not economic interpretation since, it lies far from the observed data.

The coefficient of independent variables like EPS, DPS etc. shows that there is marginal relationship between these variables and dependent variable like as MPS.

The coefficient of EPS is 57.191, it implies that when one percent change in EPS then MPS also increase by 51.191 taking DPS as a constant.

Similarly, the coefficient of DPS is -88.832 it implies that when one percentage change in DPS than MPS is also decrease by -88.832 while EPS remaining constant.

### 4.4.6 Correlation and Regression Analysis of Development Credit Bank Ltd.

Table 4.11
Performance Indicators of Development Credit Bank Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 0 | 0.11 | 0 |
| $2001 / 02$ | 145 | 5.85 | 0 |
| $2002 / 03$ | 145 | 10.41 | 10.53 |
| $2003 / 04$ | 165 | 19.22 | 10.53 |
| $2004 / 05$ | 305 | 22.27 | 12.63 |
| $2005 / 06$ | 390 | 13.68 | 0.63 |
| $2006 / 07$ | 800 | 16.78 | 0.63 |
| $2007 / 08$ | 855 | 4.96 | 0 |
| Sum | 2805 | 93.28 | 34.95 |
| Mean | 350.625 | 11.66 | 4.369 |
| S.D. | 296.21 | 7.191 | 5.355 |
| C.V. | 0.8448 | 0.6167 | 1.225 |

Source: Appendix - I (f)
Table 4.12
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.1535 | 0.0236 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.3458 | 0.1196 |

Source: Appendix - I (f)

MPS, EPS and DPS are taken as the major performance indicators of Development Credit Bank Ltd. The above table shows that there is increadiable during the observed period. The MPS of DCBL is only Rs. 145 in 2001/02, then after increase up to 800 in 2007/08. The coefficient of variation indicates the realities in the variables during the period of observations. So, higher CV indicates the higher volatile and lower CV indicates the lower volatile. Therefore, C.V. of EPS is $61.67 \%$ which has lower CV comparing to other variables. It means CV of EPS is less volatile. But the CV of DPS is higher i.e. $122.57 \%$ which means highest volatile. The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. The above table shows that MPS of Development credit Bank Ltd. is positively correlated with EPS. That mean, its value changes occurs the change in MPS also changes in some direction. But negatively correlated with DPS. That means the value of DPS changed then value of MPS also changes but it opposite direction. The magnitude of correlation of MPS with EPS and DPS are $15.35 \%$ and $-34.58 \%$ respectively. The coefficient of determination shows that $2.36 \%$ of the change in MPS is describe by EPS and $11.96 \%$ of the change in MPS is describe by DPS. It seems and concluded that the effect of independent variables to dependent variables has significant figure even then MPS is negative correlated with DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure:

## Figure 4.5

## The Linear Relationship of MPS with EPS and DPS

The above line of fit is derived from the simple regression analysis based on MPS being dependent variable

MPS on EPS.
MPS $=276.908+6.322$ EPS

The constant of regression equation is 276.908 , it implies that when EPS is zero then MPS remains 276.908. The coefficient of EPS is 6.322 , it implies that when EPS increased by Rs.1, the MPS is increases by Rs. 6.322 and vice-versa.

MPS on DPS
MPS $=434-19.130$ DPS

The constant of regression equation is 434, it implies that when DPS is zero then MPS remains 434. The coefficient of DPS is -19.130 , it implied that when DPS increases by Rs.1, then MPS decrease by Rs.19.130 and vice-versa

$$
\begin{aligned}
& \text { MPS on EPS and DPS } \\
& \text { MPS }=214.281+28.352 \text { EPS }-44.462 \text { DPS }
\end{aligned}
$$

The above presented multiple regression equation describes that the constant coefficient 'a' is 214.281, it shows that if EPS and DPS are zero then MPS becomes 214.281. The value of constant coefficient 214.281 has no economic interpretation since it lies far from the range of observation data.

The coefficient of independent variables like EPS and DPS shows that there is marginal relationship
between these variables and MPS

The coefficient of EPS is 28.352 , it implies that when one percentage change in EPS then MPS increases by 28.352 while DPS keeping constant.

Similarly, the coefficient of DPS is 44.462 , it implies that one percent change in DPS then MPS also decrease by -44.462 while EPS remaining constant.

### 4.4.7 Correlation and Regression Analysis of Nepal Nirdhan Utthan Bank Ltd.

Table 4.13
Synopsis of Performance Indicators of Nepal Nirdhan
Utthan Bank Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X7}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 0 | 0 | 0 |
| $2001 / 02$ | 0 | 0 | 0 |
| $2002 / 03$ | 0 | 0 | 0 |
| $2003 / 04$ | 100 | 49.38 | 0 |
| $2004 / 05$ | 100 | 51.1 | 7.40 |
| $2005 / 06$ | 103 | 30.57 | 6.30 |
| $2006 / 07$ | 110 | 41.84 | 16.90 |
| $2007 / 08$ | 148 | 24.04 | 1.41 |
| Sum | 561 | 196.93 | 32.01 |
| Mean | 112.2 | 39.386 | 6.702 |
| S.D. | 18.269 | 10.548 | 5.959 |
| C.V. | 0.1628 | 0.2678 | 0.8891 |

Source: Appendix - I (g)

Table 4.14
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | -0.7665 | 0.5875 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.2482 | 0.0616 |

Source: Appendix $-I(g)$

MPS, DPS and EPS are taken as the major performance indicators of Nirdhan Utthan Bank Ltd. The above table shows that there is fluctuation in MPS and during the observed period. The observed period is taken from 2003/04 to 2007/08. It because of bank operated under listed company on 2002. The MPS of Nirdhan Utthan Bank is Rs. 148 in the year 2007/08 which is higher among the observation. Bank MPS is moved up and down, and reach up to Rs.148. The coefficient of variation indicates, the realities in the variables during the period of observation. So higher CV indicates the higher volatile and lower CV indicates the lower volatile. Therefore, CV of MPS is $16.28 \%$ which has lower CV than other remaining variables. It means MPS is less volatile. But the CV of DPS and EPS are $88.91 \%$ and $26.78 \%$ respective. In this way, CV of DPS is higher than other variables like MPS and EPS. Then DPS of Nirdhan Utthan Bank Ltd. is maximum volatile. The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variable. The above table shows that MPS of Nirdhan Utthan Bank Ltd. is negatively correlated with its EPS and DPS. The meaning of that, if the value of EPS and DPS changed then value of MPS also changes. The magnitude of correlation of MPS with EPS and DPS are $76.65 \%$ and $24.82 \%$ respectively. But inverse related MPS with EPS and DPS. The Coefficient of determination shows that $58.75 \%$ of the change in

MPS is described by EPS and $6.16 \%$ of the change in MPS is described by DPS. It seems and concluded that effect of independent variables to dependent variables has insignificant figure even the MPS is negatively correlated with EPS and DPS.

Figure 4.6
The Linear Relationship of MPS with EPS and DPS

The best line of fit is derived from the simple regression analysis based on MPS being dependent variable.

MPS on EPS
MPS $=16.506+2.178$ EPS

The regression constant coefficient ' $\mathrm{O}_{1}$ ' is 16.506 , it implied that when EPS is zero then MPS become 16.506. The regression constant coefficient of EPs is 2.178 , it implied that when EPS of Nirdhan Utthan Bank Ltd. increases by Rs.1, then MPS also increases by 2.178 and vice-versa.

```
MPS on DPS
MPS = 51.032 + 4.772 DPS
```

The constant of regression equation is 51.032 , it implies that when DPS is zero, then MPS becomes 51.032. The regression constant coefficient of DPS is 4.777, it implied that when Nirdhan Utthan Bank Ltd. increases by Rs.1, then MPS also increases by 4.772 and vice-versa.

MPS on EPS and DPS
MPS $=16.392+2.117 \mathrm{EPS}+0.406 \mathrm{DPS}$

The above presented multiple regression equation describes that constant coefficient 'a' is 16.392 . It shows and suggests that if EPS and DPS are zero. Then MPS become Rs.16.392. The value of constant coefficient 16.392 has economic interpretation since it lies in the range of observed data.

The coefficient of EPS and DPS shows that there is marginal relationship between these variables and

MPS.

The coefficient of EPS is 2.117, it means if one percentage change in EPS then MPS also increases by 2.117 percent while DPS keeping as a constant.

Similarly, the coefficient of DPS is 0.406 , it means if one percent change in DPS then MPS also increases by 0.406 percent while EPS keeping as a constant.

### 4.4.8 Correlation and Regression Analysis of Siddhartha Bank Ltd.

Table 4.15
Synopsis of Performance Indicators of Siddhartha Bank Ltd.

| Year | MPS (X $\left.\mathrm{X}_{1}\right)$ | EPS (X2) | DPS (X3) |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ |  |  |  |
| $2001 / 02$ | 0 | -0.37 | 0 |
| $2002 / 03$ | 0 | -8.89 | 0 |
| $2003 / 04$ | 0 | 20.05 | 0 |
| $2004 / 05$ | 360 | 13.05 | 0 |
| $2005 / 06$ | 778 | 15.88 | 0.79 |
| $2006 / 07$ | 1090 | 17.29 | 0.79 |
| $2007 / 08$ | 2228 | 57.04 | 1.58 |
| Sum | 742.667 | 9.507 | 0.79 |
| Mean | 299.067 | 9.695 | .0 |
| S.D. | 0.4027 | 1.0198 | 0 |
| C.V. |  |  |  |

Source: Appendix - I (h)
Table 4.16
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.5467 | 0.2989 |
| $\mathrm{rx}_{1}, \mathrm{X}_{3}$ | 0.9310 | 0.8668 |

Source: Appendix - I (h)

Over the last 8 years data, the table shows the relationship of MPS with DPS and EPS.

MPS, DPS and EPS are taken as the major performance indicators of Siddhartha Bank Limited. The coefficient of variation indicates the fluctuation of indicators (variables) during the period of time. The higher, CV indicates the higher volatility and lower CV indicates the lower volatility. So, CV of MPS, EPS and DPS are $40.27 \%, 101.98 \%$ and $0 \%$ respectively. But the CV of DPS is lower than other two indicators MPS and EPS. Therefore, DPS has no volatile. Similarly, CV EPS is $101.98 \%$ which is the higher CV than MPS and DPS. Therefore, EPS of Siddhartha Bank Limited is more volatile.

The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. From the above table, it seems that MPS is positively correlated with EPS and DPS. The meaning of that is change occurs in EPs and DSS, change in MPS in the same direction. The magnitude of correlation of MPS with EPS and DPS are 54.67\% and 93.10\% respectively. It means the magnitude of correlation of MPS with DPS is higher than EPS. So, MPs is significantly correlated with DPS due to its higher magnitude of correlation. The coefficient of determination shows that $29.89 \%$ change in MPS is described by EPS and $86.68 \%$ is described by DPS.

Figure 4.7
The Linear Relationship of MPS with EPS and DPS

The best line of fit is derived from the simple regression analysis based on MPS being dependent and variables.

$$
\begin{aligned}
& \text { MPS on EPS } \\
& \text { MPS }=159.829+22.248 \mathrm{EPS}
\end{aligned}
$$

The regression constant coefficient ' $a$ ' is 159.829 , it implies that when EPS is zero then MPS becomes 159.829. The constant coefficient of EPS is 22.248, it implies that when EPS increase by Rs.1. Then, MPS also increases by Rs. 22.248 and vice-versa.

MPS on DPS
MPS $=90+1068.354$ DPS

The regression constant coefficient ' $a$ ' is 90 , it implies that when DPS is zero then MPS becomes 90 . The constant coefficient of DPS is 90. It implies that when DPS increase by Rs.1, then MPS also increases by 1068.354 and vice-versa.

> MPS on EPS and DPS
> MPS $=57.67+5.418 \mathrm{EPS}+995.542 \mathrm{DPS}$

The above presented multiple regression equation describes that the constant coefficient ' 0 ' is 57.67 . It shows and suggests that if EPS and DPS are zero then MPS becomes 57.67. The value of constant coefficient 57.67 has no significant because it does not lies in the range of observed data.

The coefficient of EPS and DPS shows that there is marginal relationship between these variables and MPS. The coefficient of EPS is 5.418 , it implies that one percent change in EPS then MPS also
increases by 5.418 while DPS taking as a constant. The coefficient of DPS is 995.542 , it implies that one present change in DPS then MPS also increases by 995.542 while EPS taking as a constant

### 4.4.9 Correlation and Regression Analysis of Citizen Investment Trust

Table 4.17
Synopsis of Performance Indicators of Citizen Investment Trust

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 180 | 18.11 | 0 |
| $2001 / 02$ | 165 | 15.08 | 14.35 |
| $2002 / 03$ | 170 | 18.83 | 14 |
| $2003 / 04$ | 165 | 36.7 | 15 |
| $2004 / 05$ | 200 | 43.93 | 15.78 |
| $2005 / 06$ | 265 | 61.62 | 68.42 |
| $2006 / 07$ | 352 | 67.02 | 52.64 |
| $2007 / 08$ | 438 | 75.86 | 35.09 |
| Sum | 1935 | 337.15 | 215.28 |
| Mean | 241.875 | 42.144 | 30.754 |
| S.D. | 95.978 | 22.420 | 22.036 |
| C.V. | 0.3968 | 0.5320 | 0.7165 |

Source: Appendix - I (i)
Table 4.18
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.8939 | 0.7991 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.6205 | 0.3850 |

Source: Appendix - I(i)

Over the last 8 years data, the table shows the relationship of MPs with EPS and DPS.

MPS, EPS and DPS are taken as major performance indicators of Citizen Investment Trust. The coefficient of variation indicates that the fluctuation of indicators (variables) during the period of time. Theoretically, the higher CV indicates the lower volatility. So, CV of MPS, EPS and DPS are $39.68 \%$, $53.20 \%$ and $71.65 \%$ respectively. But the CV of MPS is lower than other two indicators EPS and DPS. Therefore, MPs is less volatile. Similarly, CV of DPS of citizen investment Trust is more volatile. Last one, CV of EPS is $53.20 \%$ which is moderate volatile comparison with DPS.

The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. From the above table, it seems that MPS is positively correlated with EPS and DPS. The meaning of that is if the change occurs in EPS and DPS then MPS also changes in same direction. The magnitude correlation of MPS with EPS and DPS are $89.39 \%$ and 62.05 respectively. It means that magnitude of correlation of MPS with EPS is higher than DPS. So MPS is
significantly correlated with EPS. The coefficient of determination shows that $79.91 \%$ and $38.50 \%$ respectively, which means $79.91 \%$ change in MPS is described by EPS and $78.50 \%$ change in MPS in described by DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure.

## Figure 4.8

## The Linear Relationship of MPS with EPS and DPS

The best line fit is derived from the simple regression analysis based on MPS being dependent variables.

$$
\begin{aligned}
& \text { MPS on EPS } \\
& \text { MPS }=80.594+3.827 \text { EPS }
\end{aligned}
$$

The regression constant coefficient ' $a$ ' is 80.594 it implies that when EPS is zero then MPS become 80.594. The constant coefficient for EPS is 3.877 , it implies that when EPS increases by Rs.1, MPs also increases by Rs.3.827 and vice-versa

$$
\begin{aligned}
& \text { MPS on DPS } \\
& \text { MPS }=168.012+2.745 \text { DPS }
\end{aligned}
$$

The regression constant coefficient ' $a$ ' is 168.012, it implies that when DPS is zero, MPS becomes 168.012. The coefficient of DPS is 2.745 , it implies that when DPS increase by Rs.1, MPS increases by 2.745 and vice-versa.

MPS on EPS and DPS
MPS $=75.758+4.544$ EPS - 0.943 DPS

The above presented multiple regression equation describes that the constant coefficient is 75.758 , it shows and suggest that if EPS and DPS are zero then MPS would be only 75.758 . The value of constant coefficient 75.758 has economic interpretation since it lies the observed data.

The coefficient of independent variable like EPS, DPS etc. shows that there is marginal relationship between these variables and MPS

The coefficient of EPS is 4.544 it implies that when one percent change in EPS then MPS also increases by $16.82 \%$ taking DPS as constant.

The coefficient of DPS is -0.943 it implies tat when one percent change in DPS then MPS decreases by $-0.943 \%$ while EPS remaining constant.

### 4.4.10 Correlation and Regression Analysis of Nepal Housing and Merchant Finance Ltd.

Table 4.19
Synopsis of Performance Indicators of Nepal Housing and
Merchant Finance Ltd.
Merchant Finance Ltd.

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 280 | 33.93 | 15 |
| $2001 / 02$ | 175 | 17.80 | 15 |
| $2002 / 03$ | 240 | 16.33 | 10 |
| $2003 / 04$ | 230 | 12.49 | 10.53 |
| $2004 / 05$ | 214 | 24.2 | 15.79 |
| $2005 / 06$ | 210 | 15.86 | 21.05 |
| $2006 / 07$ | 280 | 33.99 | 24.21 |
| $2007 / 08$ | 816 | 34.98 | 31.58 |
| Sum | 2445 | 189.58 | 143.16 |
| Mean | 305.625 | 23.698 | 17.895 |
| S.D. | 195.711 | 8.953 | 6.845 |
| C.V. | 0.6404 | 0.3778 | 0.3825 |

Source: Appendix - I (j)
Table 4.20

## Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.5858 | 0.3432 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.7689 | 0.5912 |

Source: Appendix - I (j)

Over the last 8 years data, the table shows the relationship of MPS with EPS and DPS.

MPS, EPS and DPS are taken as major performance indicators of Nepal Housing and Merchant Finance Limited (NH\&MF). The coefficient of variation indicates that the fluctuation of indicators (variables) during the period of time. Theoretically, the higher CV indicates the higher volatility and lower CV indicates the lower volatility. So, CV of MPS, EPS and DPS are $64.04 \%, 37.78 \%$ and $38.25 \%$ respectively. But the CV of MPS is higher than other two indicators EPS and DPS. Therefore, MPS is high volatile. Similarly, CV of EPS is lower than other two indicators means less volatile.

The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. From the above table, it seems that MPS is positively correlated with EPS and DPS. The meaning of that is if change occurs in EPS and DPS then MPS also changes in same direction. The magnitude of correlation of MPS with EPS and DPS are $58.58 \%$ and $76.89 \%$ respectively. It means that magnitude of correlation of MPS with DPS is higher than EPS. The coefficients of determination shows that $34.32 \%$ and $59.12 \%$ respectively. Which mean $34.32 \%$ change in MPS is described by EPS and $59.12 \%$ change in MPS is described by DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure.

Figure 4.9

## Relationship of MPS with EPS and DPS of Nepal Housing and Merchant Finance Limited

The best line fit is derived from the simple regression analysis based on MPS being dependent variables.

```
MPS on EPS
MPS = -4.430 + 13.084 EPS
```

The regression constant coefficient ' $a$ ' is -4.430 , it implies that when EPS is zero then MPS become 4.430. The constant coefficient of EPS is 13.084 , it implies that when EPS increases by Rs.1, than MPS also increases by 13.084, and vice-versa

```
MPS on DPS
MPS =-87.774 + 21.984 DPS
```

The regression constant coefficient 'a' is -87.774 , it implies that when DPS is zero then MPS become 87.774. The constant, coefficient of DPS is 21.984, it implies that when DPS increases by Rs.1, than MPS also increases by 21.984 and vice-versa

MPS on EPS and DPS
MPS $=-111.533+2.850 \mathrm{EPS}+19.538$ DPS

The above presented multiple regression equation describes that the constant coefficient 'a' is -111.533 , it shows that if EPS and DPS are zero, then MPS become -111.533 , it shows that if EPS and DPS are zero, then MPS become -111.533 . The value of constant coefficient has not economic interpretative. Since, it lies far from the observed data.

The coefficient of independent variables like EPS, DPS etc. shows that there is marginal relationship between these variables and dependent variable like as MPS.

The coefficient of EPS is 2.850, it implies that when one percent changes in EPS then MPS also increase by 2.850 taking DPS as a constant.

Similarly, the coefficient of DPS is 19.538, it implies that when one percentage change is DPS than MPS is also increase by 19.538 while EPS remaining constant.

### 4.4.11 Correlation and Regression Analysis of Nepal Share Market and Finance Limited

Table 4.21
Synopsis of Performance Indicators of Nepal Share Market
and Finance Limited

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 180 | 0.14 | 0 |
| $2001 / 02$ | 159 | 4.18 | 0 |
| $2002 / 03$ | 125 | -2.32 | 0 |
| $2003 / 04$ | 103 | 2.9 | 0 |
| $2004 / 05$ | 120 | 10.94 | 10 |
| $2005 / 06$ | 145 | 16.92 | 10.53 |
| $2006 / 07$ | 300 | 22.11 | 20 |
| $2007 / 08$ | 1670 | 11.23 | 8.42 |
| Sum | 2802 | 66.1 | 48.95 |
| Mean | 350.25 | 8.263 | 12.238 |
| S.D. | 502.101 | 7.954 | 3.216 |
| C.V. | 1.4366 | 0.9626 | 0.2628 |

Source: Appendix - I (k)
Table 4.22
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.2097 | 0.0439 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | 0.2033 | 0.0413 |

Source: Appendix $-I(k)$

MPS, EPS and DPS are taken as the major performance indicators of Nepal Share Market and Finance Limited. The above table shows that there is incerasible during the observed period. The MPS of NSM\&F is only Rs. 103 in 2003/04 year, then after increase up to Rs. 1670 in 2007/08. The coefficient of variation indicates the realities in the variables during the period of observations. So, higher CV indicates the higher volatile and lower CV indicates the lower volatile. Therefore, CV of MPS is $143.36 \%$ which has higher CV company to other variables. It means CV of MPS is high volatile. But the CV of DPS is $26.28 \%$ which mean less volatile compare to other two variables.

The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variable. The above table shows that MPS of NSM\&F limited is positively correlated with EPS and DPS. That mean, it's value changes occurs the change in MPS also changes in same direction. The magnitude of correlation of MPS with EPS and DPS are $20.97 \%$ and $20.33 \%$ respectively. The coefficient of determination shows that $4.39 \%$ of change in MPS is describe by EPS and $4.13 \%$ of the change in MPS is described by DPS. It seems and concluded that the effect of independent variables to dependent variables has not significant figure.

The linear relationship of MPS with EPS and DPS can be presented in following figure.
Figure 4.10
The Linear Relationship of MPS with EPS and DPS

The best line fit is derived from the simple regression analysis based on MPS being dependent variables.

MPS on EPS
MPS $=240.855+13.240$ EPS

The regression constant coefficient 'a' is 240.855 , it implies that when EPS is zero, then MPS becomes 240.855. The constant coefficient of EPS is 13.240, it implies that when EPS increases by Rs.1., then MPS also increases by Rs. 13.240 and vice-versa

MPS on DPS
MPS $=259.917+14.763$ DPS

The regression constant coefficient 'a' is 259.917, it implies that when DPS is zero, then MPS becomes 259.917. The constant coefficient of DPS is 14.763 , it implies that when DPS increases by Rs.1, then MPS also increases b Rs.14.763 and vice-versa.

## MPS on EPS and DPS

MPS $=242.689+11.174 \mathrm{EPS}+2.490$ DPS

The above presented multiple regression equation describes that constant coefficient ' a ' is 242.689 . It shows and suggests that if EPS and DPS are zero then MPS becomes 242.689. The value of constant coefficient 242.689 has economic interpretation since it lies in the range of observed data.

The constant coefficient of EPS and DPS shows that there is marginal relationship between these variables and MPS.

The coefficient of EPS is 11.174, it implies that one percent change in EPS then MPS increase by $11.174 \%$ while DPS taking as a constants.

The coefficient of DPS is 2.490 , it implies that one percent change in DPS then MPS increases by 2.490 by taking EPS as constant.

### 4.4.12 Correlation and Regression Analysis of Peoples Finance Limited

Table 4.23
Synopsis of Performance Indicators of Peoples Finance Limited

| Year | MPS $\left(\mathrm{X}_{1}\right)$ | EPS $\left(\mathrm{X}_{2}\right)$ | DPS $\left(\mathrm{X}_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 230 | 0 | 0 |
| $2001 / 02$ | 130 | 8.44 | 0 |
| $2002 / 03$ | 90 | 3.87 | 0 |
| $2003 / 04$ | 104 | 14.88 | 10 |
| $2004 / 05$ | 100 | 17.62 | 10 |
| $2005 / 06$ | 111 | 9.72 | 0 |
| $2006 / 07$ | 127 | 13.14 | 0 |
| $2007 / 08$ | 669 | 19.01 | 0 |
| Sum | 1561 | 86.68 | 20 |
| Mean | 195.125 | 6.835 | 10 |
| S.D. | 183.758 | 0.5721 | 0 |
| C.V. | 0.9417 |  | 0 |

Source: Appendix - I (l)
Table 24
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.3629 | 0.1317 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.2926 | 0.0856 |

Source: Appendix - I (l)

MPS, DPS and EPS are taken as the major performance indicators of Peoples Finance Limited. The coefficient of variation, CV indicates that the volatility of the performance indicators during the period of time. the higher CV indicates the higher volatility. So, CV of MPS, EPS and DPS are $94.17 \%, 57.21 \%$ and $0 \%$ respectively. But the CV of MPS is higher i.e. $94.17 \%$ mean higher volatile than two indicates EPS and DPS. The CV of DPS is $0 \%$ mean no volatile

The simple correlation coefficient shows that the relationship between one dependent variable and other independents. From the above table it seems that MPS is positively correlated with EPS. But negative correlated with DPS. Positively correlated mean change in EPS leads to change in MPS in same direction. But change in DPS leads to change opposite direction on MPS. The magnitude of correlation of MPS with EPS and DPS are $36.29 \%$ and $-29.26 \%$ respectively. So, MPS is significantly correlated with EPS due to its higher magnitude of correlation. The coefficient of determination shows that $13.17 \%$ and $8.56 \%$. The coefficient of determination shows that $13.17 \%$ describe by EPS and 8.56 describe by DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure.

Figure 11

## The Linear Relationship of MPS with EPS and DPS

The best line fit is derived from the simple regression analysis based on MPS being dependent variables.

MPS on EPS
MPS $=78.574+10.757$ EPS

The constant of regression equation is 78.574 , it implies that when EPs is equal to zero then MPS remains Rs.78.574. The coefficient of EPS is 10.757, it implies that when EPS increase by Rs.1, the MPS increase by 10.757 and vice-versa.

```
MPS on DPS
MPS = 226.167-12.417 DPS
```

The constant of regression equation is 226.167 , it implies that when DPS is equal to zero then MPS is Rs.226.167. The coefficient of DPS is -12.417 , it implied that when DPS increase by Rs.1, then MPS is decreases by -12.417 and vice-versa.

MPS on EPS and DPS
MPs $=42.929+20.292$ EPS -27.068 DPS

The above presented multiple regression equation describe that the constant coefficient ' O ', is 42.929 , it shows that if DPS and EPS is zero, then MPS becomes Rs.42.929, the value of constant coefficient has not economic interpretation since it lies far from the observed data

The coefficient of independent variable like EPS and DPS shows that there is marginal relationship between these variables and MPS.

The coefficient of EPS is 20.292, it implies that when one percentage change in EPS then MPS increase by 20.292, while DPS keeping as constant.

Similarly, the coefficient of DPS is -27.068 , it implies that when one percentage change in DPS then MPS decreases by -27.068. While EPS remaining constant.

### 4.4.13 Correlation and Regression Analysis of Universal Finance Limited

Table 4.25
Synopsis of Performance Indicators of Universal Finance Limited

| Year | MPS (X1) | EPS $\left(\mathrm{X}_{2}\right)$ | DPS (X $\left.{ }_{3}\right)$ |
| :---: | :---: | :---: | :---: |
| $2000 / 01$ | 181 | 21.79 | 16.51 |
| $2001 / 02$ | 175 | 21.4 | 16 |
| $2002 / 03$ | 150 | 19.76 | 15 |
| $2003 / 04$ | 130 | 26.72 | 0 |
| $2004 / 05$ | 130 | 25.79 | 13.53 |
| $2005 / 06$ | 181 | 21.21 | 0 |
| $2006 / 07$ | 200 | 34.24 | 0 |
| $2007 / 08$ | 283 | 28.8 | 0 |
| Sum | 1430 | 178.75 | 24.975 |
| Mean | 45.994 | 4.599 | 61.04 |
| S.D. | 0.2573 | 0.1841 | 0.8039 |
| C.V. |  |  | 0.0527 |

Source: Appendix - I (m)
Table 4.26
Relationship of MPS with EPS and DPS

| Variable | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| $\mathrm{rx}_{1} \mathrm{x}_{2}$ | 0.3711 | 0.1377 |
| $\mathrm{rx}_{1}, \mathrm{x}_{3}$ | -0.3945 | 0.1556 |

Source: Appendix - I (m)

Over the last 8 years data, the table shows the relationship of MPs with EPS and DPS

MPS, EPS and DPS are taken as major performance indictors of Universal Finance Limited. The coefficient of variation indicates that the fluctuation of indicators (variables) during the period of the time. Theoretically, higher CV indicates the higher volatility and lower CV indicates the lower volatility. So CV of MPS, EPS and DPS are $25.73 \%, 18.41 \%$ and $5.27 \%$ respectively. But CV of DPS is lower than other two indictors EPS and DPS. Therefore, DPS is less volatile. Similarly, CV of MPS is more volatile. Last one, CV of EPS of Universal Finance Limited is $18.41 \%$ which is moderate volatile comparison with two variables.

The simple correlation coefficient shows that the relationship between one dependent variable and other two independent variables. From the above table, it seems that MPS is positively correlated with

EPS but negatively correlated with DPS. The meaning of that is, if the change occurs in EPS then MPS also change in same direction. But change occurs in DPS then MPS change in opposite direction. The magnitude of correlation of MPs with EPS and DPS are $37.11 \%$ and $-39.45 \%$ respectively. It means that magnitude of correlation of MPS with EPS is higher than DPS. So, MPS is significantly correlated with EPS. The coefficient of determination shows that $13.77 \%$ and $15.56 \%$ respectively. Which mean $13.77 \%$ described by EPS and 15.56 by DPS.

The linear relationship of MPS with EPS and DPS can be presented in following figure.

## Figure 4.12

## The Linear Relationship of MPS with EPS and DPS

The best line fit is derived from the simple regression analysis based on MPS being dependent variables

MPS on EPS
MPS $=86.05+3.712$ EPS

The regression constant coefficient 'a' is 86.05, it implies that when EPS is zero then MPS become 86.05. The constant coefficient for EPS is 3.712, it implies that when EPS increases by Rs.1, MPS also increases by 3.712 and vice-versa.

MPS on DPS
MPS $=196.795-2.365$ DPS

The constant of regression equation is 196.795 , it implies that when DPS is equal to zero then MPS remains 196.799. The coefficient of DPS is -2.365 , it implies that when DPS increases by Rs. 1 then MPS decrease by -2.365 and vice versa.

$$
\text { MPS on EPs and DPS } \quad \text { MPS }=140.013+2.039 \text { EPS }-1.599 \text { DPS }
$$

The above presented multiple regression equation describes that the constant coefficient ' a ' is 140.013, it shows that if EPS and DPS are zero, then MPS become 140.013. The value of constant coefficient has significant important because it lies on the observed data.

The coefficient of independent variables like EPS, DPS etc. shows that there is marginal relationship between these variables and dependent variables like as MPS.

The coefficient of EPS is 2.039 , it implies that when one percentage in EPS then MPS also increases by

Similarly, the coefficient of DPS is -1.599 , it implies that when one percentage change in DPS than MPS is also decrease by -1.599 while EPS remaining constant.

### 4.5 Analysis of Stock Market Sensitivity

Beta coefficient has been taken to analyze the sensitivity of the tock market. Beta coefficient is considered as a measure of systematic risk. So, beta coefficient is also called as an index of systematic risk and used to rank the assets. Beta of a market return always equal to 1 . If beta is greater than 1 , then asset is more volatile than the market and called aggressive beta. If the beta is less than 1, then the price fluctuation of assets is less volatile than the market and called a defensive beta.

### 4.5.1 Beta Coefficient of Sampled Companies

From different types of organizations here are taken only thirteen companies as a sample. Beta coefficient of the sampled companies is calculated on the basis of MPS and EPS, DPS which is shown in annex.

Table 4.27
Beta Coefficient of the Sampled Companies on the Basis of MPS and EPS

| S.N. | Name of the sample company | Beta coefficient <br> $(\beta)$ | Ranking |
| :---: | :--- | :---: | :---: |
| 1 | Himalayan Bank Limited | 0.7873 | $7^{\text {th }}$ |
| 2 | Nabil Bank Limited | 1.2990 | $11^{\text {th }}$ |
| 3 | Nepal Investment Bank Limited | 0.6451 | $5^{\text {th }}$ |
| 4 | Nepal SBI Bank Limited | 0.1505 | $2^{\text {nd }}$ |
| 5 | Standard Chartered Bank Nepal Ltd. | 0.6951 | $6^{\text {th }}$ |
| 6 | Development Credit Bank Ltd. | 0.8715 | $8^{\text {th }}$ |
| 7 | Nirdhan Utthan Bank Limited | 0.0074 | $1^{\text {st }}$ |
| 8 | Siddhartha Development Bank | 0.9393 | $10^{\text {th }}$ |
| 9 | Citizen Investment Trust | 0.60 | $4^{\text {th }}$ |
| 10 | Nepal Housing and Merchant Finance Ltd. | 0.9029 | $9^{\text {th }}$ |
| 11 | Nepal Share Market and Finance Limited | 2.2598 | $13^{\text {th }}$ |
| 12 | Peoples Finance Limited | 1.6647 | $12^{\text {th }}$ |
| 13 | Universal Finance Limited | 0.41078 | $3^{\text {rd }}$ |

Source: Appendix - II.

From the above table, it is observed that the Beta coefficient between MPS and EPS of all the sample company are shown. If the beta coefficient is less than one, it is considered that risk adjustment factor will be less than risk adjustment factor for the market. It mean beta coefficient which is less than one indicates the these all companies are less sensitive to the market and the common stocks of these all
companies are defensive to the market. But, here beta coefficient of most sampled companies is less than one, so the companies are ranked by taking nearest value to the one. It means, the risk adjustment factor of the Nirdhan Utthan Bank Limited is more less than risk adjustment factor for the market. So, price fluctuation of asset of Nirdhan Utthan Bank Limited is more less volatile the market. In other words, Beta of Nirdhan Utthan Bank limited is called defensive beta. Similarly, the beta coefficient of the Nepal Share Market and Finance Limited is higher than other companies comparatively. It means the risk adjustment factor of the Nepal Share Market and Finance Limited is more higher than risk adjustment factor for the market. So price fluctuation of assets of NSM\&FL is more volatile than the market. The beta coefficient of Himalayan Bank Limited, Nabil Bank Limited, Nepal Investment Bank Limited, Nepal SBI Bank Limited, Standard Chartered Bank Limited, Development Credit Bank Limited, Siddhartha Development Bank, Citizen Investment trust, Nepal Housing and Merchant Finance Limited, Peoples Finance Limited and Universal Finance Limited are 0.7873, 1.2990, 0.6451, $0.1505,0.6951,0.8715,0.9392,0.60,0.9029,1.6647$ and 0.41078 respectively.

Table 4.28
Beta Coefficient of the Sampled Companies on the Basis of MPS and DPS

| S.N. | Name of the sample company | Beta coefficient ( $\beta$ ) | Ranking |
| :---: | :--- | :---: | :---: |
| 1 | Himalayan Bank Limited | 0.7853 | $7^{\text {th }}$ |
| 2 | Nabil Bank Limited | 1.3245 | $10^{\text {th }}$ |
| 3 | Nepal Investment Bank Limited | 0.6306 | $5^{\text {th }}$ |
| 4 | Nepal SBI Limited | 1.4755 | $11^{\text {th }}$ |
| 5 | Standard Chartered Bank Limited | 0.6980 | $6^{\text {th }}$ |
| 6 | Development Credit Bank Limited | 0.0107 | $1^{\text {st }}$ |
| 7 | Siddhartha Development Bank Ltd. | 0.905 | $9^{\text {th }}$ |
| 8 | Nirdhan Utthan Bank Limited | 0.2747 | $3^{\text {rd }}$ |
| 9 | Citizen Investment Trust | 0.8895 | $4^{\text {th }}$ |
| 10 | Nepal Housing \& Merchant Finance Ltd. | $8^{\text {th }}$ |  |
| 11 | Nepal Share Market and Finance Ltd. | 1.5637 | $13^{\text {th }}$ |
| 12 | Peoples Finance Ltd. | 0.2608 | $2^{\text {th }}$ |
| 13 | Universal Finance Ltd. |  |  |

Source: Appendix - II.

Beta coefficient is taken as measure of systematic risk. Which measures the sensitivity of the return of the company to the return of the market. From the above table it is observed that the beta coefficient between MPS and DPS of most of the sampled companies is less than one. If the beta coefficient is less than one, it is considered that risk adjustment factor will be less than risk adjustment factor for the market and vice-versa. But, here beta coefficient of Development Credit Bank Ltd. is more less than other companies. It means the risk adjustment factor of Development Credit Bank Ltd. is more less risk adjustment factor for the market. So, price fluctuation of asset of DCBL is more less volatile than the market. In other words, Beta of DCBL is called defensive beta. Similarly, the beta coefficient of the Nepal Share Market and Finance Ltd. is higher than other companies comparatively. It means the risk adjustment factor of NSM\&FL is more higher than risk adjustment factor for the market. So price fluctuation of assets of NSM \& FL is more higher volatile than the market. The beta coefficient of HBL, NABIL, NIB Ltd., SBI Bank Ltd., SCB Ltd., DC Bank Ltd., SDB, NUB, CIT, NH\&MF Ltd., NSM\&FL, Peoples Finance, Universal Finance are 0.7853 , 1.3245, 0.6306, 1.4755, 0.6980, 0.0107, $0.905,0.2747,0.5532,0.8895,2.2510,1.5637$ and 0.2608 respectively.

### 4.6 Empirical Analysis

An empirical investigation was conducted to evaluate the qualitative factors affecting on the determination of the market price of common stocks from the experience of the real world. The major tools used for this study is an opinion questionnaires which was distributed to more than 150 respondents, out of which only 110 responses were received from them. The respondents selected for this study were individual investors, stock brokers and listed companies. But there are large number of
stakeholders in the capital market of Nepal. The total major 14 variables which could play the vital role to fluctuate or determine the market price of stock of companies in NEPSE were identified. The views of the respondents were collected from Kathmandu valley only. Questions were provided with two or more alternatives. Information collected form the respondents were tabulated into the separate format and they were expressed in terms percentage of total number and then have been analyzed into descriptive ways. The number of respondents by different groups are shown in following table:

Table 4.29
Responses by Groups

| S.N. | Group of respondents | Sample size | Percentage |
| :---: | :--- | :---: | :---: |
| 1 | Individual investors (shareholders) | 60 | 54.55 |
| 2 | Stock brokers | 20 | 18.18 |
| 3 | Listed companies in NEPSE | 30 | 27.27 |
| Total |  |  |  |

The results obtained from the opinion survey have been analyzed separately according to their respective groups.

### 4.6.1 Higher the Cash Dividend Higher the Share Price

To know the view of the respondents about higher the cash dividend higher the share price a question was asked, "Are you agree with statement that higher the cash dividend higher the share price?" The different responses received from the respondents are tabulated as follows:

Table 4.30
Higher the Cash Dividend Higher the Share Price

| Respondent <br> groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 35 | 31.82 |  | 4.55 | 20 | 18.18 | 60 | 54.55 |
| Stock brokers | 10 | 9.10 |  | 6.36 | 3 | 2.73 | 20 | 18.18 |
| Listed <br> companies | 16 | 14.55 | 9 | 8.18 | 5 | 4.55 | 3 | 27.27 |
| Total | 61 | 54.47 | 21 | 19.09 | 28 | 25.46 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that higher the cash dividend higher will be the share price. It is
observed that out of total 110 samples collected, 54.47 percent of the respondents felt that higher the cash dividend higher the share price whereas 19.09 percent of respondents were not agree and 25.46 percent of respondents were not known with the statement that higher the cash dividend higher the share price. So, it is concluded that cash dividend is also the determining factors of the share price. In this way, increase in cash dividend increase in the market price of share and vice-versa as opinioned by the 54.47 percent respondent groups.

### 4.6.2 Higher the EPS Higher the Share Price

To know the view of the respondents about higher the EPS higher the share price a question was asked, "Is there higher the EPS higher the share price?" The responses of the different respondent groups are as follows:

Table 4.31
Higher the EPS Higher the Share Price

| Respondent <br> groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 41 | 37.27 | 5 | 14 | 17 | 12.73 | 60 | 54.55 |
| Stock brokers | 12 | 10.91 | 6 | 2 | 2 | 1.82 | 20 | 18.18 |
| Listed |  |  |  |  |  |  |  |  |
| companies | 24 | 21.82 | 6 | 0 | 0 | 0 | 30 | 27.27 |
| Total |  |  |  |  |  |  |  |  |

Source: Opinion survey.

The above table shows that 70 percent of respondent have agreed with higher the EPS higher the share price. However 15.45 percent of the respondents showed their disagreement to this view and 14.55 percent of the respondents who were unknown about it. Among those respondents who showed their agreement to this view, 37.27 percent were individual investors, 10.91 percent were stock brokers and 21.82 percent were listed companies. So, it is concluded that higher the EPS of the company higher will be the market price of share in the capital market.

### 4.6.3 Relationship between Growth Rate and Share Price

To know the view of the respondents about relationship between growth rate and share price a question was asked, "Is there positive relationship between growth rate and share price?" The responses of the different respondent groups are as follows:

Table 4.32
Relationship between Growth Rate and Share Price

| Respondent <br> groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 26 | 23.64 | 15 | 13.64 | 19 | 17.27 | 60 | 54.55 |
| Stock brokers | 18 | 16.36 | 2 | 1.82 | 0 | 0 | 20 | 18.18 |
| Listed |  |  |  |  |  |  |  |  |
| companies | 21 | 19.10 | 9 | 8.18 |  | 0 | 30 | 27.27 |
| Total |  |  |  |  |  |  |  |  |

Source: Opinion survey.

From the above table, it is found that 59.10 percent respondents accept that the growth rate of the company increases the share price of the company. However, 23.64 percent respondents didn't accept and 17.27 percent respondents have given the response of unknown. Among those respondents who showed their acceptance to this view, 23.64 percent were individual investors, 16.36 percent were stock brokers and 19.10 percent were listed companies. So it is concluded that there is positive relationship between growth rate and share price of the company.

### 4.6.4 Present Number of Stock Brokers

To know the view of the respondents about the present number of stock brokers a question was asked, "Is the present number of stock brokers adequate to serve the large number of investors?" The responses of the different respondent groups are tabulated as follows:

Table 4.33
Present Number of Stock Brokers

| Respondent <br> orouns | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Individual <br> investors | 10 | 9.10 | 43 | 39.10 | 7 | 6.36 | 60 | 54.55 |
| Stock brokers | 17 | 15.45 |  | 2.73 | 0 | 0 | 20 | 18.18 |


| Listed companies | 8 | 7.27 | 22 | 20.00 | 0 |  | 30 | 27.27 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 35 | 31.82 | 68 | 61.83 | 7 | 6.36 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 861.83 percent respondents didn't accept that the present number of stock brokers are adequate to serve the large number of investors. However, 31.82 percent respondents did accept to this view and 6.36 percent respondents have given the response of unknown. Among those responses who didn't show their acceptance to this view, 39.10 percent were individual investors, 2.73 percent were stock brokers and 20 percent were listed companies. So, it is concluded that the present number of stock brokers existing in Nepalese capital market are not adequate to serve the large number of investors.

### 4.6.5 Relationship between Interest Rate and Share Price

To know the view of the respondents about the relationship between interest rate and share price a question was asked, "Is there positive relationship between interest rate and share price?" The responses of the different respondent groups are as follows:

Table 4.34
Relationship between Interest Rate and Share Price

| Respondents groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual investors | 39 | 35.45 | 14 | 12.73 | 7 | 63.63 | 60 | 54.55 |
| Stock brokers | 6 | 5.45 | 14 | 2.73 | 0 | 0 | 20 | 18.18 |
| Listed companies | 21 | 19.1 | 9 | 8.18 | 0 | 0 | 30 | 27.27 |
| Total | 66 | 60.00 | 37 | 33.64 | 7 | 6.36 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 60 percent respondents accepted that there is positive relationship between interest rate and share price. however, 33.64 percent respondents did not agree to this view and 6.36 percent respondents have given their responses of 'Don't know'. Among those responses who did show their acceptance to this view, 35.45 percent were individual investors, 5.45 percent were stock brokers and 19.10 percent were listed companies. So, it is concluded that increase in interest rate increase in share price and vice-versa.

### 4.6.6 Strikes, Political Instability Reduces the Share Price

To know the view of the respondents about strikes, political instability and instability of government reduces the share prices a question was asked, "Do you agree that strikes, political instability and instability of government reduces the share price?" The responses of the different respondent groups
are as follows:

Table 4.35
Strikes, Political Instability Reduces the Share Price

| Respondents <br>  <br> groups | Yes, agree |  | No, not agree |  | Doesn't <br> know |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 34 | 30.91 | 11 | 10.0 | 10 | 9.1 | 5 | 5.55 | 60 | 54.55 |
| Stock brokers | 17 | 15.45 | 2 | 1.18 | 0 | - | 0 | - | 20 | 18.18 |
| Listed <br> companies | 30 | 27.27 | 0 | - | 0 | - | 0 | - | 30 | 27.27 |
| Total | 81 | 73.63 | 13 | 11.18 | 10 | 9.1 | 5 | 5.55 | 110 | 100.00 |

Source: Opinion survey.

### 4.6.7 Lower Tax Rate Reduces the Share Price

To know the view of the respondents about the lower tax rate reduces the share price a question was asked, "Is lower tax rate reduce the share price? The responses of the different respondents groups are as follows:

Table 4.36
Lower Tax Rate Reduces the Share Price

| Respondents <br> groups | Yes, agree |  | No, not agree |  | Doesn't <br> know |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 18 | 16.36 | 23 | 20.91 | 5 | 4.55 | 14 | 12.73 | 60 | 54.55 |
| Stock brokers | 3 | 2.73 | 11 | 10.00 | 6 | 5.45 | 0 | - | 20 | 18.18 |
| Listed <br> companies | 12 | 10.91 | 8 | 7.27 | 7 | 6.36 | 3 | 2.72 | 30 | 27.27 |
| Total | 33 | 30.00 | 42 | 38.18 | 18 | 16.36 | 17 | 15.45 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 38.18 percent respondents did not accept that lower tax rate reduces the share price. However, 30 percent respondents did show their acceptance to this view, 16.36 percent respondents have given responses of 'Don't affect' and 15.45 percent respondents also have given responses of 'Don't know' about this view., 20.91 percent were individual investors, 10 percent were stock brokers and 7.27 percent were listed companies. So, by studying the view of the respondents it is concluded that, lower tax rate doesn't reduce the share price.

### 4.6.8 Seriousness of the Listed Companies Towards the Shareholder's Interest

To know the view of the respondents about seriousness of the listed companies towards the shareholder's interest a question was asked, "Do you agree that listed companies are serious towards shareholder's interest?" The responses of the different respondent groups are tabulated as follows:

Table 4.37
Seriousness of the Listed Companies Towards the
Shareholder's Interest

| Respondents <br>  <br> groups | Yes, agree |  | No, not <br> agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 23 | 20.91 | 31 | 28.18 | 6 | 5.45 | 60 | 54.55 |
| Stock brokers | 15 | 13.64 | 4 | 3.64 | 1 | 0.91 | 20 | 18.18 |
| Listed companies | 21 | 19.31 | 9 | 8.18 | 0 | 0 | 30 | 27.27 |
| Total | 59 | 53.65 | 44 | 40.00 | 7 | 6.36 | 110 | 100.00 |

Source: Opinion survey.

From the above table, it is observed that 53.65 percent respondents did agree that listed companies are serious towards shareholder's interest. However, 40 percent respondents did not agree to this view and 6.36 percent respondents have given their responses of 'Don't know' about it. Among these responses who did agree to this view, 20.91 percent were individual investors, 13.64 percent were stock brokers and 19.1 percent were listed companies. So, by studying the view of the respondents it is concluded that most of the listed companies are serious towards shareholder's interest.

### 4.6.9 Better the National Economic Condition better the Share Price

To know the view of the respondents about relationship between national economic condition and share price a question was asked, "Do you agree with this statement that better the national economic condition better the share price in capital market?" The responses of the different respondent groups are tabulated as follows:

Table 4.38
Better the National Economic Condition better the Share Price

| Respondents groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual investors | 23 | 20.91 | 31 | 28.18 | 6 | 5.45 | 60 | 54.55 |
| Stock brokers | 15 | 13.64 | 4 | 3.64 | 1 | 0.91 | 20 | 18.18 |
| Listed companies | 21 | 19.31 | 9 | 8.18 | 0 | 0 | 30 | 27.27 |
| Total | 59 | 53.65 | 44 | 40.00 | 7 | 6.36 | 110 | 100.00 |

Source: Opinion survey.

From the above tale it is observed that 72.73 percent respondents did show their agreement that better national economic condition better the share price in capital market. It means better national economic
condition shows the potentiality of increasing in market share price of the listed companies. However, 14.55 percent respondents did not agree and 12.73 percent respondents have given the responses of 'Don't know' about it. So, by studying the view of the responses it is concluded that market price of share is determined by the national economic condition.

### 4.6.10 Impact of Market Demand and Supply to Share Price Determination

To know the view of the respondents about the impact of demand and supply to share price determination a question was asked, "Is share price affected by market demand and supply?" The responses of the different respondent groups are tabulated as follows:

Table 4.39
Impact of Market Demand and Supply to Share Price Determination

| Respondents <br>  <br> groups | Yes, agree |  | No, not <br> agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 36 | 32.73 | 7 | 6.36 | 17 | 15.45 | 60 | 54.55 |
| Stock brokers | 19 | 17.27 | 1 | 0.91 | 0 | 0 | 20 | 18.18 |
| Listed companies | 27 | 24.55 | 3 | 2.73 | 0 | 0 | 30 | 27.27 |
| Total | 82 | 74.55 | 11 | 10.00 | 17 | 15.45 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 74.55 percent respondents did show their acceptance that market price of share is affected and determined by market demand and supply. However, 10 percent respondents did not show their acceptance and 15.45 percent respondents have given/expressed their responses of don't know about it. So, by studying the view of the responses it is concluded that share price is determined by the market demand and supply. In this way, higher the demand higher will be share price and vice-versa. Among those responses who did show their acceptance to this view, 32.73 percent were individual investors, 17.27 percent were stock brokers nad 24.55 percent were listed companies.

### 4.6.11 Appropriateness and Effectiveness of the Present Regulatory <br> System of the Nepalese Capital Market

To know the view of the respondents about effectiveness of the present regulatory system of the Nepalese capital market a question was asked, "present regulatory system of the capital market is appropriate and effective. Do you agree with this statement? The responses of the different respondents groups are tabulated as follows:

Table 4.40
Appropriateness and Effectiveness of the Present Regulatory
System of the Nepalese Capital Market

| Respondents <br> groups | Yes, agree |  | No, not <br> agree |  | Doesn't <br> know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual <br> investors | 13 | 11.82 | 40 | 36.36 | 7 | 6.36 | 60 | 54.55 |
| Stock brokers | 2 | 1.82 | 18 | 16.36 | 0 | 0 | 20 | 18.18 |


| Listed companies | 12 | 10.91 | 18 | 16.36 | 0 | 0 | 30 | 27.27 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 27 | 24.55 | 76 | 69.1 | 7 | 6.36 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 69.10 percent respondents didn't agree that present regulatory system of the capital market is appropriate and effective. However, 24.55 percent respondents agreed to this view and 6.36 percent respondents have expressed their responses of 'Don't know' about it. Among those responses who didn't agree to this view, 36.36 percent were individual investors, 16.36 percent were stock brokers and 16.16 percent were also listed companies. So, by studying view of the responses it is concluded that present regulatory system of the capital market is not appropriate and effective for the expansion and development of the capital market. So it is necessary to improve the present regulatory system in the context of the economic liberalization and globalization.

### 4.5.12 Open Out-Cry Trading System Discourage the Stock Brokers

To know the view of the respondents about open-out cry trading system discourage the stock brokers a question was asked, "Does an open-out-cry trading system discourage the stock brokers in capital market? The responses of the respondent groups are tabulated as follows:

Table 4.41
Open Out-Cry Trading System Discourage the Stock Brokers

| Respondents groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual investors | 19 | 17.27 | 33 | 30.00 | 8 | 7.27 | 60 | 54.55 |
| Stock brokers | 11 | 10.00 | 9 | 8.18 | 0 | 0 | 20 | 18.18 |
| Listed companies | 18 | 16.36 | 12 | 10.91 | 0 | 0 | 30 | 27.27 |
| Total | 48 | 43.64 | 54 | 49.10 | 8 | 7.27 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 49.10 percent respondents did not accept that an open-out-cry trading system discourages the stock brokers. However, 43.65 percent respondents did accept to this view and 7.27 percent respondents have given the responses of the 'Not known'. Among those responses who did not accept to this view, 30 percent respondents were individual investors, 8.18 percent were stock brokers and 10.91 percent were listed companies. So, by studying view of the responses it is concluded that the open-out-cry trading system in NEPSE doesn't discourage the stock brokers. So there is no need to change the open-out-cry system.

### 4.6.13 Communication and Information Technology Affects the Share Price

To know the view of the respondents about the communication and information technology affects the market price of share a question was asked as, "Is share price affected by communication and information technology?" The responses of the different respondent groups are tabulated as below:

Table 4.42

## Communication and Information Technology Affects <br> the Share Price

| Respondents groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual investors | 47 | 42.73 | 2 | 1.82 | 1 | 10.00 | 60 | 54.55 |
| Stock brokers | 20 | 18.18 | 0 | 0 | 0 | 0 | 20 | 18.18 |
| Listed companies | 26 | 23.64 | 4 | 3.64 | 0 | 0 | 30 | 27.27 |
| Total | 93 | 84.55 | 6 | 5.45 | 11 | 10.00 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 84.55 percent respondents did accept that communication and information technology affects the share price. However, 5.45 percent respondents did not accept to this view and 10 percent respondents have given the response of the not known about it. Among those responses who did accept to this view, 42.73 percent were individual investors, 18.18 percent were stock brokers and 23.64 percent were the listed companies. So, by studying view of the responses, it is concluded that communication and information technology help to determine the market price of share in the capital market.

### 4.6.14 Transparency in the Performance of the Listed Companies

To know the view of the respondents about transparency in the performance of the listed companies a question was asked as, "Is there transparency in the performance of the listed companies?" The responses of the different respondent groups are tabulated as follows:

Table 4.43
Transparency in the Performance of the Listed Companies

| Respondents groups | Yes, agree |  | No, not agree |  | Don't know |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Percent | No. | Percent | No. | Percent | No. | Percent |
| Individual investors | 9 | 8.18 | 44 | 40.00 | 7 | 6.36 | 60 | 54.55 |
| Stock brokers | 14 | 12.73 | 4 | 3.64 | 2 | 1.82 | 20 | 18.8 |
| Listed companies | 25 | 22.73 | 5 | 4.55 | 0 | 0 | 30 | 27.27 |
| Total | 48 | 43.64 | 53 | 48.18 | 9 | 8.18 | 110 | 100.00 |

Source: Opinion survey.

From the above table it is observed that 48.18 people respondents has given their responses that there is not transparency in the performance of the listed companies. However, 43.64 percent respondent gave their responses that there is transparency in the performance of the listed companies, 40 percent were individual investors, 8.64 percent were stock brokers and 4.55 percent were listed companies. So, by studying view of the response it is concluded that there is necessary to make the performance of the listed companies transparent.

### 4.6 Major Findings of the Study

On the basis of presenting and analyzing the secondary data, the following important findings are observed.

## 1. Findings based on correlation, regression analysis and CV.

a) The coefficient of variation of Himalayan Bank Ltd. of MPS, DPS and DPS are $33.54 \%$, $22.76 \%$ and $65.21 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Himalayan Bank Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS that means move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $51.58 \%$ and $50.92 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 9.734 while DPS keeping constant. When one present change in DPS than MPS increase by 11.418 while EPS keeping constant.
b) The coefficient of variation of NABIL Bank Ltd. of MPS, DPS and DPS are $77.23 \%, 28.77 \%$ and $46.06 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the NABIL Bank Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS and DPS move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $65.60 \%$ and $87.41 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS decrease by -45.093 while DPS keeping constant. When one present change in DPS than MPS increases by 79.629 while EPS keeping constant.
c) The coefficient of variation of Nepal Investment Bank Ltd. of MPS, DPS and DPS are $44.55 \%, 43.92 \%$ and $76 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Nepal Investment Bank Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS but negatively correlated with DPS which mean change in EPS move MPS in same direction but opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS are $68.26 \%$ and $-19.77 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that one percent change in EPS, then MPS increase by 40.651 while DPS keeping constant. When one present change in DPS than MPS decreases by -33.758 while EPS keeping constant.
d) The coefficient of variation of Nepal SBI Bank Ltd. of MPS, DPS and DPS are $66.84 \%$, $55.78 \%$ and $35.55 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Nepal SBI Bank Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS and DPS move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $48.44 \%$ and $2.17 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and

DPS it is found that is one percent change in EPS then MPS increase by 37.948 while DPS keeping constant. When one present change in DPS than MPS decreases by -48.027 while EPS keeping constant.
e) The coefficient of variation of Standard Chartered Bank Nepal Ltd. of MPS, DPS and DPS are $96.99 \%, 88.46 \%$ and $98.22 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the standard Chartered Bank Nepal Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS but negatively correlated with DPS which mean change in EPS move MPS in same direction but opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS are $21.80 \%$ and $-61.71 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 57.191 while DPS keeping constant. When one present change in EPS than MPS decreases by -88.832 while EPS keeping constant.
f) The coefficient of variation of Development Credit Bank Nepal Ltd. of MPS, DPS and DPS are $84.48 \%, 61.67$, and $122.57 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Development Credit Bank Nepal Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS but negatively correlated with DPS which mean change in EPS move MPS in same direction but opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS are $15.35 \%$ and $-34.58 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS , MPS increase by 28.352 while DPS keeping constant. When one present change in DPS than MPS decreases by -44.462 while EPS keeping constant.
g) The coefficient of variation of Nirdhan Utthan Bank Ltd. of MPS, DPS and DPS are 16.28\%, $26.78 \%$ and $88.91 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Nirdhan Utthan Bank. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is negativly correlated with EPS and DPS which mean change in EPS and DPS move MPS in opposite direction.The magnitude of correlation of MPS with EPS and DPS are $-76.65 \%$ and $-24.82 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 2.117 while DPS keeping constant. When one present change in DPS than MPS increase by -.406 while EPS keeping constant.
h) The coefficient of variation of Siddhartha Bank Limited of MPS,, EPS and DPS are 40.27\%, $101.98 \%$ and $0 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Siddhartha Bank Limited is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS and DPS move

MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $54.67 \%$ and $93.10 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 5.418 while DPS keeping constant. When one present change in DPS than MPS increase by 995.542 while EPS keeping constant.
i) The coefficient of variation of Citizen Investment Trust of MPS, DPS and DPS are 39.68\%, $53.20 \%$ and $71.65 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Citizen Investment Trust is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $89.39 \%$ and $62.05 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 4.544 while DPS keeping constant. When one present change in DPS than MPS decreases by -0.943 while EPS keeping constant.
j) The coefficient of variation of Nepal Housing and Merchant Finance Ltd. of MPS, DPS and DPS are $64.04 \%, 37.78 \%$ and $38.25 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Nepal Housing and Merchant Finance Ltd. is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS and DPS move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $58.58 \%$ and $76.89 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that one percent change in EPS, MPS increase by 2.850 while DPS keeping constant. When one present change in DPS than MPS increases by 19.538 while EPS keeping constant.
k) The coefficient of variation of Nepal Share Market and Finance Limited of MPS, DPS and DPS are $143.36 \%, 96.29 \%$ and $26.28 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Nepal Share Market and Finance Limited is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS and DPS which mean change in EPS and DPS move MPS in same direction. The magnitude of correlation of MPS with EPS and DPS are $20.97 \%$ and $20.33 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS then MPS increase by 11.174 while DPS keeping constant. When one present change in DPS than MPS increased by 2.490 while EPS keeping constant.

1) The coefficient of variation of Peoples Finance Limited of MPS, DPS and DPS are $94.17 \%$, $57.21 \%$ and $0 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Peoples Finance Limited is the dependent or predicted
variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS but negatively correlated with DPS which mean change in EPS move MPS in same direction but opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS are $36.29 \%$ and $-29.26 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that one percent change in EPS, MPS increase by 20.292 while DPS keeping constant. When one present change in DPS than MPS decreases by -27.068 while EPS keeping constant.

The coefficient of variation of Universal Finance Limited of MPS, DPS and DPS are $25.73 \%$, $18.41 \%$ and $5.27 \%$ respectively. That indicates the volatility of the performance indicators during the period of time. The MPS of the Universal Finance Limited is the dependent or predicted variable whereas the EPS and DPS are the independent or predictor variables. The MPS is positively correlated with EPS but negatively correlated with DPS which mean change in EPS move MPS in same direction but opposite direction with DPS. The magnitude of correlation of MPS with EPS and DPS are $37.11 \%$ and $-39.45 \%$ respectively. Similarly, in case of the multiple regression analysis MPS on EPS and DPS it is found that is one percent change in EPS, MPS increase by 2.039 while DPS keeping constant. When one present change in DPS than MPS decreases by -1.599 while EPS keeping constant.

## 2. Finding Based on Beta-Coefficient Analysis

a) Beta-Coefficient of the Sample Company on the bass of MPS and EPS

The Beta coefficient between MPS and EPS of all the sample company are shown. If the beta coefficient is less than one, it is considered that risk adjustment factor will be less than risk adjustment factor for the market. It mean beta coefficient which is less than one indicates companies are less sensitive to the market and the common stocks of these all companies are defensive to the market. But, here beta coefficient of most sampled companies is less than one, so the companies are ranked by taking nearest value to the one. It means, the risk adjustment factor of the Nirdhan Utthan Bank Limited is more less than risk adjustment factor for the market, Beta coefficient of the sample companies on the basis of MPS and EPS. So, price fluctuation of asset of Nirdhan Utthan Bank Limited is more less volatile the market. In other words, Beta of Nirdhan Utthan Bank limited is called defensive beta. Similarly, the beta coefficient of the Nepal Share Market and Finance Limited is higher than other companies comparatively. It means the risk adjustment factor of the Nepal Share Market and Finance Limited is more higher than risk adjustment factor for the market. So price fluctuation of assets of NSM\&FL is more volatile than the market. The beta coefficient of Himalayan Bank Limited, Nabil Bank Limited, Nepal Investment Bank Limited, Nepal SBI Bank Limited, Standard Chartered Bank Limited, Development Credit Bank Limited, Siddhartha Development Bank, Citizen Investment trust, Nepal Housing and Merchant Finance Limited, Peoples Finance Limited and Universal Finance Limited are $0.7873,1.2990,0.6451,0.1505,0.6951,0.8715,0.9392,0.60,0.9029,1.6647$ and 0.41078 respectively.

## b) Beta Coefficient of the Sampled Companies on the Basis of MPS and DPS

Beta coefficient is taken as measure of systematic risk. Which measures the sensitivity of the return of the company to the return of the market. From the above table it is observed that the beta coefficient between MPS and DPS of most of the sampled companies is less than one. If the beta coefficient is less than one, it is considered that risk adjustment factor will be less than risk adjustment factor for the market and vice-versa. But, here beta coefficient of Development Credit Bank Ltd. is more less than other companies. It means the risk adjustment factor of Development Credit Bank Ltd. is more less risk adjustment factor for the market. So, price fluctuation of asset of DCBL is more less volatile than the market. In other words, Beta of DCBL is called defensive beta. Similarly, the beta coefficient of the Nepal Share Market and Finance Ltd. is higher than other companies comparatively. It means the risk adjustment factor of NSM\&FL is more higher than risk adjustment factor for the market. So price fluctuation of assets of NSM \& FL is more higher volatile than the market. The beta coefficient of HBL, NABIL, NIB Ltd., SBI Bank Ltd., SCB Ltd., DC Bank Ltd., SDB, NUB, CIT, NH\&MF Ltd., NSM\&FL, Peoples Finance, Universal Finance are 0.7853 , 1.3245, 0.6306, 1.4755, 0.6980, 0.0107, $0.905,0.2747,0.5532,0.8895,2.2510,1.5637$ and 0.2608 respectively.

## 3. Finding Based on Primary Data Analysis

From the opinion survey following findings are observed:

- Dividend per share, earning per share and growth rate are the major indicators to measure the performance of the listed companies. These indicators play significant role to determine the share price in capital market. So, MPS is affected by these indicators.
- Present number of the stock brokers existing in Nepalese capital market are not adequate to serve the large number of investors.
- There is positive relationship between interest rate and market price of the share. So, increase in interest rate ultimately increases the share prices.
- The MPS of the listed companies is directly influenced by the strikes, political instability and instability of government. Which are the external determining factors of the share price in the capital market.
- The MPS is not affected by the lower tax rate or lower tax rate doesn't reduce the share price.
- Most of the listed companies are serious towards shareholders interest.
- The market price of share is also affected by the economic better will be the share.
- The MPS of the listed companies is determined by market demand and supply.
- The present regulatory system of the Nepalese capital is not appropriate and effective. So, there is necessary to improve and restructured the present regulatory system in the context of the economic liberalization and globalization.
- There is no need to change the open-out-cry system because that open-out-cry trading system has not discouraged the stock brokers in the floor of NEPSE.
- The MPS of the listed companies is also affected by the communication and information technology. So, these are major determining factors.
- The performance of the listed companies is not transparent. Investors are hesitate to invest their money in securities due to the lack of transparency in the performance of the listed companies. So, there is need to make the performance of the listed companies transparent. Furthermore, transparency is the one of the major element of the corporate governance.


## CHAPTER V <br> SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary and Conclusions

Capital market is that market meant for long term securities issued by the government or corporation. There are various instruments or securities used in the capital market like as shares of stock, bonds or debentures, etc. Efficient capital market helps to mobilize the financial resources and provides efficient channel to productive investment. So, development and expansion of capital market is essential for the rapid growth of the country. But, in the context of Nepal the concept of capital market is neither very old nor very complex. It is still in the beginning stages and different efforts have been made for the development of capital market since 1936 to till now. But also, Nepalese capital market got a proper structure only in the year 1993 when the Securities Board established as a regulatory body and stock trading commenced through the member brokers adopting open-out-cry auction system. When the NEPSE opened its trading floor on $13^{\text {th }}$ January 1994, after that NEPSE has listed more than 125 public companies till now. Capital market proved to be one of the important segment of the national economy since it facilitates and provides better institutional arrangements for the borrowing and lending of longtern funds. So, capital market is the general barometer that measures the proper collection and channelization of savings for investments in productive and income generating assets. The allocative efficiency in the use funds is the basis for measuring the performance of capital market.

Market efficiency is reflected by the efficient market hypothesis. EMH may exist at three levels like
weak, semi-strong and strong form. In the real world of stock market, only the semi-strong and weak form of market efficiency exist. All the currently available information is captured in the semistrong form of market but in the weak form of market, the stock price movement show no definite pattern. The stock price efficiency takes an important place in the stock market. If there is imperfect competition in the stock markets, a wise investors attempt to utilize this opportunity to achieve a better return. But this perception has no rational significance in the world of stock market where shares are efficiently priced. In the efficiency market, share price should move randomly upward and downward with the disclosure of new information. The market value of share is determined by the demand and supply factors and reflects the negotiation between investors and seller for the transaction. The market value of share is also affected by various factors like expected earnings and dividends, interest rate, communication and information technology, economic condition of the nation, speculations, awareness of the investors, government rules and regulation regarding the stock market and other signaling effects like major events happened inside the country, strikes, political instability etc. In the context of Nepalese capital market, government is not able to create the basic infrastructure, sound policies and laws and their effective implementation. Result of that there is not transparency in the performances of the listed companies. The stock investors have not got proper education and information to speculate the share price. So, the government should given high priority to develop the capital market in Nepal.

The present study entitled "Determining factors of share price in Nepalese capital market" is based on both primary and secondary sources of data. Total thirteen listed companies are taken as sample from 142 total listed companies such as five commercial banks, three development bank, five finance companies. The main objectives of the study were:

- To indicate the major determining factors of share price in Nepal.
- To analyze the stock market sensitivity of the listed companies.
- To evaluate the effect of EPS and DPS on MPS.
- To assess the effective factors in the view of three respondent groups they play major role of share pricing in Nepal.

In the course of the study, following research questions were taken in consideration.

- What are the major determinants of share price in Nepalese capital market ?
- How and which variables play significant role in stock price movement?
- What is the relationship of MPs with DPS and EPS ?
- Can valuable information be obtained from studying charts of past price movement ?
- Is the trend of share price, no. of listed companies and no. of transacted companies in increasing order?
- Do instability of government, strikes, demonstration, and other events happen inside the country reduce the share price ?

Similarly, to meet the purpose of this, the quantitative variables are indicated and analyzed by correlation and regression analysis of secondary data of the thirteen sampled companies. To evaluate the qualitative factors that affect on the MPS, the study focused to collect the opinions from the three respondent groups through research questionnaires.

From the secondary data analysis, some company have positive correlation coefficient between the MPS and DPS, EPS whereas some have negative correlation. It is also seen that MPS of all the companies is less volatile and DPS is maximum volatile. In some cases, DPS and EPS increased by 1 percent then MPS also increased but this situation is not exist in all cases of the sampled companies. The beta coefficient of the all sampled companies is less than one i.e. $\beta<1$. It means all companies are not sensitive to the market.

The identification and analysis of affecting variables to the MPS has been attempted from the three respondents groups i.e. individual investors, stock brokers and listed companies. In their opinion, dividend, earnings and growth rate of the organization affect MPS significantly in the capital market. Whereas present number of the stock brokers existing in capital market are not adequate to serve the large number of investors and increase in interest rate ultimately increases the share price. The factors related to the environmental forces instability of the government, strike, communication, information technology have significant affect on the MPS of the listed companies. The most of the listed companies are serious towards shareholder's interest. The most of the listed companies are serious towards shareholder's interest. It is also concluded that lower tax rate doesn't reduce the share price. The performance of the listed companies is not transparent so, there is necessary to make the performance of the listed companies transparent. The present regulatory system of the Nepalese capital market is not appropriate and effective. Similarly, the open-out-cry trading system has not discouraged the stock brokers in the floor of NEPSE.

At last, it is summarized and concluded that due to the lack of the adequate knowledge of individual investors and their unwillingness to use the service of the stock brokers and lack of assessing information regarding to share price of the market in accurate manner, the real market price of share can't be reflected in almost cases in Nepalese stock market. Based on the secondary data analysis, it is concluded that the determining factors of the MPS are not only DPS, and EPS but there are other several factors which determines the MPS like retention ratio, investment opportunities, expansion of business, change in the technology, etc. To generalize the responses of the different respondent groups, the market price of share is affected by DPS, EPS demand and supply, instability of government, strikes, economic condition of the nation, growth rate of the organization,
communication and information technology. On the other hand the MPs is not affected by low tax rate and open-cut-cry system has not discouraged the stock brokers in their service. From the above analysis, it is also concluded that the NEPSE index, No. of listed companies and no. of transacted companies in Nepalese capital market are in increasing trend. This trend shows that there is possibility of growing the Nepalese capital market in future prospective due to present favourable condition of the Nepalese business environment.

### 5.2 Recommendation

The Nepalese capital market has grown in the country as an important base for the collection, mobilization and utilization of needed funds in the listed public companies. Still now, the number of listed companies in the NEPSE are not enough in comparison of other developing countries. To increase the no. of listed companies in the NEPSE and improve the behaviour of the individual investors towards the invest in the securities. The following recommendations are made on the basis of findings and conclusion.

- Investors are also responsible for facing losses from capital market especially when they behave irrationally without applying careful and prudential judgment in their investment decision. Investors at present are not vigilant and very much consciousness enough to invest in securities. So, investors should be aware to their investment decision and that will be helpful to determine the MPs through demand and supply forces always be aware of the daily price, volume of stock traded, rules and regulations of the stock market and related listed companies. In other hand, most of the investors hesitate to get the adequate information from the listed companies and accept the decision whatever the management of the companies decided. In this way, it is suggested that the investors should try to analyze the market situation on the basis of the risk and return analysis.
- In the context of Nepalese stock market, there is necessary to make a better information disclosure system. Listed companies should submit their financial transactions reports timely. There should transparency in the performance of the listed companies. Listed companies should disclose the information timely and frequently on the basis of actual performance by means of communication and information technology to the stock brokers. Listed companies should also organize their Annual General Meeting (AGM) and audit within specified time. But, in the opinions of the respondents it is found that listed companies are serious towards shareholder's interest.
- Stock brokers are the financial intermediaries between the investors and listed companies. They have a significant role, responsibility and duties to create and operate the capital market opportunities. But professional ethnics of the brokers is questioned in different public gathering and investor's forum. There are no clear cut laws or professional code of conduct to curb the unfair trading practices of the brokers. So, SEBO/N should formulate the guidelines
for professional code of conduct of stock brokering companies in order to make stock brokering business more credible and transparent along with specifying clearly the duties and responsibilities of the stock brokers towards their clients, other financial intermediaries and regulatory bodies. For contributing the development of capital market it is suggested that, the stock brokers should provide their kindly, friendly, rational and adequate advices to their investors and increase their knowledge and professionalism. The existing present number of the stock brokers is not adequate to serve the large number of investors. So, there should increase the number of stock brokers to some extent.
- The representation of investors in Securities Board is necessary to represent common investor's interest. Moreover, there should be investor's representation in NEPSE Board.
- Timely and accurate flow of information as provisioned in law needs to be followed strictly followed to inform the investors about what is happening in the company. The practices of providing false statement in prospectus should be discouraged.
- $\quad \mathrm{SEBO} / \mathrm{N}$ should establish enforceable action committee to compensate the investors suffering from losses caused by investment done on the bass of frauds detected in prospectus.
- NEPSE has to open stock exchange in outside the Kathmandu valley to provide the opportunity to all investors and facilitate and promote public transactions. In other words, there should expand securities exchange facilities in other places of the country considering its feasibility for the severs residing there.
- The MPS is affected by the economic condition of the nation. So, the government should give priority to develop the economic infrastructure.
- The MPS is also affected by the communication and information technology. So the government should give priority and increase the investment in the development, expansion and promotion of communication and information technology.
- The MPOS is reduced by strikes, political instability and other events happening inside the country. So, there should be political stability and eliminated the strikes culture.
- There should make the securities trading process and financial statement of the issuer companies more credible and transparent.
- There should develop clear regulatory benchmarking of SEBO and NEPSE.
- There should provide training and education on different aspects of the stock market and make institutional arrangement for regular study and research.


## Recommendations for the Further Researcher

For those researchers in the days to come are heartily requested to do research on different areas of the Nepalese capital market regarding to the stock price determination.

- It will better to do research on technical analysis of share price in Nepalese stock market and pricing of securities in NEPSE.
- It will better to do next research on major issues and challenges of the listed companies and assessing performance of the top ten companies.
- An analytical study will be done on impact of economic policies, rules and regulation and present situation of the political change in Nepalese stock market.
- It will also better to do research on corporate governance practice in Nepalese capital market.


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