## CHAPTER - I

## INTRODUCTION

### 1.1 Background of the Study

Nepal is considered as an agriculture country as its economy is based mainly on agriculture. Due to political instability, unplanned growth of population and geographical situation of the country, the country's economic growth is very sluggish. Nepalese economy is thus considered very poor and has ushered backwards. There are only a handful of industries. Among these, very few are in profitable conditions and most are the verge of either extinction or closing. However, after development of suitable financial policies and adoption of economic liberalization, financial institutions have mushroomed in several urban areas of the country. (Ministry of Finance; Economic Survey: 2005/2006, July 2006).

The economy of the country largely depends upon the utilization of its resources and mobilization of capital. Due to lack of proper utilization of resources, the country is going backward. The mobilization of the capital is an important tool to utilize the resources and hence it affects the overall economy directly and indirectly. The financial institutions contribute the national economy by accumulating the capital funds to meet the financial needs of different productive sectors. They actively participate in the money market and the capital market, as both suppliers and demanders of the funds.

Nepalese economy is in a developing phase. Financial sector has a crucial role to pool scattered savings for capital formation. Capital is the lifeblood of business Organizations. Every business enterprise requires short term, intermediate term and long-term capital fund for the smooth operations and expansion of organizational activities. Long-term funds plays highly significant role for future growth and prosperity of the organization. Most business organization collect long term funds from financial market.

### 1.1.1 Financial market

Financial market is the place where the financial instruments are traded. Financial instrument means share, bond debenture etc. It is a way to transfer funds from investor to those organizations, which has needed of funds. The purpose of financial market in economy to allocate the saving efficiently during the period of time a day, a week or a quarterly to parties who used funds for investments in real assets or for consumption.

The failure of financial market obstructs the progress of the whole economy. Financial market mainly refers to money market and capital market. It facilitates the transfer of spare funds from the public to those investors who invest in capital goods.

### 1.1.2 Money market

Money market can be defined as short-term financial market, which facilitates liquidity and market ability of securities. It is the market for short-Term marketable instruments having one year or less than the one-year maturity period.

### 1.1.3 Capital market

Capital market is concerned with the long-term finance. The funds collected in the market for long terms and invest in long term financial instruments such as equities and bonds. Capital market facilities the allocation of funds between the savers and borrowers. This allocation will be optimum if the capital market has efficient pricing mechanism. If the capital market is efficient, the current share prices of the company fully reflect the available information and there will be no question of the share price being over or under price.

Stock exchange is the market for long term capital where both new capital can be raised by companies and where existing share can also traded (bought and sold) by providing secondary market for investors to sell their shares, the stock
exchange also provides a market for government loans and securities. On the market, the main operators are the market maker who trade in a group of share and the stock brokers who act as agents for their clients, who are the investors who are actually buying and selling shares for example NEWYORK stock exchange (NYSE), Mumbai stock exchange and Nepal stock exchange (NEPSE)

Security board of Nepal was established on May 26 1993, under the provision of securities exchange act, 1983. The objectives of the board are to promote and protect the interest of the investors by regulating the issuance, sales and distribution of securities and purchase, sales or exchange of securities to supervise and monitor the activities of the stock exchange and other related firms on securities business and to render the contribution on the development of the capital market by making securities transaction fair, healthy, efficient and responsible.

Nepal government converted the Securities Exchange Center Ltd. Into Nepal Stock Exchange (NEPSE) in 1993 with a view to reform the capital market NEPSE is a non-profitable organization, under securities exchange act, 1983.

The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor on 13 January 1994 to the combined interest of Nepal government, Nepal Rastra bank, Nepal industrial development corporation and members of the shareholders of the NEPSE.

A securities market is the place where people buy and sell financial instruments. Financial instrument may be in the form of government bonds, corporate bonds or debentures, ordinary share, preference share etc.

The securities market is the place where share of listed companies are traded or transferred from one to another a fair price through the organized brokerage
system. The major function of securities market is a competitive price, future marketability and liquidity.

Securities market can be further categorize into two groups as primary market and secondary market.

### 1.1.3.1 Primary market

Primary market is the place where corporations and government issue new securities. All securities whether in money or capital market are initially issued in the primary market. This is the only market, in which the corporate or government issuer is directly involved in the transactions and receives direct benefits from an issue, i.e., the company actually receives the proceeds from the sale of securities. Once the securities begin to trade among individuals, businesses, governments or financial institutions, savers and investors, they become a part of the secondary market. The term 'Primary Market' is used to denote the Market for the original sale of securities by an issuer and to the public.

The issuer receives cash, which may be invested in productive assets or retirement of debt. Corporate bodies issue new securities in the primary market hence, securities available for the first time are offered through the primary security market. The issuer may be a brand new company or that has been in business for years. The securities offered might be a new type for the issuer or additional amount of security - used frequently in the past (Gitman; 2000:3334).

### 1.1.3.2 Secondary market

Secondary market is the market in which securities are traded that has been issued at same previous point of time. Share or stock is the major component of the securities market. Secondary market deals with previously issued shares mainly traded through stock exchange, over the counter market or direct selling. The function of the security market is to provide liquidity for the
security purchased in the primary market. Once investors have purchased securities in the primary markets, they need a place to sell those securities. Without the liquidity of the secondary markets, firms would have difficulty raising funds for productive purposes in the primary markets (Cheney and Moses; 1996:72). Secondary Markets in another term can be called Security Market.

Security Market brings buyers and Sellers of financial assets to facilitate trading. All securities are initially issued in the primary market. It is the places where original sales of securities are made. The secondary market denotes the place where securities are traded that has been issued in the primary market. Participation in country's Industrialization process as visualized by the national plans is possible through the efficient mechanism of the securities market. Securities market promotes efficient collection of small and scattered savings from the investors and provides returns to them in the form of dividend and interest with the productive uses of these savings. A developed securities market is the medium through which only those firms having good performance can raise capital through primary market. Liquid markets reduce the disincentives to investing in long- duration projects because investors can easily sell their stake in the project if they need their savings before the project matures. Moreover, securities markets play a key role in allocating capital to the corporate sector, which will have a real effect on the economy in aggregate.

### 1.1.4 Stock Exchange

It is a market for long-term capital where both new capitals can be raised by companies and where existing shares can be bought and sold. By providing a second hand market for investors to sell their shares, it facilitates the raising of new capital on the new issue market. The stock exchange also provides a market for government loans and securities, and increasingly involved in the buying and selling in securities in the overseas companies. On the market, the main operators are the market makers who trade in a group of shares, and the
stockbrokers who act as agents for their clients, who are the investors who are actually buying and selling shares (Famma \& Miller; 2002:225). Hence, the stock exchange is one of the forms of secondary market where the shares of listed companies are transferred one hand to another mobilizing the funds to finance the productive sectors. It creates and enhances liquidity in the securities.

### 1.1.5 Security Board, Nepal [SEBO/N]

Security Board, Nepal [SEBO/], regulator of Nepalese security Market was established on may 26, 1993, under the provision of the Security Exchange Act, 1983.

Nepal Security Board promotes and protects the interest of the investors by regulating the issuance, sale and distribution of securities and purchase, sale and exchange of securities, to supervise, look after and monitor the activities of the stock exchange and the other related firms on securities business, and to render contribution to the development of the capital market by making securities transactions fair, healthy, efficient and responsible. (SEBO/N 2004:3)

### 1.1.6 Nepal Stock Exchange (NEPSE)

In Nepal, NEPSE is the only organized stock exchange where stocks are traded through registered brokers under the set of rules and regulations. For the development of capital market, Nepal security market centre was established in 1970 AD. It was the first and foremost step taken by the Nepalese government for the development of securities market in Nepal. Immediately after those securities, Exchange Act was passed and securities Biratnagar Jute Mills ltd changed in Market to securities Exchange Centre (SEC), the history of securities market began with the flotation of shares in 1937 AD. After the introduction of the company Act 1964 AD and the establishment of developments resulting to capital markets.

Securities Exchange Centre was established with an objective of facilitating and promoting the growth of capital markets. Before conversion in to stock exchange it was the only capital market institution under taking the job of brokering, underwriting, managing public issues, market making for government bonds and other financial services.

His Majesty's Government (presently Changed in to Nepal Government) under a program initiated to reform, capital market converted Securities Exchange (NEPSE) in 1993 AD. NEPSE is a non-profit making organization operating under securities Exchange Act 1983. The basic objective of the NEPSE is to import marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor through market intermediaries, such as broker's market makers etc. NEPSE first opened its trading floor on 13 February 1994 through licensed members. Nepal Government, Nepal Rastra Bank, Nepal Industrial Development Corporations and the licensed members are the shareholders of the NEPSE as well. Presently, There are 27 valid member brokers (currently working 22 members) and 156 listed companies (8 June 2009) in NEPSE. IT had adopted 'Open out Cry' system on trading shares until 2064 Asoj. Hence, transactions were conducted on the open trading floor where price was determined when bid and offer match i.e. as per the demand and supply of the shares.

NEPSE has recently enhanced its trading system from the open- out cry system to the new Computer Assisted Trading (CAT) system for securities trading of the listed companies through registered brokers. It means transactions of securities are conducted through the computer network. The buying broker with the highest bid will registered the price and his code number directly on online computer system, while the selling broker with the lowest offer will post the price and code number on the selling column of the system. The market makers quote their bid and offer price on their own board before the floor starts. Once the bid and offer price match, contracts between the buying and
selling brokers or between the brokers and market makers are concluded on the system.

### 1.1.6.1 Board of director of NEPSE

The board of directors of NEPSE consists of nine directors in according with securities act 1983 A.D. Six directors nominated by NG, two from the license member and last one is General Manager of NEPSE.

Table No 1.1
Board of directors on NEPSE

| SN | Name of Organization | No of directors | Designation |
| :---: | :--- | :---: | :---: |
| 1. | Ministry Of Finance | 1 | Chairman |
| 2. | Security Board | 2 | Director |
| 3. | Nepal Rastra Bank | 2 | Director |
| 4. | Nepal Industrial Development <br> Corporation | 1 | Director |
| 5. | License Member | 2 | Director |
| 6. | General Manager | 1 | Director |

### 1.1.6.2 Trading Days and Hours of NEPSE

NEPSE has fixed the trading days and hours during which brokers are Allowed to make the transaction through Computer Assisted Trading System.

Table No. 1.2
Trading Days and Hours of NEPSE

| Type of Trading | Days | Trading Time |
| :--- | :--- | :--- |
| Regular Trading | Sunday to Thursday | 12 AM to 3 PM |
| Odd Lot Trading | Friday | 11 AM to 1 AM |

### 1.2 Focus of the Study

NEPSE is an organized stock exchange for trading stocks in secondary market. Although small investor can invest their money by purchase shares of companies in primary market or in the secondary market, they lack effective knowledge of capital market and its mechanism. The investment in stock is highly risky being an ownership capital. It bears purchasing power risk; bullbear market risk, management risk, default risk, liquidity risk, taxability risk, political risk, industry risk etc. but the investors like to risk avert. A number of factors determines stock price, some factors are qualitative, and the effect of such factors on share price cannot be quantified whereas other factors are quantitative whose effect on share price can be quantified. This study focuses on the sensitivity on stock price on NEPSE with special focus to commercial banks towards various factors. In other words, this study intends to identify prime determining factors of stock determination of Nepalese commercial banks.

### 1.3 Statement of the Problem

Stock price is determined by demand and supply. Both the qualitative factor determines the stock price, to specify exactly what factors to determine the stock is a controversial/ unpredictable issue. The stock price fluctuates time to time and stock exchange reacts with the environmental changes. This study will try to identify the determinants of stock price and find out the degree of affection of those determinants. More specifically, this study is expected to answer the following research questions;
$>$ What are the major determinants of the stock price in NEPSE?
$>$ How earning and book value affect on the stock price?
$>$ What is the effect of the dividend on the stock price?
> Are the investors aware of financial indicators, which influence the MPS of the company?

### 1.4 Objective of the Study

Investors require proper knowledge of share price i.e. how it is formed, why does it fluctuate, what factor are responsible for the determination of its price and so on. A few studies have been made regarding securities listed in NEPSE, however, most of the studies made up to present capital structure analysis, dividend policy and risk and return etc but sufficient researches have not been done to provide core prospective on the determinants of stock price. This study aims to identify the factors respective for determinants of stock price and their relationship with the stock price, so that it will give a better insight into the stock price. Furthermore, this study is proposed to meet the following objectives;
$>$ To identify the qualitative as well as quantitative factors affecting the stock price in NEPSE with focus to commercial banks.
$>$ To determine the effect of earning and book value on the stock price.
$>$ To determine the effect of dividend on the stock price.
$>$ To analyze the market trends of MPS with financial indicators.

### 1.5 Importance of Study

A few studies have been made on the securities listed in NEPSE. Most of the studies made up to present on capital market are related to financial performance evaluation, capital structure analysis, dividend policy, risk and return etc. However, none of the researches has yet been made on the core perspectives of the determinants of the stock price. So the present study will be of substantial importance for investors, planners, researchers, students and policy makers to meet their personal and organizational objectives. This study attempts to construct the relation of MPS of the Nepalese commercial banks to the major financial indicators like EPS, BPS, and DPS etc. The relation is hoped to show the status of Nepalese commercial banks with respect to the determiners of share price. These findings may be helpful to the potential investors to make the better investment decision.

Likewise, this thesis provides the information about the position of share price in share industry. Moreover, the industrial average regarding different financial indicators are helpful to compare with the individual banks. This information is expected to be helpful to the managers of the respective banks. Finally, the research intends to help the national economy through mobilization of idle capital of average Nepalese in productive sectors to accelerate the economic growth and to reduce dependency on foreign assistance.

### 1.6 Limitations of the Study

The study tries to explore the factors determining the stock price in Nepal stock exchange. Both primary and secondary data are analyzed however; this study may face the following limitation during the course of research;
$>$ Time constraint.
$>$ Takes into account a few number of selected organizations (Five listed private commercial banks) from among the listed companies.
> Most of the primary data are based on research questionnaire. Therefore, the reliability and validity of the data depends upon their source.
$>$ Takes into account the only latest available five years.

### 1.7 Organizations of the Study

The study concentrates on specific sector i.e. commercial banks. The commercial banking sector is the most efficient sector among others.

This study has been divided in to five chapters, which are as follows:

## Chapter I: Introduction

It includes general introduction of capital of capital market and Nepal stock Exchange. Except that, this chapter comprises of background, focus, statement of the problems, significances and limitations of the study.

## Chapter II: Review of Literature

This chapter reviews the relevant previous studies made on the stock price determination and the principle set on stock market. This chapter includes the conceptual framework on common stock, stock certificates, securities as well as security markets, stock price etc. except that, this chapter reviews the published books, journals and unpublished thesis reports separately.

## Chapter III: Research Methodology

This chapter includes the details framework of the study such as sample, population, variables, statistical and financial tools to be used, sources of data, data collection and analysis techniques.

## Chapter IV: Data Presentation and Analysis

This chapter is concerned with the presentation and analysis of data. In this chapter, the primary and secondary data collected from different sources are presented in systematic formats and analyzed using different analytical tools (like: average, standard deviation, coefficient of variation, correlation, regression).

## Chapter V: Summary, Conclusion and Recommendations

This chapter involves the summary, conclusions and recommendation of the study and concludes the reports with the major recommendations/ suggestions to the investors, listed commercials banks and government about the stock price determination.

The Bibliography and Appendices have been given at the end of the study.

## CHAPTER - II

## REVIEW OF LITERATURE

In the global contexts, there are thousands of research papers, articles, books and journals relating to the capital market and organized stock exchange (OE). Similarly, some of the major determinants of the stock price in various stock exchanges have been identified. Even though the capital market is not well developed in Nepal, there are various researches made on it. It is being very infancy; the factor which affect the stock price of large and well-developed OE may varies from that of NEPSE. However, some of the common factors are worldwide. In this chapter various books, magazines, journals, research papers, unpublished thesis reports etc. are reviewed, which determines/affects the stock price in OE and in NEPSE.

### 2.1 Conceptual Framework

Before getting into the core concept of factors determining the stock price, it is logical to be familiar with some technical terms, which are frequent use in researches on capital market and finance. So in this section, some of the technical terms related to the capital market are defined.

### 2.1.1 Common Stock

A firm can collect funds required, by issuing shares and debentures as longterm sources of funds. Common stocks are ownership capital whereas debentures are creditor ship capital. In between of ownership and creditor ship capitals, preferences share capital also exists, which is regarded as a hybrid source of financing.
"The common stock represents equity, or an ownership position in a corporation. It is a residual claim in the sense that creditors and preferred stockholders must be paid as scheduled before common stockholders can receive any payments. In bankruptcy, common stockholders are in principle
entitled to any value remaining after all other claimants have been satisfied (However, in practice courts sometimes violate this principle).

The great advantage of the corporate firm of organization is the limited liability of its owners. Common stocks are generally "fully paid and non assessable," meaning that common stock holders may loose their initial investment but not more. That is, if the corporation fails to meet its obligations, the stockholders cannot be forced to give the corporation the funds that are needed to pay off the obligations. However, as result of such a failure, it is possible that the value of corporations share will be negligible. This outcome will result in the stockholders having lost an amount equal to the price paid to buy the shares (Sharpe, Alexander, Bailey, 200:457).

Common stock is "finance an equity share is the ownership of a company that gives the owner the right to participate in electing the board of directors and voting on other matter brought before the stockholders, in proportion to the number of shares hold".

### 2.1.2 Stock Certificates

"The ownership of a firm's stock has typically been represented by a single certificate, with the number of shares held by the particular investor noted on it. Such a stock certificate is usually registered, with the name, address and holding of the investor included on the corporation's books. Dividend payments; voting material, annual and quarterly reports and other mailings are then sent directly to the investor, taking into account the size of his or 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. Frequently, a register will make sure that this canceling and issuing of certificate has been done properly.

Usually, banks and trust companies act as transfer agents and registrars. Many stockholders have chosen to avoid these rather cumbersome procedures. Instead, depository trust companies are used, which substitute computerized records for embossed certificates" (Sharpe, Alexander and Bailey, 2000:458).

### 2.1.3 Securities

"When someone borrows money from a pawnbroker, he or she must leave some item of value as security. Failure to repay the loan (plus interest) means that pawnbroker can sell the pawned item to recover the amount of the loan (plus interest) and perhaps make a profit. The terms of the agreement are recorded via pawn tickets. When a college student borrows money to buy a car, the lender usually holds formal title to the car until the loan is repaid. In the event of default, the lender can repossess the car and sell it to recover his or her costs. In this case, the official certificate of title, issued by the state serves the security for the loan. A person who borrows money for a vacation may simply sign a piece of paper promising repayment with interest. The loan is unsecured in the sense that there is no collateral, meaning that no specific asset has promised to the lender in the event of default. In such a situation, the lender would have to take the borrower to court to try to recover the amount of the loan. Only a piece of paper called a promissory note stands as evidence of such loan.

When a firm borrows money, it may not offer collateral. For example, some loans may be secured (backed) with specific pieces of property (building or equipment). Such a loan are recorded by means of mortgage bonds, which indicate the term of repayment and the particular assets pledged to the lender in the event of default. However, it is much more common for corporation to simply pledge all of its assets, perhaps with some provision for the manner in which the divisions will take a place in the event of default. Such a promise is known as debenture bond.

Finally, a firm may promise a right to share in its return for investors funds. Nothing is pledged, and no irrevocable promises are made. The firm simply pays whatever its directors deem reasonable from time to time. However, the investor is given the right to participate in the determination of who will be the members of the board of directors. The right protects the investor against serious malfeasance. A share of common stock, which can be sold to someone else, who will then be able to exercise the right, represents the investor's property right. The holder of common stock is said to be an owner of the corporation and can, in theory, exercise over its operation through the board of directors.

In general, only a piece of paper represents the investor's rights to certain prospects or property and the conditions under which he or she may exercise those rights. This piece of paper, serving as evidence of property right is called a security. It may be transferred to another investor, and with it will go all its rights and conditions. Thus, everything from pawn ticket to share of common stock is a security. Hence, the term of security can be understood as a legal representation of the right to receive prospective future benefits under stand conditions. The primary task of security analysis is to identify misplaced securities by determining these prospective future benefits, the conditions under which they will be received and the likelihood of such conditions (Francis, 2002: 31).

### 2.1.4 Security Markets

"Security market exists in order to bring together buyers and sellers of securities, meaning that they are mechanisms created to facilitate the exchange of financial assets. Security markets can be distinguished one-way, primary and secondary markets in many ways. Here the key distinction is whether the securities are being offered for sale by issuer. Interesting, the primary market itself can be subdivided into seasoned and unseasoned new issues. A seasoned new issue refers to the offering of an additional amount of an already existing
security; security: where as an unsecured new issue involves the initial offering of a security to the public. Unseasoned new equity issues are often referred to as initial public offerings (IPO's).

Another way of distinguishing between security markets considers the life span of financial assets. Money markets typically involve financial assets that expire in one year or less; where as capital markets typically involve financial assets with life spans of greater than one year" (Sharpe, Alexander and Bailey, 2000:9-10).

### 2.1.5 Stock Market and Stock Exchanges

Secondary markets are those in which outstanding previously issued securities are traded. By far the most active secondary market, and the most important one to financial managers, is the stock market. It is here that the price of firm's stocks are established, and since the primary goal of financial management is to maximize the firms stock price, a knowledge of the market in which this price is established is essential for anyone involved in managing a business.

There are two basic types of stock markets the organized exchanges, which include the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), and several regional exchanges, and the less formal over- the-counter markets. Since the organized exchanges have actual physical market location and are easier to describe and understand, we shall consider them first. The organized security exchange are tangible physical entitles. Each of the larger once occupies its own building, has specifically designated members, and has an elected governing body its board of governors. Members are said to have "seats" on the exchange, although everybody stands up. These seats, which are bought and sold, give the holder the right to trade on the exchange (Weston and Brigham, 1987:78).

### 2.2 Stock Price

Stock price is the amount of money that one has to pay to purchase/receive a stock company. If A buys of Bank Of Kathmandu from B, he/she pays Rs. 2000 for these 10 shares, then the price of the share is Rs. 200 (i.e.2000/10). Thus, stock price is the amount paid by a buyer to buy one stock or the amount received by selling a stock. The stock price is determined in a stock market, by market forces, i.e. demand (buyers' force) and supply (sellers' force). The demand and supply are based on the environmental forces and individuals future expectations/assumptions. The stock (market) price is different from its par value and book value.

### 2.2.1 Par Value

"When a corporation is first chartered, it's authorized to issue up to 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 stock holders if doing so would reduce the balance sheet value of stockholders equity below the amount represented by the par value of outstanding stock. For this reason, the par value is typically low relative to the price for which the stock is initially sold. Some corporations issue no-par stock. (In the case, a stated value must be recorded in a place as the par value)" (Sharpe, Alexander, Bailey, 2000:461). The initial offering price of share may vary from its par value if stocks are issued on premium or discount.

### 2.2.2 Book Value

"With the passage of time, a corporation will generate income, much of which is paid out to creditors (as interest) and to stock holders (as dividend). Any remainder is added to the amount shown as cumulative retained earnings on the corporation's books. The sum of the cumulative retained earnings and other entries (such as "common stocks" and "capital contributed in excess of par value") under stockholders equity is the book value of the equity:

Book Value of Equity $=$ Cumulative Retained Earnings + Capital Contributed In excess of Par + Common Stock

The book value per share is obtained by dividing the book value of the equity by the numbers of shares outstanding". (Sharpe, Alexander, Bailey, 2000:461462).

### 2.2.3 Earning Per Share

The firm's earning per share is generally of interest to present or prospective stockholder and to management. The amount earned during the accounting period on each outstanding share of common stock, calculated by dividing the period's total earnings available for the firm's common stock holders by the number of common stock outstanding.

### 2.2.4 Dividend

The percentage of earning the firm pays in cash to its shareholders is known as dividend. The dividend, of course, reduces the amount of earnings retained in the firm and effect the total amount of internal financing.

Nothing is more important than dividends to stockholders. They buy share of firm with the hope of sharing profits earned by firms. The role motive of stockholders is to receive return on their investment, nothing pleases them than knowing the firms earnings and more profits mean more dividends coming in

## Cash Dividend

Payments made in cash to stockholders are termed as cash dividend. For which a firm needs to have enough cash in its bank account. When cash dividend, is declared the cash amount and reserves account of the firm will be reduced, thus both the total assets and the net worth of the firm are reduced in case of distribution of cash dividend.

## Bonus Share (Stock) Dividend

An issue of bonus share represents a distribution of share in addition to cash dividend to the existing stockholder. This practice has the effect of increasing the number of outstanding share of the company, which is distributed proportionately. Thus, a shareholder retains proportionate ownership of the company.

### 2.2.5 Market Price per Share (MPS)

A share of common stock can be authorized either with or without par value. Par value is the recorded figure in the corporate charter. Generally, par values of most stocks are set at fairly low figures with compare to their market values and the market values per share of common stock is the function of the current and expected future dividend of the company and the perceived risk of the stock on the part of investors ( Van Horne and Wachowicz, 2000:546).
"Common stock holders are sometimes referred to as a residual owner since in essence he or she receives what is left the residual after all other claims on the firm's income and asset have been satisfied. All the companies issue common stock. Common stockholders are true owners of business firm. They invest money with the expectation of getting high return. The return from common stock is usually from the capital gain earned. If they increase in value after public buy them. That is why price of common shares can be more volatile. They move up and down due to the factors like economy and company performance" (Gitman, 1991:573).

The market price of the share gives the value of shares, and the value of the organization. The market price of shares is that the price in which the shares are traded or the amount, which is paid by the buyer to the seller to purchase a stock of a company. The market price of shares varies from one company to another. Since the common shareholders are the owner of the organizations and have least priority to claim in liquidation, the share price is highly volatile and
very sensitive to the environmental factors. An organization has two types of environment, i.e. internal and external. The environment within the organization is called the internal environment and is somehow in control of the organization. Therefore, the organization tries to maintain the favorable environment to maximize the share price of the stock market. On the other hand, the external environment forces are not within the control of the organization, but such forces highly affect the market price of shares. So, the firm tries to adjust themselves according to the changing environmental forces, and such adjustments are intended to maximize the share price or the value of the firm.

Since the market price of shares is very much sensitive to the environmental forces, the share price increases if there is favorable environment and vice versa. This increase in the share price is based on the market mechanism or market forces, i.e. demand and supply. If the earning and dividend of an organization increases, then the investors has positive perception towards the organization and they like to buy the shares of the organization, as a result demand increases; on the other hand the suppliers like to hold the shares and supply decreases, and there is gap between demand and supply so the market price of shares increases. The investors determine the price, they would like to pay for the shares of an organization and the sellers determine the price, they would like to receive by selling shares based on their assumptions towards the organization and future expectations. Such assumptions and expectations vary from individual to individual. Since different person analyzes the same situation differently with their limited knowledge.

The index of stock gives the surrogate of market price of the share. NEPSE index is the surrogate of all listed companies in NEPSE. So, its one of the indicators of stock price in NEPSE. There are various indexes to analyze the stock behavior in the world's capital market. "Stock market indexes are "pure numbers" used for making the comparison between index numbers in the same series or other index number. An index is usually a ratio tabulated from average
of different securities. Typically, a time series of index numbers is constructed from the same base date and base value (usually set as 100 or 10 or1) to make time differently comparable. Some past year is selected as the base year from which index's base value is calculated in order to impart time perspective to the index (Francis, 1991:183).

### 2.3 Review of Previous Studies

This part of the literature review is devoted to review of major previous studies relating to stock prices in detail.

There are large numbers of studies in foreign and Nepalese context but only few of them are briefly reviewed below.

### 2.3.1 Foreign Context

International Monetary Fund (IMF) (1997), Policy Development and Review Development Division published a working paper entitled "Determinants of Stock Prices: The Case of Zimbabwe". The working paper examined the general relationship between stock prices and macroeconomics variables in Zimbabwe, using the revised DDM, errorcorrection, model, and model, the multi factor return - generating model. Despite the large fluctuation in stock prices since 1991, the analysis indicted that the Zimbabwe Stock Exchange functioned quite consistently during that period. Whereas sharp increases in stock prices during 1993-94 were mainly due to the shift of the risk premium that was caused by partial capital account liberalization, the movements of monetary aggregates and market interest rates explained the rapid increase of 1990's in stock prices.

Jennergren and Korsvold (1975), "The Non Random Character of Norwegian and Swedish Stock Market Prices" examined the daily price series of 15 stocks from Oslo stock exchange (Norway) and 30 stocks from Stockholm stock exchange (Sweden) by using serial correlations and run analysis, during 1957, and found considerable dependence in both Norwegian
and Swedish stock market prices. Based on their findings, they concluded, "price changes are not dependent random variable in case of the majority of the 45 investigated Norwegian and Swedish Stocks. This implies that the random walk hypothesis is probably not a very accurate description of share price behavior on the Norwegian and Swedish stock markets.

Dorkery (2000), "Some Consideration in the Governance and price Behavior of the Warsaw Stock Exchange" examined the governance and supervision of the Warsaw Stock Exchange (WSE) and investigated the price behavior of the market using variance ratio tests and the Z test. The findings suggested that although an adequate infrastructure, both legal and physical, is in place, the behavior of the market cannot be said to follow a random walk process. The implications of such results were important not only for the institutional and private investors who may make improper portfolio choices, but also for public policymakers. Since the existence of an inefficient market that do not reflect fundamentals is likely to impede the markets ability to play its role in allocating funds to the moist productive sectors of the economy.

Gupta (1985) analyzed the "Equity Share Price Behavior in India" during the period from January 1971 to March 1976 and extensively tested indices. He employed the autocorrelation analysis, run test, and found the evidence in support of the RWH. He also concluded that the random walk model appeared to be an appropriate model even for the share price behavior (Gupta, reprinted in 1989: 53-54).

Miller and Modigliani (1961), studied "Dividend Policy, Growth and the Valuation of Shares" has concluded that dividend payout ratio (dividend policy) does not affect the wealth of the shareholders or on the share price of the firm. It argues that the value of the firm is determined by the earning power of the firm's assets or its investment policy, and that the manner in which the earnings stream is split between dividends and retained earnings do not matter. However, this study is based on the assumptions as mentioned below:

- The perfect capital markets in which all investors are rational and information are available to all at free of costs, instantaneous transaction cost, infinitely divisible securities, and no investors large enough to affect the market price security.
- An absence of flotation costs on securities by the firm.
- A world of no taxes.
- The firm has a fixed investment policy and is not subjected to change.
- Perfect certainty by every investor as to the future investments and profits of the firm.


#### Abstract

James E. Walter (1963), "Dividend Policy: It's Influence on the Value of Enterprise" argues that dividend policies usually affect the value of the enterprises. The investment policy of a firm cannot be separated from its dividend policy, which is just the opposite of what MM said. The key argument in the support of the relevant proposition of the model is the relation between the return of firm's investments or its internal rate (r) and its cost of capital (k), the stock price will be enhanced by retention and will vary inversely with dividend payout.


The basic assumptions of the model are:

- The firm finances all investments through retained earnings i.e. the firm does not use debt or equity financing.
- The firms ' $r$ ' and ' $k$ ' are constant.
- The firm distributor its entire earnings or retains it for investment immediately.
- There are no change values of earnings per share and dividend per share.
- Perpetual life of the firm.

Based on the above assumptions, Walter's formula to determine the market price per share is as follows:
$\mathrm{P}=\frac{\mathrm{DPS}}{\mathrm{K}}+\frac{\mathrm{r}(\mathrm{EPS}-\mathrm{DPS}) / \mathrm{K}}{\mathrm{K}}$
P = DPS $-\mathrm{r} / \mathrm{k}($ EPS-DPS $)$,
Where,
$\mathrm{P}=$ Prices of shares;
EPS= Earning Per Share;
$r=$ internal rate of return;
$\mathrm{K}=$ cost of capital.

Myron Gordon in his study "The investment, Financing and Valuation of corporation" concludes that the dividend policy of a firm affects its value. Unlike Walters model, he argues that the dividend policy affects the value of hare even in a situation in which the return on investment is equal to the capitalization rate that is $(\mathrm{r}=\mathrm{Ke})$. It is assumed that investors have a preference for present dividends for future capital gains under the condition of uncertainty. This argument insists that an increase in the stock prices for the reason that the investors consider that the dividend yield ( $\mathrm{d} 1 / \mathrm{Po}$ ) is less risky than expected capital gain. The basic assumptions of this model are as follows:

- The firm is all equity firms.
- No existing financing is available so retained earnings will be used to finance any expansion.
- The internal rate of return (r) and cost of capital (k) are constant.
- The firm and its stream of earnings are perpetual.
- The corporate taxes do not exist.
- The retention ratio (b) once decided upon is constant. Thus, the growth rate, $\mathrm{g}=\mathrm{b} \mathrm{x} \mathrm{r}$ is constant.
- 'Ke' must be greater than ' $g$ ' to get meaningful value.

The market value of a share is equal to the present value of the future steams of dividends. A simplified version of Gordon's model can be symbolically expressed as,
$\mathrm{P}=\frac{\mathrm{EPS}(1-\mathrm{b})}{\mathrm{Ke}-\mathrm{bxr}^{\prime}}$

Where,
$\mathrm{P}=$ Price of Share
EPS $=$ Earning Per Share
$\mathrm{b}=$ Retention ratio
$1-b=$ dividend payout ratio,
$\mathrm{Ke}=$ capitalization rate or cost of capital,
$B * r=$ growth rate.

Fama (1965), "The Behavior of Stock Market Prices" study on the random walk model is considered one of the best definitive and comprehensive studies conducted. He observed the daily proportionate price of each individual stock of Daw Jones Industrial Average. The time periods covered started from end of the 1957 to 26 September 1962. He employed the statistical tools such as serial correlation and run test to examine whether any dependency exists in any lag price changes. He found that the serial correlation coefficient for daily price changes were very small and average was 0.03 , which is close to zero, but correlation coefficient of 11 stocks out of 30 were more than twice of their computed standard errors. He used serial correlation coefficient for differencing intervals stronger evidence of dependence. It leads either Fama to conclude that the evidence produced by the serial correlation model seems to indicate that dependence in successive price is extremely, slight or nonexistent.

Fama further examined by using run test analysis to testify whether price changes were likely to be followed by more price changes in the same time. In fact, he found that the actual and expected runs are not significantly different. The largest difference exists for daily changes, but the difference was not significant. However, the difference for the 4- day, 9- day and 16-day intervals was very small. In all cases, the departure from random walk hypothesis was negligible. On the basis of these tests, Fama concludes that there was little
evidence, either from serial correlation or from run tests, of any large degree of dependence in the daily 4-day, 9 -day and 16-day price changes.

### 2.3.2 Nepalese Context

There are many loopholes in our stock exchange Act. Investor feels insecure here. A few years back there was a company called Nimrod Pharmaceuticals Company that floated in shares but where is it now? Similarly, it has been more than a decade that Bansbari Leather has allotted its shares, but why didn't the company list its shares in the market? It has been 5 years that Gorakhkali rubber Udhyog has not called its AGM. The NRB has recently done a decision to take on liquidation of Nepal Development Bank Ltd. Government remains silent in all these cases. This is why the public as well as the institutional buyers is not feeling secure in investing in stock market (Business age, Jan 2000, 25)

Investment in the capital market now has become very uncertain, sending the investor in search of avenues of more certain retains. The equity investment is considered riskier than investment in bond preferred stock etc. the secondary market is not performing well. The NEPSE index is hovering around 208 and 215 since long. After great slum Nepal stock market in F/Y 2000/01, dissatisfaction has increased in the mind of investors. The NEPSE index on 23 Nov 2000 had reached the pick of 545,82 and after that it is continuously on the decline (Business Age, March 2004, 42)

A study conducted by Pradhan and Balampaki (2004), on the title of "Fundamentals of Stock Return" has given some important insight regarding nature of stock return in Nepal. This study deals with fundamentals of stock returns. It examines if dividend yield, capital gain yield and total yield are related to earnings yield, size, book to market ratio and cash flow yield. The study is based on pooled, crossed, sectional data of 40 enterprises whose stocks are listed in Nepal Stock Exchange Ltd. and traded in the stock market. The
study reveals that earning yield and cash flow yield have significant impact on divided yield.

Other main findings of the study are earning yield and cash flow yield have insignificant impact on book to market value whereas size has negative impact in dividend yield. In the case of earning yield and cash flow yield, cash flow yield have been found to be more informative than earning yield.

Capital gain yield is positively influence by earning yield and size, whereas the same is negatively influence by book to market value and cash flow yield. Book to market value has been found to be statistically strong in predicting capital gain yield. Similarly, total yield is positively determined by earning yield and size whereas the same is negatively determined by book to market value and cash flow yield. Book to market value has been found to be more informative than other variables.
K.C. (2004) has conducted a study entitled "Development of Stock M arket and Economic Growth in Nepal" based upon the data of ten years. The study reports that the relationship between financial development and economic growth, with focus on developmental role of stock markets has been in debate for sometimes-in past. Empirical studies suggest that financial development does not matter and stock market do spur economic growth. Unfortunately, in Nepal, despite a history of about half decade, financial sector despite, many problems have developed significantly in Nepal. However, most of the developments were confined to the banking sectors. Stock market has virtually remained stalled because of this priority in the government's financial reform policies. Various measures of stocks market deployment indicate that the stock market in Nepal is underdeveloped and has failed to show impact on the overall national economy. Small market size has made it vulnerable to manipulation and price rigging. Low turnover ratio and value-traded ratio to volatility, and high concentration ratio indicate that the stock market in Nepal is liquid and risky. Investors tend to avoid stock market because they do not have option to
it since stock market is less reliable source of raising funds for them. Due to this, financial system of Nepal has remained bank dominated.

## Review of Master's Thesis

There are some researches carried out by different researchers in this topic in Nepal. Here are some of the reviewed thesis, which can help us to understand about their objectives, used statistical tools and major findings of the study.

Dhamala (2004), studied on "Determinants of Share Price in Nepalese Financial M arket" taking ten public companies i.e. 5 from commercial banks and 5 from finance companies covering relevant data and information for 5 years from 1996 to 2001. He found in his study that the Nepalese stock market is not efficient enough to determine MPS in accordance with the respective financial performance. The market price of the share in Nepal is not indicative of a company's financial performance in stock market and the share market is imperfect, is not efficient, and is liable to manipulation.

Basically, value of share price is to be determined by the future prospects of the company based on the past financial indicators.

Neupane (2004), conducted a study on "Determinants of Stock Price in Nepal Stock Exchange" taking 11 sample organizations using various financial and statistical tools like standard deviation, correlation, regression analysis, t-test, Z-test. He concluded that in NEPSE, DPS, BPS and EPS individually do not have consistent relationship with the market price of share, among the listed companies. The pricing behavior varies from one company to another. But EPS, BPS and DPS, jointly have significant effect in market price shares. So there may be other major factors affecting the share price significantly. NEPSE is in its primary stage, adopting open out cry system for stock trading and stockbrokers lack professionalism to create investing opportunities in NEPSE. Commercial banking sector has dominated the overall performance of NEPSE. Manufacturing and processing, trading and hotel
sector have week performance. So financial intermediaries are strong but their ultimate investment is suffering.

Dhungel (2005), conducted a study on "Stock Price Movement and Financial Performance of Nepalese Listed Companies", derive the conclusion as the invisible factors causes the ups and downs movement of monthly share Volume, price and market capitalization throughout each fiscal year, the fluctuation trends is not in order and there is no correlation between volume and price stocks.

The large stocks have the lower price earning ratios, large market value to book value ratio and lower ratio of dividend per share to market price per share, higher and less variable leverage and lower profitability.

Dhakal (2007), his study on "Determinants of Share Price On Nepalese Commercial Banks" with randomly selected 10 commercial banks, concluded that the MPS of most of the banks are found to be correlated with other individual financial indicator like BPS, EPS and DPS insignificantly. This shows that they individually rarely influences share price but they have combine effect on it.

Most banks are unknown about laws and policies regarding share market but poor rules and regulation as well as infective regulatory mechanism of market makers are the problem of Nepalese capital market.

Due to the inadequate knowledge of share market among Nepalese investors, capital market of Nepal has not been well developed yet. The reason why commercial banks are only the attractive sectors to invest, in the view of investors is that they are better managed and controlled, that is why they are in profit and distribute good rate of dividend.

Acharya (2008), his study on " Determinants of Stock price in Nepalese Commercial Banks" with randomly selected 10 commercial banks, concluded that Share price are affected by different kinds of micro and macro variables
such as EPS, DPS, information disclosed, political instability, growth rate according to respondents survey. But interest rate, retention ratio, cost of equity, market liquidity, change in management do not significantly affect the share price in NEPSE.

The major findings show in the study that the market price per share has high degree of positive relationship with EPS in all sample banks and largely depends on EPS.

### 2.4 Research Gap

Earlier studies and researches on the stock price movement in the NEPSE are carried out on the apparent approach by taking the most common Indicators in consideration. During the review of previous thesis, it is found that no researcher has been conducted by taking these sample companies, which the researcher has selected in this research.

So, it is believed that this study will fulfill the gap, which had been made by the earlier researcher. Researcher has taken sample from only the first class commercial banks, which also could predict the sensitive stock moment as well. Moreover, the researcher has been conducted on price behavior related to stock market efficiency by using share brokers, market analysts and individual investors as primary sources of information. There was a need to conduct a survey with he share brokers, market analyzers and individual investors who are the major stakeholders of the stock market.

Furthermore, it shows that there is very few research works conducted on various aspects of securities price formation of commercial banks in the field of stock market. The studies conducted in developed security markets may not be entirely relevant in the security markets of underdeveloped country like Nepal. There applicability to test in the context of smaller and underdeveloped capital market likes ours. The changes taken place after the completion of these studies
might have reduce their relevance. Therefore, it is necessary to test the validity of these studies and their applicability in our context.

Most of the above stated studies use technical method and statistical methods like regression analysis, correlation coefficient, NEPSE trend etc. for analysis purpose. Only few of studies use fundamental analysis tools for the research work. More than that, some few studies are concerned about financial indicators like EPS, DPS and BVPS, which are the most influencing factors for the MVPS. So, this study tries to analyze the relationship of these factors along with influencing factor on market price of the stock.

Various quantitative and qualitative factors affect the share price formation. Many studies documented that dividend is one of the most influencing factors in share price formation. The fundamental analysts say that the price of stock is the present value of the future cash flows and the price of stock must be equal to this value. The role of brokers and market makers is crucial in pricing.

Another factor playing a major role in price formation is information and signaling effects. Political turmoil, unstable government, lack of farsighted policies and other macro economic factors equally play the vital role in the price fluctuation and make impact in a decisive role in share price formation which researcher try to analyze during study.

## CHAPTER - III

## RESEARCH METHODOLOGY

A systematic research study requires a proper methodology to achieve the set of objectives. Research methodology is a systematic method of finding solution of a problem i.e. systematic collection, recording, analysis, interpretation and reporting of data and information.

This chapter aims to present a basic framework of the research work. The overall approach to the research is presented in this chapter. This chapter contains the research design, sample size, data collection procedure, data processing tools and techniques, variables etc.

### 3.1 Research Design

In this study, historical as well as descriptive design is adopted. To determine the affect of earning, book value, dividend and other factors on stock price, historical research design is adopted along with correlation and regression analysis and to identify the qualitative factors affecting stock price, the descriptive research design is adopted.

Therefore, the main objective of this study is to examine the interrelation of MPS with EPS, DPS, BVPS and other financial indicators. To achieve this objective descriptive and exploratory research designs have been adopted. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been used to determine factors determining stock prices of commercial banks in NEPSE.

### 3.2 Population and Sample

The total variables/observation is simply called population. There are 26 commercial banks (including government owned, private and joint ventures) at present in the market and only five banks are taken as sample of the study. The
process of selecting the sample out of the population is called sampling. In this study, the population size is 26 and the sample size is 5 . The sample size is $19.23 \%$ of the population size in this study. The sampling method used is he judgment sampling.

The sample of the study is as follows:

| S.N. | Name |
| :---: | :--- |
| 1. | Bank of Kathmandu Ltd. |
| 2. | Everest Bank Ltd. |
| 3. | NABIL Bank Ltd. |
| 4. | Siddhartha Bank Ltd. |
| 5. | Standard Chartered Bank Ltd. |

### 3.3 Sources and Nature of Data

The study is base on secondary data as well as primary data. To show the relationship between the different variables (share price- earnings, share Price book value, share price-dividend, share price-debt ratio, share price-liquidity ratio, share price-turnover, share price-retained earning) secondary data used but to determine the factors, which affect the stock price, primary data are collected from the respondents through research questionnaire. The sources of the secondary data are AGM reports of related banks, SEBON, NEPSE, financial statistics reports, bulletins publications of different authorities, researches, journals, unpublished thesis reports, newspapers, Internet Websites.

### 3.4 Data Collection Techniques

The research consists of both primary as well as secondary data. Since the nature of these two types of data is different, the data collection procedure also varies. To collect the secondary data, published materials are viewed in various spots like books by different authors, unpublished thesis reports, journals,
internet web sites, online library, and AGM reports of listed companies. NEPSE, SEBON, etc. to collect these secondary data, the researchers visited campus library of NCC, TU central library, SEBON library. On the other hand, primary data collected through scheduled questionnaire.

### 3.5 Data Processing

Data so obtained have no meaning unless they are arranged and presented in a systematic way. Further, they need to be verified and simplified for the purpose of analysis. Moreover, data and information so gathered are to be checked, edited and tabulated in such ways that provide convenience for computation and interpretation.

The relevant data have been inserted in meaningful tables. Only the data that are relevant to the study have been presented in tabular form in the understandable way and unnecessary data excluded. It is attempted to find out the conclusion from the available data, with the help of various financial as well as statistical tools. An advanced computerized statistical program, SPSS has been widely used to provide efficiency in calculation of statistical information.

### 3.6 Data Analysis Tools

The primary and secondary data collected from various sources leads to the logical conclusion, only if the appropriate tools and techniques are adapted for analysis of such data. The collected data has no meaning. If such data are not analyzed various statistical and financial tools have been used to analyze the data in this study, the different tools used in the study are as follows

## i. Average (Mean)

Mean is the value, which represents the group of values and gives an idea about the concentration of values in the central part of the distribution. An average gives us a point, which is most representative of the data. It depicts
the characteristics of the whole group. The value of arithmetic mean lies in between the two extreme observations of the entire data. It is an envoy of the mass homogeneous data.

The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically,

Arithmetic Mean (AM) is given by, $\bar{X}=\frac{\sum x}{n}$

Where,
$\bar{X}=$ Arithmetic Mean
$\Sigma X=$ Sum of all the values of the variable $X$
$\mathrm{n}=$ Number of observations

## ii. Standard Deviation

The standard Deviation ( $\sigma$ ) measures the absolute dispersion. The greater the standard deviation, greater will be magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of uniformity of the observations as well as homogeneity of a series and vice versa.

Mathematically,

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

## iii. Coefficient of Variation

Coefficient of Variation (CV) is a relative measure. To compare the variability between two or more series, CV is more appropriate statistical tool.

Mathematically,
$\mathrm{CV}=\frac{\sigma}{\bar{X}} \times 100$

## iv. Correlation Coefficient (r)

When the relationship is of quantitative nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it, in a brief formula is known as correlation. If the value of the variables are directly proportional than the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1 . by Karl Pearson, the simple correlation coefficient (between two variables, say X and Y ) is given by,
$\mathbf{r}_{\mathrm{xy}}=\frac{\operatorname{cov}(X, Y)}{\sigma X \sigma Y}$
$\mathbf{r}_{\mathrm{xy}}=\frac{N \sum X-\sum X \sum Y}{\sqrt{N \sum X^{2}-\left(\sum x\right)^{2}} \sqrt{N \sum Y^{2}-\left(\sum Y\right)^{2}}}$

Where, $\mathrm{r}_{\mathrm{xy}}$ is the correlation between two variables X and Y ,
' $r$ ' lies always between +11 and -1
When ' r ' $=+1$, there is perfect position correlation.
When, 'r' $=-1$, there is perfect negative correlation.
When ' $r$ ' $=0$, there is no correlation.
When ' $r$ ' lies between 0.7 to 0.999 (or -0.7 to -0.999 ) there is high degree of positive or negative correlation.

When ' $r$ ' lies between 0.5 and 0.699 , there is a moderate degree of correlation. When ' $r$ ' is less than 0.5 , there is low degree of correlation.

## v. Coefficient of Determination

The coefficient of determination is the way to measure the contribution of independent variables in predicting the dependent variables. It is more
appropriate while verifying the results than the correlation coefficient and computed by square of the correlation coefficient as mentioned above.

$$
\mathrm{R}^{2}=\mathrm{r} \times \mathrm{r}
$$

## vi. Regression Analysis

Regression is the statistical tool, with the help of which we can predict the unknown value of one variable from known value of any other variable. Assuming that the two variables are closely related, we can estimate the value of one variable from the value of another. The variable, whose value is given, is called independent variable and the variable whose value is to be predicted is called "dependent variable". Hence, regression determines the average probable change in one variable based on a certain amount of change in another. It is a statistical tool for determining relationship between the variables by the establishment of an approximate functional relationship between them. It is used to determine that whether the dependent variable is influenced by the given independent variable or not.

Regression analysis is a branch of statistical theory that is widely used in almost all the scientific disciplines. One of the most frequently used techniques in economics and business research, to find a relation between two or more variables that are related casually is regression analysis.

The regression analysis can be classified as follows:

## a. Simple Regression Analysis

The analysis used to describe the average relationship between two variables is called "simple linear regression analysis". It is considered as a useful tool for determining the strength of relationship between two (variables in simple regression) or more variables in multiple regression. Specially, regression is used to estimate or predict the most probable value of dependent variables based on one or more independent variables.

In this study, the following simple regression has been analyzed.

$$
\begin{align*}
& \text { MPS }=a+b E P S \ldots \ldots \ldots \ldots . . \\
& \text { MPS }=a+b D P S \ldots \ldots \ldots \ldots \text { (ii) } \\
& \text { MPS }=a+b B V P S \ldots \ldots \ldots \ldots \text { (iii) } \tag{ii}
\end{align*}
$$

## b. Multiple Regression Analysis

Multiple regression analysis is a logical extension of the simple linear regression analysis. Instead of single independent variable, two or more independent variables are used to estimate the unknown values of a dependent variable. However the fundamental; concept in the analysis remains the same.

Multiple regression is defined as statistical device which is used to estimate (or predicts) the most probable value of dependent variable on the basis of known value of two or more independent variables.

The following multiple regression equation is analyzed.

$$
\text { MPS }=a+b_{1} \mathrm{EPS}+\mathrm{b}_{2} \mathrm{DPS}+\mathrm{b}_{3} \mathrm{BVPS}
$$

Where, MPS is dependent variable and EPS, DPS and BVPS are independent variables.

## CHAPTER - IV

## DATA PRESENTATION AND ANALYSIS

### 4.1 Introduction

This chapter is the main body part of this study. The data, both primary and secondary, are collected in unprocessed form. Such collected data are presented in systematic formats and analyzed using different appropriate tools and techniques, has been used in this chapter. The secondary as well as primary data, collected from different sources, are presented in an understandable presentation and analyzed separately using both qualitative and quantitative measure whichever are appropriate.

### 4.2 Analysis of Financial indicators

Table No. 4.1
Mean, S.D. \& C.V. of MPS, EPS, DPS and BVPS

| Bank |  | MPS | EPS | DPS | BVPS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SCBNL | mean | 4119 | 152.364 | 126 | 440.696 |
|  | s.d. | 1970.927 | 16.4744 | 10.19804 | 43.46895 |
|  | c.v. | 0.478497 | 0.108125 | 0.080937 | 0.098637 |
| NABIL | mean | 3014 | 114.54 | 92 | 358.2 |
|  | s.d. | 1799.432 | 16.27821 | 26.94439 | 39.58485 |
|  | c.v. | 0.597024 | 0.142118 | 0.292874 | 0.11051 |
| EBL | Mean | 1698.2 | 66.564 | 16 | 244.716 |
|  | s.d. | 939.7711 | 16.6402 | 13.56466 | 54.68281 |
|  | c.v. | 0.553392 | 0.249988 | 0.847791 | 0.223454 |
| BOKL | mean | 1060 | 40.942 | 27.022 | 209.968 |
|  | s.d. | 746.9337 | 11.60298 | 15.17438 | 23.32737 |
|  | c.v. | 0.704654 | 0.2834 | 0.561557 | 0.1111 |
| SBL | mean | 742.6667 | 11.482 | 0.79 | 116.696 |
|  | s.d. | 431.3206 | 10.4353 | 0.387019 | 14.95581 |
|  | c.v. | 0.580773 | 0.90884 | 0.489898 | 0.12816 |
| Overall Value | Mean | 2247.13 | 77.17 | 59.39 | 262.3 |
|  | S.D. | 1878.09 | 52.62 | 50.81 | 123.114 |
|  | C.V. | 0.8357 | 0.6818 | 0.8556 | 0.4693 |

During the study period, the mean of SCBNL, analysis period is Rs. 4119 that means average MPS of SCBNL is Rs. 4119. The standard deviation of SCBNL is 1970.927 and the coefficient of variation is 0.4784 . The $47.84 \%$ CV of MPS indicates that there is light fluctuation in MPS of SCBNL. The average EPS earned by SCBNL during the study period is 152.364 . The standard deviation of EPS is 16.47 . The coefficient of variation is 0.1081 , which shows that there is no high risk involved in earning capacity of SCBNL.

The average DPS of this bank is Rs. 126 with the standard deviation of 10.19. The coefficient of variation is 0.0809 i.e. $8.09 \%$ which indicates that there is less fluctuation in DPS during the study period. The average BVPS is Rs. 440.69 with 43.46 standard deviation. The coefficient of variation is 0.0986 i.e. $9.86 \%$ which shows there is less fluctuation in BVPS.

SCBNL is distributing its dividend each year over the period. The industry average of CV (overall CV) of MPS, EPS, DPS, and BVPS are $83.57 \%$, $68.18 \%, 85.56 \%$ and $46.93 \%$ respectively. This shows that all the financial indicators MPS, EPS, DPS and BVPS of SCBNL have low degree of CV than that of industry average. It means they are less volatile than other banks, which in fact show the more consistent in Bank's financial performance.

Under the study of Nabil, the average MPS is Rs. 3014.The standard deviation is 179.43 and the coefficient of variation is $59.7 \%$ during the study period. It indicates that there is moderate risk involved in market price of share for the investor and shareholders of this bank. The average EPS earned by this bank during the study period is 114.54 . The standard deviation is 16.27 and the coefficient of variation is 0.14 . This shows that there is diminutive risk involved in earning capacity of Nabil. The average DPS is Rs. 92 with standard deviation of 26.94. The coefficient of variation is $29.29 \%$, which indicates that there is moderate fluctuation in DPS of Nabil During the study period. The average BVPS is Rs. 358.2 with 39.58 standard deviation. The coefficient of
variation is $11.05 \%$, which indicates that there is less fluctuation in DPS of Nabil during the study period.

The industry average of CV (overall CV) of MPS, EPS, DPS and BVPS are 83.57, $68.18,85.56$ and 46.93 respectively. This shows that all the financial indicators MPS, EPS, DPS and BVPS of Nabil have low degree of CV than that of industry average. It means it is less volatile than other banks, which in fact show the more consistent in bank's financial performance.

Under the study of EBL, the mean MPS of analysis period is Rs. 1698.2. The standard deviation is 939.77 and the coefficient of variation is 0.55 . The $55 \%$ CV of MPS explains that there is moderate risk involved in market price of share for the investor and shareholders of the bank.

The average EPS earned by this bank during the study period is 66.56 . The standard deviation is 16.64 and the coefficient of variation is 0.24 . The $24 \%$ CV of EPS explains that there is low risk in earning capacity of EBL. The average DPS is Rs. 16 with standard deviation of 13.56. The coefficient of variation is $84 \%$, which indicates that there is high fluctuation of DPS during the study period. The BVPS is Rs. 244.71 with 54.68 standard deviation. The coefficient of variation is $22.34 \%$, which indicates that there is not as much of fluctuation in BVPS during the study period.

The industry average CV (overall CV) of MPS, EPS, DPS and BVPS are $83.57 \%, 68.18 \%, 85.56 \%$ and $46.93 \%$ respectively. This shows that all the financial indicators MPS, EPS, DPS and BVPS of EBL have low degree of CV than that of industry average. However, the DPS of the company involves exceptionally in high degree of risk in comparison to other indicators because of high oscillation in dividend payout. In general, bank has volatility in all indicators in comparison with whole industry. Less volatility in these indicators of this bank indicates consistency in the financial performance.

Under the study of BOKL, the average MPS is Rs. 1060. The standard deviation is 746.93 and the coefficient of variation is $70.76 \%$ during the study period. It indicates that there is high fluctuation in MPS of this bank.

The average EPS is Rs. 40.94 and the standard deviation is 11.60. The coefficient of variation is $28.35 \%$. The CV of EPS indicates that there is not high risk involved in earning capacity of BOKL. The average DPS of the bank is Rs. 27.17 with 15.17 standard deviation. The coefficient of variation is $56.15 \%$. The CV of DPS indicates that there is moderate fluctuation in DPS of this bank. The average BVPS is Rs. 209.96 with 23.32 standard deviation. The coefficient of variation is $11.11 \%$, which indicates that there is light fluctuation in BVPS during the study period.

The distribution of dividend seems to be much volatile for the company with the coefficient of variation $56.15 \%$, where as book value seems to be less volatile with the coefficient of variation $11.11 \%$. The higher volatile in DPS is because of irregular distribution of DPS. The market price per share is moderately volatile with CV of $70.46 \%$.

The industry average of CV (overall CV) of MPS, EPS DPS and BVPS are $83.57 \%, 68.18 \%, 85.56 \%$ and 46.93 respectively. This shows that all the financial indicators MPS, EPS, DPS and BVPS have low degree of CV than that of industry average. This means they are moderate volatile, which in fact shoe the more consistent in bank's financial performance.

Under the study of SBL, the mean MPS of analysis period is Rs. 742.667. The standard deviation is 431.32and the coefficient of variation is 0.58 . The $58 \%$ CV of MPS explain that there is moderate risk involved in market price of share for the investor and shareholders of this bank.

The average EPS earned by this bank during the study period is Rs.11.48.The standard deviation is 10.43 and the coefficient of variation is 0.9088 . The $90.88 \%$ of EPS explains that there is high risk involved in earning capacity of

SBL. The average DPS is Rs. 0.79 with standard deviation of 0.387 . The coefficient of variation is $48.98 \%$, which indicates that there is moderate fluctuation in DPS during the study period.

The average BVPS is Rs 116.696 with 14.95 standard deviation. The coefficient of variation is $12.82 \%$, which indicates that there is less fluctuation in BVPS during the study period.

The industry average CV (overall CV) of MPS, EPS, DPS and BVPS are $83.57 \%, 68.18 \%, 85.56 \%$ and $46.93 \%$ respectively. This shows that all the financial indicators MPS, DPS and BVPS of SBL have low degree of CV than that of industry average. However, EPS of SBL has high degree of CV than that of industry average. It means there is high risk in earning capacity of SBL.

Thus, the above analysis shows the CV of MPS in BOKL is high among the sampled banks, which indicates that there is high risk involved in market price of share for the investors and shareholders of this bank. The CV of MPS in SCBNL is low which indicates that there is low risk involved in market price of share for the investors and shareholders of this bank.

The CV of EPS in SBL is the highest, which mean that SBL's common stocks are riskier as compared to other banks. The CV of SCBNL is lower comparing with others and it is less risky among all.

The CV of DPS of EBL is the highest and SCBNL has the lowest. The SBL has also the high coefficient of variation among the sampled banks. The CV of EBL and SBL indicates that both banks common stock are riskier as compared to other sampled banks. The least CV of SCBNL indicates that SCBNL has the highest consistency in paying dividend.

The EBL has the highest and SCBNL has the lowest CV of BVPS respectively. The CV of EBL shows that there is high fluctuation in BVPS and CV of SCBNL shows lower fluctuation among the sampled banks.

### 4.3 Correlation Analysis

The correlation analysis overall data is done to find out the relationship of different variables with MPS.

| Table No. 4.2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Relationship of MPS with EPS, DPS \& BVPS |  |  |  |  |

The correlation between MPS and EPS is 0.736. It shows that MPS is significantly positively correlated with EPS at 0.01 level of significance (2tailed). It indicates that when EPS increases MPS also increases and viceversa. The coefficient of determination is 0.5416 , which indicates that nearly $54 \%$ of the total change in MPS is due to the effect of EPS and rest $46 \%$ change in MPS is due to other factors. The correlation between MPS and DPS is 0.769 . It reveals that MPS is significantly highly positively correlated with DPS at 0.01 level of significance (2-tailed). It indicates that when DPS increases MPS also increases and vice versa. The coefficient of determination 0.5913 explains that nearly $59 \%$ of the total change in MPS is due to the effect of DPS and remaining $41 \%$ change in MPS is due to other factors. The correlation of MPS with BVPS is 0.755 . Correlation between MPS and BVPS shows that there is also high degree of positive relationship. The coefficient of determination between MPS and BVPS is 0.5700 that means nearly $57 \%$ variation in MPS is explained by variation in BVPS. Rest $43 \%$ is explained by other factors. The correlations of individual factors with MPS have very high degree of association with MPS. We cannot conclude that any of single factors
play more vital role to fix the price of MPS. All the factors have almost equal significance in the price determination of share.

### 4.4 Regression Analysis

The regression analysis is carried out to determine whether the dependent variable is influenced by the given independent variables or not.

### 4.4.1 Simple Regression Analysis

## 1. MPS on EPS

Where, MPS is dependent and EPS is independent.
Table No. 4.3
Regression Coefficient
MPS = a + b EPS

| Bank | Regression <br> Constant (a) | Regression <br> Coefficient (b) | $\mathrm{R}^{2}$ |
| :--- | :--- | :--- | :--- |
| SCBNL | 4061.28 | 0.379 | 0.000 |
| Nabil | -3752.95 | 59.07 | 0.286 |
| EBL | -2035.62 | 56.09 | 0.987 |
| BOKL | -1485.63 | 62.17 | 0.933 |
| SBL | -1855.74 | 168.65 | 0.994 |

Table 4.3 shows the simple regression analysis between MPS and EPS of selected commercial banks.

The correlation of MPS and EPS of all banks are positive. The regression coefficient of SCBNL, Nabil, EBL, BOKL and SBL are 0.379, 59.07, 56.09, 62.17 and 168.65 respectively. It indicates that holding other variable constant one-rupee increase in EPS leads to an average of about Rs.0.379, 59.07, 56.09, 62.17 and 168.65 increases in stock price of SCBNL, Nabil, EBL, BOKL and SBL respectively.

The coefficient of multiple determinations is $0.000,0.286,0.987,0.933$ and 0.994 of SCBNL, Nabil, EBL, BOKL and SBL respectively. The $R^{2}$ of SCBNL is lowest among other banks. It indicates that 0.00 or there is no variation in MPS is explained by EPS. This value is highest in case of SBL, which indicates that $99.4 \%$ variation in MPS is explained due to change in EPS of the bank. Similarly, $28.6 \%, 98.7 \%$ and $93.3 \%$ variation in MPS is explained due to change in EPS of Nabil, EBL and BOKL respectively. It can be concluded that the MPS of these bank is highly affected by EPS except SCBNL.

The value of constant (a) is 4061.28, -3752.95, -2035.62, -1485.63 and 1855.74 of SCBNL, Nabil, EBL, BOKL and SBL respectively. The value of constant of SCBNL has positive. This shows that MPS of this bank is highly affected by other factor besides the EPS of the bank. But in contrary, negative constant of Nabil, EBL, BOKL and SBL banks show that the MPS of respective banks are deeply depends on the EPS or earning behavior of the stocks of respective banks.

## II. MPS on DPS

Where, MPS is dependent variable and DPS is independent variable.
Table No. 4.4
Regression Coefficient
MPS = a + b DPS

| Bank | Regression <br> Constant (a) | Regression <br> Coefficient (b) | $\mathrm{R}^{2}$ |
| :--- | :--- | :--- | :--- |
| SCBNL | -10850.76 | 118.80 | 0.378 |
| Nabil | -2278.15 | 57.52 | 0.742 |
| EBL | 856.39 | 56.09 | 0.577 |
| BOKL | 275.09 | 29.04 | 0.348 |
| SBL |  |  |  |

Table 4.4 shows the simple regression MPS on DPS of selected commercial banks. The correlations of all the banks are positive and regression coefficient of SCBNL, Nabil, EBL and BOKL are 118.80, 57.52, 56.09 and 29.04 respectively. It indicates that holding other variable constant one-rupee increases in DPS leads to an average of about Rs. 118.80, 57.52, 56.09 and 29.04 increases in stock prices of SCBNL, Nabil, EBL and BOKL respectively. The unavailability of DPS of SBL leads no results in this regards.

The regression constant (a) of all the selected banks except SCBNL and Nabil are positive. All banks regression constant is high which indicates the average level of dependent variable or average affect on dependent variable if all variables omitted from the model. The regression constant of SCBNL and Nabil are -10850.76 and -2278.15 respectively i.e. negative, which show that MPS of these banks are deeply related with the DPS. But the regression constant of other banks (positive constant) show that the MPS of all banks are highly affected by other factors besides DPS.

The coefficient of determination $R^{2}$ SCBNL, Nabil, EBL and BOKL are 0.378, $0.742,0.577$ and 0.348 respectively. This means that $37.8 \%, 74.2 \%, 57.7 \%$ and $34.8 \%$ variation in MPS of SCBNL, Nabil, EBL and BOKL respectively are explained by the change in DPS of the respective banks and the $\mathrm{R}^{2}$ of SBL shows that there is no variation in MPS due to DPS.

## III. MPS on BVPS

Where, MPS is dependent variable and BVPS is independent.

Table No. 4.5
Regression Coefficient
MPS $=\mathbf{a}+\mathbf{b}$ BVPS

| Bank | Regression <br> Constant (a) | Regression <br> Coefficient(b) | $\mathrm{R}^{2}$ |
| :--- | :--- | :--- | :--- |
| SCBNL | -2522.87 | 15.07 | 0.110 |
| Nabil | -8040.92 | 30.86 | 0.461 |
| EBL | -2383.44 | 16.67 | 0.942 |
| BOKL | 1921.015 | -4.101 | 0.16 |
| SBL | -5113.541 | 46.001 | 0.571 |

Table 4.5 shows the simple regression analysis between MPS and BVPS of selected commercial banks. The correlation of MPS and BVPS of all banks are positive except BOKL. The regression coefficient of SCBNL, Nabil, EBL and SBL are positive. It means the correlation between MPS and BVPS of those banks are positive. The regression coefficient of SCBNL, Nabil, EBL, BOKL and SBL are $15.07,30.86,16.67,-4.101$ and 46.01 respectively. It indicates that holding other variable constant one-rupee increase in BVPS leads to and average of about Rs. 15.07, Rs.30.86, Rs. 16.67 and Rs. 46.01 increases in MPS in case of SCBNL, Nabil, EBL and SBL and average of about Rs. 4.10 decreases in MPS in case of BOKL.

The coefficient of multiple determinations $\mathrm{R}^{2}$ of SCBNL, Nabil, EBL, BOKL and SBL are $0.110,0.461,0.942,0.16$ and 0.571 respectively.

The $\mathrm{R}^{2}$ of SCBNL is lowest and EBL has the highest among the sample banks. It indicates that the variation in MPS of $11 \%, 46.1 \%, 94.2 \%, 16 \%$ and $57.1 \%$ are explain by the variation in BVPS of respective banks.

The value of constant (a) is $-2522.87,-8040.92,-2383.44,1921.01$ and 5113.54 of SCBNL, Nabil, EBL, BOKL and SBL respectively. The values of constant of BOKL show that MPS of respective bank is highly affected by
other factor besides BVPS of the bank. But in Contrary, negative constant of SCBNL, Nabil, EBL and SBL shows that the MPS of respective banks are deeply affected by BVPS besides other factors.

### 4.4.2 Multiple Regression Analysis

Multiple regression analysis is done to find out the relationship of MPS on EPS, DPS, and BVPS.

Where, MPS is dependent variable and EPS, DPS and BVPS are independent variables.

Regression equation

MPS $=a+b_{1}$ EPS $+b_{2}$ DPS $+b_{3}$ BVPS
Table No. 4.6
Multiple regression analysis of MPS on EPS, DPS and BVPS

| Bank | Regression <br> Constant | Regression coefficient |  |  | Multiple Correlation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | a | $\mathrm{b}_{1}$ | $\mathrm{~b}_{2}$ | $\mathrm{~b}_{3}$ | r | $\mathrm{r}^{2}$ |
| SCBNL | -11725.12 | -1.350 | 0.848 | 0.991 | 0.920 | 0.846 |
| Nabil | -14557.61 | -2.662 | 0.272 | 3.046 | 0.938 | 0.880 |
| EBL | 2.893 | 2.427 | 0.584 | -1.920 | 0.995 | 0.990 |
| BOKL | -2059.26 | 1.314 | -0.449 | 0.38 | 1.00 | 1.00 |
| SBL | 13437.92 | . | . | -1.00 | 1.00 | 1.00 |

The table shows the result of multiple regression analysis of selected commercial banks that MPS depends on EPS, DPS and BVPS.

As far as regression coefficient is concerned the beta coefficient $b_{1}$ for EPS, $b_{2}$ for DPS, $b_{3}$ and for BVPS.

Under the study of SCBNL, the regression coefficient of EPS, DPS and BVPS denoted by $b_{1}, b_{2}$, and $b_{3}$ are $-1.350,0.848$ and 0.991 respectively. It means that Rs. 1increase in DPS and BVPS leads to Rs. 0.848 and Rs. 0.991 increase in MPS respectively. Moreover, Rs. 1 increase in EPS leads to Rs. 1.350 decrease in MPS.

The regression constant ' $a$ ' in multiple regressions that MPS on EPS, DPS and BVPS is -11725.12 . The multiple correlations between MPS, EPS, DPS and BVPS are 0.920 with 0.846 coefficients of multiple determinations. It indicates that nearly $92 \%$ variation in MPS is due to the joint effect of EPS, DPS and BVPS and remaining $8 \%$ change in MPS is due to the effect of other factors.

In case of Nabil, the regression coefficient of EPS, DPS and BVPS denoted by $b_{1}, b_{2}$, and $b_{3}$ are $-2.662,0.272$ and 3.046 respectively. It means that Rs 1 increase in DPS and BVPS leads to Rs. 0.272 and 3.046 increase in MPS respectively. And Rs. 1 increase in EPS leads to Rs. 2.662 decrease in MPS.

The regression constant ' $a$ ' in multiple regressions is -14557.61 . The multiple correlations between MPS, EPS, DPS and BVPS are 0.938 and coefficient of multiple determinations is 0.880 . It states that there is high degree of closeness and about $93.8 \%$ change in MPS of total change is due to the joint effect of change in EPS, DPS and BVPS.

In EBL, the regression coefficient of EPS, DPS and BVPS denoted by $b_{1}, b_{2}$ and $b_{3}$ are $2.427,0.584$ and -1.920 respectively. It means that Rs. 1 increase in EPS and DPS leads to Rs.2.427, and Rs. 0.584 increase in MPS respectively. Moreover, Rs. 1 increase in BVPS leads to Rs. 1.920 decrease in MPS.

The regression constant ' $a$ ' in multiple regressions that MPS on EPS, DPS, and BVPS is 2.893. The multiple correlations between MPS, EPS, DPS and BVPS are 0.995 with 0.990 coefficients of multiple determinations. It indicates that nearly $99 \%$ variation in MPS is due to the joint effect of EPS, DPS, and BVPS and remaining $1 \%$ change in MPS is due to the effect of other factors.

Under the study of BOKL, the regression coefficient of EPS, DPS and BVPS denoted by $b_{1}, b_{2}$ and $b_{3}$ are $1.314,-0.449$ and 0.38 respectively. It means that Rs. 1 increase in EPS and BVPS leads to Rs. 1.314 and Rs 0.38 increases in MPS respectively and Rs. 1 increase in DPS leads to 0.449 decreases in MPS.

The regression constant ' $a$ ' in multiple regressions that MPS on EPS, DPS and BVPS is -2059.26. The multiple correlations between MPS, EPS, DPS and BVPS are 1.00 with 1.00 coefficients of multiple determinations. It indicates that $100 \%$ variation in MPS is due to the joint effect of EPS, DPS and BVPS. It means MPS is perfectly correlated with EPS, DPS and BVPS.

In case of SBL, the regression coefficient of EPS, DPS and BVPS is denoted by $b_{1}, b_{2}$ and $b_{3}$ are 0,0 and -1 respectively. It means that Rs. 1 increase in BVPS leads to Rs. 1 decrease in MPS. But the regression coefficient of EPS and DPS cannot be calculated due to irregular dividend and earnings.

The regression constant ' $a$ ' is 13437.92. The multiple correlation and coefficient are 1 and 1 respectively. It indicates that $100 \%$ variation in MPS is due to the joint effect of EPS, DPS and BVPS.

### 4.5 Primary Data Analysis and Presentation

Another measure applied to gather information relevant to the topic is questionnaire method. For collecting primary data a questionnaire having a set of 23 questions were prepared and presented to 50 respondents. The respondents were selected randomly from the group of share- known personalities especially form the share buyer/ purchasers in broker's office and college students. The questions contained variety in types. The questions from 1 to 5 were of multiple choice type in which the respondent were asked to choose the best alternative from the list. Remaining question No. 6(under 1 to 18), the degree of agreement over the statement was asked to mention and according to their degree of agreement, the score was provided.

### 4.5.1 Classification of Respondents

A total of 50 respondents were surveyed randomly to conclude the determinants of share price of Nepalese Commercials Banks. Among these, 30 respondents were professional investors of share investment, 18 were potential investors who are willing or invest in share but have not invested yet and rests 2 were market analyzer.

Table No.4.7
Classification of Respondents

| Basis of Classification | Number | Percentage |
| :--- | :---: | :---: |
| Professional Investor | 30 | 60 |
| Potential Investors <br> (Management Students) | 18 | 36 |
| Market Analyzer | 2 | 4 |
| Total | 50 | 100 |

A number of questions were put by means of copies of questionnaire.
I. Publication of Financial reports changes a company's share price.

The first question asked the respondents that publication of financial reports changes a company's share price. Table No. 4.8 shows the result of the responses.

Table No.4.8
Publication of Financial reports changes a company's share price

| S.N. | Responses | No. of respondents | Percentage |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Yes | 40 | 80 |  |  |  |
| 2. | No | 8 | 16 |  |  |  |
| 3. | Don't know | 2 | 4 |  |  |  |
| Total |  |  |  |  | 50 | 100 |

The above table shows the number of respondents and their percentage relating the changes a company's share price due to publication of financial reports. Majority of respondents i.e. $80 \%$ said yes to the statement that
means a company's share price is changed due to the publication of financial reports. It has been shown in following chart (figure No. 4.1) as follows.

Figure No.4. 1
Publication of Financial reports changes a company's share price.

II. Financial reports of companies listed on stock exchange are only the publicly available information useful in identifying over or undervalued securities.

The following table (Table No.4.9) shows the responses against the statement that financial reports of companies listed on stock exchange are publicly available information useful in identifying over or undervalued securities.

Table No. 4.9
Financial reports are useful in identifying over or under valued securities.

| S.N. | Responses | No. of respondents | Percentage |
| :---: | :---: | :---: | :---: |
| 1. | Yes | 45 | 90 |
| 2. | No | 4 | 8 |
| 3. | Don't know | 1 | 2 |
| Total |  | 50 | 100 |

Over or undervaluation of securities are identified by financial reports of companies listed on stock exchange. $90 \%$ of the respondents said yes, $8 \%$ said no and rest 2 respondents said do not know to this statement. This shows that financial reports of listed companies are one type of publicly available information useful in identifying over or undervalued securities. It has been shown in following chart (figure No. 4.2) as follows.

Figure No. 4.2:
Financial reports of companies are useful in identifying over or undervalued securities

III. Public listed companies are not serious towards shareholders interests.

The responses of the respondents regarding the seriousness of public listed companies towards shareholders interest are summarized and presented in Table No.4.10.

Table No. 4.10
Public listed companies are not serious towards shareholders interests

| S.N. | Responses | No. of respondents | Percentage |
| :---: | :---: | :---: | :---: |
| 1. | Yes | 35 | 70 |
| 2. | No | 15 | 30 |
| 3. | Don't know | 0 |  |
|  | Total | 50 | 100 |

$70 \%$ of the respondents said yes and $30 \%$ said no to this statement. The response shows that public/ listed companies are not serious towards shareholders interests.

It has been shown in following chart (Figure No. 4.3) as follows.
Figure No. 4.3
Public listed companies are not serious towards shareholders interests

IV. NEPSE and Securities Board are able to protect investor's interest effectively.

The following table (table No. 11) shows the responses against the statement that NEPSE and Securities board are able to protect investor's interest effectively.

Table No. 4.11
NE PSE and Securities Board are able to protect investor's interest effectively.

| S.N. | Responses | No. of respondents | Percentage |
| :---: | :---: | :---: | :---: |
| 1. | Yes | 17 | 34 |
| 2. | No | 33 | 30 |
| 3. | Don't know |  |  |
| Total |  | 50 | 100 |

Only minority of the respondents agreed to the statement and the majority did not agreed. It means that NEPSE and Securities Board are not able to protect investor's interest effectively. It has been shown in following chart (Figure No. 4.4) as follows.

Figure No. 4.4
NEPSE and Securities Board are able to protect investors interest effectively.

V. Future price changes of a given share can be predicted from historical price changes.

The responses of the respondents regarding the prediction of future price changes from historical price changes are summarized and presented in table No. 4.12.

Table No. 4.12
Future price changes of a given share can be predicted from historical price changes

| S.N. | Responses | No. of <br> respondents | Percentage |
| :---: | :---: | :---: | :---: |
| 1. | Yes | 10 | 20 |
| 2. | No | 40 | 80 |
| 3. | Don't know |  |  |
| Total |  |  |  |

Only $20 \%$ of the respondents said yes and $80 \%$ said no to this statement. The response shows that, Future price changes of a given share can not be predicted from historical price changes. It has been shown in following chart (Figure No. 4.5) as follows.

Figure No. 4.5
Future Price changes of a given share can be predicted from the historical price changes


The mean value of the questionnaire of the total respondents is presented below:

| S.N | Statement | Mean Value |
| :---: | :---: | :---: |
| 1. | Higher the EPS, higher would be the share price. | 1.17 |
| 2. | Higher the DPS/cash dividend, higher would be the share price. | 1.5 |
| 3. | Lower the growth rate (g) of the company, higher would be the share price. | 3.85 |
| 4. | Higher the retention ratio, better the market price of share. | 2.35 |
| 5. | Higher the cost of equity ( $\left.\mathrm{K}_{\mathrm{e}}\right)$ reduces the share price. | 1.5 |
| 6. | If interest/reinvestment rate (r) increases, share price also increases. | 2.20 |
| 7. | Larger companies have higher share price. | 3.85 |
| 8. | Dividends have stronger effect in market price of share | 1.75 |
| 9. | Higher the book value per share, higher would be the share price. | 3.2 |
| 10. | Higher the risk associated with a company, higher would be the share price. | 2.65 |
| 11. | Share price also affected by the instability of the government. | 1.4 |
| 12. | Information on favorable future prospect would increase market price of share. | 2.10 |
| 13. | Share price decreases with the increase in liquidity in market. | 3.15 |
| 14. | Share price reacts positively/ negatively with the change in management. | 1.63 |
| 15. | Better capital structure results higher share price. | 3.15 |
| 16. | Annual general Meeting and the election of board of director influence the share price. | 2.45 |
| 17. | Rumors and whims affects share price. | 1.25 |
| 18. | NRB regulation and monitoring steps affects the share price. | 1.75 |

From the above primary questionnaire asked to the investors, researchers and management students. Among them average respondents gave following response, which is presented below:

## The strongly agreed statement is as follows:

I. Higher the EPS, higher would be the share price.

The statement has high response that means in context of Nepal earning per share is the main determinant of share price. Share price is strongly affected by EPS. Increase in EPS significantly increases the market price of share and vice versa.

Most of them are agreed on these statements as follows:

| I | Higher the DPS/ cash dividend, higher would be the share price. |
| :--- | :--- |
| II | Higher the cost of equity $\left(\mathrm{K}_{\mathrm{e}}\right)$ reduces the share price. |
| III | Share price also affected by the instability of the government. |
| IV | If interest/reinvestment rate(r) increases, share price also increases. |
| V | Information on favorable future prospect would increase market price of <br> share. |
| VI | Regulation and monitoring steps of NRB influence the share price. |
| VII | Higher the retention ratio, better the market price of share. |
| VIII | Share price reacts positively/ negatively with the change in management. |
| IX | Annual general Meeting and the election of board of director influence <br> the share price |
| X | Rumors and whims affects share price |
| XI | NRB regulation and monitoring steps affects the share price. |

The above statement has just only agreed that higher cash dividend would increase the share price. Increase in interest/ reinvestment rate also effects in share price. The high retention ratio also leads to the better market price. The respondents also agreed that higher cost of equity (ke) reduces the share price. Market price of share is strongly affected by dividends than retained earnings. The change or instability of the government also affects the share price. A company's risk also affects the share price and the information on favorable
future prospect also increases the market price of share. Regulation and monitoring steps of NRB also influence the share price. Share price are mostly affected by rumors and whims. This shows that share price are affected by cash dividend, interest rate, dividends, political instability, company's risk, information regulation and monitoring steps and rumors and whims.

## The disagreed statement is as follows:

I. Lower the growth rate (g) of a company, higher would be the share price.
II. Larger companies have higher share price.
III. Higher the book value per share, higher would be the share price.
IV. Better capital structure results higher share price.

The above statement states that the lower growth rate of a company and higher book value does not have higher share price. It also explains that larger companies do not have higher share price. It also explains that better capital structure alone do not results higher price. Thus, lower growth rate, higher book value per share, better capital structure does not affect the share price.

### 4.6 Major findings of the study

Because of the different nature of the data, the major findings of the study are presented separately for the secondary data analysis and primary data analysis.

1. The study shows that the CV of MPS in BOKL is high among the selected banks. There is high risk associated in market price of share for the investors and shareholders of this bank. The CV of MPS in SCBNL is low which indicates that there is low risk involved in market price of share.
2. The CV of EPS in SBL is the highest, which mean that SBL's common stock, are riskier as compared to other banks. The CV of SCBNL is lower comparing with others and it is less risky among all.
3. The CV of DPS in EBL is the highest and SCBNL has the lowest. The BOKL and SBL have also the high coefficient of variation. Thus, it can be concluded that EBL has higher fluctuation in DPS among all selected banks. The CV of BOKL and SBL indicates that these banks common stocks are riskier as compared to other sample banks. The least CV of SCBNL indicates that SCBNL has the highest consistency in paying dividend.
4. The EBL has the highest and SCBNL has the lowest CV of BVPS respectively. The CV of EBL shows that there is fluctuation in BVPS and CV of SCBNL shows lower fluctuation among the sampled banks.
5. The correlation analysis shows there is high degree of positive relationship of MPS with EPS among all other different variables and is significant at 0.01 level of significance (2-tailed).
6. The simple regression analysis of MPS on EPS shows that the MPS of SBL is highly affected by EPS than the other banks and MPS of SCBNL has not affected by EPS.
7. The simple regression analysis of MPS on DPS shows that MPS of Nabil and EBL are highly affected by DPS and MPS.
8. The simple regression analysis of MPS on BVPS shows that MPS of EBL is highly affected by BVPS than other banks and MPS of SCBNL is lightly affected by BVPS.
9. The coefficient of multiple determination shows MPS of BOKL and SBL is highly (totally) influenced by the joint effect of EPS, DPS and BVPS and there is a lesser amount of variation in MPS of SCBNL.

## The findings from the survey are as follows:

1. The primary analysis shows that financial reports of companies listed on stock exchange helps in identifying over or undervalued securities. To change the share price of a company, publication of financial report has greater value. Only minority of the respondents support the future price change of a share can be predicted from historical price changes. The majority of the respondents support the statement that public /listed companies are not serious towards shareholder's interests. Minority of the respondents support that NEPSE and Securities Board are able to protect investor's interest effectively.
2. On the specific opinion about the factors affecting the share price in commercial banks in Nepal, EPS was the most agreed observation. It means that share price is strongly affected by EPS.
3. The responses shows cash dividend, interest rate, political instability, risk of the company, information, rumors and whims, also affect the share price.

## CHAPTER- V

## SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter consists of three sections; first section provides the summary of the study, the second draws the conclusion of the study and the final section proposes recommendation to deal with the problems observed on the basis of findings.

### 5.1 Summary

The Nepalese capital market is in its crowing stage. Average citizens and investors have not proper ideas about the capital market, share, book value, par value, market price, pricing mechanism and the factors affecting the market price of shares. They are willing to invest, but are not able to do so due to lack of knowledge, in this subject. In spite of that, the listed companies in the capital market are suffering. The policy and view of every major party who ruled the government have different towards capital market. Hence, policy and priority has also changed with changed in government. Government has not given priority for the development of capital market even though it was in the priority list in the tenth five-year plan and interim 3-year plan also. Government is not able to create implementation, for the capital market development. As a result, there is not adequate transparency in the performances of the listed companies and the capital market due to which the capital market is struggling to become matured. The stock investors have not proper education and information to speculate the share price.

The study is focused on the determinants of stock price in commercial banks. The major objectives of the study are to identify factors affecting share price, to analyze correlation among various financial indicators and to identify qualitative factors affecting the stock price listed in NEPSE.

To meet the desired objectives, the correlation of the quantitative factors, EPS, DPS, and BVPS with MPS by correlation analysis is identified. The regression
of factors EPS, DPS and BVPS with MPS were employed for the analysis and interpretation of the collected secondary data. Whereas, to identify the qualitative factors affecting the market price of shares, the primary data has been used that was collected from the research questionnaire.

From the secondary data analysis it is known that there is not consistent performance in the relationship of MPS with EPS, DPS and BVPS for the 5 sampled banks.

The MPS has high correlation with EPS is significant at 0.01 level of significance (2-tailed). The MPS largely depends on EPS. The correlation of MPS with EPS, DPS, and BVPS is significant at 0.01 level of significance (2tailed). The correlation of MPS shows the positive correlation between all the variables taken in consideration.

The simple regression analysis of MPS on EPS shows that regression coefficient (b) is positive for all sample banks. The $r^{2}$ of SBL is highest and is lowest for SCBNL. This means the MPS of SBL is highly affected by EPS than the other banks.

The simple regression analysis of MPS on DPS shows that regression coefficient (b) is positive for all sample banks. The $r^{2}$ of Nabil is highest which means MPS of Nabil is highly affected by DPS than other banks. The $r^{2}$ of BOKL shows that MPS of BOKL is least affected by DPS.

The simple regression analysis of MPS on BVPS shows that regression coefficient (b) of SCBNL, Nabil, EBL and SBL are positive and negative for BOKL. The $\mathrm{r}^{2}$ of EBL is highest which explain that MPS of EBL is highly affected by BVPS than other banks. The $r^{2}$ of SCBNL is lowest which explains that MPS of SCBNL is lightly affected by BVPS.

The multiple regression coefficients (b) of MPS on DPS and BVPS of SCBNL is positive and MPS on EPS is negative. For Nabil DPS and BVPS are positive and EPS is negative. For EBL the multiple regression coefficients (b) of MPS
on EPS and DPS are positive. Regression coefficient (b) of MPS on EPS and BVPS are positive in case of BOKL. Incase of SBL regression coefficient (b) of MPS on EPS and DPS could not identified due to lack of data payout dividend. All the positive value of coefficient indicates that there is positive increment in MPS if any increment in the selected variable and negative values show there are opposite relations.

The multiple correlations of SCNL, Nabil, EBL, BOKL and SBL are 0.920 , $0.938,0.995,1.00$ and 1.00 respectively with $0.846,0.880,0.990,1.00$ and 1.00 coefficient of multiple determination r2. It shows that MPS of BOKL and SBL are highly influenced by the joint effect of EPS, DPS and BVPS in which, $100 \%$ change of total change on MPS in BOKL and SBL are due to the change in EPS, DPS and BVPS and lowest 84.6 \% variation in MPS of

SCBNL is due to the variation in EPS, DPS and BVPS.

From the primary data analysis, factors affecting the market price of share in NEPSE are identified. Such internal factors affecting the share price are earnings, book value, dividend payment, growth rate, and risk associated with the company. Similarly, there are other environmental factors affecting the market price of share. Such environmental factors affecting the share price are government instability, information, rumors and whims. NEPSE is in primitive stage and it has not significant effect of interest rate, retention ratio, and cost of equity, market liquidity, and change in management.

### 5.2 Conclusion

This thesis paper addressed stock price determination in commercial banks in context of Nepal. It shows how share price are affected by different variables. The study is based on 5 sample commercial banks whose stocks are listed in Nepal stock exchange and traded in stock market.

The above-mentioned major findings show that the market price per share has high degree of positive relationship with EPS in all sample banks and MPS and MPS largely depends on EPS.

The simple regression analysis shows SBL is highly affected due to EPS and SCBNL is least affected by EPS besides several other factors. MPS of Nabil is highly affected by DPS and BOKL is least affected due to DPS. MPS of EBL is highly affected by BVPS and SCBNL is least affected by BVPS. In most of the cases, EPS explain the positive changes in MPS.

The multiple regression analysis shows the high degree of closeness in BOKL and SBL among the sampled banks and variation in MPS is due to the joint effect of change in EPS, DPS and BVPS. SCBNL has least variation in MPS due to the joint effect of change in EPS, DPS, and BVPS.

The risk per unit of return for investors and total risk are different in different sample banks, which have been shown by the coefficient of variation and standard deviation respectively. Earnings, book value, dividend payment, growth rate, and risk associated with the company information disclosed, political stability are the major factors affecting the share price in NEPSE, according to the respondents of the survey. Interest rate, retention ratio, cost of equity, market liquidity, change in management do not significantly affect the share price in NEPSE.

### 5.3 Recommendation

Based on this study, the major recommendations are as follows:

1. From the research, it is known that the investors lack the education and information to analyze companies' performance and forecast price. So they are recommended to foster their frontier of knowledge to protect them from loosing, since self- protection is the best protection. They hesitate to demand adequate information from the listed companies and though cheated, accept whatever the management of the companies
decides. So they are suggested to raise their voices and complain about such misconducts to SEBO/N and Ministry of Finance. They are suggested to forecast future price based on not only the company specific factors such as earnings, dividend, timely AGM etc, but also on environmental factors.
2. The Nepalese stock market (NEPSE, SEBO/N and NRB) should take some effective initiatives to control random fluctuation of MPS and establish the system of regular monitoring and evaluation of stock market, so that investors would be assured on the NEPSE, SEBO/N and NRB.
3. People in Nepal have shown the tendency to run after those companies, which have allocated higher bonus, right share, probably at the cost of future growth and opportunities. People invest their hard money on the basis of rumors and hearsay that are spread in financial market rather than intuitive rational financing thinking. Therefore, there is need of credit rating agencies and investment banks to analyze the companies.
4. The companies should provide updated reports to the investors periodically informing actual financial position of the company.
5. There is necessity of separate body to analyze strengths and weakness of public companies, which should disclose right information and suggestions to public investors about investment risk. This will help the investors to take proper investment decision at the right time to avoid or minimize the level of risk. The NEPSE, SEBO and NRB should be able to protect investor's interest effectively.
6. Government should formulate and implement a rigid rules and regulation for further development of share market. A mechanism to take immediate action for the faulty company is to be established.
7. The ultimate objective of any firm is to maximize the wealth position of its investors, which largely depends upon the proper trends of EPS, DPS,

BVPS and other dominant variables. This reality should be well imparted to the investors in order to make them rational in the field of investment for which the public companies themselves should frequently launch their well- designed awareness campaigns.

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## APPENDICES

## Appendix -1

## Simple Regression Analysis

1. MPS on EPS
A. SCBNL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of <br> the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .003 | .000 | -.333 | 2544.4433 |

a Predictors: (Constant), EPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 4061.281 | 10585.335 |  | .384 | .727 |
|  | EPS | .379 | 69.071 | .003 | .005 | .996 |

a Dependent Variable: MPS

## B. Nabil

## Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .534 | .286 | .048 | 1963.4471 |

a Predictors: (Constant), EPS

## Coefficients(a)

|  |  | Unstandardiz <br> ed <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Model |  | B | Std. <br> Error | Beta |  |  |
| 1 | (Constan | -3752.951 | 6240.60 |  | - | .590 |
|  | $\mathrm{t})$ |  | 7 |  | .60 |  |
|  | EPS | 59.079 | 53.942 | .534 | 1.0 | .353 |
|  |  |  |  |  | 95 |  |

a Dependent Variable: MPS

## C. EBL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of <br> the Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .993 | .987 | .982 | 140.9423 |

a Predictors: (Constant), EPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. <br> Error | Beta |  |  |
| 1 | (Constant) | -2035.612 | 259.896 |  | -7.832 | .004 |
|  | EPS | 56.094 | 3.788 | .993 | 14.809 | .001 |

a Dependent Variable: MPS

## D. BOKL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .966 | .933 | .911 | 249.8115 |

a Predictors: (Constant), EPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -1485.634 | 409.734 |  | -3.626 | .036 |
|  | EPS | 62.177 | 9.628 | .966 | 6.458 | .008 |

a Dependent Variable: MPS
E. SBL

## Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .994 | .989 | .977 | 55.5066 |

a Predictors: (Constant), EPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -1855.747 | 281.875 |  | -6.584 | .096 |
|  | EPS | 168.655 | 18.177 | .994 | 9.278 | .068 |

a Dependent Variable: MPS

Note: The simple regression coefficients of different variables are calculated using SPSS 10 software program. Other calculations are done accordingly.

## II. MPS on DPS

A. SCBNL

## Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .615 | .378 | .171 | 2006.8907 |

a Predictors: (Constant), DPS

Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -10850.769 | 11125.267 |  | -.975 | .401 |
|  | DPS | 118.808 | 88.008 | .615 | 1.350 | .270 |

a Dependent Variable: MPS

## B. Nabil

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .861 | .742 | .656 | 1180.1561 |

a Predictors: (Constant), DPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -2278.154 | 1877.777 |  | -1.213 | .312 |
|  | DPS | 57.523 | 19.588 | .861 | 2.937 | .061 |

a Dependent Variable: MPS
C. EBL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .759 | .577 | .436 | 789.3388 |

a Predictors: (Constant), DPS

Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 856.391 | 545.878 |  | 1.569 | .215 |
|  | DPS | 52.613 | 26.024 | .759 | 2.022 | .136 |

a Dependent Variable: MPS
D. BOKL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .590 | .348 | .131 | 778.4961 |

a Predictors: (Constant), DPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 275.096 | 711.046 |  | .387 | .725 |
|  | DPS | 29.047 | 22.944 | .590 | 1.266 | .295 |

a Dependent Variable: MPS

## E. SBL

## Warnings

For models with dependent variable MPS, the following variables are constants or have missing correlations: DPS. They will be deleted from the analysis.
For models with dependent variable MPS, fewer than 2 variables remain.
Statistics cannot be computed.

## III. MPS on BVPS

A. SCBNL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .332 | .110 | -.186 | 2399.7753 |

a Predictors: (Constant), BVPS

Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -2522.870 | 10933.218 |  | -.231 | .832 |
|  | BVPS | 15.071 | 24.689 | .332 | .610 | .585 |

a. Dependent Variable: MPS

## A. Nabil

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .679 | .461 | .281 | 1705.5989 |

a Predictors: (Constant), BVPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -8040.924 | 6944.235 |  | -1.158 | .331 |
|  | BVPS | 30.862 | 19.269 | .679 | 1.602 | .208 |

a Dependent Variable: MPS

## A. EBL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .971 | .942 | .923 | 292.4504 |

a Predictors: (Constant), BVPS

Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -2383.442 | 599.735 |  | -3.974 | .028 |
|  | BVPS | 16.679 | 2.392 | .971 | 6.974 | .006 |

a Dependent Variable: MPS

## A. BOKL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .128 | .016 | -.311 | 956.3467 |

a Predictors: (Constant), BVPS

Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 1921.015 | 3873.304 |  | .496 | .654 |
|  | BVPS | -4.101 | 18.334 | -.128 | -.224 | .837 |

a Dependent Variable: MPS

## A. SBL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .756 | .571 | .142 | 339.3509 |

a Predictors: (Constant), BVPS

## Coefficients(a)

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -5113.541 | 5081.719 |  | -1.006 | .498 |
|  | BVPS | 46.001 | 39.887 | .756 | 1.153 | .455 |

a Dependent Variable: MPS

## Appendix-2 <br> Multiple Regression Analysis

## A. SCBNL

## Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .920 | .846 | .386 | 1727.1275 |

a Predictors: (Constant), BVPS, DPS, EPS

## Coefficients

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -11725.123 | 9998.016 |  | -1.173 | .449 |
|  | EPS | -161.508 | 92.561 | -1.350 | -1.745 | .331 |
|  | DPS | 163.872 | 95.946 | .848 | 1.708 | .337 |
|  | BVPS | 44.939 | 34.503 | .991 | 1.302 | .417 |

a Dependent Variable: MPS
B. Nabil

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .938 | .880 | .519 | 1395.3759 |

a Predictors: (Constant), BVPS, DPS, EPS
Coefficients

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -14557.619 | 18606.638 |  | -.782 | .577 |
|  | EPS | -294.212 | 306.421 | -2.662 | -.960 | .513 |
|  | DPS | 18.145 | 78.820 | .272 | .230 | .856 |
|  | BVPS | 138.474 | 163.893 | 3.046 | .845 | .553 |

a Dependent Variable: MPS
C. EBL

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .995 | .990 | .962 | 205.7136 |

a Predictors: (Constant), BVPS, DPS, EPS

Coefficients

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 2.893 | 3244.382 |  | .001 | .999 |
|  | EPS | 137.076 | 126.867 | 2.427 | 1.080 | .475 |
|  | DPS | 40.450 | 64.870 | .584 | .624 | .645 |
|  | BVPS | -33.003 | 51.734 | -1.920 | -.638 | .639 |

a Dependent Variable: MPS
D. BOKL

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1.000 | 1.000 | .999 | 22.4470 |

a Predictors: (Constant), BVPS, EPS, DPS
Coefficients

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | -2059.264 | 137.931 |  | -14.930 | .043 |
|  | EPS | 84.600 | 1.649 | 1.314 | 51.303 | .012 |
|  | DPS | -22.080 | 1.394 | -.449 | -15.842 | .040 |
|  | BVPS | 1.201 | .570 | .038 | 2.109 | .282 |

a Dependent Variable: MPS

## D. SBL

## Warnings

For models with dependent variable MPS, the following variables are constants or have missing correlations: DPS. They will be deleted from the analysis.

Variables Entered/Removed

| Model | Variables Entered | Variables Removed | Method |
| :---: | :---: | :---: | :---: |
| 1 | BVPS | . | Enter |

a Tolerance $=.000$ limits reached.
b Dependent Variable: MPS

Model Summary

| Model | R | R Square | Adjusted R <br> Square | Std. Error of <br> the Estimate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1.000 | 1.000 | 1.000 | . |

a Predictors: (Constant), BVPS

## Coefficients

|  |  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 13437.926 | .000 |  | . | . |
|  | BVPS | -95.706 | .000 | -1.000 | . | . |

a Dependent Variable: MPS

## Appendix- 3

## Correlations Analysis

|  |  | MPS | EPS | DPS | BVPS |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MPS | Pearson Correlation | 1.000 | .736 | .769 | .755 |  |  |  |  |  |  |
|  | Sig. (2-tailed) | . | .000 | .000 | .000 |  |  |  |  |  |  |
|  | N | 23 | 23 | 22 | 23 |  |  |  |  |  |  |
| EPS | Pearson Correlation | .736 | 1.000 | .932 | .980 |  |  |  |  |  |  |
|  | Sig. (2-tailed) | .000 | . | .000 | .000 |  |  |  |  |  |  |
|  | N | 23 | 25 | 22 | 25 |  |  |  |  |  |  |
| DPS | Pearson Correlation | .769 | .932 | 1.000 | .934 |  |  |  |  |  |  |
|  | Sig. (2-tailed) | .000 | .000 | . | .000 |  |  |  |  |  |  |
|  | N | 22 | 22 | 22 | 22 |  |  |  |  |  |  |
| BVPS | Pearson Correlation | .755 | .980 | .934 | 1.000 |  |  |  |  |  |  |
|  | Sig. (2-tailed) | .000 | .000 | .000 | . |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 25 | 22 | 25 |

** Correlation is significant at the 0.01 level (2-tailed).

## Appendix- 4

## Calculation of Data

## Calculation of Mean, S.D. and CV of selected banks

## 1. Standard Chartered Bank Ltd Nepal

| Year | MPS | EPS | DPS | BVPS |
| :--- | ---: | ---: | ---: | ---: |
| $2003 / 04$ | 1745 | 143.55 | 110 | 399.25 |
| $2004 / 05$ | 2345 | 143.14 | 120 | 422.38 |
| $2005 / 06$ | 3775 | 175.84 | 140 | 468.22 |
| $2006 / 07$ | 5900 | 167.37 | 130 | 512.12 |
| $2007 / 08$ | 6830 | 131.92 | 130 | 401.51 |
| mean | 4119 | 152.364 | 126 | 440.696 |
| s.d. | 1970.927 | 16.4744 | 10.19804 | 43.46895 |
| c.v. | 0.478497 | 0.108125 | 0.080937 | 0.098637 |

## 2. Nabil Bank Ltd.

| Year | MPS | EPS | DPS | BVPS |
| :---: | :---: | :---: | :---: | :---: |
| $2003 / 04$ | 1000 | 92.61 | 65 | 301 |
| $2004 / 05$ | 1505 | 105.49 | 70 | 337 |
| $2005 / 06$ | 2240 | 129.21 | 85 | 381 |
| $2006 / 07$ | 5050 | 137.08 | 140 | 418 |
| $2007 / 08$ | 5275 | 108.31 | 100 | 354 |
| mean | 3014 | 114.54 | 92 | 358.2 |
| s.d. | 1799.432 | 16.27821 | 26.94439 | 39.58485 |
| c.v. | 0.597024 | 0.142118 | 0.292874 | 0.11051 |

## 3. Everest Bank Ltd. (EBL)

| Year | MPS | EPS | DPS | BVPS |
| :---: | :---: | :---: | :---: | :---: |
| $2003 / 04$ | 680 | 45.6 | 0 | 171.52 |
| $2004 / 05$ | 870 | 54.2 | 20 | 219.87 |
| $2005 / 06$ | 1379 | 62.8 | 0 | 217.67 |
| $2006 / 07$ | 2430 | 78.4 | 30 | 292.75 |
| $2007 / 08$ | 3132 | 91.82 | 30 | 321.77 |
| Mean | 1698.2 | 66.564 | 16 | 244.716 |
| s.d. | 939.7711 | 16.640204 | 13.56466 | 54.6828096 |
| c.v. | 0.553392 | 0.249988 | 0.8477912 | 0.22345417 |

## 4. Bank of Kathmandu Ltd.

| Year | MPS | EPS | DPS | BVPS |
| :---: | :---: | :---: | :---: | :---: |
| $2003 / 04$ | 295 | 27.5 | 10 | 218.38 |
| $2004 / 05$ | 430 | 30.1 | 15 | 213.6 |
| $2005 / 06$ | 850 | 43.67 | 48 | 230.67 |
| $2006 / 07$ | 1375 | 43.5 | 20 | 164.68 |
| $2007 / 08$ | 2350 | 59.94 | 42.11 | 222.51 |
| mean | 1060 | 40.942 | 27.022 | 209.968 |
| s.d. | 746.933732 | 11.60297962 | 15.1743842 | 23.32736882 |
| c.v. | 0.704654464 | 0.283400411 | 0.561556665 | 0.111099638 |

5. Siddhartha Bank Ltd.

| Year | MPS | EPS | DPS | BVPS |
| :---: | :---: | :---: | :---: | :---: |
| $2003 / 04$ | . | -8.89 | . | 90.74 |
| $2004 / 05$ | . | 20.08 | . | 110.82 |
| $2005 / 06$ | 360 | 13.05 | . | 120.62 |
| $2006 / 07$ | 778 | 15.88 | 0.79 | 132.28 |
| $2007 / 08$ | 1090 | 17.29 | 0.79 | 129.02 |
| mean | 742.6667 | 11.482 | 0.79 | 116.696 |
| s.d. | 431.3206 | 10.4353 | 0.387019 | 14.95581 |
| c.v. | 0.580773 | 0.90884 | 0.489898 | 0.12816 |

## Appendix- 5 <br> Pro- forma of Structured Questionnaire

## A survey of share price determinants in Commercials Banks

Name (optional) $\qquad$
Position: $\qquad$
Institution

1. Publication of Financial reports changes a company's share price.
a) Yes.
b) No
.c) Don't Know
2. Public/ listed companies are not serious towards shareholders interests.
a) Yes $\qquad$ .b) No $\qquad$ .c) Don't know
3. NEPSE and Securities Board are able to protect investors' interest effectively.
a) Yes
b) No.
c) Don't know
4. Financial reports of companies listed on stock exchange are only the publicly available information useful in identifying over or undervalued securities.
a) Yes $\qquad$ .b) No
c) Don't know
5. Future price changes of a given share can be predicted from historical price changes.
a) Yes.
b) No
.c) Don't know
6. How far do you agree/ disagree with the following statements? (Please tickmark at the appropriate number as per following scheme.
$1=$ Strongly agree $\quad 2=$ Agree $3=$ Don't know
$4=$ Disagree $\quad 5=$ Strongly disagree

| S.N. | Statement | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Higher the EPS, higher would be the share price. |  |  |  |  |  |
| 2. | Higher the DPS/cash dividend, higher would be the share price. |  |  |  |  |  |
| 3. | Lower the growth rate (g) of the company, higher would be the share price. |  |  |  |  |  |
| 4. | Higher the retention ratio, better the market price of share. |  |  |  |  |  |
| 5. | Higher the cost of equity ( Ke ) reduces the share price. |  |  |  |  |  |
| 6. | If interest/reinvestment rate (r) increases, share price also increases. |  |  |  |  |  |
| 7. | Larger companies have higher share price. |  |  |  |  |  |
| 8. | Dividends have stringer effect in market price of share |  |  |  |  |  |
| 9. | Higher the book value per share, higher would be the share price. |  |  |  |  |  |
| 10. | Higher the risk associated with a company, higher would be the share price. |  |  |  |  |  |
| 11. | Share price also affected by the instability of the government. |  |  |  |  |  |
| 12. | Information on favorable future prospect would increase market price of share. |  |  |  |  |  |
| 13. | Share price decreases with the increase in liquidity in market. |  |  |  |  |  |
| 14. | Share price reacts positively/ negatively |  |  |  |  |  |


|  | with the change in management. |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 15. | Better capital structure results higher <br> share price. |  |  |  |  |  |
| 16. | Annual general Meeting and the election <br> of board of director influence the share <br> price. |  |  |  |  |  |
| 17. | Rumors and whims affects share price. |  |  |  |  |  |

Thank you for your time and effort.

# BHUBAN PRASAD BHATT <br> M aster's in Business Studies <br> Shanker Dev Campus <br> Roll No. 849/062 

