CHAPTER - I
INTRODUCTION

1.1 Background of the Study

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.

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 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.

1.2 Financial Market in Nepal

Financial Market is the place where the financial instruments are traded. Financial instruments include share, bond, debenture etc. It is a means to transfer funds from savers to those in need of funds. Financial experts have mentioned it as a brain of the entire economic system. The failure of the financial market obstructs the progress of the whole economy.

Financial markets can be defined as the centers or arrangements, which provide facilities for buying and selling of financial claims and services. Specifically, financial market chiefly refers to money market and capital market. It facilitates the transfer of funds from the savers to those who with to invest in capital goods.

The financial market in Nepal is not basically different from the financial market in general. Hence, it has been explained very briefly here. The financial market is still in infancy in Nepal. Since, the financial market plays an important role in the efficient distribution and use of resources, it is extremely

important in a country lacking enough capital for investment in different sectors like Nepal. The system of lending and borrowing in an un-organized way is prevalent in Nepal since the ancient time. Even today, substantial portion of rural credit is available from the unorganized sector. The system of providing loan through the organized sector was initiated by Hearth Adda established in 1993 B.S. The scope of this institution which made available loans only to the government employees in the beginning was limited.

The system of collecting deposit and granting loans in the organized sector had started with the establishment of Nepal Bank Ltd. in 1994 B.S. The mobilization of funds by selling securities to the public had however started with the establishment of Biratnagar Jute Mill in 1993 B.S. The organized transaction of securities started in an organized way with the establishment of Security Marketing Centre (Present Nepal Stock Exchange) in 2033 B.S.

There are many changes taking place in the financial system of Nepal due to financial liberalization. The business activities are increasing rapidly. The situation of Monopoly has come to an end and age of competition has emerged in Nepalese financial system. Many banks and financial institution have been established to cater the credit need of individuals and business firms.

1.2.1 Classification of Financial Markets

There are mainly two types of financial market. First, one is money market and second one is capital market. Short-term funds of firm are raised from money market and long and middle term funds of firms are raised from secondary market. This can explained below:

1.2.1.1 Money Market

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

Money markets are sometimes defined as organized and unorganized money markets. The organized or formal money markets provide an institutional mechanism for the transactions of short term securities and commercial banks, finance companies and other saving/credit unions are the players in the money market. Local merchants, indigenous bankers and relatives come under the informal or the unorganized sector.

The development of efficient market requires the development of institutions, instruments and operating procedure that aids widening and deepening of the market and allocation of short term resources with minimum transactions costs and delays.

Generally, money market trades Commercial papers, Certificates of deposit, Short-term bonds and Government Treasury bill. Nepalese money market can be divided as the organized and un-organized sector. Under the organized sector Commercial banks, Co-operative Ltd., Agriculture bank and Central bank are working and under the Un-organized sector, creditors, local merchants, landlords, friends and relatives are working.

1.2.1.2 Capital Market

Capital Markets also play a vital role in the national economy. Capital market facilitates 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 price of the company fully reflect the available information and there will be no question of the share price being over or under priced. Capital market is concerned with the

long term finance. The funds collected in the market are raised and traded by long term financial instruments such as equities and bonds.

Capital market is also known as long-term financial market. Long-term funds of firms are collected from the capital market. Hence, capital market is a long-term credit market. The meaning of capital market can be made clear from its definition.

"The capital market is designed to finance long-term investments; financial instruments traded in the capital market have original maturities of more than one year."

Capital is the lifeblood of any organization without it imagine is veil to conduct the business activities. Capital structure is the combination or composition of the long-term debt, preferred stock and common stock. An optimum capital structure decreases the cost of capital and increase the earning per share. A conscious financial analyst ever uses the low capital gearing, first. Business finance is that business activities which is concerned with acquisition and conversion of capital funds in meeting the financial needs and overall objective of business enterprise, from company's point of views.

Investors are the real owner of the company, they purchase shares and establish the company to get the dividend and capital gain, but who protect their investment and right? Yes, Securities Board of Nepal (SEBO) protects and promotes the interest of investors by regulating the securities market. For this purpose, SEBO was established on 26th may, 1993 under the provision of the Securities Exchange Act, 1893 (first amendment). Besides the regulatory role, it is also responsible for the development of securities market in country.
"Nepal Stock Exchange limited (NEPSE) is the only one license holder mediator of securities board of Nepal (SEBO). All the broker companies (who has received the certificate of stock trading and become the member of

NEPSE) trade in the trading floor of NEPSE. This is the secondary market of stock which is the only market for liquidating capital market instruments like share and debentures. In this respect, capital market plays a crucial role in mobilization a constant flow of saving and changing these financial resources for expanding productive capacity in the countries. Stock market is a major component of the securities market. Stock market is a medium through which corporate sector mobilizes funds to finance productive projects by issuing shares in the market. Similarly, stock market provides the best investment opportunity to the investors. "Further, many profitable projects require a long-term venture capital to finance. Most investor tempts to provide risk and is reluctant to tie their saving into the long term commitment. Liquid stock market makes the investment less risky and more attractive. It encourages savers to invest in the long-term projects because they can sell securities quickly and easily, if they want to get back their saving before the project matures. At the same time, companies receive easy access to capital through new issuance of shares.

The organized stock is recent phenomenon in Nepal. The history and securities market began with the floatation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. In 1937A.D. Introduction of the company act in 1951, the first issue of government bond in 1964 and the establishment of securities exchanges center in 1976 were other significant developments relating to capital markets. Securities exchange center was established in 1976 with the objective of facilitating and promoting the growth of capital markets. Before conversion into a stock exchange it was the only capital market institution undertaking the job of brokering, underwriting, managing public issues, market making for government bonds and other financial services.

Government of Nepal under a program initiated to reform capital market converted securities exchange center into Nepal Stock Exchange in 1993.

Nepal Stock Exchange, in short NEPSE, is a non-profit organization, operating under securities exchange Act, 1983.

The basic objective on NEPSE is to impart free marketability and liquidity of the government bonds and corporate securities by facilitating transactions in its trading floor through market intermediaries, such as brokers, market makers etc.

In board sense, Capital market can be classified into two markets. First one is securities market and second one is non-securities market. Under the securities market shares, debentures and bonds are traded by the government and reputed organization where as under the non-securities market financial institutions period the long-term loan to the industries and business. Under the securities market these are mainly six types of markets. They are Stock market, Bond market, Business securities market, Government securities market, Primary market and secondary market.

The market where securities are traded is known as capital market. The capital market is broadly categorized into two markets. They are primary capital market and secondary capital market.

）Primary Capital Market

The new securities are issued by the company to trade in the capital market. Here the securities of large business firms are issued for the first time are bought and sold. The issuer of such securities may directly sell through private placement without underwriting to the investors. Besides, the securities may be sold after being made underwriting by the institution like investment bankers. The issuer (Company) collects amount and invest in the productive sector to earn the profit.

） Secondary Capital Market

Secondary market provides the liquidity and marketability opportunity to the stock market. Stocks are traded second time in the agreement of buyer and seller in the stock market. Stock market may be either OTC marketer registered. Usually, those buying the securities for the first time went to see the securities within a short period. Secondary market can be subdivided into two parts:

OTC Market

Full form of the OTC Market is 'Over-the Counter Market'. The market where the securities of the companies not listed in the stock exchange or delisted from there are traded is called 'Over-The-Counter Market'. Intermediates and authorized dealers head such kinds of securities transaction. This market is also known as the proceeds from sale of securities in the secondary markets don't go to the organizational issuer instead to the initial owners of the securities different factors in secondary market.

Registered Stock Market

This type of market is registered in the government agency. There is only one registered stock exchange i.e. Nepal Stock Exchange (NEPSE) in Nepalese securities market. It trades the securities of listed companies firms for the general public. Here, transactions of only listed companies are made.

1.3 Statement of the Problem

Basically stock price is determined by demand and supply. Both the qualitative and quantitative factors determine the stock price. However, to specify exactly what factors do determine stock price is a controversial/unpredictable issue.

Share price is the function of the several factors. The stock price fluctuates time to time and stock exchanges react to the environmental changes. However, for some environmental changes, the stock exchanges have no effect. 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 must be have basic knowledge about 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 examine the qualitative as well as quantitative factors affecting the stock price in NEPSE with focus to commercial banks.
-) To analyze the effect of earning and book value on the stock price.
-) To examine the effect of dividend on the stock price.
-) To analyze the market trends of MPS with financial indicators.

1.5 Importance of the Study

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. Therefore, 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

This research tries to explore the factors determining the stock price in Nepal stock exchange. Secondary data are analyzed however; this study may face the following limitation during the course of research;

- Time constraint.
- Budget constrain .
- Takes into account a few number of selected organizations (Five listed private commercial banks) from among the listed companies.
- Takes into account the only latest available five years data for analysizing stock price determinants and twenty-four months for randomness examination.

1.7 Organizations of the Study

There are five chapters in this study .

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

In second 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.

In chapter three 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.

The fourth chapter is concerned with the presentation and analysis of data. In this chapter, the 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).

The last chapter involves the summary, conclusions and recommendation of the study and concludes the reports with the major recommendations 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

Review of literature is one of the most significant parts of research. It will be better to review some fundamental aspects of relevant literature before doing analysis. So, it is attempted to present brief glimpses on the common stock as well as findings of the related previous studies.

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

Conceptual framework involves some of the technical terms, which are in frequent use in researches regarding capital market and finance. Thus, before going into the details of factors affecting stock price of *Commercial Banks*, some the relevant technical terms related to capital market are defined and discussed here.

2.1.1 Common Stock

"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 and Bailey, 2000:457).

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 (Fransis, 2002).

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 and Bailey, 2000:461-462).

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. Therefore, 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, error-correction, 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).

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:

$$P \; X \frac{DPS}{K} \; \Gamma \frac{r(EPS \, ZDPS)/K}{K}$$

P = DPS – r/k(EPS-DPS),

Where,

P= Prices of shares;

EPS= Earning Per Share;

r = internal rate of return;

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 (r=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 (d1/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, g=b x 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,

$$P = \frac{EPS(1 Zb)}{Ke\, Zbxr'}$$

Where,

P = Price of Share

EPS = Earning Per Share

b= Retention ratio

1-b=dividend payout ratio,

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

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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 non-existent.

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).

Pradhan (2004),conducted a study 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 Market 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.

2.4 Review of Unpublished Thesis

There are numerous thesis reports for the partial fulfillment of Master of Business Administration, Master of Business Studies and Mater in Arts in Tribunal University. Among those thesis reports some are related to the capital market and vary few are related to the stock price in Nepal Stock Exchange. Some of those thesis reports are viewed here:

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 weak 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. However, 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.

2.5 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 the 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

Research methodology is a way to systematically solve the research problem. It refers to the various sequential steps that are to be adopted by a researcher during the course of studying the problem with certain objectives. This chapter refers to the overall research method from the theoretical aspects to the collection and analysis of data. This study covers quantitative methodology in a greater extent and also uses the descriptive part based on both technical aspects and logical aspect. This research tries to perform a well-designed quantative and qualitative research in a very clear and direct way using both financial and statistical tools. Detail research methods are described in the following headings:

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 are simply called population. There are 31 commercial banks (including government owned, private and joint ventures) at present and only 5 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 31 and the sample size is 5. The sample size is 16.13% 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 based on secondary 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. 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 in secondary data. 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 SDC, TU central library, SEBON library.

3.5 Data Processing

Data so obtained have no meaning unless they are arranged and presented in a systematic way. Further more, 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 secondary data collected from various sources , 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, $\overline{X} \ X \dfrac{x}{n}$

Where,

$\overline{X}$ = Arithmetic Mean

X = Sum of all the values of the variable X

n = Number of observations

ii. Standard Deviation

The standard Deviation ( ) 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,

$$\dagger \ X \sqrt{\dfrac{1}{n} \ (X \ Z\overline{X})^2}$$

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,

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

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,

$$r_{xy} = \frac{cov(X, Y)}{\sigma_X \sigma_Y}$$

$$r_{xy} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where, r_{xy} is the correlation between two variables X and Y,

'r' lies always between +1 and -1

When 'r' = +1, there is perfect positive 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.

$$R^2 = r \times r$$

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.

$$MPS = a + bEPS\ldots\ldots\quad \text{(i)}$$

$$MPS = a + bDPS\ldots\ldots\quad \text{(ii)}$$

$$MPS = a + bBVPS\ldots\ldots\quad \text{(iii)}$$

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.

$$MPS = a + b_1EPS + b_2DPS + b_3BVPS$$

Where,

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

vii. One Sample Runs Test

One sample runs test is a test used to judge the randomness of a sample on the basic of the order in which the observations are taken. There are many applications in which it is difficult to decide whether the sample used a random one or not. This is particularly true when we have little or no control over the selection of the data. For instance, if we want to predict a retail store's sales volume for a given month, we have no choice but to use past sales data and perhaps prevailing conditions is general. None of this information constitutes a random sample in the strict sense. To allow us to test samples for the randomness of their order, statisticians have developed the theory of runs. A run is a succession of identical letters [or other kinds of symbols] that is followed and preceded by different letters or no letters at all. To illustrate, we take the following arrangement of healthy H, and diseased D, mango trees that were planted many years ago along a certain road;

HH	DD	HHHHH	DDD	HHHH	DDDDD	HHHHHHHHH
1st	2nd	3rd	4th	5th	6th	7th

Using underlines to combine the letters which constitute the runs, we find that first there is a run of two H's, then a run of two D's, then a run of five H's, then a run of three D's, then a run of four H's, then a run of five D's and finally a run of nine H's. In this way there are 7 runs in all or r =7. If there are too few runs, we might suspect a definite grouping or a trend; if there are too many runs, we might suspect some sort of repeated alternating patterns. In the given case there seems some grouping i.e. the diseased trees seems to come in groups. Through one sample runs test that is based on the idea that too few or too many runs that the items were not chosen randomly, we can say whether the apparently seen grouping is significant or whether it can be attributed to chance. We shall use the following symbols for a test of runs;

  n1 = number of positive signs (say H in the given case)

  n2 = number of negative signs (say D in the given case)

  r = number of runs

The sampling distribution of 'r' statistic, the number of runs is to be used and this distribution has its mean and the standard deviation

$$\mu_r \; X \frac{2n_1 n_2}{n_1 - n_2} \; \Gamma 1$$

$$S_r \; X 2n_1 n_2 \; \frac{2n_1 n_2 \; Z n_1 \; Z n_2}{(n_1 \; \Gamma n_2)^2 (n_1 \; \Gamma n_2 \; Z 1)}$$

Upper limit = μr + z sr, and

Lower limit = μr - z sr ,

Where,

z = area under normal curve for the given level of significance.

If the observed number of runs (r) lies between the upper and lower limit, the null hypothesis is accepted. If it lies outside the acceptance region, alternative hypothesis is accepted.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter is the backbone of the research. In this chapter, the secondary data is presented in systematic manner. The sources of data were company brochure, annual reports, NEPSE website, SEBON website, journal and library, and banks. Those collected data are presented in systematic formats and analyzed using different appropriate tools and techniques. In this chapter, in addition to that the relationship of the variables is presented in graphs and figures. The analysis of data consists of organizing, tabulating and performing statistical analysis. In this chapter, the secondary data collected from different sources are presented in understandable form and analyzed separately using both qualitative and quantitative measures whichever is appropriate.

4.2 Analysis of Financial indicators

Table 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	Mean	2247.13	77.17	59.39	262.3
Value	S.D.	1878.09	52.62	50.81	123.114
	C.V.	0.8357	0.6818	0.8556	0.4693

Source: Appendix 1

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 4.2

Relationship of MPS with EPS, DPS & BVPS

Variables	Correlation (r)	Coefficient of determination(r^2)	Sig / Insig
MPS & EPS	0.736	0.5416	Significant (0.01 level)
MPS & DPS	0.769	0.5913	Significant (0.01 level)
MPS & BVPS	0.755	0.5695	Significant (0.01 level)

Source: Appendix 2

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 (2-tailed). It indicates that when EPS increases MPS also increases and vice–versa. 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 4.3

Regression Coefficient

MPS = a + b EPS

Bank	Regression Constant (a)	Regression Coefficient (b)	R^2
SCBNL	4061.28	0.379	0.0000009
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

Source: Appendix 3

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 4.4

Regression Coefficient

MPS = a + b DPS

Bank	Regression Constant (a)	Regression Coefficient (b)	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			

Source: Appendix 3

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 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 4.5
Regression Coefficient
MPS = a + b BVPS

Bank	Regression Constant (a)	Regression Coefficient(b)	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

Source: Appendix 3

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 R^2 of SCBNL, Nabil, EBL, BOKL and SBL are 0.110, 0.461, 0.942, 0.16 and 0.571 respectively.

The 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 4.6

Multiple regression analysis of MPS on EPS, DPS and BVPS

Bank	Regression Constant	Regression coefficient			Multiple Correlation	
	a	b_1	b_2	b_3	r	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						

Source: Appendix 4

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 0.938and 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, It is noteworthy that I can not calculate the value of b_1, b_2 and b_3 due to insufficient of data

4.4.3 Run Test Analysis
Null hypothesis H_0 : Price behaviors are random.
Alternative hypothesis H_1 : Price behaviors are not random.

Table 4.7

Run Test Analysis

Test Parameters	EBL	NABIL	BOK	SBL	SCBL
Median	2221	3597.5	1576.5	915	4848
No. of Runs (r)	4	4	4	4	4
N1(b)	12	12	12	12	12
N2 (a)	12	12	12	12	12
μr	13	13	13	13	13
sr	5.73	5.73	5.73	5.73	5.73
Upper limit	27.8	27.8	27.8	27.8	27.8
Lower limit	-1.8	-1.8	-1.8	-1.8	-1.8
Result	r lies between upper and lower limit	r lies between upper and lower limit	r lies between upper and lower limit	r lies between upper and lower limit	r lies between upper and lower limit
Decision	Ho is accepted	Ho is accepted	Ho is accepted	Ho is accepted	Ho is accepted

Source: Appendix 5

4.6 Major Findings of the Study

The major findings of the study are presented as follows.

1. 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.

2. 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.

3. 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.

4. 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.

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 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.

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 simple regression analysis of MPS on DPS shows that MPS of Nabil and EBL are highly affected by DPS and MPS.

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

Now the capital market of Nepal is in a growing stage. Average people, ruler people and also some qualified 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 interesting to invest in share , but are not able to do so due to lack of knowledge about capital market and other information about 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 unable to implementation the plan mention in long-term plan , 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, knowledge 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.

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 (2-tailed). 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 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.

5.2 Conclusion

This study 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 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 price behaviors of the selected sample size are random as the hypothesis is accepted by run test analysis.

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,. 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. Government must have to establish a 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.

2. 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.

3. Government should formulate and implement a suitable rules and regulation for further development of share market. A mechanism to take immediate action for the faulty company is to be established.

4. 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.

5. The companies should provide updated reports to the investors periodically informing actual financial position of the company.

6. 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.

7. In the future, those student who really want to study in this sector could be use more sample size, advanced methodology, large no. of observations, deep research and by including more respondents' opinion for getting the good result about stock market in Nepal from the study .

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APPENDICES

Appendix- 1

Calculation of Data

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

1. Standard Chartered Bank Ltd Nepal

Year	MPS	EPS	DPS	BVPS
2005/06	1745	143.55	110	399.25
2006/07	2345	143.14	120	422.38
2007/08	3775	175.84	140	468.22
2008/09	5900	167.37	130	512.12
2009/10	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
2005/06	1000	92.61	65	301
2006/07	1505	105.49	70	337
2007/08	2240	129.21	85	381
2008/09	5050	137.08	140	418
2009/10	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
2005/06	680	45.6	0	171.52
2006/07	870	54.2	20	219.87
2007/08	1379	62.8	0	217.67
2008/09	2430	78.4	30	292.75
2009/10	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
2005/06	295	27.5	10	218.38
2006/07	430	30.1	15	213.6
2007/08	850	43.67	48	230.67
2008/09	1375	43.5	20	164.68
2009/10	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
2005/06	.	-8.89	.	90.74
2006/07	.	20.08	.	110.82
2007/08	360	13.05	.	120.62
2008/09	778	15.88	0.79	132.28
2009/10	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- 2
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	.	
	N	23	25	22	25	

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

Appendix -3

Simple Regression Analysis

1. MPS on EPS

A. SCBNL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.003	.000	-.333	2544.4433

a Predictors: (Constant), EPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		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 Square	Std. Error of the Estimate
1	.534	.286	.048	1963.4471

a Predictors: (Constant), EPS

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3752.951	6240.607		-.601	.590
	EPS	59.079	53.942	.534	1.095	.353

a Dependent Variable: MPS

C. EBL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.993	.987	.982	140.9423	

a Predictors: (Constant), EPS

Coefficients(a)

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
Model		B	Std. 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 Square	Std. Error of the Estimate	
1	.966	.933	.911	249.8115	

a Predictors: (Constant), EPS

Coefficients(a)

		Unstandardized Coefficients		Standardized 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 Square	Std. Error of the Estimate
1	.994	.989	.977	55.5066

a Predictors: (Constant), EPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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 Square	Std. Error of the Estimate
1	.615	.378	.171	2006.8907

a Predictors: (Constant), DPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		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 Square	Std. Error of the Estimate
1	.861	.742	.656	1180.1561

a Predictors: (Constant), DPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		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 Square	Std. Error of the Estimate
1	.759	.577	.436	789.3388

a Predictors: (Constant), DPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		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 Square	Std. Error of the Estimate	
1	.590	.348	.131	778.4961	

a Predictors: (Constant), DPS

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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 Square	Std. Error of the Estimate	
1	.332	.110	-.186	2399.7753	

a Predictors: (Constant), BVPS

Coefficients(a)

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

a. Dependent Variable: MPS

B. Nabil

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.679	.461	.281	1705.5989	

a Predictors: (Constant), BVPS

Coefficients (a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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

C. EBL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.971	.942	.923	292.4504	

a Predictors: (Constant), BVPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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

D. BOKL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.128	.016	-.311	956.3467	

a Predictors: (Constant), BVPS

Coefficients(a)

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

a Dependent Variable: MPS

E. SBL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.756	.571	.142	339.3509	

a Predictors: (Constant), BVPS

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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-4

Multiple Regression Analysis

A. SCBNL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.920	.846	.386	1727.1275	

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

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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 Square	Std. Error of the Estimate	
1	.938	.880	.519	1395.3759	

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

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		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 Estimate	
1	.995	.990	.962	205.7136	

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

Coefficients

		Unstandardized Coefficients		Standardized 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 Square	Std. Error of the Estimate	
1	1.000	1.000	.999	22.4470	

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

Coefficients

		Unstandardized Coefficients		Standardized 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

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.

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 Square	Std. Error of the Estimate	
1	1.000	1.000	1.000	.	

a Predictors: (Constant), BVPS

Coefficients

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

a Dependent Variable: MPS

Appendix 5

Calculation of run taking N1(b) as below the median value and N2(a) as above the median value (from baisakh 2065 to chaitra 2066)

	MPS	EBL	NABIL	BOK	SBL	SCBNL
1	Chaitra 2066	1478	2133	750	389	2960
2	Falgun 2066	1555	2333	829	419	3090
3	Magh 2066	1581	2320	800	453	3020
4	Paush 2066	1666	2613	927	655	3447
5	Mansir 2066	1625	2614	1333	657	3494
6	Kartik 2066	1729	2765	1516	715	3604
7	Aswin 2066	2390	2880	1605	790	3680
8	Bhadra 2066	2290	2820	1580	790	5235
9	Shawan 2066	2482	4706	1694	963	5882
10	Ashad 2066	2297	4413	1573	921	5712
11	Jestha 2066	2345	4216	1509	915	5575
12	Baisakh 2066	2125	3660	1420	892	4825
13	**Chaitra 2065**	2040	3585	1444	915	4647
14	Falgun 2065	2090	3526	1463	911	4612
15	Magh 2065	1990	3450	1350	850	4450
16	Paush 2065	2010	3520	1750	1052	4672
17	Mansir 2065	2152	3610	1954	1112	4871
18	Kartik 2065	2352	3775	2190	1111	5090
19	Aswin 2065	3017	4029	2460	1285	8155
20	Bhadra 2065	3149	5755	2496	1276	8106
21	Shawan 2065	3171	5811	2532	1233	7618
22	Ashad 2065	2751	5152	2265	1108	6599
23	Jestha 2065	2546	4691	2081	1038	5738
24	Baisakh 2065	2548	4340	1930	942	5500
	Median	**2221**		**1576.5**	**915**	**4848**

					Run (r)	N1 (b)	N2 (a)
EBL	aaaaaa	bbbbb	aaaaaa	bbbbbbb	4	12	4
Nabil	aaaaaaaa	bbbb	aaaa	bbbbbbb	4	12	4
BOK	aaaaaa	bbb	aaaaa	bbbbbbbb	4	12	4
SBL	aaaaaaaa	bbb	aaaa	bbbbbb	4	12	4
SCBL	aaaaaaaa	bbbb	aaaaaa	bbbbbbbb	4	12	4

Distribution Mean $(\mu_r) = \dfrac{2n_1n_2}{n_1 - n_2} + 1$

Standard Deviation $(s_x) = 2n_1n_2 \dfrac{2n_1n_2 - n_1 - n_2}{(n_1 + n_2)^2 (n_1 + n_2 - 1)}$

z (area under normal curve for the given level of significance)

Upper Limit $= \mu_r + z\, s_r$

Lower Limit $= \mu_r - z\, s_r$