## CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

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

The stock market is the primary place for institutions to deploy stocks and increase fund. If there are listed public institutions then they can deploy their shares in the market to collect more funds to expand the business. As for companies that did not participate in the stock market, they have to start the Initial Public Offering Process (IPO). The market is the common factor between buyers and sellers of these stocks so that each institution listed in the stock market offers its shares. It could be said that the stock exchange has a primary function by supporting the economic growth of the country in the fields of industry and commerce. Market is the main cause for the development of industry and commerce as it plays an important role in developing industrial sector of the country (sen and ray, 2013).

Stock market plays a vital and massive role in the economy of any country. It also contributes in the economic development of country by promoting capital formation and raising economic growth. Fluctuation in stock prices are occurs due to the supply and demand forces. But there is no foolproof or perfect system that indicates the exact movement of stock prices. The factors are behind the increase or decrease in the demand and supply of stock prices can be categorized into three main types: technical factors, fundamental factors and market sentiments. In other words we can also say that the factors that influence the share prices are based on internal \& external factors. Internal factors such as dividend per share, earnings per share, book value, leverage
and size etc. External factors or macro-economic variables such as gross domestic product, interest rate, government regulation and foreign exchange rate etc. To forecast future stock prices, fundamental analysts use stock valuation ratios to derive a stock's current fair value and forecast future value. Various researchers have found important internal factors that determine the share prices for different markets, viz., dividend, retained earnings, size, earning per share, dividend yield, leverage, payout ratio, and book value per share.

In an efficient market, stock prices would be analyzed by technical analysis or fundamental analysis. Technical analysis evaluates the stock price movement and predicts the future stock price based on historical data of stock price. Fundamental analysis evaluates the intrinsic value of the company and compares it to the stock price. Srinivasan (2012) state that internal factors determine the share prices for different markets dividend, return on assets, return on equity, retained earnings, size, age of banks, earning per share, dividend yield, leverage, payout ratio, and book value per share. Understanding the impact of various fundamental variables on share price is very much helpful to investors as it will help them in taking profitable investment decisions.

Fama (1970) examined the nature of stock market to be efficient (Pricing) if current securities' prices reflect all available information. In an efficient market, stock prices would be analyzed by technical analysis or fundamental analysis. Technical analysis evaluates the stock price movement and predicts the future stock price based on historical data of stock price. Fundamental analysis evaluates the intrinsic value of the company and compares it to the stock price.

Equity markets enhance corporate efficiency, spur innovation and provide a valuable source of capital for long term economic development. They also provide a useful mechanism for governments to raise capital through the sale of state owned enterprises. Moreover, equity market investments constitute an important element of individuals' assets, particularly as governments shift their pension systems toward the private sector. In short, it is clear that equities constitute an increasingly important capital market in the world economy (Mosley and Singer, 2008).

The present study deals with an attempt to analyze the determinants of share price of commercial banks on the basis of financial statements information in Nepalese context. The objective of this study is to examine the impact of the internal factor on the stock prices of Nepalese commercial banks. The purpose of the study is to investigate the relationship between the firm specific and macroeconomic variables as determinants and market price per share (MPS) in Nepal's banking sector. Specially, it examines the impact of earning per share (EPS), price earnings ratio ( $\mathrm{P} / \mathrm{E}$ ratio), book value per share (BVPS) and return on assets (ROA) on market price per share.

### 1.2 Statement of the Problem

The price volatility of Nepalese Share price is unpredictable. Stock price is determined by the interaction of demand and supply. Both qualitative and quantitative factors determine the stock price. Sharif, Purohit, and Pillai (2015) have conducted a research In Bahrain to analyze the factors affecting share prices in Bahrain stock exchange and they found that there is significant positive relationship between ROE, ROA, BVPS, P/E ratio, age and Size of the firm suggesting that these factors act as active determinants in shaping the market price of shares. However a significant negative relationship was found between dividend yield and MPS. There are different findings in different countries which raise the question, "What different factors do affect the share price of Nepalese commercial bank"?

This study is answering the following questions:

1. What is the current status MPS of commercial banks in Nepal?
2. What is the current status EPS, P/E ratio, BVPS and ROA of commercial banks in Nepal?
3. Do the company's EPS, P/E ratio, BVPS and ROA have impact on stock price?

### 1.3 Purposes of the Study

The main purpose of the study is to examine the factors affecting the share price of commercial banks in Nepal. To achieve the main purpose, the following purposes are set:

1. To analyze the MPS of commercial banks.
2. To analyze the EPS, P/E ratio, BVPS and ROA of commercial banks.
3. To examine the impact of EPS, P/E Ratio, BVPS and ROA on stock price.

### 1.4 Conceptual Framework

The conceptual framework is design to understand the factors that are affect the market price per share. In view of theories and major empirical evidences, it is expected that the MPS of commercial banks may be influenced by EPS, P/E ratio, BVPS and ROA of the banks. The conceptual framework is developed to test the effects of these variables on the market price per share of listed commercial banks of Nepal.
Independent Variables Dependent Variable


### 1.5 The Variables \& Hypotheses

## Market Price (MPS)

Stock price can change minute by minute due to changes in the buying and selling pressure. Due to these changes it becomes difficult to decide as to which market price should be regressed as a measure of independent variables. In the present study closing price of stock at the end of the financial year of the bank has been taken to represent market price. The market price is used as dependent variable in the present study.

## Earnings per Share (EPS)

Earnings per share, also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. According to Sharma (2011) the study revealed that earning per share has significant impact on the market price of share. Bhatt and JK (2012) found that EPS and market value of equity share in the Indian context are positively related. Based on it, this study develops the following hypothesis:

H1: There is a positive relationship between MPS and EPS.

## Price Earnings Ratio (P/E ratio)

The Price-to-Earnings Ratio or P/E ratio is a ratio for valuing a company that measures its current share price relative to its per-share earnings. Nickolson (1960) the study revealed that stocks with a low P/E ratio have a better investments performance than high P/E stocks. Based on it, this study develops the following hypothesis:

H3: There is a positive relationship between MPS and P/E ratio.

## Book Value per Share (BVPS)

BVPS is financial measure that represents a per share assessment of the minimum value of a company's equity. More specifically, this value is determined by relating the original value of a firm's common stock adjusted for any outflow (dividends and stock buybacks) and inflow (retained earnings) modifiers to the amount of shares outstanding. Sharma (2011) conducted a study that book value per share has significant impact on the market price of share. Emamgholipour et al. (2013) carried out a book value per share has positive impact on the market price of share. Based on it, this study develops the following hypothesis:

H4: There is a positive relationship between MPS and BVPS.

## Return on Assets (ROA)

ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of income to its total asset. Emekekwue (2008) found return on assets as a ratio which seeks to measure the amount of profit generated from the entire assets of the firm. Based on it, this study develops the following hypothesis:

H5: There is a positive relationship between MPS and ROA.

Table 1.1: Description of Explanatory Variables and Their Expected Sign

| Variables | Description | Expected Sign |
| :--- | :--- | :---: |
| EPS | Earning per Share | + |
| P/E ratio | Price Earning ratio | + |
| BVPS | Book Value per Share | + |
| ROA | Return on Assets | + |

### 1.6 Significance of the Study

1. This research is useful for further researcher to conduct a research in this field.
2. This research is helpful to commercial banks to analyze their activities and to know about factors which affect the share price of banks.
3. This is very useful for individuals who have invested their funds in share of commercial banks and who are interested to invest in common stock of commercial banks.
4. The research also is helpful to different policy makers such as SEBON, NEPSE, and NRB etc. to formulate better policy in the area of share market and share prices.

### 1.7 Limitations of the Study

This study is milestone in the field of knowing factors affecting the share price of Nepalese commercial bank. Findings of the study are very useful for both academician and future researcher. However this study has following limitations:

1. This study is based on only selected commercial banks.
2. The dependent variable is only market price per share of common stock.
3. The calculations of the study are fully depending on the accuracy of data provided by the organization.

### 1.8 Organization of the Study

On this research, the study is carried out in different stages and procedures, as it needed. As well as study organized on following chapters in order to make the study easy to understand.

## Chapter I Introduction

Chapter I introduce the major internal factors that affect the Market Price of Share of Nepalese commercial banks, statement of problems, objectives, significance and limitations of the study.

## Chapter II Literature Review

This chapter is the brief review of literature related to this study. It includes a discussion on the conceptual framework and review of the major studies. It gives an overview of the related literature done in the past related to this study.

## Chapter III Research Methodology

Chapter III Research Methodology, describes the different methodologies employed in this study, sources of data are mentioned and described in this chapter.

## Chapter IV Results

This chapter is the major part of the whole study in which all collected relevant data are analyzed and interpreted by the help of different financial and statistical tools. In this chapter we explained the major findings of the study

## Chapter V Conclusions

This chapter includes the summary, conclusions and the implication of the study. The findings are included in this chapter along with the suggestions and their recommendations.

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

## CHAPTER II

## LITERATURE REVIEW

This chapter implies the review of literature related to the study. The objectives of this chapter are to review some basic literature on factors affecting the share price of Nepalese commercial banks concerning theories including review of the empirical evidence of previous studies.

In the global contexts there are thousands of research papers, articles, books and journals relating to the securities market. 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, these are various researches made on it. It is being very infancy, the factor which affect the stock price of Nepalese commercial bank large may varies from that of NEPSE. In this chapter various books, magazines, journals, research papers, unpublished thesis reports etc. are reviewed, which affects the stock price in Nepalese commercial banks. This chapter has been divided in to three sectors. The first section of this chapter contains conceptual review. The second section relates with the review of journals and articles and the third section related literature carried out previously in the Nepalese context. This chapter has 3 sections.

### 2.1 Conceptual Review

### 2.2 Review of Previous Works

### 2.3 Research Gap

### 2.1 Conceptual Review

### 2.1.1 Security

Securities are negotiable financial instruments issued by a company or government that give ownership rights, debt rights, or rights to buy, sell, or trade an option. Securities are traded on the exchange markets. Although the term refers to all types of financial instruments, there are differences in its legal definitions, which mostly consider equities and fixed income as securities. Nevertheless, securities can be stocks, bonds, mutual funds, interest-bearing Treasury bills, notes, derivatives,
warrants, and debentures. Furthermore, interests in oil-drilling programs are also considered securities. The legal entity that issues securities is the issuer of the security stocks and warrants etc. The piece of paper serving as evidence of property rights is called security (Sharpe et al, 2005).

Securities differ in their level of inherent risk. For example, equities are considered riskier than bonds, but also some equities are riskier than other equities. Depending on the level of risk that an investor wants to accept, he selects the relevant securities. Moreover, securities differ in their level of liquidity. Highly liquid securities like bonds, equities and money market instruments are traded more frequently because investors can increase their price by buying more securities and realizing a higher return on investment.

### 2.1.2 Security Market

Securities markets are the markets in which securities, or financial assets, are traded. There are two different types of securities markets. The first is known as the primary market, which is used for trading newly issued securities. The second type is known as the secondary market, which is used for trading securities that have already been issued. Primary markets and secondary markets are generally used for trading equity securities. Securities market is a mechanism created to facilitate the exchange of financial securities or assets by bringing together buyers and sellers of securities (Sharpe, etal, 2005).

Securities markets are markets in financial assets or instruments and these are represented as I.O.Us (I owe you) in financial form. These are issued by business organizations, corporate units and the Governments. There are different types of business organizations in Nepal, namely, partnership firms, cooperative societies, private and public limited companies and joint and public sector, organizations etc. Public limited companies are raise funds from the public through the issue of shares. The methods of raising funds used by the corporate sector are to issue securities, either ownership instruments or debt instruments.

### 2.1.3 Stock Market

The stock market is where you can buy, sell, and trade stocks any business day. It's also called a stock exchange. Stocks allow you to own a share of a public corporation. The stock price is based on the corporation's earnings. If the company does well, or even if everyone thinks the company is going to do well, the stock price goes up. Also, many companies give a dividend payment each year to the stockholders' which provides extra value.

The stock market refers to the collection of markets and exchanges where the issuing and trading of equities. Also known as the equity market, the stock market is one of the most vital components of a free-market economy, as it provides companies with access to capital in exchange for giving investors a slice of ownership. It is a place where the companies get listed to issue share and raised the funds. In case of an already listed public company, they issue more shares to the market for collecting more funds for business expansion. The stock market can be split into two main sections: the primary market and the secondary market.

### 2.1.3.1 Primary Market

The primary market is the part of the capital market that deals with issuing of new securities. In a primary market, companies, governments or public sector institutions can raise funds through bond issues and corporations can raise capital through the sale of new stock through an initial public offering (IPO). The Primary Market, also known as a New Issue Market, is where new securities are issued. It is part of the capital market. Corporations, national and local governments, and other public sector institutions can get financing through the sale of new stock or bond issues through the primary market.

In an initial public offering (IPO) shares are sold in the primary market. The money earned from the sale of securities in a primary market goes directly to the issuing company. The primary market is vital for both the capital market and the economy as a whole. It is where capital formation takes place. The buying and selling of existing shares and bonds (not new securities) occur in the secondary market through a stock exchange, bond market or derivatives exchange. In the secondary market, the money
goes to the investor who is selling the security and not the company or entity that first issued the security. There are three ways in which a company may raise capital in the primary market.

## Public Offering

A primary offering is the first issuance of stock from a private company for public sale. This is the means by which a private company can raise equity capital through financial markets in order to expand its business operations. A primary offering is also known as an "initial public offering" (IPO). A public offering is an organization's sale of equity shares or other financial instruments to the public in order to raise funds for business expansion and further investment. Financial instruments may include equity stakes, such as common or preferred shares, or other assets that can be traded. A public offering requires the issuing company to publish a prospectus detailing the terms and rights attached to the offered security, as well as information on the company itself and its finances. Many other regulatory requirements surround any public offering and they vary according to jurisdiction.

Initial public offering (IPO) is one type of public offering. Not all public offerings are IPOs. An IPO occurs only when a company offers its shares (not other securities) for the first time for public ownership and trading, an act making it a public company. However, public offerings are also made by already-listed companies. The company issues additional securities to the public, adding to those currently being traded. For example, a listed company with 8 million shares outstanding can offer to the public another 2 million shares. This is a public offering but not an IPO. Once the transaction is complete, the company will have 10 million shares outstanding.

Most public offerings are in the primary market, that is, the issuing company itself is the offer of securities to the public. The offered securities are then issued (allocated, allotted) to the new owners. If it is an offering of shares, this means that the company's outstanding capital grows. If it is an offering of other securities, this entails the creation or expansion of a series (of bonds, warrants, etc.). However, more rarely, public offerings take place in the secondary market. This is called a secondary market offering.

## Right Offering

A rights issue is a dividend of subscription rights to buy additional securities in a company made to the company's existing security holders. When the rights are for equity securities, such as shares, in a public company, it is a non-dilutive pro rata way to raise capital.

A right offering is a group of rights offered to existing shareholders to purchase additional stock shares, known as subscription warrants, in proportion to their existing holdings. In a rights offering, the subscription price at which each share may be purchased is generally discounted relative to the current market price. Rights are often transferable, allowing the holder to sell them in the open market. Companies generally offer rights when they need to raise money. Examples include when there is a need to pay off debt, purchase equipment, or acquire another company. In some cases, a company may use a rights offering to raise money when there are no other viable financing alternatives.

## Private Placement

A private placement is a capital raising event that involves the sale of securities to a relatively small number of select investors. Investors involved in private placements can include large banks, mutual funds, insurance companies and pension funds. A private placement is different from a public issue in which securities are made available for sale on the open market to any type of investors.

The buyer of a private placement bond issue expects a higher rate of interest than he earns on a publicly traded security. Because of the additional risk of not obtaining a credit rating, a private placement buyer may not buy a bond unless the bond is secured by specific collateral. A private placement stock investor may demand a higher percentage of ownership in the business or a fixed dividend payment per share of stock.

### 2.1.3.2 Secondary Market

The secondary market, also called the aftermarket and follow on public offering is the financial market in which previously issued financial instruments such as stock,
bonds, options, and futures are bought and sold. After the initial issuance, investors can purchase from other investors in the secondary market.

In the secondary market, securities are sold by and transferred from one investor to another. It is therefore important that the secondary market be highly liquid. As a general rule the greater the number of investors that participate in a given marketplace, and the greater the centralization of that marketplace, the more liquid the market.

Securities issued by a company for the first time are offered to the public in the primary market. Once the IPO is done and the stock is listed, they are traded in the secondary market. The main difference between the two is that in the primary market, an investor gets securities directly from the company through IPOs, while in the secondary market, one purchase securities from other investors willing to sell the same.

Equity shares, bonds, preference shares, treasury bills, debentures, etc. are some of the key products available in a secondary market. Secondary markets can be organized in two ways:

## Organized Stock Exchange

Organized Stock Exchange is the place where the buyers and sellers of the securities (or their agents or brokers) meet in one central location to conduct trades. An exchange is an organized market where the tradable securities, commodities, foreign exchange, future, options, contracts are bought and sold. The stock exchange may be private company, non-profit company or publicity traded company.

Stock Exchange is one important constituent of capital market. Stock Exchange is an organized market for the purchase and sale of industrial and financial security. It is convenient place where trading in securities is conducted in systematic manner i.e. as per certain rules and regulations. It is also called stock market or share market. The Indian Securities Contracts (Regulation) Act of 1956, defines Stock Exchange as, an association, organization or body of individuals, whether incorporated or not, established for the purpose of assisting, regulating and controlling business in buying, selling and dealing in securities.

For example: NEPSE, NYSE, Tokyo Stock Exchange, American Stock Exchange(Amex), Bombay Stock Exchange are the some example of organization stock exchange.

## Over-the-Counter Market (OTC Market)

A decentralized market without a central physical location where market participants trade with one another through various communication modes such as the telephone, email and proprietary electronic trading systems. An over-the-counter (OTC) market and an exchange market are the two basic ways of organizing financial markets. In an OTC market, dealers act as market-makers by quoting prices at which they will buy and sell a security, currency, or other financial products. A trade can be executed between two participants in an OTC market without others being aware of the price at which the transaction was completed. In general, OTC markets are typically less transparent than exchanges and are also subject to fewer regulations.

The another method of organizing a secondary market is to have an Over-the-counter market, in which dealers at different locations who have an inventory of securities stand ready to buy and sell securities "Over the counter" to anyone who comes to them and is willing to accept their prices. Because Over-the-counter dealers are in computer contact and know the prices set by one another, the OTC market is very competitive and not very different from a market with an organized exchange. Many common stocks are traded Over-the-counter, although a majority of the largest corporations have their shares traded at organized stock exchanges.

It is a part of secondary market. Generally, securities of those companies, which are not listed in security exchange, traded in over the counter market. A decentralized market, without a central physical location, participants trade with the means of various communication modes such as the telephone, email and proprietary electronic trading systems. An over-the-counter (OTC) market and an exchange market are the two basic ways of organizing financial markets. In an OTC market, authorized dealers act as market makers by quoting prices at which they will buy and sell a security or currency. A trade can be executed between two participants or intermediaries in an OTC market without others being aware of the price at which the transaction was
effected. In general, OTC markets are therefore less transparent than exchanges and are also subject to fewer regulations.

### 2.1.4 Common Stock

Common stock is a form of corporate equity ownership, a type of security. The terms voting share and ordinary share are also used frequently in other parts of the world; "common stock" is being primarily used in the United States. They are known as Equity shares or Ordinary shares in the UK and other Commonwealth realms. This type of share gives the stockholder the right to share in the profits of the company, and to vote on matters of corporate policy and the composition of the members of the board of directors.

It is called "common" to distinguish it from preferred stock. If both types of stock exist, common/equity stockholders usually cannot be paid dividends until all preferred/preference stock dividends are paid in full; it is possible to have common stock that has dividends that are paid alongside the preferred stock. In the event of bankruptcy, common stock investors receive any remaining funds after bondholders, creditors (including employees), and preferred stockholders are paid. As such, common stock investors often receive nothing after a liquidation bankruptcy.

Common Stock represents the ownership position in the company. The holders of common stocks are called common stockholders or shareholders and they are the legal owners of the company. Common stocks are also known as equity shares or ordinary shares. Ordinary shares have no maturity date and they are the source of permanent capital. Common stocks are variable income security, meaning that the dividend payment to the shareholder is not fixed like interest to the bondholders and dividend to the preference shareholders.

The common stocks are the permanent and vital source of capital since they do not have a maturity date. As a return to the contribution of shareholders investment, they are entitled to dividends. It means, in the case of organizational profit, the shareholders are provided a certain sum of money as dividend. The amount or rate of dividend is fixed by the Board of Directors. Hence, the common stock is a kind of variable income security. Being the owner of the company, the shareholders bear the
risk of ownership. They are entitled to dividends after the claims of outsiders' are satisfied. Common stock or ordinary share is also the most important form of corporate stock. Common stock holders are the real owners of a firm. These stock holders invest in firm with the expectation of return in future. This is because they receive only the residual left after satisfying the claims of all on firm's assets and income. Investors of such stocks create the complete risk of ownership as the business may fall to unacceptable level. However the risk of common stock is limited and the stockholders are only responsible for the amount of funds invested by them and no more than that.

## Features of Common Stock

Common stock is very popular among ordinary middle class peoples. It yields great profit with average investments. Some of the features of common stock are:

Par Value: The price arbitrarily printed in each common stock certificate is par value. Par value is always determined less than the present market value of the stock. However some common stocks are issued without par value. While buying the stock par value is regarded as the initial investment of the owner is the firm.

Classified Common Stock: Firm issues common stock more than one class from time to time. This process is carried out in order to control and dividend payment. example: if the firm issues the class X stock and class Y stock, The X class stock has voting right and Y class do not have voting rights Now from these stock which do not have voting rights, the initial promoters get control over whole vote. In this case if cash dividend is to be divided or distributed or the firm is to be dissolved, more priority is given to Y class stocks than X class in assets and earning.

Maturity Date: While you purchase a common stock there are no any maturity dates. Being common stock a residual security, generally they don't have anything such as maturity date. These stock remains so long as the firm survives. However the number of share may increase or decrease.

Ownership: Common stock may have ownership of only a person or of a small group of investors or public ownership of large group or institutional investors. Ownership
of this kind of stock is easy and people prefer to invest in common stock more than other stocks.

Ownership Rights: People interesting in common stock has wider scope in ownership rights as they are assigned with various rights associated with ownership. The common stock holders are assigned the following rights:

1. Right to Earnings: Common stock holders always have right in earning and dividend if declared. As the common stock is residuals security, stockholders has right only in the earning available to them. Beside these earnings if the board of director of the company decides to distribute dividend without keeping the retained earnings, they also have rights to get dividend.
2. Right to Assets: If there is the case of dissolution of the firm the stockholders also have rights to assets. The stockholders has right to take the remaining assets after the end of firm's life. However if the firm is closed due to bankruptcy, nothing is left behind for stockholders. And in case if firm is dissolved and is purchased by other firm, the stockholders get the amount left after payment of all liabilities.
3. Rights to Vote: Common stockholders has right to vote in the affairs of the company. In most case of common stock, each shareholder can cast one vote in one share. However, sometimes the stocks not permitting the shareholders to vote are also issued.
4. Preemptive Right: Most of the companies give preemptive right to their shareholders. Preemptive right provides an opportunity to the common stockholders to purchase common stock or convertible securities before selling to the general public. However this right can and can't be taken by shareholders.

Certificates and Transferability: Purchasing common stokes, shareholders has right to get their stock certificate showing the evidence of ownership. The person who has common stock or who buys common stock can also sell it or transfer it to other person. Transferring the ownership in a systematic way by assembling the sellers and
buyers is one of the most important functions of the secondary market. In some case shares are also issued by keeping limit to transfers.

### 2.1.5 Stock Price

Stock price is the amount of money that one has to pay to purchase/receive a stock of a company. If 'A' buys 10 shares of NABIL bank from B, she/he pays Rs. 2000 for these 10 shares, than the price of 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 the seller a sock. The stock price is determined in stock market, by market forces, i.e. demand (buyer forces) and supply (seller's 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.

### 2.1.6 Share Price Determinants

Different studies have been conducted in the field of share price determinants by various researchers in the past. Some of them have been reviewed in this study in order to avoid possible duplication and bridge the gap.

Stock price is determined by various internal and external factors. There are so many factors which determine the price of share which are as follows:

## Earnings per Share (EPS)

Earnings per share or EPS are an important financial measure, which indicates the profitability of a company. It is calculated by dividing the company's net income with its total number of outstanding shares. It is a tool that market participants use frequently to gauge the profitability of a company before buying its shares.

EPS is the portion of a company's profit that is allocated to every individual share of the stock. It is a term that is of much importance to investors and people who trade in the stock market. The higher the earnings per share of a company, the better is its profitability. While calculating the EPS, it is advisable to use the weighted ratio, as the number of shares outstanding can change over time.

Earnings per share (EPS) are generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate
the price-to-earnings ( $\mathrm{P} / \mathrm{E}$ ) valuation ratio, where the ' E ' in P/E refers to EPS. By dividing a company's share price by its earnings per share, an investor can understand the fair market value of a stock in terms of what the market is willing to pay based on a company's current earnings.

The EPS is an important fundamental used in valuing a company because it breaks down a firm's profits on a per share basis. This is especially important as the number of shares outstanding could change, and the total earnings of a company might not be a real measure of profitability for investors. If Ford's total earnings were to increase in a subsequent year to $\$ 1.8$ billion, this might seem like great news to an investor until they consider the fact that the company's total shares outstanding increased to 4.5 billion. In this case, EPS would have only gone up to $\$ 0.40$. It can be presented symbolically as:

$$
\text { EPS }=\frac{\text { Total Earnings Available to Common Shareholders }}{\text { No. of Shares Outstanding }}
$$

## Dividend per Share (DPS)

Dividend per share (DPS) is the sum of declared dividends issued by a company for every ordinary share outstanding. The figure is calculated by dividing the total dividends paid out by a business, including interim dividends, over a period of time by the number of outstanding ordinary shares issued. A company's DPS is often derived using the dividend paid in the most recent quarter, which is also used to calculate the dividend yield. Dividend per share (DPS) is the total dividend declared for every common share outstanding. Just like, we find earning per share (EPS) because per share data provides a better idea of company's profitability. Similarly, dividend per share (DPS) provides an idea of how much dividend an investor is going to get on a per share basis.

The sum of declared dividends for every ordinary share issued. Dividend per share (DPS) is the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued. Modigliani and Miller (1958) found a firm's share price is based upon its earnings; firm's value is unrelated with dividend policy. Rashid and Anisur (2008)
and Zakaria et al. (2012) found that significant positive relationship between the dividend and share price.

It can be presented symbolically as:
DPS $=\frac{\text { Total Dividend paid to Common Shareholders }}{\text { No. of Shares Outstanding }}$

## Dividend Yield (DY)

The dividend yield or dividend-price ratio of a share is the dividend per share, divided by the price per share. It is often expressed as a percentage. Dividend yield is used to calculate the earnings on investment (shares) considering only the returns in the form of total dividends declared by the company during the year.

A financial ratio that indicates how much a company pays out in dividends each year relative to its share price. Dividend yield is represented as a percentage and can be calculated by dividing. The formula for calculating dividend yield may be represented as follows:

$$
\text { DY }=\frac{\text { Dividend Per Share }}{\text { Market Price Per Share }}
$$

## Price Earnings Ratio (P/E Ratio)

The Price Earnings Ratio (P/E Ratio) is the relationship between a company's stock price and earnings per share (EPS). It is a popular ratio that gives investors a better sense of the value of the company. The $\mathrm{P} / \mathrm{E}$ shows the expectations of the market and is the price you must pay per unit of current earnings (or future earnings, as the case may be).

Earnings are important when valuing a company's stock because investors want to know how profitable a company is and how profitable it will be in the future. Furthermore, if the company doesn't grow and the current level of earnings remains constant, the $\mathrm{P} / \mathrm{E}$ can be interpreted as the number of years it will take for the company to pay back the amount paid for the share. P/E ratio is calculated as the following:

## Price Earnings Ratio $=\frac{\text { Market Price Per Share }}{\text { Earnings Per Share }}$

## Book Value per Share (BVPS)

Book value of equity per share (BVPS), which is the equity available to common shareholders divided by the number of outstanding shares, is the minimum value of a company's equity. Because preferred stockholders have a higher claim on assets and earnings than common shareholders, preferred stock is subtracted from shareholder's equity to derive the equity available to common shareholders.

Shareholders' equity is the owners' residual claim after debts have been paid, and is equal to a firm's total assets minus its total liabilities, which is the net asset value or book value of a company. The book value per share formula is used to calculate the per share value of a company based on its equity available to common shareholders. The term "book value" is a company's assets minus its liabilities and is sometimes referred to as stockholder's equity, owner's equity, shareholder's equity, or simply equity. Common stockholder's equity, or owner's equity, can be found on the balance sheet for the company. In the absence of preferred shares, the total stockholder's equity is used. The book value per share is obtained by dividing the book value of the equity by the numbers of shares outstanding (Sharpe, etal, 2005). The formula for calculating book value per share may be represented as follows:

$$
\text { BVPS }=\frac{\text { Total Common stockholder's Equity }}{\text { Number of Common Shares }}
$$

## Return on Assets (ROA)

Return on Assets (ROA) is a type of return on investment (ROI) that measures the profitability of a business in relation to its total assets. This ratio indicates how well a company is performing by comparing the profit it's generating to the capital it's invested in assets. The higher the return, the more productive and efficient management is in utilizing economic resources. The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company
can manage its assets to produce profits during a period.

It only makes sense that a higher ratio is more favorable to investors because it shows that the company is more effectively managing its assets to produce greater amounts of net income. A positive ROA ratio usually indicates an upward profit trend as well. ROA is most useful for comparing companies in the same industry as different industries use assets differently. For instance, construction companies use large, expensive equipment while software companies use computers and servers. The formula for calculating return on assets may be represented as follows:

$$
\text { ROA }=\frac{\text { Net Income }}{\text { Average Total Assets }}
$$

### 2.1.7 Stock Valuation Model

There are three basic valuation models. All these three models often offer different answer.

## 1. Net Assets Model (NAV)

Net asset value (NAV) is the value of an entity's assets minus the value of its liabilities. This may also be the same as the book value or the equity value of a business. Net asset value may represent the value of the total equity, or it may be divided by the number of shares outstanding held by investors, thereby representing the net asset value per share.

There is no universal method or basis of valuing assets and liabilities for the purposes of calculating the net asset value used throughout the world, and the criteria used for the valuation will depend upon the circumstances, the purposes of the valuation and any regulatory and/or accounting principles that may apply.

## 2. Dividend Valuation Model (DVM)

The dividend discount model (DDM) is a method of valuing a company's stock price based on the theory that its stock is worth the sum of all of its future dividend payments, discounted back to their present value. In other words, it is used to value stocks based on the net present value of the future dividends. The formula for
calculating price of stock by using dividend discount model may be represented as follows:
$P_{o}=D_{1}\left(1+K_{e}\right)^{1}+D_{2}\left(1+K_{e}\right)^{2}+\ldots \ldots \ldots \ldots \ldots \ldots \ldots+D_{n}\left(1+K_{e}\right)^{n}$
$\mathrm{P}_{\mathrm{o}}=\sum \mathrm{D}_{\mathrm{l}}\left(1+\mathrm{K}_{\mathrm{e}}\right)^{\mathrm{t}}$

## 3. Earning Valuation Model (EVM)

In this model the value of share will change with changes in EPS and P/E ratio. An alternative approach to this model is earning capitalization model. Although DVM has some drawbacks, this is one of the best available methods of valuing shares.

### 2.2 Review of Previous Works

### 2.2.1 Review of Articles in the Journals

A good number of empirical studies have been conducted to find out the determinants of stock prices in different countries. Different studies carried over different time periods across different markets have given varying results. Some recent studies related to the determinants of stock prices have been reviewed here.

The study of Nirmala, Sanju and Ramachandran (2011) identified the determinants of share prices in the Indian market. The study used panel data pertaining to three sectors viz., auto, healthcare and public sector undertakings over the period 2000-2009 and employs the fully modified ordinary least squares method. They found that dividend, price-earnings ratio and leverage are significant determinants of share prices for all the sectors under consideration. Further, profitability was found to influence share prices only in the case of auto sector.

The study of Sharma (2011) examined the empirical relationship between equity share prices and explanatory variables such as: book value per share, dividend per share, earning per share, price earnings ratio, dividend yield, dividend payout, size in terms of sale, and net worth for the period 1993-94 to 2008-09. The results revealed that earning per share, dividend per share, and book value per share has significant impact on the market price of share. Furthermore, results of the study indicated that dividend per share and earnings per share being the strongest determinants of market price, so
the results of the study supports liberal dividend policy and suggests companies to pay regular dividends.

Pakistan Khan and Amanullah (2012) investigated different determinants of share prices of Karachi Stock Exchange (KSE) 100 index using Linear Multiple Regression model. A sample of 34 companies has been randomly selected from 34 sectors of KSE. Ten years' (2000-2009) data has been collected for the sample companies. The study found that rise in GDP, dividend and $\mathrm{P} / \mathrm{E}$ ratio leads to rise related to share prices.

The study of Malhotra and Tandon (2013) attempted to determine the factors that influence stock prices in the context of National Stock Exchange (NSE) of 100 companies. A sample of 95 companies was selected for the period 2007-2012 and linear regression model was used. The results indicated that firms' book value, earning per share, and price-earnings ratio are having a significant positive association with firm's stock price while dividend yield is having a significant inverse association with the market price of the firm's stock.

Almumani (2014) attempted to identify the quantitative factors that influence share prices for the listed banks in Amman Stock Exchange over the period 2005-2011 using a linear multiple regression model. There is a significant positive relationship between EPS and the MP of the listed banks in Jordan. Moreover, moreover, there is a significant relationship between banks BV and MP. Another empirical finding from the regression analysis shows a positive relationship between P/E and MP. Empirical findings from the regression analysis on the relationship between size and MP indicate that there is an inverse relationship between size and MP. Finally, other variables (DPS and DY) have insignificant impact on market price of stock.

Irfan and Nishat (2002) identified factors exerting impact on the share prices in Karachi Stock Exchange for the period between 1981 and 2000. The study employed cross-sectional weighted least square regression and analyzed the impact of six variables viz. dividend yield, payout ratio, size, asset growth, leverage and earning volatility on share prices. Of these the payout ratio, size, leverage and dividend yield
emerged as the significant factors affecting the stock market prices in Karachi. This suggests that firm specific factors have a significant impact on market price of shares.

Uddin (2009) analyzed the relationship of microeconomic factors with the stock price by using multiple regression analysis. This research found a significant linear relationship among market return and some microeconomic factors such as net asset value per share, dividend percentage, earning per share of bank leasing, and insurance companies. He also found that non-linear relationship among the variables is insignificant at 95 percent level of significance.

A study by Al Masum (2014) examines the proceeds excess stock market for all banks included in the thirty- Dhaka Stock Exchange for the period from 2007 to 2011. Attempts are being made to determine the existing relationship between the distribution of profits and stock market returns policy of the private commercial banks in Bangladesh kind, and to what extent return on equity can be explained through the distribution of their profits for the same period of time the policy. Various theories concerning the distribution of profits are being used in different parts of the world with different results and conclusions of the policy. Sample size is large i.e. all the listed commercial banks of Dhaka Stock Exchange so the results are reliable and valid. Panel data approach is used to explain the relationship between stock prices and dividends after the control variables such as Return on Equity, Earnings per Share, Retention Ratio have positive relationship with Stock Prices and significantly clarify the variations in the market prices of shares, while the Profit after Tax and dividend yield has negative, insignificant relationship with stock prices. The final results show that the dividend policy has an important positive impact on stock prices.

A study by Flora and Hutabarat (2015) explored the factors affecting stock price of Indonesia. It found that all institutions are seeking to get the most profit in the shortest possible time. The companies can do different things, including funding to achieve their goals. There are different methods that can be used by the company to earn as much money as possible for the survival of the company. One of the most important ways is to attract investors to invest their capital as a source of corporate finance. The investment of the capital markets is the way to find out those who have a surplus of
money and in need of funds. In Indonesia, the banking industry is important. Such as Indonesia survives the financial crisis of 2008 the world, Indonesia has grown interest from other countries. The banking industry can support the growth of one nation. Investors are trying to find a suitable opportunity to invest in this sector, especially state-owned banks, which is based on the banking industry in Indonesia. However, banks have operating structures differ from normal industrial companies. For this reason, investors have different elements to think about them when evaluating banks and thinking about investing in a bank. The result of this study was a recommendation for investors to invest in Bank Mandiri and Bank BNI and Bank BRI because they found it through financial ratios alone is a useful and greatly affects the share price. For Bank BNI, there is no significant financial ratios and inflation in the prices of shares relationship.

A study by Geetha and Swaaminathan (2015) aims to study factors influencing stock price such as price earnings ratio, firm s book value and earnings per share to have a significant positive with the company's market price. A sample of four cars and information technology industries selected sample (listed on the BSE and NSE) for five years in 2010 to 2014.

Srinivasan (2012) state that internal factors determine the share prices for different markets, dividend, retained earnings, size, earnings per share, dividend yield, leverage, payout ratio, and book value per share. Understanding the impact of various fundamental variables on share price is very much helpful to investors as it will help them in taking profitable investment decisions.

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

### 2.2.2 Review of Previous Theses

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

Dhakal (2007) conducted 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.

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 outcry 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.

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.

Sah (2011) conducted a study on factors affecting the share price in Nepalese commercial banks listed in NEPSE by using the data between 2005/06 to 2009/10. The objectives of this study are as follows:

1. To explore the effect of major financial indicators and its relationship with MVPS.
2. To identify whether the stock of sample banks are over price, under price and equilibrium price.
3. To study informational and other factors affecting the share price of the Nepalese commercial bank.
4. To analyze the investor awareness regarding the share price of Nepalese commercial bank.

The findings on the above objectives of study are as follows:

1. EPS, DPS, BVPS etc. are the main financial indicators and there is positive relationship between MVPS and these financial indicators.
2. Pricing status analysis of the stocks of sampled banks has shown that SCB, NBL, EBL, BOK, NIBL and MBL were underpriced during the study period because actual returns were remarkably higher than required rate of return. But HBL and SBI are overpriced during the study period because actual returns were lesser than required rate of return.
3. The stock of SCB, HBL, EBL, BOK, NIBL, and MBL are defensive because their beta coefficients are less than 1 . So these stocks are considered that its risk adjustment factor is less than the risk adjustment factor for the market where as stock of NBL and SBI are aggressive because their beta is greater than 1 . Thus
these stocks are considered that its risk adjustment factor is greater than the risk adjustment factor for the market. Defensive stocks indicate that they are less volatile in compression to market where as aggressive stock are more volatile than that of market return.
4. This study finds that informational and other factors do affect the share price of the Nepalese commercial banks.
5. This study finds that the investors have less awareness regarding the share price of Nepalese commercial banks.

### 2.3 Research Gap

Earlier studies and researches on the determinants of stock price of commercial bank in Nepal listed in the NEPSE. During the review of previous thesis, it was found that no research has been conducted by taking these sample banks and these data. Researcher has taken sample banks from only the first class commercial banks. Present study is based on the data's taken from five commercial banks.

By reviewing earlier thesis it was found that researchers only analyzed the market trend of MPS with other financial indicators but this study has examined those internal factors that play important role in determining market price of commercial banks. This study also examines the impact and relationship of market price with other financial indicators like EPS, P/E Ratio, BVPS and ROA of the firms. Previous researches have analyzed only the qualitative factors affecting stock price but this research is based on quantitative factors affecting stock price. The researcher has conducted research on stock price movement and stock price behavior by taking secondary data. To find out the subjective facts and to fulfill the gaps the present study is conducted.

## CHAPTER III

## METHODOLOGY

This chapter refers to 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 quantitative and qualitative research in very clear and direct way using both financial and statistical tools. Detail research methods are described in the following headings.

### 3.1 Research Design

This research study is attempted to analyze the internal factors of commercial banks and its effect of stock price. According to the objective of the study, descriptive research design is used. Thus, to fulfill the objectives of the study secondary data are used.

### 3.2 Population and Sample

There are 28 commercial banks in Nepal so this is the number of population. Due to the lack of time and resource factor, it is not possible to study all of them. Hence, the 5 commercial banks have taken as samples which are operating in Nepal. The five commercial banks were selected by using convenience sampling method from the list of commercial banks. Among the total commercial banks the following five commercial banks were selected for the study.

Table 3.1: Number of Commercial Banks selected for the study

| S. No. | Name of Commercial Banks | Study Period |
| :---: | :--- | :--- |
| 1. | Laxmi Bank Itd. | $2012 / 13-2016 / 17$ |
| 2. | Himalayan Bank Ltd. | $2012 / 13-2016 / 17$ |
| 3. | Prabhu Bank Ltd. | $2012 / 13-2016 / 17$ |
| 4. | Machhapuchchhre Bank Ltd. | $2012 / 13-2016 / 17$ |
| 5. | Everest Bank Ltd. | $2012 / 13-2016 / 17$ |

In conclusion, Population size $=28$ commercial Banks

Sample size $=5$ commercial Banks.
Sample percentage $=17.85 \%$

### 3.3 Sources of Data

This research study mainly based on the secondary data, Secondary data are used to analysis the internal factors affect on market price of stock of selected commercial banks. The secondary data have been acquired from various sources as like follows.

1. Annual report published by those commercial banks.
2. Http://www.Nepalstock.com (website)
3. Financial report published by Nepal stock exchange.
4. Economic report published by NRB.
5. Annual report of SEBON.
6. News paper, journals \& magazines.

### 3.4 Data Collection and Data Processing Procedure

The study is based on secondary data. For this, the published materials, books of different authors, unpublished thesis reports, journals, magazines, Internet web sites, AGM reports of commercial banks, bulletins published by NRB etc. are the major sources of the secondary data. To collect these secondary data, the researcher visits different campus library including online library, TU central library, SEBON library and NRB library. Different web sites are also search to collect necessary information for the study. To find the result of the research the SPSS statistical software use while processing the data.

### 3.5 Data Analysis Tools

The data collected from different sources are recorded systematically as necessary. Only useful and related data are grouped as per need of the research work. Data are presented in appropriate forms of tables, graphs and charts. For analysis appropriate mathematical, financial as well as statistical tools are used. Some of them are:

### 3.5.1. Financial Tools

For the proper financial analysis of data ratio analysis is the best tool. It is very simple analyzing tools under which ratios are taken to express the relation between two or
more data. Through ratio analysis we can establish the relationship among the data and research into conclusion. Under ratio analysis following ratio related to bank are analyzed.

## 1. Market Price of Share (MPS)

Simply the market price per share reflects per unit price of the share traded in the market which is determined by demand and supply of stock. This is most visible price of financial data. The market price of common stock as sole financial indicator is useless. Comparing this value to the EPS, higher the EPS higher the MPS and vice versa.

It is also comparing with book value per share (BVPS), if MPS>BVPS it is the condition of over valuation but if MPS<BVPS it is the condition of undervaluation of stock. MPS is calculated by dividing total market capitalization by total number of shares outstanding. It can be presented symbolically as:

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

## 2. Earnings per Share (EPS)

Earnings per share refer the rupee amount earned per share of common stock outstanding. It measures the return of each equity shareholders. It is also identified to measure the profitableness of the shareholders investment. The earnings per share simply show the profitability of the banks on a per share basis. The higher earning indicates the better achievements of the profitability of the banks by mobilizing their funds and vice versa. In other words, higher earnings per share denote the strength and lower earnings per share indicates the weakness of the banks.

Earnings per share are computed to know the earnings capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common shareholders by the total number of common stock outstanding of banks. Thus,

$$
\text { EPS }=\frac{\text { Total Earnings available to common shareholders }}{\text { No. of Shares Outstanding }}
$$

## 4. Price Earnings Ratio (P/E Ratio)

The Price Earnings ratio of a stock is the market price divided by its EPS. This tells you how other investors view the stock. It relates with the comparison of market value with its earnings per share. The price earnings ratio indicates the extent to which the earnings of each share are covered by its price. It tells whether the share price of a company is fairly valued, undervalued, or overvalued. In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E.

A company is have a high PE if investors hope their earnings from the stock is increase; this is why they buy the share. This increase in demand is result in the share's market price rising. It can be presented symbolically as:

$$
\text { Price Earnings Ratio }=\frac{\text { Market Price Per Share }}{\text { Earnings Per Share }}
$$

## 5. Book Value per Share (BVPS)

Book value of equity per share (BVPS), which is the equity available to common shareholders divided by the number of outstanding shares, is the minimum value of a company's equity.

A company is have a high BVPS if investors hope their earnings from the stock is increase; this is why they buy the share. This increase in demand is result in the share's market price rising. It can be presented symbolically as:

$$
\text { BVPS }=\frac{\text { Total Common stockholder's Equity }}{\text { Number of Common Shares }}
$$

## 6. Return on Assets (ROA)

Return on Assets (ROA) is a type of return on investment (ROI) that measures the profitability of a business in relation to its total assets. This ratio indicates how well a company is performing by comparing the profit it's generating to the capital it's invested in assets. The higher the return, the more productive and efficient management is in utilizing economic resources. The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In
other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period.

It only makes sense that a higher ratio is more favorable to investors because it shows that the company is more effectively managing its assets to produce greater amounts of net income. A positive ROA ratio usually indicates an upward profit trend as well. It can be presented symbolically as:

$$
\text { ROA }=\frac{\text { Net Income }}{\text { Average Total Assets }}
$$

### 3.5.2 Statistical Tools

Statistical tools are the mathematical technique used to analysis and interpret of performance. It is used to describe the relationship between variables and interpret the result. Statistic also used to test the objectives that are set to know the information of population. The research holds various statistical tools, which are defined as follows;

## 1. Mean ( $\bar{X}$ )

The arithmetic mean or average is the sum of total values to the no of observation in the sample. It is the sum of total value of dividend by number of value .It is calculated as;

$$
\operatorname{Mean}(\bar{X})=\frac{\sum X}{n}
$$

## 3. Coefficient of Variation (CV)

CV reflects the relationship between standard deviation and mean. The coefficient of dispersion based on standard deviation multiply by 100 is known as the coefficient of variation (CV). It is independent of unit. So, two distributions can bitterly be compared with the help of C.V for their variability .Less the C.V more will be the uniformity, consistency and more than C.V less will be the uniformity, consistency. It is calculated as;

$$
\text { C.V }=\frac{\sigma}{\bar{X}} \times 100
$$

## 4. Correlation Coefficient (r)

Correlation analysis is the statistical tools that can be used to describe the degree to which one variable is linearly related to another. The correlation coefficient measures the degree of relationship between two sets of figures. Correlation coefficient is most widely used in practice correlation can either be positive or it can be negative. It is denoted by $r$. Its value lies between -1 to +1 . When $r=-1$, it means, there is perfect negative relationship between the variables and when $r=+1$, it means, there is perfect positive relationship between the variables. However, in practice such values of $r$ is $+1,-1$ and 0 are rare. In practical life, the possibility of obtaining either prefect positive or perfect negative correlation is vary remote, Gupta, (2000).

$$
\mathrm{r}=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum X^{2}-\left(\sum X\right)^{2}} \sqrt{n \sum Y^{2}-\left(\sum Y\right)^{2}}}
$$

## 5. Regression Analysis

Regression analysis is the development of the statistical model that can be used to predict the values of the dependent variable based upon the values of at least one independent variable. Regression analysis helps us to know the relative movement in the variables.

## Simple regression analysis

The simple regression equation of Y on X , which is used to describe the variation in the value of Y of given change in the value of X .

$$
Y=a+b x
$$

Where,
$Y=$ dependent variable
$\mathrm{X}=$ independent variable
$\mathrm{a}=$ Regression constant
$b=$ Regression coefficient

## Multiple Regression Analysis

Similarly the multiple regression models has been used to find out whether the dividend per share, dividend payout ratio and earning per share of finance companies
are related to market price of finance companies or not. The equation for this regression model is as follows:
MPS $=\boldsymbol{a}_{\mathbf{1}}+\boldsymbol{b}_{\mathbf{1}}$ EPS $+\boldsymbol{b}_{\mathbf{2}}$ P/E ratio $+\boldsymbol{b}_{\mathbf{3}}$ BVPS $+\mathrm{b}_{4}$ ROA
Where,
MPS $=$ Market Price of Stock
EPS = Earning per Share
P/E ratio= Price Earning Ratio
BVPS = Book Value Ratio
ROA= Return on Assets
$\boldsymbol{a}_{\mathbf{1}}=$ Constant,
$\boldsymbol{b}_{\mathbf{1}}, \boldsymbol{b}_{2}, \boldsymbol{b}_{\mathbf{3}}, \boldsymbol{b 4}=$ Regression Coefficient.

## CHAPTER IV

## RESULTS

In this chapter, data for the study, sourced from the annual report of commercial banks and the price list of the Nepal Stock Exchange were presented, tested and analyzed. From the analysis and results generated, deductions and logical conclusions were obtained. Descriptive statistics of all the variables were also presented and analyzed. The variables for the study include stock prices, as the dependent variable and earnings per share, dividend per share, price earnings ratio, book value per share and return on assets as the independent variables. The sample size which was five commercial banks for five (5) years 2012-2017.

### 4.1 Analysis of Financial Variables

Under this topic different financial indicators have been presented and analyzed. This analysis includes:
I. Market Price of Share (MPS)
II. Earnings per Share (EPS)
III. Price Earnings Ratio (P/E Ratio)
IV. Book Value per Share (BVPS)
V. Return on Assets (ROA)

### 4.1.1 Market Price per Share (MPS)

Simply the market price per share reflects per unit price of the share traded in the market which is determined by demand and supply of stock. This the most visible price of financial data. The capital market determines the MPS. Market price per share represents the closing market price of the particulars share in particulars fiscal year in NEPSE. The market price per share of selected commercial banks is presented in the following table:

Table 4.1 Analysis of Market Price per Share (MPS in RS)

|  | MPS |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | Mean | C.V |
| LBL | 309 | 588 | 400 | 876 | 390 | 512.6 | 0.44 |
| HBL | 700 | 941 | 813 | 1500 | 888 | 968.4 | 0.32 |
| PBL | 137 | 207 | 348 | 415 | 406 | 302.6 | 0.41 |
| MBL | 203 | 576 | 564 | 680 | 360 | 476.6 | 0.40 |
| EBL | 1591 | 2631 | 2120 | 3385 | 1353 | 2216 | 0.37 |

Sources: Annual Report of Commercial Banks
Table 4.1 shows descriptive statistics- mean, CV and value of each year Market Price per Share (MPS) associated with selected commercial banks for five year period. The table shows that average MPS of LBL during this period of study is Rs. 512.6. The MPS of LBL range between Rs. 309 to 876 during the study period. The coefficient of variation of the MPS under the period of study is 0.44 . The MPS of HBL ranges from Rs. 700 to Rs. 1500 leading to average of Rs. 968.4 whereas CV of HBL is 0.32 . The average MPS of PBL measured at Rs. 302.6 which ranges from Rs. 137 to Rs. 415 with the CV 0.41. Similarly the average MPS of MBL is Rs. 476.6 which is range from Rs. 203 to Rs. 680 with coefficient of variation 0.40 . The MPS of EBL ranges from Rs. 1353 to Rs. 3385 with an average of Rs.2216. The CV is 0.37 . It is seen that EBL has highest average price \& LBL has highest C.V which indicates the highest variation in MPS.

The annual market price of stock of each sample finance companies can be analyzed presented on graphs as follows:

Figure 4.1 Market Prices per Share

(Sources: Annual Report of commercial banks)

Figure 4.1 shows the trends of MPS of selected commercial banks in five year periods. In each study period EBL has heights MPS than other commercial banks. Similarly HBL has second higher MPS in each year.PBL has lowest MPS in first four years. Each bank has highest MPS in 2015/16, after that decreasing MPS. Market price of all commercial banks is fluctuated every year of study period.

### 4.1.2 Earning Per Share (EPS)

Earning Per share refers the rupee amount earned per share of common stock outstanding it measures the profitableness of the shareholders investment. The EPS shows the profitableness of the institutions on per share basis. The higher earning indicates the better achievement of the profitability of the institutions by mobilizing their funds and vice-versa. The earning per share of selected commercial banks under the study is tabulated and interpretation as follows:

Table 4.2 Analysis of Earning per Share (EPS in RS)

|  | EPS |  |  |  |  |  |  |
| :--- | ---: | ---: | :---: | ---: | ---: | ---: | :---: |
|  |  |  |  |  |  |  |  |
| Banks | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | Mean | C.V |
| LBL | 24.78 | 26.07 | 19.42 | 27.15 | 19.15 | 23.31 | 0.16 |
| HBL | 34.19 | 33.10 | 33.37 | 43.03 | 33.55 | 35.45 | 0.12 |
| PBL | $(40.23)$ | $(15.24)$ | 31.73 | 26.75 | 27.17 | 6.04 | 5.32 |
| MBL | 5.98 | 18.34 | 22.20 | 25.04 | 24 | 19.11 | 0.41 |
| EBL | 91.88 | 86.04 | 78.04 | 65.97 | 44.32 | 73.25 | 0.26 |

(Sources: Annual Report of Commercial Banks)

Table 4.2 shows the earning price per share of five commercial banks for the period of 20112/13 to 2016/17. Table 4.2 shows the earning per share of LBL which is range from Rs. 19.15 to Rs. 27.15 with a mean of Rs. 23.31. The coefficient of variation is 0.16.The average EPS of HBL during the study period considered is noticed to be Rs. 35.45 with range of EPS Rs. 33.10 to Rs. 43.03 and the CV is o.12. Similarly, the EPS of PBL ranges from a minimum of Rs. -40.23 to Rs. 31.73 with an average of Rs. 6.04 and the CV is 5.32. EPS of MBL has minimum value of Rs. 5.98to maximum of Rs. 25.04 with mean of Rs. 19.11 and the coefficient of variation is 0.41 . Similarly, average EPS of EBL during the study period is Rs. 73.25 with maximum of Rs. 91.88 and minimum of Rs. 44.32. Whereas coefficient of variation is 0.26 .

The annual earning per share of each sample finance companies can be presented on graphs as follows:

Figure 4.2 Earning Per Share

(Sources: Annual Report of Commercial Banks)

Similarly, figure 4.2 shows the earning per share of commercial banks as graphics forms. According to above figure in year 2011/12 and 2012/13 EPS of EBL \& PBL is heights and lowest respectively. EPS of EBL has highest in each year and EPS of PBL has negative in 2012/13 \& 2013/14. In fiscal year 2016/17 LBL has lowest EPS.

### 4.1.3 Price Earnings Ratio (P/E Ratio)

The Price Earnings ratio of a stock is the market price divided by its EPS. This tells you how other investors view the stock. It relates with the comparison of market value with its earnings per share. The price earnings ratio indicates the extent to which the earnings of each share are covered by its price. It tells whether the share price of a company is fairly valued, undervalued, or overvalued. In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. The P/E ratio per share of selected commercial banks is presented in the following table:

Table 4.3 Analysis of Price Earnings Ratio (P/E ratio in Times)

|  | P/E ratio |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Banks | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | Mean | C.V |
| LBL | 12.47 | 22.55 | 20.60 | 32.26 | 20.36 | 21.65 | 0.33 |
| HBL | 20.47 | 28.43 | 24.38 | 34.86 | 26.47 | 26.92 | 0.20 |
| PBL | $(3.41)$ | $(13.58)$ | 10.97 | 15.51 | 14.94 | 4.87 | 2.63 |
| MBL | 33.96 | 31.40 | 25.40 | 27.15 | 15.00 | 26.58 | 0.28 |
| EBL | 17.32 | 30.58 | 27.17 | 51.31 | 30.53 | 31.38 | 0.39 |

(Sources: Annual Report of Commercial Banks)

Table 4.3 shows descriptive statistics- mean, CV and price earnings ratio associated with selected commercial banks for five year period. The price earnings ratio of LBL ranges from 12.47 times to 32.26 times with average of 21.65 times and CV is 0.33 . The average P/E ratio of HBL during this period of study is 26.92 times with CV of 0.20 , which ranges minimum 20.47 times to 34.86 times. Similarly, the P/E ratio of PBL lies between -13.58 times to 15.51 times with average of 4.87 times and coefficient of variation are 12.85 times \& 2.63 respectively. The average $\mathrm{P} / \mathrm{E}$ ratio of MBL is 26.58 times and it is ranges from 15 times to 33.96 times with CV of 0.28 . Similarly, the P/E ratio of EBL ranges from 17.32 times to 51.31 times. The average of $\mathrm{P} / \mathrm{E}$ ratio is 31.38 times and CV of 0.39 .

Figure 4.3 Price Earnings ratio

(Sources: Annual Report of Commercial Banks)

Figure 4.3 shows that the price earning ratio of commercial banks. According to figure 4.3 in 1012/13, P/E ratio of MBL has higher \& in year 2012/13 \& 2013/14, PBL has lowest \& negative price earning ratio than compared to other commercial banks. In year 2014/15, 2015/16 \& 2016/17 EBL has higher P/E ratio than other commercial banks.

### 4.1.4 Book Value per Share (BVPS)

Book value of equity per share (BVPS), which is the equity available to common shareholders divided by the number of outstanding shares, is the minimum value of a company's equity. A company will have a high BVPS if investors hope their earnings from the stock will increase; this is why they buy the share. This increase in demand will result in the share's market price rising. The book value per share of selected commercial banks can be tabulated and presented in graph as follows:

Table 4.4 Analysis of Book Value per Share (BVPS in Rs)

|  | BVPS |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Banks | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | Mean | C.V |
| LBL | 160.60 | 162.96 | 177.36 | 185.88 | 128.35 | 163.03 | 0.14 |
| HBL | 192.02 | 210 | 208.81 | 196.12 | 180.31 | 197.45 | 0.06 |
| PBL | 71.23 | 56.70 | 115.11 | 109.39 | 140.86 | 98.66 | 0.35 |
| MBL | 112.81 | 130.54 | 137.46 | 138.18 | 124.43 | 128.68 | 0.08 |
| EBL | 291.53 | 296.30 | 335.60 | 320.07 | 253.28 | 299.36 | 0.10 |

(Sources: Annual Report of Commercial Banks)

Table 4.4 shows descriptive statistics- mean, CV and Book Value per Share (BVPS) associated with selected commercial banks for five year period. The table shows that average BVPS of LBL during this period of study is Rs. 163.03. The BVPS of LBL range between Rs. 128.35 to 185.88 during the study period. The coefficient of variation is 0.14 . The BVPS of HBL ranges from Rs. 180.31 to Rs. 210 leading to average of Rs. 197.45 and CV of HBL is 0.06 respectively. The average BVPS of PBL measured at Rs. 98.66 which ranges from Rs. 56.70 to Rs. 140.86 and CV 0.35 . Similarly the average BVPS of MBL is Rs. 128.68 which is range from Rs. 112.82 to Rs. 138.18 with coefficient of variation is 0.08 respectively. The BVPS of EBL ranges from Rs. 253.28 to Rs. 335.60 with an average of Rs. 299.36 and the CV is 0.10. It is seen that EBL has highest average BVPS and PBL has highest C.V which indicates the highest variation in BVPS.

Figure 4.4 Book Value per Share

(Sources: Annual Report of Commercial Banks)

Figure 4.4 shows that the book value per share of commercial banks. According to figure, EBL has higher book value per share in study period \& BVPS of HBL has second. The book value per share of PBL has increasing after the year 2013/14. MBL \& LBL has decreasing after the year 2015/16. The book value per share of PBL has lowest in 2013/14.

### 4.1.5 Return on Assets (ROA)

Return on Assets (ROA) is a type of return on investment (ROI) that measures the profitability of a business in relation to its total assets. This ratio indicates how well a company is performing by comparing the profit it's generating to the capital it's invested in assets. The higher the return, the more productive and efficient management is in utilizing economic resources. The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period. The return on assets of selected commercial banks can be tabulated and presented in graph as follows:

Table 4.5 Analysis of Return on Assets (ROA in \%)

|  | ROA |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Banks | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6} / \mathbf{1 7}$ | Mean | C.V |
| LBL | 1.50 | 1.47 | 1.04 | 1.35 | 1.61 | 1.39 | 0.16 |
| HBL | 1.54 | 1.30 | 1.34 | 1.94 | 2.03 | 1.63 | 0.21 |
| PBL | $(3.43)$ | $(1.44)$ | 2.19 | 1.64 | 1.76 | 0.14 | 17.13 |
| MBL | 0.49 | 1.12 | 1.26 | 1.51 | 1.89 | 1.25 | 0.41 |
| EBL | 2.39 | 2.25 | 1.85 | 1.61 | 1.72 | 1.96 | 0.17 |

(Sources: Annual Report of Commercial Banks)

Table 4.5 shows mean, CV and Return on Assets (ROA) associated with selected commercial banks for five year period. The table shows that average ROA of LBL during this period of study is $1.39 \%$. The ROA of LBL range between $1.04 \%$ to $1.61 \%$ during the study period. The coefficient of variation is 0.16 . The ROA of HBL ranges from $1.30 \%$ to $2.03 \%$ leading to average of 1.63 . Whereas CV of HBL is 0.21 . The average ROA of PBL measured at o.14\% which ranges from $-3.43 \%$ to $2.19 \%$ with the CV 17.13. Similarly the average ROA of MBL is $1.25 \%$ which is range from $0.49 \%$ to $1.89 \%$ with coefficient of variation 0.41 . The ROA of EBL ranges from $1.61 \%$ to $2.39 \%$ with an average of $1.96 \%$ and the CV is 0.17 . It is seen that EBL has highest average ROA and PBL has highest total risk which is presented by highest Standard deviation. PBL has highest C.V which indicates the highest variation in ROA.

Figure 4.5 Return on Assets

(Sources: Annual Report of Commercial Banks)

Figure 4.5 shows that the Return on Assets of commercial banks. According to figure, EBL has higher Return on Assets in study period 2012/13 \& 2013/14, whereas ROA of PBL has negative in 2012/13 \& 2013/14, also PBL has highest ROA in 2014/15. The ROA of HBL increasing after the year 2014/15. There is a ROA of HBL highest in last two years of study period.

### 4.2 Presentation of Statistical Variables

Statistical tools are the mathematical technique used to analysis and interpret of performance. It is used to describe the relationship between variables and interpret the result. This analysis includes Correlation co-efficient and the Regression coefficient between the following financial variable have been calculated and interpreted.

### 4.2.1 Bivariate Correlations

The bivariate correlation analysis is used to assess the relationship between two variables. The bivariate correlation analysis results have been presented in Table 4.6.

Table 4.6 Bivariate correlation analysis

|  | MPS | EPS | P/E ratio | BVPS | ROA |
| :--- | ---: | ---: | ---: | ---: | ---: |
| MPS | 1 |  |  |  |  |
| EPS | $0.790^{* *}$ | 1 |  |  |  |
| P/E ratio | $0.631^{* *}$ | $0.563^{* *}$ | 1 |  |  |
| BVPS | $0.888^{* *}$ | $0.893^{* *}$ | $0.622^{* *}$ | 1 |  |
| ROA | 0.382 | $0.782^{* *}$ | $0.575^{* *}$ | $0.532^{* *}$ | 1 |

**. Correlation is significant at the 0.01 level (2-tailed).
Sample size ( n ) $=25$
Sources: Research finding (2018)

According to table 4.6, the highest correlation has been observed to be 0.893 between EPS and BVPS. The market price of share is positively related to the all independent variables. There is highest correlation with market price per share and independent variable (BVPS) is 0.888 . The result shows that higher the earning per share, price earnings ratio, book value per share and return on assets, higher would be the market price per share. There is all correlation are positive, it means that there is positive relationship between the study variables. The market price per share is positive correlated with independent variables, so if value of independent variables increases the value of dependent variable also increase and vice verse.

### 4.2.2 Regression Analysis

The regression analysis is carried out to determine whether the dependent variable is Influence by the given independent variables or not. In this analysis MPS is dependent Variables and EPS, P/E ratio, BVPS and ROA are independent variables. The equation of regression model is as follow:

$$
\text { MPS }=a+b_{1} \text { EPS }+b_{2} \text { P/E ratio }+b_{3} \text { BVPS }+b_{4} \text { ROA }
$$

Where,

$$
\boldsymbol{a}_{\mathbf{1}}=\text { Constant, } \boldsymbol{b}_{\mathbf{1}}, \boldsymbol{b}_{\mathbf{2}}, \boldsymbol{b}_{\mathbf{3}}=\text { Regression Coefficient }
$$

Table 4.7 variation in MPS Explained by EPS, P/E ratio, BVPS \& ROA (Model Summary)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| :--- | :--- | ---: | ---: | ---: |
| 1 | $.939^{\mathrm{a}}$ | .881 | .857 | 304.39912 |

a. Predictors: (Constant), ROA, BVPS, P/E Ratio, EPS

Source: Research finding (2018)

As shown the table 4.7 of model summery, which explain the total variation in MPS explained by EPS, P/E ratio, BVPS \& ROA. The value of coefficient of multiple determinations R Square is 0.881 . This implies that the variation in MPS can be explained by $88.1 \%$ independent variables (EPS, P/E ratio, BVPS \& ROA) at $95 \%$ confident interval. The chance of error of the estimate is 304.39912. In other word, finding of the coefficient of multiple determination R Square shows that $88.1 \%$ changes in MPS of Nepalese commercial banks could be accounted to changes in EPS, P/E ratio, BVPS \& ROA and remaining $11.9 \%$ are contributes by other factors. R is the correlation coefficient which shows the relationship between the study variables, from the findings shows in the table above there was a highly significantly positive relationship between the study variables as shown by $0.939^{\text {a }}$. This result is complimented by the adjusted R- square of about $85.7 \%$, which is essence is the proportion of total variance that is explained by the model. The table 4.8 below shows the Analysis of Variance (ANOVA).

Table 4.8 Goodness of Fit of Regression (ANOVA ${ }^{\text {a }}$ )

| Model |  | Sum of Squares | D. f. | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Regression | 13745692.13 | 4 | 3436423.03 | 37.087 | . $000{ }^{\text {b }}$ |
|  | Residual | 1853176.429 | 20 | 92658.821 |  |  |
|  | Total | 15598868.56 | 24 |  |  |  |

a. Dependent Variable: MPS
b. Predictors: (constant), EPS, P/E Ratio, BVPS, ROA

Source: Research finding (2018)

From the ANOVA statics in table 4.8 above, the processed data which is the population parameters, had a significance level of $0.00^{\mathrm{b}} \%$ which shows that the data is ideal for making a conclusion on the population's parameters as the value of significance ( $\mathrm{p}-\mathrm{value} \mathrm{)} \mathrm{is} \mathrm{less} \mathrm{than} \mathrm{standard} \mathrm{( } \mathrm{5} \mathrm{\%} \mathrm{)}$. than the critical value $(37.087>1.984)$ an indication that independent variables (EPS, P/E ratio, BVPS \& ROA) of Nepalese commercial banks significantly influence by on MPS on Nepalese commercial banks. In other word, the F value is about 37.087 and a P - value or F (sig) that is equal to $0.00^{\mathrm{b}}$ this invariably suggests clearly that simultaneously the explanatory variables are significantly associated with the dependent variable. That is, they strongly determine the behavior of the market values of share prices.

The regression results for independent effect of EPS, P/E ratio, BVPS \& ROA on MPS is shown in table 4.9 below.

Table 4.9 Regression Result for Independent Effect of EPS, P/E ratio, BVPS \& ROA on MPS (Coefficients ${ }^{\text {a }}$ )

| Model | Unstandardized Coefficients |  | Standardized <br> Coefficients$\|$ Beta | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error |  |  |  |
| (Constant) | -171.344 | 283.621 |  | -. 604 | . 553 |
| EPS | 29.844 | 9.514 | 1.043 | 3.137 | . 004 |
| $1 \mathrm{P} / \mathrm{E}$ Ratio | 25.110 | 7.700 | . 399 | 3.261 | . 004 |
| BVPS | 54.871 | 13.345 | . 267 | 6.237 | . 001 |
| ROA | -46.471 | 112.213 | -. 708 | -3.725 | . 754 |

a. Dependent Variable: MPS

## Source: Research finding (2018)

From the table 4.9 regression model, Earning per share (EPS), Price Earnings ratio (P/E ratio), Book Value per Share (BVPS) and Return on Assets (ROA) of Nepalese commercial banks to a constant zero, Market per Share of Nepalese commercial banks would be -171.344 , its established that a unit increase in level of Return on Assets
(ROA) would lead to an increase in Market Price per Share (MPS) by factor of 46.471, a unit increase in level of EPS would cause to an increase MPS by a factor of 29.844, a unit increase in P/E ratio lead to increase in MPS by a factor of 25.110 and a unit increase in BVPS would cause increase in MPS by a factor 54.871 of Nepalese commercial banks. From the above finding there is positive relationship between MPS and first three independent variables (EPS, P/E ratio \& BVPS), and there is negative relationship between MPS and ROA. The study further revealed that the P-value was less than $5 \%$ are EPS, P/E ratio and BVPS, which shows that there are three independent variables, has a statistically significant for this study at $95 \%$ confidence level. Thus this means that EPS, P/E ratio \& BVPS has significantly influence on MPS. From the table 4.9 we find out following result.

1. There is a significant positive relationship between MPS and EPS (i.e. p- value $0.04<0.05)$.
2. Another empirical finding from the regression analysis shows that there is significant positive relationship between MPS and P/E ratio (i.e. p- value $0.04<0.05)$.
3. There is significant positive impact of BVPS on MPS, because p-value ( 0.001 ) is less than 0.05 .
4. There is insignificant negative relationship between ROA and MPS of Nepalese commercial banks (i.e. p- value $0.754>0.05$ ).

### 4.3. Major Findings

I. According to market price per share analysis, EBL has highest average price per share i.e. Rs. 2216 and PBL has lowest average price per share i.e. Rs. 302.60.
II. According to EPS analysis, the average EPS of all commercial banks under the study are positive and consistent. The EBL has a heights average EPS i.e. Rs.44.32 and PBL has lowest average EPS i.e. Rs. 6.04.
III. According to P/E ratio, EBL has highest average price earnings ratio i.e. 31.38 times. It means that when there is 1unit increase in earnings, the share prices will increases by Rs. 31.38. PBL has lowest average price earnings ratio.
IV. According to book value per share analysis, BVPS of all commercial banks lies in between RS. 98.66 to Rs. 299.36. PBL has the highest fluctuation in BVPS while HBL has lowest fluctuation in BVPS during the period of study.
V. According to return on assets, EBL has the highest average ROA (i.e. 1.96\%). PBL has the lowest average ROA (i.e. 0.14\%).
VI. From the bivariate correlation analysis, the market price per share (MPS) of sampled banks is positively correlated with the EPS, P/E ratio, BVPS \& ROA. It indicates that increase in EPS, P/E ratio, BVPS \& ROA of the commercial banks lead to increase in MPS of these banks and vice -versa.
VII. There is high degree of positive correlation between MPS and EPS of commercial banks (i.e. 0.790).
VIII. There is moderate degree of positive correlation between MPS and P/E ratio of commercial banks (i.e.0.631).
IX. There is high degree of positive correlation between MPS and BVPS of commercial banks (i.e.0.888).
X. There is low degree of positive correlation between MPS and ROA of commercial banks (i.e. 0.382).
XI. The coefficient of multiple determination of the equation is 0.881 . This means the variables EPS, P/E ratio, BVPS and ROA are responsible for determining stock price by $88.1 \%$ and the rest $11.9 \%$ are unexplained on determining the stock price.
XII. The multiple regressions show that the regression coefficients are positive for earning per share, Price earnings ratio \& BVPS. Similarly, regression coefficients are negative for ROA.
XIII. The tests of P-value explain that the relationship of MPS with EPS, P/E ratio, BVPS and ROA of the bank at $5 \%$ level of significant. Since the P-value of EPS, P/E ratios and BVPS are less than 0.05 which mean that EPS, P/E ratio and BVPS significantly affect the Market prices. And, the P- value of ROA of the banks is more than 0.05 which mean that ROA of the bank have insignificant impact on share prices of Banks.

## CHAPTER V

## CONCLUSION

This is the final chapter that involves summary, conclusions and implications of the research work. The facts and findings from secondary data analysis are presented in this chapter. Besides summary and concluding research work, implications are made to concerned persons and organizations.

### 5.1 Summary

The objective of the study was to investigate the internal factors affecting on stock price of Nepalese commercial banks. In doing so, the study could contribute immensely to the scarce literature in the area of corporate finance in the Nepalese context. Chapter one gave a detailed background of market price and objectives of the study. Further, the chapter discussed. The chapter also focused on the significance of the study and the organization of the study.

The basic objective of this study is to examine the relationship between internal factors (EPS, P/E ratio, BVPS \& ROA) and its impact on stock price in the context of Nepalese commercial banks. The specific objectives of this study are (1) to analyze the MPS of Nepalese commercial banks, (2) to examine the impact of EPS, P/E ratio, BVPS \& ROA on stock price of Nepalese commercial banks. The main objective of the research is assessing the relationship between internal factors and market price of commercial banks.

Chapter two presented the review of theoretical literature on securities market and share prices. Different stock valuation models are also discussed in this chapter. Different theories of stock price are also discussed in this part. So many international articles and theses related to factors affecting the share prices of commercial banks are also reviewed in this section. The chapter also focused on the critical review of major issues followed by the summary and gaps to be filled by the study.

Chapter three was structured around research design, target population, sample design, data collection procedures and instruments, and data analysis and presentation. The sample comprised of 5 sampled commercial banks (i.e. LBL, HBL,

PBL, MBL and EBL) from total population of 28 commercial banks by using convenient sampling method that met the eligibility criteria. To achieving the objectives of the study, descriptive and casual comparative research design has been employed.

Chapter four presented and discussed the results of empirical testing of factors affecting the share pieces of commercial banks. Data are analyzed by using appropriate financial and descriptive and analytical tools. In analysis part, interpretation and comments are also made wherever necessary. Major findings of the study were also pointed out in this chapter.

### 5.2 Conclusion

The study of factors affecting the share prices of commercial banks has been a subject of great interest these days. Moreover, it is a subject of immense curiosity especially a banking sector to identify the factors that influence share prices. The shares of commercial banks offer the investment opportunities to Nepalese investors because these shares are more frequently traded in the market than as compared to others in Nepalese context. Specifically, this study examined the effect of earnings per share, price earnings ratio, book value per share and return on assets on the share price of commercial bank listed on Nepal stock exchange limited.

The findings of the study over the period of 2012/13 to 2016/17 reveled that earning per share, price earnings ratio and book value per share have the significant positive association with share price while return on assets of the banks have no explanatory power toward stock price movement. It means if earnings per share, price earnings ratio and book value per share increases, the price of share will also increases and vice-versa. But return on assets of the bank does not affect the share price. It means if return on assets of the bank increases there is no guarantee that the prices of share will also increases and vice-versa. The study concludes that earnings per share, price earnings ratio and book value per share are the major determinants of share price of Nepalese commercial banks.

The results of this study uncovered new evidence in Nepalese perspective, which are
considered to be valuable to the market participants. Thus, findings of the this study seems to be particularly useful for equity investors and fund managers as they can watch out for these significant factors while estimating stock returns and predicting share prices.

### 5.3 Implication

This study has also several implications pointing to interesting avenues for future research. Some implication and suggestion for future research are discuses here:

1. This study examined the internal factors that affect the share price of commercial banks listed on the NEPSE. The variables chosen were firm specific variables and may not be the only variables that affect share prices. It is recommended that further research could be conducted to establish whether macro-economic variables affect stock price for firms listed in the NEPSE.
2. This study has been conducted in the context of Nepalese commercial banks, with short period of time and with small sample size. Future studies may deal with wide area of firms with long period of time.
3. There is need to conduct event study on the factors affecting the share price for listed commercial banks at the NEPSE and by extension, on emerging markets. In addition, research could be conducted on factors affecting in the market returns in Nepal. Despite a lot of literature in this area, internal factors like (EPS, P/E ratio, BVPS and ROA) are vital element of commercial banks. This thesis revealed much on the factors affecting the stock price in Nepalese commercial banks and hence has contributed immensely in the area of banking sector in Nepal.
4. This study acts as a guide to potential investors in Nepal to focus on the factors discussed above before making investment decisions. Nepal is an economy with lots of opportunities and it is imperative to conduct studies which will benefit the investors to make rational investors.
5. Since general public are unaware about the share and share market, an organised effort is necessary to aware the public about it. A separate department in NEPSE or an independent organisation is recommended which analyse, inform and create the awareness within the emerging potential investors about share.

### 5.4 Scope for Future Research

This study has portrayed some crucial results and one avenue for future research is to extend the study to other emerging markets.

1. This result is basically from " A " class financial institution of Nepal. Thus, the future study may incorporate other financial sectors such as development banks, insurance finance companies and micro- finance companies.
2. The study is entirely based on secondary data and does not include the preference of different investors and other stake holders. Therefore, future studies can be based on using primary data or both primary and secondary data.
3. The sample size and time period taken for the study is limited so future study can be carried out by taking large sample size for longer time period. The model used in this study is limited on multiple linear regressions. Thus other models can be taken to set a model and examine the impact of corporate governance on the capital structure of Nepalese commercial banks.
4. Finally, future studies can use some advance statistical tools. For example, the future studies can use non-linear statistical tools and bidirectional causality tool.
5. The study is limited to Nepalese commercial banks. Therefore, the findings of this study could only be generalized to firms similar to those that were included in this research.
6. Further studies could consider other corporate governance variables.
7. The findings are based on research in a single country and may not be generalized.

## References

Sen,S. and Ray, R. (2013), Determinants of stock prices in India. The ICFAI Journal of Applied Finance, Vol 9, No (7), Pp 35-40.

Srinivasan, P. (2012). Determinants of equity share prices in India: A panel data approach. The Romanian Economic Journal, 46, 205-228.

Fama, F. (1970). Efficient capital market, A review of theory and empirical work, The Journal of Finance. 25(2).

Sharif, T. , purohit, H. and Pillai, R. (2015), Analysis of factors affecting share prices: The case of Bahrain stock exchange, International Journal of Economics and Finance, Vol. 7, No. 3.

Sharma, S. (2011). Determinants of equity share prices in India. Journal of Arts, Science \& Commerce, 2(4), 51-60.

Bhatt, P., \& S. JK. (2012). Impact of earnings per share on market value of an equity share: An empirical study in Indian capital market. Journal of Finance, Accounting and Management, 3(2), 14-30.

Modigliani, F. and Miller, M. H. (1958). Dividend policy, growth, and the valuation of shares. The Journal of Business , 34(4), 411-433.

Rashid, A., \& A. Rahman (2008). Dividend policy and stock price volatility: Evidence from Bangladesh. Journal of Applied Business and Economic, 8(4), 71-81.

Zakaria, Z. (2012). The impact of dividend policy on stock price volatility: Malaysian construction and material company. International Journal of Economic and Management Science, 2(5), 1-8.

Nickolson, S. F. (1960). "Price earning ratio". Financial Analysts Journal, 16, 43-45.
Emamgholipour, M., A. (2013). The effects of performance evaluation market ratios on the stock return: Evidence from the Tehran stock exchange. International Research Journal of Applied and Basic Sciences, 4(3), 697-703.
Emekewue, P. (2008). Corporate Financial Management, Depot legal no. 234/2008 First quarter.

Sharpe, Alexander and Bailey (2005). Investment Analysis. New Delhi: Prentice hall of India pvt. Ltd.

Uddin, M. B. (2009). Determinants of market price of stock: A study on bank leasing and insurance. Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 2(2), 124-130.

Nirmala, P.S., Sanju, P. S. \&Ramachandran, M. (2011).Determinants of share prices in India.Journal of Emerging Trends in Economics and Management Science (JETEMS), 2(2), 124-130.

Amanullah, M. (2012). Determinants of share prices at Karachi stock exchange. International Journal of Business \& Management Studies, 4, 1309-1347.

Malhotra, N, and Tandon, K, (2013), Determinants of stock prices: Empirical evidence from NSE 100 companies, International Journal of Research in Management \& Technology, Vol. 3, No. 3.

Almumani, M, (2014), Determinants of equity share prices of the listed banks in Amman stock exchange: Quantitative approach, International Journal of Business and Social Science, Vol. 5, No. 1.

Irfan, C., \&Nishat, M. (2002). Key fundamental factors and long-run price changes in an emerging market: A case study of Karachi Stock Exchange (KSE). The Pakistan Development Review, 41, 517-533.

Masum, A. A. (2014). Dividend policy and its impact on stock price - A study on commercial banks listed in Dhaka stock exchange. Global Disclosure of Economics and Business, 3(1), 9-17.

Flora, J, and Hutabarat, F, (2015), Exploring factors affecting stock price of Indonesia state owned bank listed at Indonesia stock exchange, Academic Research International, Vol. 3, No. 6.

Geetha, E, and Swaaminathan, M, (2015), Study on the factors influencing stock price A comparative study of automobile and information Technology Industries stocks in India, International Journal of Current Research and Academic Review, Vol. 3, No. 3.

Pradhan, R.S. (2004). Stock market behavior in a small capital market: A case of Nepal. The Nepalese Management Review. Kathmandu: Tribhuvan University, 9(1):20-32.

Sah, B. (2011). Factors Affecting the Share Price in Nepalese Commercial Banks Listed in NEPSE; An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.

Neupane, A. (2004). Determinants of stock price in NEPSE. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.
Acharya, R.C. (2008). Determinants of Stock Price in Nepalese Commercial Bank. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.

Dhakal, R.C. (2007). Determinants of Stock Price Fluctuation in Nepal. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.

## Appendix

## Financial Indicators of Laxmi Bank Ltd.

| Year | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPS (Rs) | 309 | 588 | 400 | 876 | 390 |
| EPS (Rs) | 24.78 | 26.07 | 19.42 | 27.15 | 19.15 |
| P/E ratio(Times) | 12.47 | 22.55 | 20.60 | 32.26 | 20.36 |
| BVPS (Rs) | 160.60 | 162.96 | 177.36 | 185.88 | 128.35 |
| ROA (\%) | 1.50 | 1.47 | 1.04 | 1.35 | 1.61 |

Financial Indicators of Himalayan Bank Ltd.

| Year | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPS (Rs) | 700 | 941 | 813 | 1500 | 888 |
| EPS (Rs) | 34.19 | 33.10 | 33.37 | 43.03 | 33.55 |
| P/E ratio(Times) | 20.47 | 28.43 | 24.38 | 34.86 | 26.47 |
| BVPS (Rs) | 192.02 | 210 | 208.81 | 196.12 | 180.31 |
| ROA (\%) | 1.54 | 1.30 | 1.34 | 1.94 | 2.03 |

Financial Indicators of Prabhu Bank Ltd.

| Year | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPS (Rs) | 137 | 207 | 348 | 415 | 406 |
| EPS (Rs) | $(40.23)$ | $(15.24)$ | 31.73 | 26.75 | 27.17 |
| P/E ratio(Times) | $(3.41)$ | $(13.58)$ | 10.97 | 15.51 | 14.94 |
| BVPS (Rs) | 71.23 | 56.70 | 115.11 | 109.39 | 140.86 |
| ROA (\%) | $(3.43)$ | $(1.44)$ | 2.19 | 1.64 | 1.76 |

Financial Indicators of Machhapuchchhre Bank Ltd.

| Year | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPS (Rs) | 203 | 576 | 564 | 680 | 360 |
| EPS (Rs) | 5.98 | 18.34 | 22.20 | 25.04 | 24 |
| P/E ratio(Times) | 33.96 | 31.40 | 25.40 | 27.17 | 15.00 |
| BVPS (Rs) | 112.81 | 130.54 | 137.46 | 138.18 | 124.43 |
| ROA (\%) | 0.49 | 1.12 | 1.26 | 1.51 | 1.89 |

Financial Indicators of Everest Bank Ltd.

| Year | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MPS (Rs) | 1591 | 2631 | 2120 | 3385 | 1353 |
| EPS (Rs) | 91.88 | 86.04 | 78.04 | 65.97 | 44.32 |
| P/E ratio(Times) | 17.32 | 30.58 | 27.17 | 51.31 | 30.53 |
| BVPS (Rs) | 291.53 | 296.30 | 335.60 | 320.07 | 253.28 |
| ROA (\%) | 2.39 | 2.25 | 1.85 | 1.61 | 1.72 |

## References

Sen,S. and Ray, R. (2013), Determinants of Stock Prices in India. The ICFAI Journal of Applied Finance, Vol 9, No (7), Pp 35-40.

Srinivasan, P. (2012). Determinants of equity share prices in India: A panel data approach. The Romanian Economic Journal, 46, 205-228.

Fama, F. (1970). Efficient capital market, A review of theory and empirical work, The Journal of Finance. 25(2).

Sharif, T. , purohit, H. and Pillai, R. (2015), Analysis of factors affecting share prices: The case of Bahrain stock exchange, International Journal of Economics and Finance, Vol. 7, No. 3.

Sharma, S. (2011). Determinants of equity share prices in India. Journal of Arts, Science \& Commerce, 2(4), 51-60.

Bhatt, P., \& S. JK. (2012). Impact of earnings per share on market value of an equity share: An empirical study in Indian capital market. Journal of Finance, Accounting and Management, 3(2), 14-30.

Modigliani, F. and Miller, M. H. (1958). Dividend policy, growth, and the valuation of shares. The Journal of Business , 34(4), 411-433.

Rashid, A., \& A. Rahman (2008). Dividend policy and stock price volatility: Evidence from Bangladesh. Journal of Applied Business and Economic, 8(4), 71-81.

Zakaria, Z. (2012). The impact of dividend policy on stock price volatility: Malaysian construction and material company. International Journal of Economic and Management Science, 2(5), 1-8.

Nickolson, S. F. (1960). "Price earning ratio". Financial Analysts Journal, 16, 43-45.

Emamgholipour, M., A. (2013). The effects of performance evaluation market ratios on the stock return: Evidence from the Tehran stock exchange. International Research Journal of Applied and Basic Sciences, 4(3), 697-703.

Emekewue, P. (2008). Corporate Financial Management, Depot legal no. 234/2008 First quarter.

Sharpe, Alexander and Bailey (2005). Investment Analysis. New Delhi: Prentice hall of India pvt. Ltd.

Uddin, M. B. (2009). Determinants of market price of stock: A study on bank leasing and insurance. Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 2(2), 124-130.

Nirmala, P.S., Sanju, P. S. \&Ramachandran, M. (2011).Determinants of share prices in India.Journal of Emerging Trends in Economics and Management Science (JETEMS), 2(2), 124-130.

Amanullah, M. (2012). Determinants of share prices at Karachi stock exchange. International Journal of Business \& Management Studies, 4, 1309-1347.

Malhotra, N, and Tandon, K, (2013), Determinants of stock prices: Empirical evidence from NSE 100 companies, International Journal of Research in Management \& Technology, Vol. 3, No. 3.

Almumani, M, (2014), Determinants of equity share prices of the listed banks in Amman stock exchange:Quantitative approach, International Journal of Business and Social Science, Vol. 5, No. 1.

Irfan, C., \&Nishat, M. (2002). Key fundamental factors and long-run price changes in an emerging market: A case study of Karachi Stock Exchange (KSE). The Pakistan Development Review, 41, 517-533.

Masum, A. A. (2014). Dividend policy and its impact on stock price - A study on commercial banks listed in Dhaka stock exchange. Global Disclosure of Economics and Business, 3(1), 9-17.

Flora, J, and Hutabarat, F, (2015), Exploring factors affecting stock price of Indonesia state owned bank listed at Indonesia stock exchange, Academic Research International, Vol. 3, No. 6.

Geetha, E, and Swaaminathan, M, (2015), Study on the factors influencing stock price A comparative study of Automobile and Information Technology Industries stocks in India, International Journal of Current Research and Academic Review, Vol. 3, No. 3.

Pradhan, R.S. (2004). Stock market behavior in a small capital market: A case of Nepal. The Nepalese Management Review. Kathmandu: Tribhuvan University, 9(1):20-32.

Sah, B. (2011). Factors Affecting the Share Price in Nepalese Commercial Banks Listed in NEPSE; An unpublished master's degree thesis, submitted to faculty of management, Tribhuwan University.

Neupane, A. (2004). Determinants of Stock Price in NEPSE. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.

Acharya, R.C. (2008). Determinants of Stock Price in Nepalese Commercial Bank. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.
Dhakal, R.C. (2007). Determinants of Stock Price Fluctuation in Nepal. Kathmandu: An unpublished master's degree thesis, submitted to faculty of management, Tribhuvan University.

