# CHAPTER - I INTRODUCTION

#### 1.1. General Background of the Study

Nepal, being a small landlocked country with an area of 1, 47,181 square meters and sandwiched between two big economic giants, China and India, have relatively closed economy. The slowdown of Nepalese economic growth is mainly due to limited natural resources, landlocked location, difficult geography, and poor infrastructure, wake human base with extremely poor level of education and health and poor public management capacity. Due to lack of education, Nepalese people are unable to grab the opportunity of the open business environment.

Agriculture is the backbone of Nepalese economy and means of livelihood for the majority of population and also the main of gross domestic production. But non-agriculture sector has also significant contribution in the national economy. Different manufacturing organizations like industries and non-manufacturing organization like business enterprises, commercial banks and finance companies come under this sector. The establishment of these organizations helps in the smooth development of any country by generation employment and production activities for the rapid economic development. These establishments need huge amount of capital for its operation, growth and existence. These capitals can be raised mainly from financial market.

Financial market is the place where the financial instruments are trade. Financial instrument include marketable securities like treasury bills, commercial papers and shares, bonds, debentures, etc. It is a means to transfer fund from savers to those in need of funds. Financial experts have mentioned it as a brain of the entire economic system. The failure of the financial market is money and capital market.

Money market is short term financial market which is created by a financial relationship between suppliers and demanders of short term fund which have maturity of one year or less. Most of the money market transactions are made in marketable securities, which are short term debt instruments, such as treasury bills, commercial papers and negotiable certificates of deposit issued by government, business and financial institutions. The money market exists because certain individuals, businesses, government, and financial institutions have temporary idle funds that they wish to place in some type of liquid asset government and financial institutions find themselves in need of seasonal or temporary financing. The money market thus brings together the suppliers and demanders of short term liquid funds.

Capital market is the place where financial instruments are traded. Financial instruments include shares, bonds, debenture, etc. Capital market is a market for long term funds having maturity greater than one year. They are vital to long term growth and prosperity of economy since they provide channel through which needed fund can be raised. It is the mechanism through which public saving are channel zed to industrial and business enterprises. Demand for the capital in the capital market come from agriculture, industry, trade and government while the source of supply is from individuals, corporate saving, and institutional investors and surplus of government. For mobilization of inevitable resources, capital market is an important intermediary through which effective bridging of the deficit units and surplus units can be ensured. Capital market institutions are engaged in mobilization of saving from surplus units to deploy funds into the deficit units for productive investment. In this respect, capital market plays a crucial role in mobilizing a constant flow of savings and channeling these financial resources for expanding productive capacity in the countries.

Capital market can be decomposed into securities market and non- securities market. Stock market is major component of securities market and a medium through which corporate sector mobilizes funds to finance productive projects by issuing shares in the market. Similarly, the stock market provides the best investment opportunity to the investors. Thus the effective collection of small amounts of savings and transferring funds into competitive and efficient uses require a well functioning capital market to facilitate the process. Securities market refers to the market for securities where securities like government bonds, corporate bonds or debentures, ordinary shares, mutual funds and certificates are bought and sold as other commodity. Secondary market is of two types, primary market and secondary market.

Primary market is concerned with the floatation and distribution of first hand securities to the general public which is known as issue market. Secondary market is concerned with the trading of second hand securities. The second hand securities are bought and sold in the secondary market for investment and speculative motives. The secondary market ensures the liquidity to the securities. This encourages to invest in the long term ventures and also enables them to covert their securities into cash before they mature. The liquid stock market helps promote the primary issuance of new securities because the investors will have easy access to the liquid stock market, which makes their investment less risky and more attractive. So it can be observed that both primary and secondary markets are positively and highly interrelated.

The history of Nepalese capital market is not too long. The systematic and organized development of capital market is a recent phenomenon in Nepal. Securities market being major component of capital market also remained underdeveloped for long time. The history of securities market began with the flotation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Introduction of Company Act in 1964 and the establishment of securities Exchange Centre Ltd. in 1976 was other significant development resulting to capital market. Initially, the SEC limited its function for trading the government bonds and national saving certificates only. Then, it acted as an issue manager for corporate securities and started to list and provides market for corporate stocks from fiscal year 1984/85, under the Securities Exchange Act, 1983. Thus the SEC served to promote the primary as well as secondary market for government and corporate securities from fiscal year 1984/85. The incorporation of Securities Board, Nepal (SEBO) under the Securities Exchange Act, 1983 and conversion of SEC into Nepal Stock Exchange (NEPSE) under the government policy on capital market reform has greatly contributed to the development of primary as well as secondary market for the corporate securities.

SEBO was established on 26 May, 1993/85. It established with the objective of promoting and protecting the interest of investors by regulating the securities market. Besides the regulatory role, it also responsible for the development of securities market in the country.

NEPSE was established in 1993. The basic objective of NEPSE is to impart free marketability and liquidity of the government bonds and corporate securities by facilitating transactions in its trading floor through market intermediaries, such as brokers, market makers, etc. NEPSE is the only one license holder mediator of SEBO. All the companies, who has received the certificate of stock trading and become the member of NEPSE, trade on the trading floor of NEPSE. This is the secondary market of stock which provides liquidity to the stock.

The non-security market of Nepal came under regulatory framework when Nepal Rastra Bank, the central bank of Nepal was established in 1956. Prior to this time, Nepal Bank Ltd. was the only financial institution operating under Nepal Bank Limited Act, 1937. Another commercial bank, Ratria Banijya Bank was established under Rastriya Banijya Bank Act. 1966 in the public sector. A single commercial bank Act was enacted in 1974 to consolidate the functioning of all the commercial banks under one legal umbrella. Also the Finance Companies Act and Development Bank Act came in 1985 and 1966 respectively. At present, the country has many commercial banks including joint venture banks, development banks and finance companies.

Efficiency in the stock market implies that all available relevant information regarding a given is instantly reflected in its price. An efficient market is one where the current price of security gives the best estimate of its true worth.

Market price of shares as the output of the demand and supply interaction is the most influencing factor in determining the price of the stock. Market price is determined at a given time on the basis of the price and volumes of its past transaction and is the meaningful indication of future supply and demand. And such relationship is the most important element in determining the probable direction of the price movements. If the demand exceeds the supply, the price will rise and if the supply exceeds the demand the price will fall.

#### **1.2 Focus of the Study**

Market price of the stock fluctuates daily in the Nepalese Securities Market. To find the main factor that affect the market price of the stock is the main focus of the study. The behavior of stock price has been the controversial subject matter among the academics of financial and economic circles. In general, price of the stock is determined by the demand and supply of the stock in the market. The demand and supply of the stock is affected by many signaling effects like the performance of the company, is its dividend policy, economic and political situation of the country, etc. Efficient market price is the one which reflects the true worth of the company and represents the financial indicator like NWPS, EPS, DPS, etc. This study focuses on the efficiency of the Nepalese stock market and behavior of the stock price in Nepalese Securities Market.

#### **1.3 Statement of the Problem**

With the trend of economic liberalization and globalization policies adopted by the Nepalese government, many companies are emerging in the Nepalese Stock Market. Although Nepal's capital market history is short, the concept of capital market is growing rapidly within a short span of time and institutions like banks, insurance companies, and finance companies, airlines, manufacturing companies, hotel and various other service sectors are floating their stocks in the market. It is mandatory to enlist these public limited companies in NEPSE. NEPSE creates liquidity on shares of such companies issued in the primary market and provides floor for trading of these shares.

Most of investors are not aware of the financial position of the companies on which they are investing their money. They do not analyze the financial indicators of the company before they invest their funds through secondary market. The market price of the stock dose not seems to be in accordance with the financial indicators- Net worth per share (NWPS), Earning per share (EPS), Dividend per share (DPS), etc. Instead in determination of the market price of share, there has been major influence of rumors than

the strength of the company. The market price of commercial banks especially foreign joint venture banks is much higher then the market price of other sector.

Generally the trend is that the market price of public companies is quoted above their book value. The market value is determined by the supply and functions. However, in an efficient market, the market price fully reflects all the historical information publicly available.

The major problem of Nepalese financial market is that due to the dubious and haphazard movement of share prices, the investors are confused on investing their funds in the capital market. They are also not aware of the financial situation of the company and the financial indicators representing the market price due to which they are investing their funds haphazardly without considering the risk involved in their investment. To make the study, the following research questions have been raised out;

- a. Is there any significant relationship between MPS with the other financial indicators like EPS, DPS and BPS.
- b. To what extent does EPS, DPS and BPS affect the MPS?
- c. Besides EPS, DPS and BPS, is there any factor that fluctuates the MPS?
- d. What are the problems of securities markets of Nepal?

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

The main objective of this study is to find out the share price behavior of listed companies in Nepal. The other specific objectives of the study are enumerated below:

- a. To identify the relationship between market prices of commercial bank's equity shares and EPS, DPS and BPS.
- b. To examine the effectiveness of EPS, DPS and BPS in determining the market price of the securities.
- c. To identify the factors affecting the market prices of securities in Nepal.
- d. To identify problems of securities market in Nepal and suggest measures to correct the existing problems.

# **1.5 Significance of the Study**

The study on the behavior of share prices in Nepalese security market is very significant to all the people related to stock market like investors, brokers, security dealers, issue managers, and the market makers. The significant of the study can be pointed out as follows:

- 1. The study helps to provide guidelines to the interested investors in the market.
- The study is helpful to the people who are curious to know the price trend of the stock, volume of stock traded, list of new companies in the secondary market (NEPSE) and whether the financial indicators represent the market price.
- 3. The study is helpful to know the movement of share price of the corporate firms with respect to the change in the financial position of the firm.
- 4. The study provides literature to further researchers in this area.

# 1.6 Limitations of the Study

This study is not far from several limitation of its own kind, which weakens the heart of the study. Some of such limitations are as follows;

- a. The study covers the market prices of shares and yield pattern of selected commercial bodies and does not examines the other institutions.
- b. The study is constraint to share only and does not specifically deal with market prices of other securities like preference shares and Government Securities, bonds and debentures.
- c. This study deals with ordinary equity shares, their market prices and yield behavior. The study does not cover the analysis of capital structures, the cost of capital and financial flows of capital in the market.
- d. The results of this study will be limited to the stock price behavior of commercial banks, mainly the relationship between the returns on the shares and the stock pricing.
- e. This study assumes that the individuals who responded to this survey are truthful. Since the data are mainly collected from the source, the study assumes that collected data, especially rated to yielding behavior is reliable, authentic and has not been manipulated.

f. The study covers only the period of five years, i.e. from the fiscal year 2003/04 to 2007/08.

# **1.7 Organization of the Study**

The study has been divided into five chapters, which are as follows:

# **Chapter - I: Introduction**

It includes general introduction, focus of the study, statement of the problem, objectives of the study, significance of the study, hypothesis of the study, limitations of the study and organization of the study.

# **Chapter II: Review of Literature**

This chapter consists of the review of books, articles, journals, reports and other relevant materials.

# **Chapter III: Research Methodology**

It covers on research design, population and sample, source of data, data of collection, procedure, analytical tools, etc.

# **Chapter IV: Data Presentation and Analysis**

This chapter attempts to analyze and evaluate data with the help of analytical tools and interpret the result obtained.

# **Chapter V: Summary, Conclusion and Recommendations**

It sums up the results obtained through analysis and recommends some suggestions.

# CHAPTER - II REVIEW OF LITERATURE

This part of the study deals with the review of conceptual framework, review of journals and articles and review of previous study.

# 2.1 Conceptual Review

#### 2.1.1 Common Stocks (Shares)

Common stock is the basic form of ownership in a company. People who hold common stock have a claim on the assets of a firm those of preferred stockholders and bond holders (www.greekshares.com).

The common stocks are issued by the firms to raise ownership capital and investors buy them with expectation that they received a share of profit periodically. The common stocks legally represent the equity of business firm, and the holders are the owners who share all the profits and losses of the business. They enjoy all earnings after meeting the obligations of interest on debts and dividends on preferred stocks. Thus, they enjoy all net benefits of the business by assuming the risk of losing their capital (Pradhan, 1996:132-133 & 333).

Common stockholders have a residual claim on the earnings and assets of their corporation. This means that the law requires corporations first to pay employees' wages, suppliers' bills, and bondholders' interest; then, after all other bills are paid, the common stockholders share in whatever earnings or losses are left. Also if the corporation comes to its demise in bankruptcy, the law says that all bills must be paid before common stockholders are free to divide up whatever assets remain, if any, from the bankrupt operation.

2.1.2 Valuesa) Par Value

Par value is the face value of a share or stock. It was originally used to guarantee that the corporation receives a fair price for the value to keep stockholders with friends in the corporation from getting shares at a low price while others buyers of identical shares have to pay may. Selling share at reduced price to friends is a form of price discrimination against many potential investors (Francis, 1983:40).

The face value of the stock, established at the time the stock is initially issued, is the par value. Without a stock split or other action by the board of directors, the par value of the stock does not change (Cheney and Mosses, 1995: 417).

The par value of new issue in Nepalese capital market is usually Rs. 100, as directed by company act 1993.

### (b) Book Value

Book value per share can be calculated by adding the common stock's total value (or par value plus paid-in surplus plus retained earnings accounts) in the net worth section of the balance sheet and then dividing by the number of share of common stock outstanding. Book value gives a picture of the assets if the corporation, but it has no real relation to stock prices. Companies sometimes find their common stock selling for different from book value (Francis, 1983: 40).

#### (c) Market Value

Market value in the secondary markets is determined by the demand and supply factors, and reflects the consensus option of investors and traders concerning the "value" of the stock. The market value is influenced by many factors including economic and industry conditions, expected earnings and dividends, and market and company risk considerations (Cheney and Mosses, 1995: 418).

# 2.1.3 Classifications of Common Stock on the Basis of their Features

#### a) Blue Chip Stocks

Stocks of very large, well-established corporation have been in dominant position with strong balance sheets and size and are called blue chip stock.

# b) Growth Stocks

Stock whose price grows with the growth of corporation's earning and dividend with a comparatively higher growth than the average price appreciation.

# (c) Income Stocks

Stocks having stable cash dividends record are often called as income stocks.

# (d) Cynical and Defensive Stocks

Stocks, which are influenced by economic and industrial cycles, are called as cyclical stocks whereas stocks which are less susceptible to economic cycles are called defensive stocks.

# (e) Speculative Stocks

Stocks, which are viewed by investors with some speculative motives, are called speculative stocks.

# (f) Small Stocks

Stocks depending upon the capitalization norms are generally known as small or even blue chip stocks.

# (g) Treasury Stocks

If a corporation decides to buy back it own stock, the acquired stocks are called treasury stocks.

# 2.1.4 Characteristics of Common Stocks

# **Claim on Income**

The common shareholders have a claim to residual income, which are earrings available for ordinary shareholders after paying expanses, interest charges, taxes and preference dividend if any. The income maybe split into two parts, dividends are retained earrings (Cheney and Mosses, 1995: 415).

#### **Claim on Assets**

The common stockholders have residual claims on the company's assets in case of liquidation. Out of the realized value of assets, first the claim of debt holders and then preference shareholders are satisfies, and the remaining balance if any, is paid to the common stockholders.

#### **Right to Control**

The ordinary shareholders have the legal power to elect directors to the board. If the board fails to protect their interests, they can replace the directors. They are able to participate in the management of the company through their voting right and right to maintain proportionate ownership.

#### **Voting Rights**

The ordinary stockholders are required to vote in order to elect the directors and change the memorandum of associations. For instance, if they want to change its authorized capital or the objectives of business they need ordinary shareholder's approval. The power to vote for the board of director and for or against major issues (such as merger or expansions into new product lines) belongs to the common stockholders because they are the owners of the corporation.

#### **Preemptive Right**

The law grants the shareholders the right to purchase new shares in proportions to their current ownership. Thus the preemptive right entitles stockholder to maintain his proportionate share ownership in the company. The stockholders option to purchase a stated numbers of new shares at a specified price during a given period, is called rights which can be exercised at a subscription price which is generally much below the correct market price of shares (Francis, 1983:39).

#### **Limited Liability**

The common stockholders are the true owners of the company, but their liability is limited to the amount of their investment in shares. If a stockholder has already fully paid the issue price of shares purchased, he has nothing more to contribute in the event of financial distress or liquidation. The limited liability feature of share encourages unwilling investors to invest their funds in the company which helps company to raise funds (Pandey, 1995:905-908).

#### **Earning per Share (EPS)**

Accounting earning that represents the difference between revenues and expense including the expenses associated with non-equity source of funds (such as interest to debt, dividend to preference share) is also known as total earnings available for common stock. If this portion of income is divided by number of outstanding shares, we get earning per share (Sharpe, Alexander Biley, 2001:622).

#### **Retained Earnings**

The balance sheet account which indicates the total amount of earnings the firm has not paid out as dividend throughout its history; these earnings have been reinvested in the firm.

#### **Dividend Par Share (DPS)**

Nothing is more important than dividends to stockholders. They buy shares of firm with the hope of sharing profit earned by firms. The sole motive of stockholders is to receive return on their investment, nothing please them more than knowing the firm's earning and more profits mean more dividends coming in (Pradhan, 1996:375-376).

#### **Forms of Dividend**

#### **Cash Dividend**

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

#### **Stock Dividend (Bonus Share)**

An issue of bonus share represents a distribution of share in addition to cash dividend (known as stock dividend in USA) to the existing stockholders. This practice has the effect of increasing the number of outstanding shares of company, which are distributed proportionately. Thus, a shareholder retains his/her proportionate ownership of the company (Pandey, 1995: 705-706).

#### **Stock Splits**

Stock splits have an effect on a firms share price similar to that of stock dividends. A stock split is a method commonly used to lower the market price of a firm's stock by increasing the number of shares belonging to each shareholder. Quite often, a firm believes that its stock is priced too high and that lowering the market stock will enhance the marketability of the stock and stimulates market activity. A stock split has no effect on the firm's capital structure. It commonly increases the number of share outstanding and reduces the stocks per share par value. In other words, when a stock is split, a specified number of new shares are exchanged for given number of outstanding shares. In a 2 or 1 split, two shares are exchanged for a given number of outstanding shares are exchanged for two old shares; in a 2 or 3 split, two new shares are exchanged for three old shares, and so on (Gitman, 1988: 627-628).

#### **Stock Repurchases**

In the recent past, firms have increased their repurchasing of shares of outstanding common stock in the marketplace. A stock repurchase is made for a number of reasons: to obtain shares to be used in acquisitions, to have shares available for employee stock option plans, to achieve a gain in the book value of equity when shares are selling below their book value, or merely to retire outstanding shares. (Gitman, 1988:628-629).

#### Net Worth Per- share (NWPS)/ Book Value Per Share

The book value of the equity reflects the historical costs of - brick and meter-the physical assets of the company. A well run company with strong management and an organization

that functions efficiently should have a market value greater than the historical book value of its physical assets (Weston and Copelan, 1992:695).

Book value is generally considered to be relatively unimportant in determination of the value of company, since it represents only the historical investments made in the company-investments that may have little relating to current values of price (Weston and Copelan, 1992: 1113).

#### Market Price Per- share (MPS)

The market price of any asset, indeed, depends on the future earning power of the asset or the value of an asset depends on the future cash flows that the asset is expected to generate (Pradhan, 1996: 20). Once the shares, issued in the primary market, are listed in the stock exchange, investors are able to buy and sell the shares among themselves with the help of brokerage firm. Generally, the price of share is determined by demand and supply preferences.

Due to the market imperfections and uncertainty, shareholders may give a higher value to the near dividends capital gains. Thus, payment of dividend may significantly affect at the market price of shares. Higher dividends increase the value of shares and low dividends reduced the value (Pandey, 1995:681).

#### 2.2 Investment Return and Risk

In the following paragraphs, brief discussions have been made on the various aspects of return and risk, which may be relevant to this study.

# Types of Investment Return Holding Rate of Return

The investment return is defined as the after tax increase in value of the initial investment. The increase in value can come from two sources: a direct cash payment to investors or an increase in the market value of the investment relative to the original purchase price. Investors prefer to express returns as percentage.

#### **Risk-free Rate of Return**

It is the return, such as the return on treasury bills, which is a nominal and denoted by Rf. It consists of real rate of return and an inflation premium. In fact, inflation is presented in the economy, which insists to include a premium in the nominal Rf. rate. For instance if real interest rate is 3% and anticipated inflation rate is 5%, the risk-free rate should be approximately 8% (Jones, 1988:34).

#### **Required Rate of Return**

Consumption is forgone today; the investor is entitled to a rate of return that compensates for this differed consumption. So, an investor must consider the real rate of return, expected inflation and risk. The investor expects to receive an increase in the real goals purchased later, and assuming, for the moment, zero expected inflation and risk, the required rate could equal to the real rate of return, in which case it would represent the pure time value of money. The capital markets determine this rate based upon the supply of money to be invested, relative to the demand for borrowed money.

#### **Expected Rate of Return**

The expected rate of return is based upon the expected cash receipts (e.g. dividend or interest) over the holding period and the expected ending or selling price. The expected return is an unknown future return. Unless the rate of return is guaranteed, most investors recognize the several rates of return are possible. The investors summarize these possible rates of return into a single number called the expected rate of return. This return should be equal to or greater than required rate of return for that investment (Cheney and Moses, 1992: 34).

#### 2.3 Capital Asset Pricing Model

The most important aspect of risk is the overall risk of the firm as viewed by investor in the market place. The overall risk significantly affects investment opportunities- and even more important, the owner's wealth. The basic theory that links together risk and return for all assets is commonly called the capital asset pricing model CAPM).

The total risk of security can be viewed as consisting of two parts:

Total Security Risk= Non-Diversifiable Risk + Diversifiable Risk

#### **Diversifiable Risk**

Diversifiable risk, which is sometimes called unsystematic risk, represents the portion of an asset's risk associated with random causes that can be eliminated through diversification. It is attributable to firm-specific events, such as strikes, lawsuits, regularity actions, loss of a key account, and so forth.

### Non-Diversifiable Risk

Non-Diversifiable Risk, which is also called systematic risk, is attributable to market factors that affect all firms. Factors such as war, inflation international incidents, and political events account for non-diversifiable risk. An investor can create a portfolio of assets that will eliminate all, or virtually all, diversifiable risk, the only relevant risk is non-diversifiable risk, which reflects the contribution of an asset to the risk of the portfolio. The measurement of non-diversifiable risk is thus of primary importance in selecting those assets possessing the most desired risk-return characteristics.

#### Beta Coefficient (B)

Beta Coefficient (B) used to measure non- diversifiable risk. It is an index of the degree of movement of an asset's return in response to a change in the market return. The beta coefficient for an asset can be found by examining the asset's historical returns relative to the return to the return for the market. The market return is the return on the stock portfolio of all traded securities. The return on a portfolio of the stocks in Standard & Poor's 500 stock Composite Index or same similar stock index is used to measure the market return. The beta coefficient for the market is considered to be equal to 1.0; all other betas are viewed in relation to this value. Asset betas may take on values that are either positive or negative, but betas are the norm. The majority of coefficient falls between 0.5 and 2. Using the beta coefficient, to measure non-diversifiable risk, the CAPM is given as below.

 $K_j = R_f + [\beta_j * (K_m - R_F)]$ 

Where  $k_j$  = required return on asset j; Rf = risk-free rate of return;  $\beta j$  = beta coefficient or index of non-diversifiable risk for asset j; Km = market return, the return on market portfolio of assets.

The required return on an asset is an increasing function of beta ß, which measures nondiversifiable risk. In other words, the higher the risk, the higher the required return, and vice versa. The model can be broken into two parts, viz risk- free rate (Rf) and the market risk premium [ßj\*(km - bRf)]. The (Km -Rf) portion of the risk premium is called the market risk premium, since it represents the premium the investor must receive for taking the average amount of risk associated with holding the market portfolio of assets.

#### 2.4 Behavior of Stock Market Prices

Simply stock price behavior refers the movement of stock price in the secondary capital market, i.e., market value is more than book value, market value is less than book value and market value is more than book value due to the different internal and external factors. Market value can be changed. When we try to study of Nepalese security market, it is necessary to study the other external factors of foreign country due to the globalization, liberation and modernization, all the world has become within the boundary so effect of one area's movement automatically lies upon others. Theory is code of conduct of explanation process is pushed further from where is concrete theme can be derived. In the wide sense, there are three theories concerning the stock price behavior which are as follows;

#### 2.4.1 Efficient Market Theory

A market is said to be informational efficient if the current market price instantaneously and fully reflects all relevant available information. The market value of a particular share may be under or overvalued. An efficient market is one where shares are always correctly priced and when it is not possible to out perform the market consistently.

The efficient market theory contends that in a free and perfect competitive market stock price always reflect all the available information and adjust instantaneously every influx of new information. In an efficient market, only price change that would occur are those, which result from new information? "An initial and very important premise of an efficient market is that there are large numbers of knowledgeable and profit maximizing independent buyers and sellers, new information is generated randomly and the investors adjust the information rapidly" (Reilly, 1986: 43)

Therefore if market is efficient, it sues all available information to it in setting price. The measure of efficiency involved from the notion of perfect competition, which assumes free and instantly available information, rational investors with no tax and transaction costs.

"The requirements for a securities market to be an efficient market are:

- Price must be efficient so that new investors and better products will cause a firm's securities price to rise and cause investors to want to supply capital to the firm.
- ) Information must be discussed freely and quickly across the national so all investors can react to new information.
- ) Transactions cost such as sales commissions on securities are ignored.
- ) Taxes are assumed to have no noticeable effect on investment policy.
- ) Every investor is allowed to borrow or lend at the same rate.
- ) Investors must be rational and able to recognize efficient assets so that they will want to invest money where it is needed most. (i.e., in the assets with relatively high returns)" (Bhalla, 1983: 238).

# 2.4.2 Fundamental Analysis Theory

Fundamental analysis approach involves working to analyze different factors such as economic influences, industry factors, government action, firm's financial statement, it's competitor and pertinent company information like product demand, earnings, dividends and management in order to calculate an intrinsic value for firm's securities. The analyst is who believes of fundamental facts to determine the intrinsic value of stock is popularly known as popularly known as fundamental analyst or fundamentalist.

Fundamentalist forecast stock price on the basis of economic industry and company statistic. The principal decision variable ultimately takes in the form of earnings and value with a risk – returns framework based upon earning power and the economic environment. "Fundamental analysts delve into company's earnings, their management, economic outlook, firms competitors market conditions and many other factors" (Francis, 1986: 398).

The objective of fundamental security analysis is to appraise the intrinsic value of security. The intrinsic value is the true economic work of financial assets. "The fundamentalist maintain that any points of time every stock has an intrinsic value which should in principle be equal to that present value of the future stream of income from that stock discount at an appropriate risk related rate of interest" (Bhalla, 1983: 283). Therefore the actual price of security is considered to be a function of a set of anticipation. Price change as anticipation changes, which in turn change, as a result of new information. In other words, a new piece of news is released, securities intrinsic values will change, and the securities market price will adjust towards the new values.

On the basis of such a study fundamentalists project a company's future profits and earning capacity with reasonable accuracy what the price of a company's share ought to be. This estimated price is termed as intrinsic value. The intrinsic value of the stock is generally away from its present market value. Thus, there is difference or gap between them. Fundamentalist reaches and investment decision by comparing this value with the current market price, it is believed that price will rise. In this situation, fundamentalists will acquire shares as this difference presents them with an opportunity to make profit. Alternatively, if the intrinsic value is lower than the market value, the share is called overpriced and is an indication to the fundamentalists to sell. Following these rules, they believe, above average return can be attained, given that market is inefficient in pricing the shares.

"The fundamental analysis work to find new information before other investors so they can get into a position to profit from price changes they anticipate" (Francis, 1986: 603). "Fundamental analysis uses different models like Top-Down versus Bottom-Up forecasting, probabilistic forecasting econometric models, financial statements analysis etc. to estimate the value of security" (Sharpe, Alexander and Bailey, 2001: 850). Therefore the fundamental analyst reaches an investment decision on the basis of these analytical tools.

#### 2.4.3 Technical Analysis Theory

The word Technical Analysis peruses sound like gobbledygook to many. But it is an alternative approach to predicting stock price behavior in the literatures of investment management. "Technical analysis is market-oriented philosophy and it can concentrate on the force of supply of and the demand for share as reflected in the actions of market rather than the intrinsic worth of share. The analysts or prospective investors who analyze the security to predict the future price of share on the basis of study of its price movements in the past are known as technical analysts or technician" (Fisher & Jordon, 2000: 509).

"The technician believes the forces of supply and demand are reflected in patterns of price and volume of trading. By examination of these patterns, the predicts whether prices are moving higher or lower, and even by how much" (Fisher and Jordan, 2000: 510).

Therefore, the patterns or trend in price is the basis of technical analysis. Various charts are prepared to determined trends and to determine whether prices are likely to rise or fall. Technicians tend to look backward. "The technician usually attempts to predicts short-term price movements and thus makes recommendations concerning the timing of

purchases and sales of either specific stock or groups of stocks (such as industries) or stocks in general. It is sometimes said that fundamentals analysis is designed to answer the question "what?" and technical analysis to answer the question "when?" (Sharpe, Alexander and Bailey, 2001: 844).

Technical analysts discern past pattern or trends, which they believe to repeat in the future and recommend for the timely holding and disposing mechanism, which is profitable. Or that recommend for short-term speculation based on its forecast of profitable pattern. In other words technical analysis is backward looking, in which past data are used to calculate the value of the stock. Past trends play vital role.

The technical analysts estimate prices instead of values. They largely ignore the fundamental facts such as the firm's risks and earning growth rates in favor of concentration on various barometers of supply and demand that they have devised.

"The basic assumptions underlying technical analysis are as under;

- Market value is determined solely by interaction of supply and demand.
- Demand and supply are governed by many rational and irrational factors.
- ) Changes in trend are caused by shifts in supply and demand.
- ) In disregard of minor fluctuations in the stock market, share price tend to move in trends, which persist for an appreciable length of time.
- ) Shifts in supply and demand, no matters why they occurs can be detected sooner or later in charts of market action.
- Some chart patterns tend to repeat themselves" (Edwards and Magee, 1958: 86).

#### 2.5 Review of Related Studies

In order to make this study more comprehensive some articles, books, research articles and studies related to stock price behavior stock price movement are reviewed hereunder.

Louis Bachelier (1990) first tested the random walk model. He tested the model in commodity prices and found that those prices followed a random walk. He presented the

evidence that the commodity speculation in France was a 'fair game'. He also concluded that the certain price of a commodity was an un biased certain estimate of its future price. After the first discovery of the random walk model in 1990 by Louis Bachelier, empirical testing of the model in the stock market prices almost remained stagnant until 1960s.

Cootner (1962), in his study explained "if any substantial group of buyers thought price were too low, their buying would force up the prices. The reverse would be true for sellers, except for appreciation due to earning retention the conditional expectation of tomorrow's price, given today's price is today's price. In such a world the only price change that would occur are those that result for new information. Since there is not reason to expect that information to be no-random in appearance, the period to period price changes of a stock are random movements, statistically independent of one another.

H V Roberts carried next study in 1959. He conducted stimulation test by comparing the accumulation of random number and the Dow Jones industrial average index for about one year stating from Dec 30, 1955 to Dec 28, 1956. He found similarity between these two series. He further observed that the first difference of these two series produce the same pattern. His work was significant in that he gave a number of methodological suggestions for testing what he calls the choice model. In particular, he suggested runs analysis for testing independence of price changes.

Granger and Morgenstern (1962), applied spectral methods of analysis to the weekly, monthly and volume series from the New York stock market using Dow Jones, standard and poor and other various indices as well as price series of individual stocks. The result confirmed the random walk hypothesis for weekly and monthly price data the New York stock market.

Fama's (1965) on the study of Random Walk model was one of the best definitive and comprehensive every study conducted. He observed the daily proportionate prices of 30 individual stocks of the Dow Jones industrial average index for the period of 1957 to 1962. He employed the statistical tools such as serial correlation and runs test to draw

inference about dependence or the price series. He calculated auto-correlation coefficient for daily changes in log prices for lag from 1to 30 and found that the coefficient were almost close to zero in overall. The correlation coefficient for daily changes in average was +0.03, which is near to zero. But on the daily price changes, 11 out of 30 stocks had correlation coefficient more than twice their computed standard errors. The coefficient ranged from smallest 0.06 to largest 0.123. However Fama concluded," dependence as such a small order of magnitude is, from a practical point of view, probably unimportant for both the statistician and the investor". Fama also calculated serial correlation for lag from 1 to 10 for no-overlapping differencing intervals of four, nine and sixteen days to examine the possibility if price change across longer interval shows dependence. All the results are again not significantly different from zero.

Niarchos (1972), studied price series of 15 individual stocks from the Athens stock exchange (Greece) for the period from 1957-1968. He reported the average 1 lag serial correlation coefficient 0.036 for the individual stock prices. The coefficients for individuals stock were close to zero. So he concluded that the price fluctuations were random walks and past price has no meaningful information for future.

Roa (1988) conducted the study on the weekend prices of the eight blue chip stocks for five from July 1982 to June 1987. He applied serial correlation analysis, run test and filter rules. The results from all the tests supported the random walk hypothesis.

Sweeney's (1988) study developed a filter rule was able to earn modest profit. He replicated Fama and Blume's test and found that the part of their filter rule that resulted in the short position usually generated the trading loses. In contrast, Sweeney found that the long run were often profitable.

"Lack of adequate and effective trading mechanism with Nepal stock exchange (NEPSE), the only secondary market in the country for securities transaction, is virtually blocking an early issuance of a new financial the securities board, the regulatory authority governing the stock market operations in the country conceded that lack of proper set up has prevented new entrants into the financial markets and the development of capital markets" (The Kathmandu Post, Feb. 2009).

# 2.6 Review of Master's Level Thesis

In this section various master's level dissertation related to this study has been reviewed.

Gurung (1999) conducted research on "*Share Price Behavior of Listed Companies in Nepal*", to carry out the task of analyzing trends of Nepalese stock markets and influence variables.

The main objectives of the study were to identify the relationship between stock price and independent variables. The basic objectives of his research are given as follows:

- ) To analyze the trend in paid up value and market capitalization.
- ) To identify market behavior in Nepalese securities market.
- ) To analyze the relationship between traded and listed company.
- ) To analyze the effect of earning and book value to the stock price in NEPSE and behavior of NPESE index.
- ) To evaluate the trends of trading turnovers.

After analyzing the above objectives the major finding of his research are as follows:

- ) The no. of listed companies has been increased during the study period. In addition, the no. of secondary market intermediaries has also been increased.
- Both of no of traded and listed companies have increased during the study period. Shares of all the listed commercial banks have been operated in the market and the no. of trading companies whose share have traded in each year.
- NEPSE index in general, is in decreasing trend, which implies that the performance of economy is deteriorating year by year.
- ) Listed company were not found relatively responsible agency in the stock market efficiency in Nepalese security market. In Nepalese securities market all the three agencies i.e. broker, government and market maker are found responsible in the present market inefficiency.

) The trading turnover in term of amounts, number of transaction occurred, market capitalization etc have in banking group as compared together groups, the performance of banking group is highly attractive and liquid.

Dahal (2002) conducted research on "*Stock Market Behavior of Listed Joint Stock Companies in Nepal*". The study aims to find out the behavior of stock market n Nepal on the basis of secondary as well as primary dates.

The basic objectives of the study are as follows:

- ) To study and analyze the no. of companies and maintenance of listed companies in NEPSE.
- ) To analyze stock price trend and volume of shares traded in the secondary market.
- ) To analyze the investors view regarding the decision on stock investment.
- ) To analyze the affecting factors impact on stock price with the help of NEPSE index.
- ) To suggest the abstract result to the interested parties related to stock market.

The major objectives drawn by Dahal are;

- ) Most of the investors were asked for their performance of investing sectors. Major position of them said that they were attached with banking sector for investment.
- ) Investment process and its other factors like NEPSE index, price trends and investment facilitator are not doing their work in systematic way.
- ) The investors were not satisfied with their investment as they were asked whether they were satisfied or not to their investment.
- ) The efficiency of stock markets, different parties, brokers market makers, security exchange Ltd were not sound efficient by analyzing interviewer's expression as they were not getting required support from these parties.
- While analyzing the rate of listing of new companies showed that increasing trend from the year 1997 to 2001.
- ) Volume of stock traded in the stock exchange during the study period was found increasing trend but in last year it was decreasing trend.

- ) On the analyzing paired t-test for signaling factors with reference to major seven events it was found that signaling effects had played a major role in fluctuation of the stock prices.
- ) It was found that investors in the stock market take the investment decision on the basis of market price of the shares.

Dhakal (2003) studied on heading "*Dividend and Stock Price Behavior*", which was carried out by date for 16 enterprises from 1998 to 2002. This study had used simultaneously equation model as developed by Friend and Puckett (1964).

In this study, the main objectives are as follows:

- ) To analyze the impact of dividend policy on share prices.
- ) To test the difference between dividend per share and share price.
- ) To identify whether it is possible to increase the market value of the stock, changing dividend policy.
- ) To analyze and determine the company's DPS distribution rate.

From the data analysis, the major findings drawn are as below:

- ) Dividend per share affects the share prices variedly in different sector.
- ) The difference between dividend per share and stock price is positive in the sample companies.
- ) Changing the dividend policy or DPS might help to increase the market price of shares.
- ) The difference between stock prices and lagged earning ratio is negative.
- ) DPS of different corporation's were fluctuating up and down.

Shrestha (2004) conducted research on the topic, "*Share Prices Behavior in Nepal*." The major objective of securities market of Nepal, which are as follows:

- ) To analyze development and the efficiency of stock market of Nepal.
- ) To analyze the sensitivity of securities (specially banking, financing and insurance sectors) and compare with market return.

) To determine the efficiency of the stock market through the theoretical model of efficiency market hypothesis in the securities market.

The researcher examined daily closing prices of 30 stocks during the period from 13 Jan, 1994 to mid July, 1998 by means of serial correlation and runs tests fund that the successive price changes are dependent. The main findings of this study are:

- ) The price changes in the present and future stock market may not be independent of the price change in the past and present respectively.
- ) The changes of price of the present and past may be helpful to forecast future price change. Hence, there exists the sufficient amount of opportunities for the sophisticated investors.
- ) There exist no profitable trading rules to make greater profit than they would make under the naive-buy and hold strategy in their speculation through the information of past price changes.
- ) When logs of days increase, the mean value of series correlation of coefficient is lower, that indicates the past price changes may have low power to predict the future price change.
- ) The development of institute rates of stock markets are also not in satisfactory factors and Nepalese stock market is not efficient in pricing shares.

Subedi (2005) studied, "*Stock Price Behavior in Nepal*". The main objectives of the study were to identify the relationship between stock price and other variables.

The basic objectives of this research are as follows:

- ) To analyze the effect of book value to stock price in securities market.
- ) To evaluate the effect of earning to stock price in securities market and to show the relationship effect of market variables in securities market.
- ) To analyze the effect of dividend to stock price in Nepalese stock market.
- ) To analyze the listing of new companies and volume of share traded.
- ) To access the effect and efficient qualitative factors in the opinion of the employees of A grade listed companies.

For the analysis, she also drew the following findings:

- ) In NEPSE, EPS, DPS & BPS individually do not have consistent relationship with the market price of shares, among the listed companies, the pricing behavior, various from on company to another.
- But EPS, DPS and BPS jointly have significant effect in market prices of shares. So they may be other major factor affecting the share price significantly.
- All of the Nepalese share investors have not found adequate knowledge to analyze the share price behavior.
- ) There is difference of proper laws and policies regarding the capital market, share holders are feeling unsecured to invest in security market due to poor regulatory mechanism to protect shareholders interest.

Poudyal, (2005) studied on "A Study on Share Price Movements of Joint Venture Commercial Banks in Nepal". The basic objectives of the study are as follows:

- ) To examine analyze NEPSE market and to judge whether the market shares of different banking indicators (book value per shares and major financial ratio) explain the share price monuments.
- ) To analyze the scenario why the shares of selected banks emerge as blue chips to the potential investors and to make a conclusion on the basis of the financial ratio analysis.
- ) To analysis how risky the investment in commercial banks.
- ) To provide fruitful suggestions for the improvement of stock market in Nepal.
- ) To analyze the movement of stock market price in relation to Nepalese joint venture commercial banks are either dependent or independent to historical price of stocks.

From the analysis, he drew up the following findings:

) The market shares of these banks do not capture the market share and the growth rates of different banking indicators used.

- Having good track record of the financial position, the market potential investors buy the shares of joint venture commercial banks. Therefore the share of joint venture commercial bank emerge a blue chips in the Nepalese stock markets.
- ) The ordinary least square equation of book value per share on market value per share reveals that the independent variables doesn't fully explain the dependent variables on the basis of the above mentioned two points, Nepal stock exchange operates in a weak form of efficient market hypothesis indicating that the market price move randomly.
- ) The beta-coefficient which measures the riskiness of individual securities between in relative terms, suggested that none of shares of eight sampled banks are risky. The shares of publicity quoted joint venture commercial banks are less risky as compared to other average stocks traded in the stock exchange.

Similarly, Regmi (2006) in his Master's Thesis, "*Role of Financial Indicators in Determining Share Price in Nepalese Financial Market*", has the major objective of determining role of financial indicators in share price. The other supporting objectives of his research are:

- ) To examine and evaluate the relationship of MPS with various financial indicators like NWPS, EPS, DPS, ROE, etc.
- ) To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- ) To find out whether stocks of the sampled companies are equilibrium priced of not.
- ) To identify qualitative factors affecting the stock price.

The major findings of Regmi are as follows:

- ) NABIL's MPS is positively correlated with all financial indicators but these values are not statistically significant at either 5% or 10% level of significance.
- ) NIBL's MPS has negative correlation with all financial indicators.
- ) For all other banks, the correlation coefficients of MPS with other financial indicators are both positive and negative. These values are statistically significant at either 5% or 10% level of significance.

- ) Relationship with all financial indicators of MPS for NFCL is positively correlated and the relationship is statistically significant at 5% level of confidence with EPS and at 10% level of confidence with NWPS and DPS.
- ) For other Finance Companies, the correlation coefficient of MPS with other financial indicators, are both positively and negatively correlated and the relationship is statistically significant for KFL and UFCML and for others it is insignificant.

Devkota (2008) in his Master's Thesis, "*Stock Price Determinants in Nepal Stock Exchange*", has a major objective of identifying the prime determining factor of share price fluctuation of Nepalese Commercial Banks. The other supporting objectives of his research are:

- ) To examine and evaluate the relationship between MPS with the various financial indicators like EPS, BPS, DPS etc.
- ) To analyze the market trends of MPS with financial indicators.
- ) To conduct the opinion survey of potential investors regarding various aspects of share behaviours in Nepal.

The major findings of Devkota are as follows:

- DPS of BOK is much volatile in comparison to MPS, BPS and EPS. Bank of Kathmandu has positive correlation with between their Market price per share and DPS, BPS and EPS. This indicates that they directly affect the Share Price of BOK.
- ) BPS and EPS are positively correlated in the case of Everest Bank Limited whereas DPS is negatively correlated. This indicates that increase in DPS of this Bank don't contribute on the increase of Share Price rather it decreases it. But increase in BPS and EPS increase the share price and vice versa. DPS is much volatile in comparison with MPS, BPS and EPS.
- ) The correlation between MPS and other indicators are found to be insignificant for most of Banks. It shows that they individually influence very less but jointly they influence a lot. There can be other factors which influence the share price of the organisation.

Dividend pattern plays a great role on share price movement. Higher the DPS, more will be the Share Price. Most of the investors like to analyse the Dividend pattern of the company before they invest in their shares.

# 2.7 Research Gap

All the study mention about price and yield behavior of equity share in Nepal is related with DPS, EPS, NWPS and DPR. These studies have pointed out the similarities between the findings. The conclusions of those researchers are that the price and yield of equity shares are not related with only these financial data. They are also influenced by rumors and manipulations. Therefore the study is designed to highlight effect between yield and behavior equity shares.

# CHAPTER - III RESEARCH METHODOLOGY

The preceding section presented the background of study, defined research problems, annotated factors which may influence stock price behavior and presented theoretical underpinning for the study. In this section, the research methodology is described. Furthermore, this section puts explanation on research design, research hypotheses and tools of analysis. Then, the section describes the population, sampling frame, procedure for surveys, and explains data analysis to be used to test hypotheses.

#### 3.1 Research Design

A research design is a plan for the collection and analysis of data. It present a series of guide posts to enable the researcher to progress in the right direction in order to achieve the goal. Research design includes secondary data as well as primary sources of data as per the study needed. The research design was followed with exploratory and analytical approach.

To conduct the study, descriptive, survey and analytical research approach have been adopted. Descriptive approach is utilized for conceptualization, problem identification, conclusion and suggestions for the research. Survey method is used to collect investor's perception on the stock pricing in Nepal. Analytical approach is followed to the parametric and non-parametric test of the data.

#### 3.2 Data Source

Various literatures by experts on securities markets are reviewed to gain a thorough theoretical understanding of the subject matter. The data related to market price of the equity share and the yielding behavior of the concerned company would be collected mainly through secondary source. However, since this research cannot be completed without the study of share investor's perception on share pricing, a questionnaire would be formulated and get response from the selected sample of 50 share investors. The respondent would be selected from judgmental sampling technique, with equal strata of both sexes. The response thus collected would be analyzed to study the investor's perception and use it to test the hypothesis.

#### **3.3 Population and Sample Size**

The population for this study includes the commercial banks operating in Nepal and those enlisted with the Nepal Stock Exchange (NEPSE) for the trading of their equity share in the secondary share market, i.e. NEPSE's trading floor. According to Nepal Rastra Bank there are 26 commercial banks currently operating in Nepal. Among these, 17 commercial banks are listed in the stock market. Excluding, NMB Bank and Development Credit Bank, all of the commercial banks listed in NEPSE have been taken as sample for the study. Thus, the sample covers almost 88% of the total population. For the primary data analysis purpose, 50 respondents were chosen for questionnaire. Out of which 32 were professional investors , 15 were potential investors and 3 were market analyzer. The questionnaire contained 12 set of questions.

#### **3.4 Data Analysis Tools**

The data collected from various sources leads to the logical conclusion, only if the appropriate tools and techniques are adapted to analyze such data. The collected data has been no meaning if such data are not analyzed. To analyze the data in this research, the researcher has used some statistical and financial tools which are explained here.

#### **3.4.1 Financial Tools**

Except the Statistical tools, some financial tools are also used in this research work. The major financial tools used in this research are.

#### a. Earning Per Share

The earning per share (EPS) is the share of a stock on the earning of the company.

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

#### b. Dividend Per Share

The DPS is the amount paid as dividend to the holder of one share of the stock.

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

#### c. Market Price Per Share

The MPS is amount in which a share of the stock is traded in the market.

MPS = Total Market Capitalization No. of Shares Outstanding

#### d. Book Value Per Share

The BPS represents the real net worth per share. It is simply the ratio of net worth (share capital plus retained earnings i.e. ownership capital) and the number on existing shares.

 $BPS = \frac{Net Worth}{No. of Shares Outstanding}$ 

### 3.4.2 Statistical Tools

Statistical tools are the measures or the instruments to analyze the collected data from different sources. In statistics, there are numerous statistical tools to analyze data of various natures. In this study, the researcher has used the following statistical tools to analyze the data.

#### a. Correlation Coefficient

When the relationship is of quantities nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it in a brief formula is known as correlation. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. By Karl Pearson, the simple correlation coefficient (R) is;

 $\mathbf{r} = \frac{\mathbf{N} \sum \mathbf{X} \mathbf{Y} - \sum \mathbf{X} \sum \mathbf{Y}}{\sqrt{\mathbf{X} \sum \mathbf{X} - (\sum \mathbf{X})^2} \sqrt{\mathbf{N} \sum \mathbf{Y} - (\sum \mathbf{Y})^2}}$ 

Where,  $r_{xy}$  = the correlation coefficient between two variables X & Y r lies between +1 to -1

when r = +1, there is perfect positive correlation

when r = -1, there is perfect negative correlation

when r = o, there is no correlation when r lies between 0.7 and 0.999, there is high degree of positive or negative correlation.

When r lies between 0.5 and 0.699, there is moderate degree of correlation.

When r is less than 0.5, there is low degree of correlation.

#### b. Probable Error (P.E.)

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested by using the probable error (P.E.) and it is denoted by the following model:

Probable Error (P.E.) = 
$$0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Where, r = the value of correlation coefficient

n = number of pairs of observations

if r< P.E., it is insignificant, i.e. there is no evidence of correlation

if r>6 P.E., it is significant

if P.E.<r< 6 P.E., nothing can be concluded

#### c. Simple Regression

The regression line is the line, which gibes the best estimate of one variable for any given value of the other variable. In case of two variables X and Y, we will have two regression lines i.e. lines is called the regression equation and also estimating equations. Since there are two regression lines, there are two regression equations.

X and Y are the independent and dependent variable respectively. Regression equation of Y on X

The regression equation is expressed as;

y = a + bx

We shall get the normal equation for estimating "a" and "b" as.

$$X = Na + b \quad Y$$
$$XY = a \quad Y + b \quad Y^{2}$$

Where,

X = the value of independent variable

Y = the value of dependent variable

a = Y-intercept

b = slope of the trend line/coefficient of regression

N = number of pairs of observations.

a = Y-bX

#### d. Coefficient of Regression

The coefficient 'b' which is the slope of line of regression of y on x is called the coefficient of regression of y on x. It represents the increment in the value of the dependent variable y for a unit change in the value of the independent rate of change.

The convenient way to calculate the variable of 'b' is as;

$$\mathbf{b} = \frac{\mathbf{n} \sum \mathbf{X} \mathbf{Y} - \sum \mathbf{X} \sum \mathbf{Y}}{\mathbf{n} \sum \mathbf{Y}^2 - (\sum \mathbf{Y})^2}$$

#### e. Multiple Regressions

Multiple regression equation describes the average relationship between one dependent variables with other two and more than independent variable which is used to forecast the value of dependent variable.

Here,  $X_1 = a = b_1 X_2 = b_2 X_3$ .....[1]

Where

 $X_1$  is dependent variable.

 $X_2$  and  $X_3$  are impendent variable and it is called the regression equation of  $X_1$  on  $X_2$  and  $X_3$ 

A= value of  $X_1$  when  $X_2=0$  and  $X_3=0$ 

(i.e. intercept made by regression plane)

 $b_1$ =Partial regression coefficient of  $X_1$  on  $X_2$  when  $X_3$  is constant  $b_2$ = Partial regression coefficient of  $X_1$  on  $X_3$  when  $X_2$  is constant

Note that a,  $b_1$  and  $b_2$  are the parameter of the equation whose values are to be determine.

To determine the value of a,  $b_1$  and  $b_2$  the following three normal equations are solved simultaneously,

$X_1 = Na = b_2$ $X_2 = b_2$	$-b_2 X_3$ (a)
$X_1X_2=a$ $X_2+b_1$	$X_2 + b_2  X_2 X_3(b)$
$X_1X_3=a$ $X_3+b_1$	$X_2X_3 + b_2  X_3^2$ (c)

Where, N is number of observation taking in the calculation.

# f. Coefficient of multiple Determination (R)<sup>2</sup>

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

Coefficient of Determination  $(\mathbb{R}^2) = \frac{\text{Explained Varition}}{\text{Total Variation}}$ 

#### g. Test of Regression Coefficient by t-Test

It was developed for the significant contribution in the theory of sampling applicable in case of small samples. When population variance is not known, the test is commonly known as student's t-test, and is based on the t-distribution. As the sample size gets larger, the shape of the t-distribution loses its flatness and becomes approximately equal to the normal distribution.

For applying t-test in context of small samples, the t-value is calculated first of all and than compared with table value 't' at certain level of significance for given degree of freedom. If the calculated value of 't' exceeds the table value say  $(t_{0.05})$  it infers that the difference is significant at 5% level but if 't' is less than the concerning table value of 't'

the difference is not treated as significant. The t-test is used when two conditions are fulfilled.

I: the sample size is less than 30.

II: the population standard deviation must be unknown.

In using t-test we assume the following:

- 1. That the population is normal approximately normal.
- 2. That the observations are independent and the samples are randomly draw samples
- 3. That in case of two samples, population variance is regarded as equal if equality of the two populations means is to be tested.

# T-test for Correlation Coefficient (Test of significant difference between sample and population correlation coefficients)

t-test is also used to test whether two related population variables are correlated or not steps:

# step 1:

**Null hypothesis H**<sub>0</sub>: P= 0 i.e the population correlation coefficient is zero. In other worlds, there is no correlation between two sample variable i.e. between MPS & DPS, MPS & BPS and MPS & EPS. It indicates that two population variables are uncorrelated.

#### Step 2:

Alternative hypothesis,  $H_1$ : (i)  $H_1$ : P# 0 tow tailed test) i.e. the population correlation coefficient is not zero. In other words, there is correlation between two sample variable i.e. between MPS & DPS, MPS & BPS and MPS & EPS. It indicates that two population variables are correlated.

#### Step 3

Test statistic: under  $_{H0}$ , the test stastices is

$$t = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2}$$

# Steps 4:

Level of significance: we use level of significance u = 5%, unless otherwise stated and specify whether the alternative hypothesis is one tailed or two tailed test.

# Step 5:

# **Degree of freedom: n-2**

Where n is sample number of pairs of observation.

# Step 6:

**Critical value:** the tabulated or critical value of t at ample level of significance for (n-2) degree of freedom in a one? Two tailed test is obtained from t-tables.

# Step 7:

**Decision:** if calculated **[t]** is less tan or equal to tabulated value of t if falls in the acceptance region and the null hypothesis is accepted and if calculated **[t]** is greater than tabulated **[ta(N - 2)]**, H<sub>0</sub> is rejected at the adopted level of significance.

# CHAPTER - IV DATA PRESENTATION AND ANALYSIS

# 4.1 Secondary Data Analysis

The relationship of EPS, DPS and BPS with MPS is determined separately to each of the sampled listed companies in this section. For their analytical purpose, the Market Price of Share (MPS) is assumed to be influenced with the fluctuation occurred in EPS, DPS and BPS. Hence, MPS is taken as dependent variable whereas EPS, DPS and BPS are taken as independent variable. The correlation analysis is performed to determine the relationship of EPS, DPS and BPS with MPS. To determine the effect of DPS, EPS, and BPS on MPS, simple correlation as well as their coefficient of determination are calculated. For the test of hypothesis of simple and multiple coefficients, calculated t-value is compared with the tabulated t-value at 5% level of significance. To determine the magnitude of the effects of the independent variables to the dependent variable, simple and multiple regression analysis are made and the magnitude is identified after determining the regression equations. In addition to that, multiple correlation coefficient, multiple coefficient of determination, standard errors of estimate are analyzed during the correlation analysis.

#### 4.1.1 Bank of Kathmandu

The Table 4.1 shows the financial summary of Bank of Kathmandu over the last five years and the relationship of EPS, DPS and BPS to MPS along with the significance of such relationship.

L L	summary of the	Financial Ferr	ormance of BOF	<b>N</b>
Year	MPS	DPS	BPS	EPS
2003/04	295	10	218.38	27.50
2004/05	430	15	213.60	30.10
2005/06	850	48	230.67	43.67
2006/07	1375	20	164.68	43.50
2007/08	2350	42.11	222.51	59.94
Mean	1060	27.02	209.97	40.94
S.D.	746.93	15.17	23.33	11.60

 Table 4.1

 Summary of the Financial Performance of BOK

C.V.%	70.47	56.16	11.11	28.34
(C	anta of DOV			

(Source: Annual Reports of BOK)

The table presents the detail financial summary of Bank of Kathmandu for five years taken for research. As table shows, the bank distributed more dividend in each year compared to the previous fiscal year except in the fiscal year 2006/07. The dividend ranged from Rs. 10 in the fiscal year 2003/04 to Rs. 48 in the fiscal year 2005/06. In average, BOK distributed Rs. 27.02 per share as dividend in the five fiscal year. Since the company distributed more dividend in the later year, it shows that the company is in better financial strength in the later year.

The market price per share of BOK seems to be much volatile for the company with the coefficient of variation 70.47% whereas the book value per share seems to be less volatile with the coefficient of variation 11.11%. Similarly, the Market Price per Share and Earning per share are moderately volatile with the coefficient of variation 56.16% and 28.34% respectively. It tends to describe that MPS is comparatively more fluctuated than others.

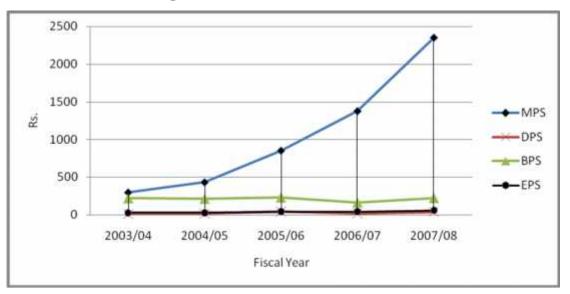


Figure 4.1 Relationship between MPS, DPS, BPS and EPS of BOK

The relation of MPS with BPS, DPS and EPS has been presented in the following table 4.2:

# Table 4.2

Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.5901	0.3482	3.49	275.10	29.05	1.86	Significant
MPS vs. BPS	-0.1281	0.0164	2.87	1921.01	-4.10	1.86	Significant
MPS vs. EPS	0.9659	0.9329	3.45	-1485.63	62.18	1.86	Significant

Relationship of BPS, EPS and DPS with MPS of BOK

(Source: Appendix IV)

Where,

r	:	Coefficient of Correlation							
$r^2$	:	Coefficient of Determination							
t-cal	:	Student's t-value							
t-table	:	Tabulated value of Student's t-distribution (at 95% level of							
		significance, $n_1+n_2-1$ i.e. $5+5-2=8$ Degree of Freedom .							
a-value	:	Y-intercept of Regression equation (MPS – dependent intercept)							
b-value	<b>:</b> :	Slope of the line (Variable Intercept)							

Table 4.2 shows the relation of MPS with DPS, BPS and EPS. It shows that MPS is positively correlated with DPS and EPS, while negatively correlated with BPS. It means rise in DPS and EPS results rise in MPS and rise in BPS causes fall in MPS. Among these three indicators, Earning per Share seems to be more positively correlated with the Market Price per share. Likewise, Dividend per Share is positively correlated second to EPS. Hence, a little rise in Earning per Share causes bigger increase in MPS. Though in smaller amount, the increase in DPS also increases MPS. Also, the t-value indicates that the relationship between EPS and MPS, DPS and MPS, and BPS and MPS is statistically significant 95% level of confidence, since the calculated value of t is higher than the tabulated value.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given in Table 4.3.

#### Table 4.3

#### **Simple Regression Equation of BOK**

S.N.	Variables	Regression Equation
1	MPS vs. DPS	MPS = 275.10 + 29.05 DPS
2	MPS vs. BPS	MPS = 1921.01 - 4.10 BPS
3	MPS vs. EPS	MPS = -1485.63 + 62.18 EPS

(Source: Appendix IV)

The first equation is the regression equation of MPS on DPS. The regression constant equals to 275.10. This means that when DPS falls to zero, MPS equals to Rs. 275.10. Likewise, the constant for DPS equals to 29.05 meaning that when DPS increases/decreases by Re. 1, MPS increases by Rs. 29.05 and vice versa.

The second equation refers to the regression equation of MPS on BPS. The regression constant equals to 1921.01. This means that when BPS becomes zero, MPS will fall to Rs. 1921.01. Likewise, the constant for BPS equals to -4.10 meaning that when BPS increases by Re. 1, MPS decreases by Rs. 4.01 and vice versa.

In the same way the last equation indicates the regression equation of MPS on EPS. The regression constant for EPS equals to 62.18 meaning that when EPS increases by Re. 1, MPS increases by Rs. 32.18 and vice versa.

The Multiple Regression equation of MPS of Bank of Kathmandu on DPS and EPS is represented by the following equation (Appendix- V).

#### MPS on DPS and EPS

#### MPS = -1780.79 - 20.15 DPS + 82.69 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -1780.79.

The constant for DPS is -20.15 meaning that when DPS increases by Re. 1, MPS will decrease by Rs. 20.15 keeping EPS constant. In the same way, if DPS holds constant and EPS increases by Re. 1, MPS will increase by Rs. 82.69 and vice versa.

#### 4.1.2 Everest Bank Ltd.

The financial performance of Everest Bank Ltd. for the five years has been summarized in the following table. It tends to show the relationship of EPS, DPS and BPS to MPS along with their significance.

Year	MPS	DPS	BPS	EPS
2002/03	445	20	150.10	29.90
2003/04	680	20	171.52	45.60
2004/05	870	20	219.87	54.20
2005/06	1379	25	217.67	62.80
2006/07	2430	40	292.75	78.40
Mean	1160.80	25.00	210.38	54.18
S.D.	705.21	7.75	49.14	16.27
C.V.%	60.75	30.98	23.36	30.04

 Table 4.4

 Summary of the Financial Performance of EBL

(Source: Annual Reports of EBL)

\*Data for 2007/08 is unavailable

The above table 4.4 presents the summary of financial performance of Everest Bank Limited for the last five years. The table showed that the MPS of EBL has followed increasing trend over the period. The MPS ranged from Rs. 445 in the fiscal year 2002/03 to Rs. 2430 in the fiscal year 2006/07. Similarly, the EPS of the bank has also followed increasing trend and reached to Rs. 78.40 in the fiscal year 2006/07 from Rs. 29.90 in the fiscal year 2002/03. However, the DPS remained constant (Rs. 20) in the first three fiscal year 2006/07. Similarly, BPS increased for the first three years and slightly decreased in the fourth year and again increased to Rs. 292.75 in the fiscal year 2006/07. High coefficient of variation (60.75%) of MPS clears that the MPS is highly volatile and inconsistent in comparison with DPS (30.98%), BPS (23.36%) and EPS (30.04%).

The following line chart (Figure 2) shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

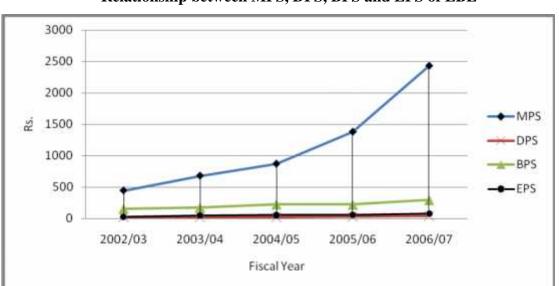


Figure 4.2 Relationship between MPS, DPS, BPS and EPS of EBL

The relation of MPS with BPS, DPS and EPS has been presented in the following table 4.5:

Table 4.5

Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.9693	0.9396	4.07	-1045.45	88.25	1.86	Significant
MPS vs. BPS	0.9535	0.9093	3.40	-1718.36	13.69	1.86	Significant
MPS vs. EPS	0.9432	0.8896	3.97	-1053.79	40.87	1.86	Significant

Relationship of BPS, EPS and DPS with MPS of EBL

(Source: Appendix IV)

Table 4.5 shows the relation of MPS with DPS, BPS and EPS. The table shows that MPS is highly correlated with DPS (0.9693), BPS (0.9535) and EPS (0.9432). Likewise the calculated t-value of all variables is greater than the tabulated t-value (1.86), which directly indicates that the relation between DPS and MPS, BPS and MPS, and EPS and MPS is statistically significant. Thus, MPS increases with the increase of each variable, DPS, BPS and EPS and vice-versa.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given in Table 4.6:

Table	<b>4.6</b>
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#### **Simple Regression Equation of EBL**

S.N.	Variables	Regression Equation
1	MPS vs. DPS	MPS = -1045.45 + 88.25 DPS
2	MPS vs. BPS	MPS = -1718.36 + 13.69 BPS
3	MPS vs. EPS	MPS = -1057.79 + 40.87 EPS

(Source: Appendix IV)

The first equation is the regression equation of MPS on DPS. The regression line of MPS on DPS indicates that the per rupee increase in DPS leads to an increase of Rs. 88.25 in MPS. Similarly, the second regression equation of MPS on BPS indicates that the per rupee increase in BPS causes Rs. 13.69 increase in MPS and the third equation of MPS on EPS implies that per rupee increase in EPS raises Rs. 40.87 increase in MPS. Comparing three variables, it clarifies that DPS is the most influencing factor for MPS in Everest Bank Limited.

The Multiple Regression equation of MPS of Everest Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -1240.54 + 54.69 DPS + 19.09 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -1240.54. It implies that when DPS and EPS becomes zero, MPS would be equal to Rs. -1240.54. The constant for DPS is 54.69 meaning that when DPS increases by Re. 1, MPS will decreases by Rs. 54.69 keeping EPS constant. In the same way, if DPS holds constant and EPS increases by Re. 1, MPS will increase by Rs. 19.09 and vice versa.

#### 4.1.3 Himalayan Bank Limited

The following table outlines the major financial performance of Himalayan Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been explained thereafter.

#### Table 4.7

Year	MPS	DPS	BPS	EPS
2002/03	836	25	247.81	49.45
2003/04	840	20	246.93	49.05
2004/05	920	31.58	239.59	47.91
2005/06	1100	35	228.72	59.24
2006/07	1740	40	264.74	60.66
Mean	1087.20	30.32	245.56	53.26
S.D.	340.14	7.10	11.78	5.50
C.V.%	31.29	23.42	4.80	10.33

#### Summary of the Financial Performance of HBL

(Source: Annual Report of HBL)

\*Data for 2007/08 is unavailable

The above table 4.7 presents the summary of financial performance of Himalayan Bank Limited for the last five years. The table revealed that the MPS of HBL increased in each fiscal year and ranged from Rs. 836 in the fiscal year 2002/03 to Rs. 1740 in the fiscal year 2006/07. However, the DPS fluctuated during the period and ranged from Rs. 20 in the fiscal year 2003/04 to Rs. 40 in the fiscal year 2006/07. Similarly, BPS decreased for the first four years and finally reached to Rs. 264.74 in the fiscal year 2006/07. Likewise, EPS fluctuated during the period and ranged from Rs. 47.91 in the fiscal year 2004/05 to Rs. 60.66 in the fiscal year 2006/07. Comparing the coefficient of variation, there is highest fluctuation in MPS (C.V. 31.29%) and lowest fluctuation in BPS (C.V. 4.80%) compared with other variables, DPS (C.V. 23.42%) and EPS (C.V. 10.33%).

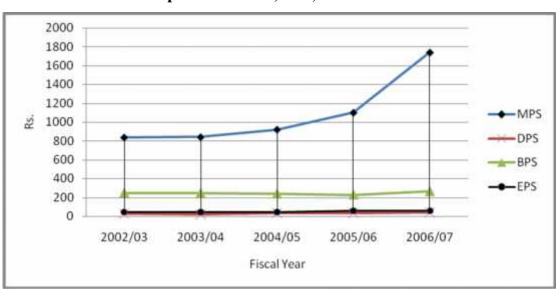


Figure 4.3 Relationship between MPS, DPS, BPS and EPS of HBL

The relation of MPS with BPS, DPS and EPS has been presented in the following table 4.8:

#### Table 4.8

Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.8329	0.6937	7.86	-122.55	39.90	1.86	Significant
MPS vs. BPS	0.6188	0.7855	6.26	-3299.86	17.87	1.86	Significant
MPS vs. EPS	0.8335	0.5526	7.69	-1656.97	51.52	1.86	Significant

(Source: Appendix IV)

The relation of MPS with DPS, BPS and EPS is shown in Table 4.9. It shows that MPS of Himalayan Bank is positively correlated with DPS (0.8329), BPS (0.6188) and EPS (0.8335). It indicates that raise in DPS, BPS and EPS results the rise in MPS and vice versa. If DPS rises by Rs. 100, the MPS will be raised by Rs. 83.29. In the same way, Rs. 100 increase in BPS and EPS results the increment of Rs. 61.88 and Rs. 83.35 in MPS respectively. In addition, the t-statistics indicates that the relationship between DPS, BPS and EPS with MPS is statistically significant, as the calculated value is higher than the tabulated value at 5% level of significance with 8 degree of freedom.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

Table	e <b>4.9</b>
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S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. DPS	MPS = -122.55 + 39.90 DPS
2	MPS vs. BPS	MPS = -3299.86 + 17.87 BPS
3	MPS vs. EPS	MPS = -1656.97 + 51.52 EPS

#### **Regression Equation of HBL**

(Source: Appendix IV)

The first equation is the regression equation of MPS on DPS. The regression constant equals to -122.55. This means that when DPS falls to zero, MPS equals to Rs. -122.55. Likewise, the constant for DPS equals to 39.90 implies that when DPS increases by Re. 1, MPS increases Rs. 39.90 and vice versa. Similarly, the second regression equation of MPS on BPS indicates that per rupee increase in BPS leads to Rs. 17.87 increase in BPS and the third equation of MPS on EPS indicates that one rupee increase in EPS leads to Rs. 51.52 increase in MPS and vice versa.

The Multiple Regression equation of MPS of Himalayan Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -1109.76 + 22.08 DPS + 28.68 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -1109.76. The multiple regression equation of MPS on DPS and EPS indicates that if other variable remains constants, per rupee increase in DPS leads to an increase of Rs. 22.08 increase in MPS and 28.68 rupees increases in MPS on per rupee increase in EPS, if DPS and other variable remain constant.

# 4.1.4 Kumari Bank Limited

The summarized form of financial performance of Kumari Bank Ltd. for the five years has been presented in the following table 4.10.

#### **Table 4.10**

Year	MPS	DPS	BPS	EPS
2003/04	-	0	114.03	9.74
2004/05	369	0	141.11	17.58
2005/06	443	21.05	149.22	16.59
2006/07	830	21.05	148.69	22.70
2007/08	1005	21.05	128.60	16.86
Mean	529.40	12.63	136.33	16.69
S.D.	354.97	10.31	13.41	4.13
C.V.%	67.05	81.65	9.83	24.73

Summary of the Financial Performance of KBL

(Source: Annual Reports of KBL)

The table given above shows the financial performance of Kumari Bank for the five years. The Market Price per Share of the organisation is available only from the fiscal year 2004/05 as there was no AGM in the first two years. The company didn't distribute any dividend for the first two years and paid Rs. 21.05 in each fiscal year 2005/06, 2006/07 and 2007/08. The average BPS of the company for the five years period is Rs. 529.40 with the C.V. of 67.05%. Similarly, KBL earned Rs. 16.69 in average per share. The coefficient of variation in EPS equals to 24.73 which indicates the volatility of EPS is 24.73%. Comparing the coefficient of variation, DPS fluctuated highest by 81.65% than other variables, MPS, BPS and EPS.

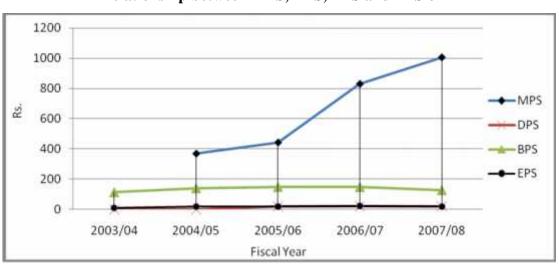


Figure 4.4 Relationship between MPS, DPS, BPS and EPS of KBL

# 4.1.5 Laxmi Bank Limited

The financial performance of Laxmi Bank Ltd. for the past five years has been summarized in the following table. It tends to show the relationship of EPS, DPS and BPS to MPS along with their significance.

#### **Table 4.11**

Year	MPS	DPS	BPS	EPS
2003/04	156	0	101.28	1.90
2004/05	285	0	98.87	4.34
2005/06	368	0	106.40	5.80
2006/07	690	0	115.66	10.75
2007/08	1113	0	126.63	13.14
Mean	522.40	0	109.77	7.19
S.D.	343.90	0	10.21	4.15
C.V.%	65.83	0	9.30	57.75

Summary of the Financial Performance of LBL

(Source: Annual Reports of LBL)

The above table reveals the summary of financial performance of Laxmi Bank Limited for the last five years. The bank has not distributed any kind of dividend yet. Hence, there is nothing to compare the relation of MPS with DPS. The table shows that The MPS is in increasing order and ranged from Rs. 156 in the fiscal year 2003/04 to Rs. 1113 in the fiscal year 2007/08. Similarly, EPS also followed increasing trend and ranged from Rs. 1.90 in the fiscal year 2003/04 to Rs. 13.14 in the fiscal year 2007/08. However, the BPS is in fluctuating trend and ranged from Rs. 98.87 in the fiscal year 2004/05 to Rs. 126.63 in the fiscal year 2007/08. The coefficient of variation of MPS, BPS and EPS are 65.83%, 9.30% and 57.75% respectively. In comparison with other indicators, the coefficient of variation of MPS is highest, which shows that it is more volatile than others. In this way, the data shows that BPS has the lowest degree of coefficient of variation.

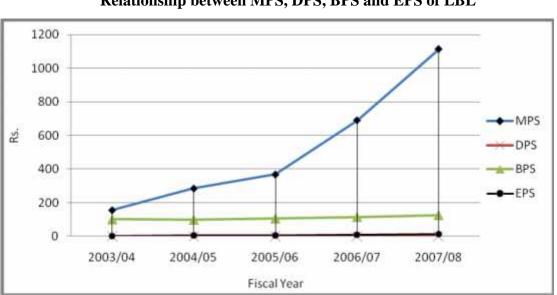


Figure 4.5 Relationship between MPS, DPS, BPS and EPS of LBL

The relation of MPS with BPS, DPS and EPS has been presented in the following table 4.12:

#### **Table 4.12**

**Relationship of BPS, EPS and DPS with MPS of LBL** 

Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. BPS	0.9776	0.9558	8.05	-30.92.33	32.93	1.86	Significant
MPS vs. EPS	0.9726	0.9459	7.24	-56.74	80.59	1.86	Significant

(Source: Appendix IV)

Table 4.12 shows the relation of MPS with BPS and EPS. The relation between MPS and DPS is not calculated because no DPS has distributed yet. The table shows that MPS is highly positively correlated (0.9776) and significant at 5% level of significance with BPS. Likewise, MPS is highly positively correlated with EPS (0.97261) and highly significant at 5% level of significance. It means that if the BPS rises by Rs. 100, MPS will be raised by Rs. 97.76. Similarly, MPS increases by Rs. 97.26 with Rs. 100 increase in EPS. The coefficient of determination shows that 95.58% of changes in MPS is explained by BPS whereas 94.59% changes in MPS is explained by EPS.

The Simple Regression equation of BPS and EPS taking MPS as dependent variable is given in Table 4.13:

#### **Table 4.13**

#### **Simple Regression Equation of LBL**

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. BPS	MPS = -3092.33 + 32.93 BPS
2	MPS vs. EPS	MPS = -56.74 + 80.59 EPS

(Source: Appendix IV)

The first equation is the regression equation of MPS on BPS. The regression constant equals to -3092.33. This means that when BPS is zero, MPS will be decreased to Rs. 3092.33. Likewise, the constant for BPS equals to 32.93, indicating that when BPS increases by Re. 1, MPS increases by Rs. 32.93 and vice versa.

The second equation refers to the regression equation of MPS on EPS. The regression constant equals to -56.74. This means that when EPS becomes zero, MPS will be equal to Rs. 56.74. Likewise, the constant for EPS equals to 80.59 means that when EPS increases/decreases by Re. 1, MPS increases/decreases by Rs. 80.59. In case of LBL, EPS is the most influencing factor for MPS than DPS and BPS.

#### 4.1.6 Lumbini Bank Limited

The summarized form of financial performance of Lumbini Bank Ltd. for the last five years has been presented in the following table. It shows the relationship of EPS, DPS and BPS to MPS along with their significance.

#### **Table 4.14**

	v			
Year	MPS	DPS	BPS	EPS
2003/04	-	0	84.71	5.33
2004/05	180	0	49.00	-39.35
2005/06	172	0	-144.41	-161.21
2006/07	505	0	-71.61	32.07
2007/08	631	0	29.50	32.91
Mean	297.60	0	-10.56	-26.05
S.D.	233.38	0	84.70	72.50
C.V.%	78.42	0	-801.94	-278.33
	1			

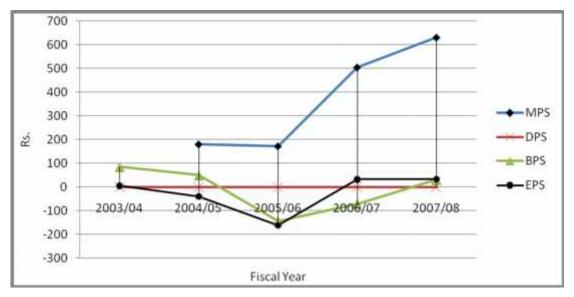
Summary of the Financial Performance of LuBL

(Source: Annual Reports of LuBL)

The table 4.14 above shows the financial performance of Lumbini Bank for the past five years. The Market Price per Share of the organisation is available only from the year 2004/05. The company didn't distribute any dividend within the study period. The average BPS of the company for the five years is Rs. -10.56 with the coefficient of variation of -801.94%. Similarly, the EPS has decreased in each fiscal year for the initial three year period and finally reached to Rs. 32.91 in the fiscal year 2006/07. Comparing all indicators, there is highest volatility of -801.94% in BPS.

# Figure 4.6

#### Relationship between MPS, DPS, BPS and EPS of LuBL



# 4.1.7 Machhapuchhre Bank Limited

The table given below Table 4.15 shows the financial summary of Machhapurchhre Bank over the last five years and the relationship of EPS, DPS and BPS to MPS along with the significance of such relationship.

Year	MPS	DPS	BPS	EPS
2003/04	125	0	100.77	8.49
2004/05	256	0	115.95	15.43
2005/06	320	15.79	130.22	18.74
2006/07	620	10.02	121.74	9.25
2007/08	1265	0	136.57	14.18
Mean	517.20	5.16	121.05	13.22
S.D.	407.60	6.58	12.35	3.86
C.V.%	78.81	127.47	10.20	29.19

**Table 4.15** 

Summary of the Financial Performance of MBL

(Source: Annual Reports of MBL)

Table 4.15 presents the detail financial summary of Machhapuchhre Bank Limited (MBL) for the past five years. As table shows, the bank has distributed dividend, equivalent to Rs. 15.79, in the fiscal year 2005/06 and Rs. 10.02 in the fiscal year 2006/07. The MPS and BPS have increased in each fiscal year and ranged from Rs. 125 to Rs. 12654 and Rs. 100.77 to Rs. 136.57 respectively during the five year period taken for research. Similarly, EPS also followed increasing trend for the first three years and

decreased to Rs. 9.02 in the fiscal year 2006/07 and finally reached to Rs. 14.18 in the fiscal year 2007/08.

The coefficient of variation indicated that there is highest volatility in DPS (127.47%) and lowest volatility in BPS (10.20%) compared with other variables, MPS (78.81%) and EPS (29.19%). In average, the bank earned Rs. 13.22 per share, distributed dividend of Rs. 5.16 per share, and maintained MPS of Rs. 517.20 per share and BPS of Rs. 121.05 per share.

The following line chart shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

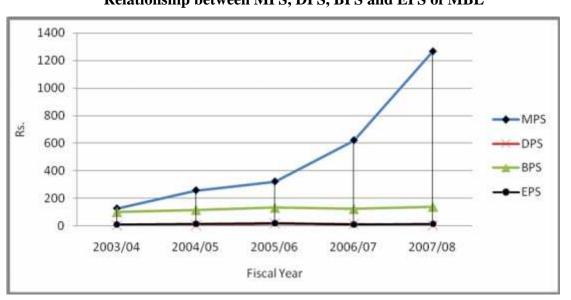


Figure 4.7 Relationship between MPS, DPS, BPS and EPS of MBL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table 4.16.

# **Table 4.16**

<b>Relationship of BPS, EPS and DPS with MPS of MBL</b>	Relationship	of BPS,	EPS	and DPS	with	MPS	of MBL
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Variables	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	-0.1554	0.0241	3.18	566.88	-9.62	1.86	Significant
MPS vs. BPS	0.7610	0.5791	2.46	-2522.72	25.11	1.86	Significant
MPS vs. EPS	0.0635	0.0040	3.13	428.54	6.71	1.86	Significant

(Source: Appendix IV)

The relation of MPS with DPS, BPS and EPS is shown in Table 4.17. It illustrates that MPS is positively correlated with BPS and EPS and negatively correlated with DPs. It means rise in BPS and EPS increases MPS and rise in DPS decreases MPS. Among these three indicators, Book Value per Share seems to be more positively correlated with the Market Price per share. Likewise, Earning per Share is positively correlated next to BPS. Also, t-calculation for the correlation of these indicators shows that the r-value of MPS with DPS, BPS and EPS are significant at 95% level of confidence as the t<sub>cal</sub> is higher than t<sub>tab</sub>.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. DPS	MPS = 566.88 - 9.62 DPS
2	MPS vs. BPS	MPS = -2522.75 + 25.11 BPS
3	MPS vs. EPS	MPS = 428.54 + 6.71 EPS

**Table 4.17** 

# **Simple Regression Equation of MBL**

(Source: Appendix IV)

The first equation is the regression equation of MPS on DPS. The regression constant equals to 566.88 and the constant for DPS equals to -9.62. This means that when DPS falls to zero, MPS equals to Rs. 566.68 and when DPS increases by Re. 1, MPS decreases by Rs. 9.62 and vice versa.

The second equation refers to the regression equation of MPS on BPS. The regression constant equals to -2522.75. This means that when BPS becomes zero, MPS will fall to Rs. -2522.75. Likewise, 25.11 is the constant for BPS meaning that when BPS increases/decreases by Re. 1, MPS increases/decreases by Rs. 25.11 and vice versa.

Similarly, the last equation indicates the regression equation of MPS on EPS. 458.54 is the regression constant equals of MPS on EPS. This means that when EPS falls to zero, MPS equals to Rs. 458.54. Likewise, the constant for EPS equals to 6.71 meaning that when EPS increases/decreases by Re. 1, MPS increases/decreases by Rs. 6.71 and vice versa.

The Multiple Regression equation of MPS of Machhapuchchhre Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = 386.45 – 12.90 DPS + 14.93 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to 386.45. It implies that when DPS and EPS becomes zero, MPS would be equal to Rs. 356.45. However, the constant for DPS (-12.90) indicates that when DPS increases by Re. 1, MPS will decrease by Rs. 12.90 keeping EPS constant. In the same way, the constant for EPS equals to 14.93 indicates that if DPS holds constant and EPS increases by Re. 1, MPS will increases by Rs. 14.93 and vice versa.

#### 4.1.8 NABIL Bank Limited

The following table outlines the major financial performance of NABIL Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been explained thereafter.

Year	MPS	DPS	BPS	EPS
2003/04	1000	65	301	92.61
2004/05	1505	70	337	105.49
2005/06	2240	85	381	129.21
2006/07	5050	140	418	137.08
2007/08	5275	100	354	108.31
Mean	3014	92	358.20	114.54

#### **Table 4.18**

#### Summary of the Financial Performance of NABIL

S.D.	1799.43	26.94	39.58	16.28
C.V.% 59.70		29.29	11.05	14.21
(C 1 1 D	CILLDIA			

(Source: Annual Reports of NABIL)

The above table presents the summary of financial performance of NABIL Bank Limited for the last five years. The table depicts that the MPS of NABIL has increased almost by five-fold within the five year period and followed increasing trend in each fiscal year. The MPS ranged from Rs. 1000 in the fiscal year 2003/04 to Rs. 5275 in the fiscal year 2007/08. Along with MPS, the other indicators, DPS, BPS and EPS, have also increased in each fiscal year, except in the fiscal year 2007/08, when all the indicators have fell by some shorten. The DPS ranged from Rs. 65 to Rs. 140, BPS ranged from Rs. 301 to Rs. 418 and EPS ranged from Rs. 92.61 to Rs. 137.08 in the five year period taken for research. Likewise, the coefficient of variation indicates that there is highest fluctuation in MPS (59.70%) than others, DPS (29.29), BPS (11.05%) and EPS (14.21%).

The following line chart shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

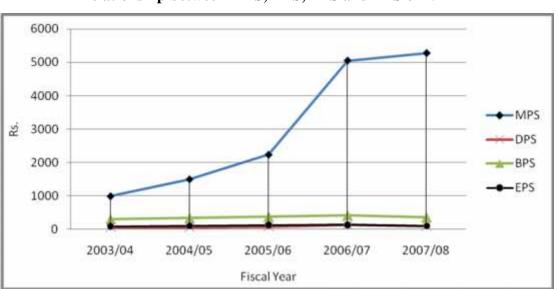


Figure 4.8 Relationship between MPS, DPS, BPS and EPS of NABIL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table 4.19.

#### **Table 4.19**

Relationship of BPS, EPS and DPS with MPS of NABIL

Relation	r	$r^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.8613	0.7419	4.11	-2278.15	57.52	1.86	Significant
MPS vs. BPS	0.6789	0.4609	3.73	-8040.92	30.86	1.86	Significant
MPS vs. EPS	0.5345	0.2856	4.08	-3752.95	59.08	1.86	Significant

(Source: Appendix IV)

The table shows the relation of MPS with DPS, BPS and EPS. It reflects that MPS of NABIL Bank is positively correlated with DPS, BPS and EPS. It indicates that rise in these indicators results the rise in MPS and vice versa. The simple correlation coefficient of MPS with DPS, BPS and EPS are 0.8613, 0.6789 and 0.5345 respectively. It means if DPS rise by Rs. 100, the MPS will be raised by Rs. 86.13. In the same way, Rs. 100 increase in BPS and EPS results the increment of Rs. 67.89 and Rs. 53.45 in MPS respectively. Despite this, the degrees of correlation of MPS with other variables are significant at 95% level of confidence as the calculated t-value of each variable is greater than the tabulated t-value.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. DPS	MPS = -2278.15 + 57.52 DPS
2	MPS vs. BPS	MPS = -8040.92 + 30.86 BPS
3	MPS vs. EPS	MPS = -3752.95 + 59.08 EPS

**Table 4.20** 

**Regression Equation of NABIL** 

(Source: Appendix IV)

The table shows that per rupee increase in DPS leads to Rs. 57.52 increase in MPS if the other variable (-2278.15) remains constant. Similarly, per rupee increase in BPS causes Rs. 30.86 increase in MPS if the variable, -8040.92, remains constant. Likewise, MPS

increases by Rs. 59.08 with the per rupee increase in EPS, if other variable remains neutral. The simple regression equations delineate that EPS is the most sensitive factor of MPS than DPS and BPS in case of NABIL.

The **Multiple Regression** equation of MPS of NABIL Bank Limited on DPS and EPS is represented by the following equation.

# MPS on DPS and EPS

# MPS = 604.64 + 76.79 DPS - 40.64 EPS

The multiple regression equation of MPS on DPS and EPS indicates that there is direct relationship between MPS and DPS, and inverse relationship between EPS and MPS. The equation shows that per rupee increase in DPS leads to Rs. 76.79 increase in MPS, if EPS remains constant. Similarly, per rupee increase in EPS leads to Re. 40.64 decrease in MPS, if DPS remains constant.

# 4.1.9 Nepal Credit and Commerce Bank Limited

The following table outlines the major financial performance of NCC Bank Limited over the past five years from 2003/04 to 2007/08.

#### **Table 4.21**

#### Summary of the Financial Performance of NCCBL

Year	MPS	DPS	BPS	EPS
2003/04	-	0	26.75	0.49
2004/05	120	0	36.55	-0.74
2005/06	94	0	-44.15	-84.77
2006/07	316	0	-72.91	-16.56
2007/08	457	0	49.74	35.41
Mean	197.40	0	-0.80	-13.23
S.D.	165.59	0	48.55	39.60
C.V.%	83.89	0	-6039.04	-299.20

(Source: Annual Reports of NCCBL)

Nepal Credit and Commerce Bank opened its share to the general public on 2060/61 for the first time. And no dividend has been distributed to its shareholders within the period taken for research. Due to the unavailability of MPS for the fiscal year 2003/04, complete analysis could not be made. The available data regarding BPS and EPS shows that the financial performance of NCC Bank in the fiscal year 2005/06 and 2006/07 is worse. NCC Bank was in loss in three years, 2004/05, 2005/06 and 2006/07, with negative EPS. The variability of BPS is -6039.04% whereas that of EPS is -299.20%. Such high variability shows the inconsistency in these indicators.

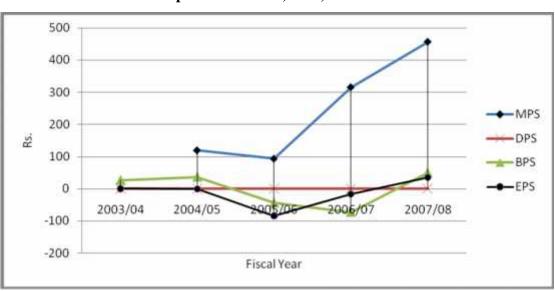


Figure 4.9 Relationship between MPS, DPS, BPS and EPS of NCC

# 4.1.10 Nepal Bangladesh Bank Limited

The following table outlines the major financial performance of Nepal Bangladesh Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been explained thereafter.

Table	4.22
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Summary of the Financial Performance of NBBL

Year	MPS	DPS	BPS	EPS
2003/04	354	0	182.42	0.74
2004/05	265	0	-32.59	-104.12
2005/06	199	0	-217.07	-249.65
2006/07	550	0	-364.54	-147.47
2007/08	565	0	-317.03	72.83
Mean	386.60	0	-149.76	-85.53
S.D.	148.03	0	201.35	112.82
C.V.%	38.29	0	-134.45	-131.90

(Source: Annual Reports of NBBL)

The above table presents the summary of financial performance of Nepal Bangladesh Bank Limited for the last five years. From the table, it can be concluded that Market Price per Share is in downward trend since 2003/04 (Rs. 354) to 2005/06 (Rs. 199) and finally increased to Rs. 550 in the fiscal year 2006/07 and Rs. 565 in the fiscal year 2007/08. However, the bank has not distributed any dividend for these periods. Also, the BPS of NBBL followed decreasing trend and finally reached to –Rs. 317.03 in the fiscal year 2007/08. Likewise, the EPS of the Bank is also in poor situation and is in negative for the last three years. The downward trend of these indicators shows that the bank is experienced financial crisis in the mid three years. However, the positive EPS of Rs. 72.83 have indicated positive financial achievement in the fiscal year 2007/08. The high variability of BPS (-134.45%) and EPS (-131.90%) shows that the net worth per share as well as the earning per share of the company is not consistent through out the study period. In comparison, MPS has lowest degree of variability, i.e. 38.29%, than other indicators.

The following line chart shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

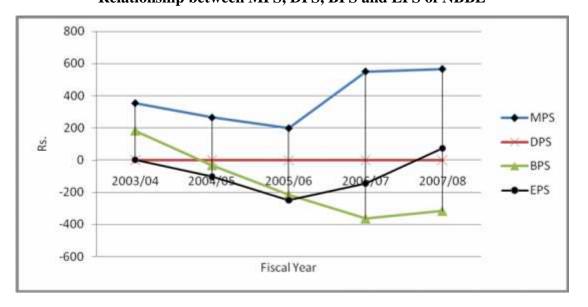


Figure 4.10 Relationship between MPS, DPS, BPS and EPS of NBBL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table

# **Table 4.23**

Variables	r	$\mathbf{r}^2$	t-cal	a-value	<b>b-value</b>	t-tab	Remarks
MPS vs. BPS	-0.5192	0.2696	5.43	329.43	-0.38	1.86	Significant
MPS vs. EPS	0.5792	0.3355	6.42	451.61	0.76	1.86	Significant

**Relationship of BPS, EPS and DPS with MPS of NBBL** 

(Source: Appendix IV)

The table 4.23 shows the relation of MPS with BPS and EPS. It reflects that MPS of Nepal Bangladesh Bank is negatively correlated with BPS (r = -0.5192) and positively correlated with EPS (r = 0.5792). It indicates that the rise in BPS leads to fall in MPS and rise in EPS leads to rise in MPS of NBBL bank. Similarly, the higher calculated t-value of MPS and BPS (5.43), and MPS and EPS (6.42) than the tabulated t-value (1.86) directly implied that the exist significant relationship between MPS and BPS, and MPS and EPS.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given in Table 4.24:

#### **Table 4.24**

**Simple Regression Equation of NBBL** 

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. BPS	MPS = 329.43 - 0.38 BPS
2	MPS vs. EPS	MPS = 451.61 + 0.76 EPS

(Source: Appendix IV)

The table shows the simple regression of MPS and BPS, and MPS and EPS. The table reveals that there exists negative relationship between MPS and BPS, the MPS decreases by Re. 0.38 with per rupee increase in BPS, if the other variable (329.43) remains constant. Similarly, there is positive relationship between EPS and MPS. The MPS increases by Re. 0.71 with per rupee increase in EPS, if the other variable (451.61) remains constant.

#### 4.1.11 Nepal Industrial and Commercial Bank Ltd.

The following table shows the major financial performance of Nepal Industrial and Commercial Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been explained thereafter.

#### **Table 4.25**

Year	MPS	DPS	BPS	EPS
2003/04	218	0	124.09	13.65
2004/05	366	30	136.84	22.75
2005/06	496	10.53	127.74	16.10
2006/07	950	21.05	139.09	24.01
2007/08	1284	21.05	138.09	25.75
Mean	662.80	16.53	133.17	20.45
S.D.	395.51	10.31	6.08	4.72
C.V.%	59.67	62.39	4.56	23.06

Summary of the Financial Performance of NICBL

(Source: Annual Reports of NICBL)

The above table presents the summary of financial performance of Nepal Industrial and Commercial Bank Limited for the last five years. From the table, it can be revealed that the Market Price per Share was in increasing order from 2003/04 to 2007/08. Similarly, NICBL distributed dividend, which is in fluctuating, in last four years. The bank paid a highest dividend of Rs. 30 in the fiscal year 2004/05. Also, the BPS and EPS of NICBL are in fluctuating trend. The BPS ranged from Rs. 124.09 in the fiscal year 2003/04 to Rs. 139.09 in the fiscal year 2006/07. Likewise, the EPS ranged from Rs. 13.65 in the fiscal year 2003/04 to Rs. 25.75 in the fiscal year 2007/08. The table shows that the coefficient of variation of MPS, DPS, BPS and EPS are 59.67%, 62.39%, 4.56% and 23.06% respectively. This indicates that the BPS has low degree of volatility (4.56%) among these four indicators. In contrast, DPS has highest coefficient of variation (62.39%) followed by MPS (59.67%) and EPS (23.06%).

The following line chart shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

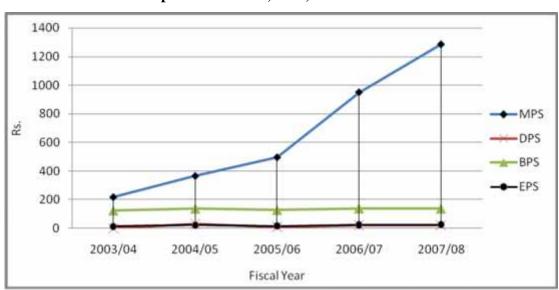


Figure 4.11 Relationship between MPS, DPS, BPS and EPS of NICBL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table

# **Table 4.26**

Relationship	of BPS,	<b>EPS</b> and	<b>DPS</b> with	h MPS	of NICBL
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Relation	r	$r^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.4150	0.1722	4.13	399.73	15.92	1.86	Significant
MPS vs. BPS	0.7166	0.5135	3.39	-5547.93	46.64	1.86	Significant
MPS vs. EPS	0.7915	0.6265	4.11	-694.78	66.38	1.86	Significant

(Source: Appendix IV)

The relation of MPS with DPS, BPS and EPS is shown in Table 4.27. It shows that MPS of NICBL is positively correlated with all three indicators DPS, BPS and EPS. It indicates that if DPS or BPS or EPS increases, MPS also increases. Among these, DPS has the low degree of correlation (0.4150) whereas the degree of correlation is bit higher than that of DPS in the case of BPS (0.7166) and EPS (0.7915). It means that if DPS rise by Rs. 100, the MPS will be raised by Rs. 41.50. In the same way, Rs. 100 increase in BPS and EPS results the increment of Rs. 71.66 and Rs. 79.15 in MPS. The coefficient of determination shows that the 17.22% of changes in the MPS is explained by DPS,

51.35% of changes in MPS is explained by BPS and 62.65% of changes in MPS is explained by EPS. In addition, the degrees of correlation of MPS with DPS, BPS and EPS are statistically significant at 95% level of confidence as the calculated t-value of MPS with DPS (4.13), BPS (3.39) and EPS (4.11) are higher than the tabulated t-value (2.776).

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

<b>Table 4.27</b>	

S.N.	Variables	Regression Equation
1	MPS vs. DPS	MPS = 399.73 + 15.92 DPS
2	MPS vs. BPS	MPS = -5547.93 + 46.64 BPS
3	MPS vs. EPS	MPS = -694.78 + 66.38 EPS

Simple Regression Equation of NICBL

(Source: Appendix IV)

The simple regression equation of MPS with DPS reveals that per rupee increase in DPS leads to Rs. 15.92 increase in MPS. Similarly the regression equation of MPS on BPS signifies that per rupee increase in BPS leads to Rs. 46.64 increase in MPS. Likewise, the regression equation of MPS on EPS clarifies that per rupee increase in EPS increases Rs. 66.38 increase in MPS. In case of NICBL, EPS is the most influencing indicator of MPS than other two indicators.

The Multiple Regression equation of MPS of NIC Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -1571.11 -39.82 DPS + 141.41 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -1571.11. The constant for DPS is -39.82 meaning that when DPS increases by Re. 1, MPS will decrease by Rs. 39.82 keeping EPS constant. In the same way, the constant for EPS

equals to 141.41 means if DPS holds constant and EPS increases by Re. 1, MPS will increases by Rs. 141.41 and vice versa.

# 4.1.12 Nepal Investment Bank Limited

The following table outlines the major financial performance of Nepal Investment Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been shown in the table.

Year	MPS	DPS	BPS	EPS
2003/04	940	15.00	246.89	51.70
2004/05	800	12.50	200.80	39.50
2005/06	1260	55.46	239.67	59.35
2006/07	1729	30.00	234.37	62.57
2007/08	2450	40.83	223.17	57.87
Mean	1435.80	30.76	228.98	54.20
S.D.	599.26	16.09	16.07	8.15
C.V.%	41.74	52.30	7.02	15.04

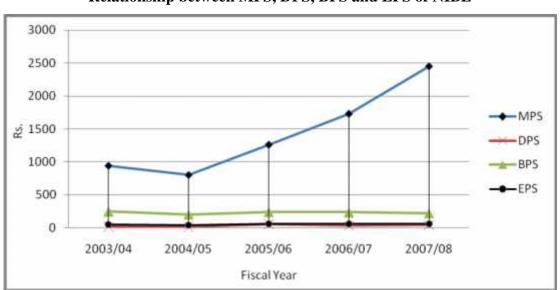
#### **Table 4.28**

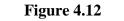
Summary of the Financial Performance of NIBL

(Source: Annual Reports of NIBL)

The above table presents the summary of financial performance of Nepal Investment Bank Limited for the last five years (2003/04 to 2007/08). The table shows that Market Price per Share of NIBL is in increasing trend, except in the fiscal year 2004/05 when the MPS decreased by Rs. 140 compared to the MPS of previous year. The MPS of NIBL was Rs. 940 in the base year 2003/04 and finally reached to Rs. 2450 in the fiscal year 2007/08. However, the DPS of NIBL is in fluctuating trend. The DPS ranged from Rs. 12.50 in the fiscal year 2004/05 to Rs. 55.46 in the fiscal year 2005/06. Similarly, the BPS and EPS are also in fluctuating trend, the BPS ranged from Rs. 200.80 in the fiscal year 2004/05 to Rs. 246.89 in the fiscal year 2003/04 and EPS ranged from Rs. 39.50 in the fiscal year 2004/05 to Rs. 62.57 in the fiscal year 2006/07. The coefficient of variation of MPS is 41.74% whereas that of DPS is 52.30%. In the same way it is 7.02% for BPS and 15.04% for EPS. It indicates that the degree of variability is highest in DPS and hence is more volatile than others. BPS bears the low degree of volatility in comparison to others.

The following line chart shows the linear relationship of Market Price per Share with BPS, DPS and EPS.





Relationship between MPS, DPS, BPS and EPS of NIBL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table 4.29.

Table	4.29
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Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.5202	0.2706	5.93	839.80	19.38	1.86	Insignificant
MPS vs. BPS	0.0591	0.0035	5.09	931.46	2.20	1.86	Insignificant
MPS vs. EPS	0.6491	0.4213	5.83	-1149.72	47.71	1.86	Significant

**Relationship of BPS, EPS and DPS with MPS of NIBL** 

(Source: Appendix IV)

The table given above shows the relation of MPS with DPS, BPS and EPS. It reflects that MPS of NIBL Bank is positively correlated with DPS, BPS and EPS. It indicates that rise in these indicators results the rise in MPS and vice versa. The simple correlation coefficient of MPS with DPS, BPS and EPS are 0.5202, 0.0591 and 0.6491. It means if DPS rise by Rs. 100, the MPS will be raised by Rs. 52.02. In the same way, Rs. 100 increase in BPS and EPS results the increment of Rs. 5.91 and Rs. 64.91 in MPS

respectively. Also, the higher t-value of MPS with DPS (5.93), BPS (5.09) and EPS (5.83) than the calculated t-value (1.86) at 95% level of confidence indicates that the relationship is significant

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. DPS	MPS = 839.80 + 19.38 DPS
2	MPS vs. BPS	MPS = 931.46 + 2.20 BPS
3	MPS vs. EPS	MPS = -1149.72 + 47.71 EPS

Table 4.30Simple Regression Equation of NIBL

(Source: Appendix IV)

The simple regression equations of MPS on DPS, MPS on BPS and MPS on EPS indicate that per rupee increase in DPS, BPS and EPS leads to increase of Rs. 19.38, Rs. 2.20 and Rs. 47.71 in MPS respectively. The equations show that there exists positive relationship between MPS and DPS, MPS and BPS, and MPS and EPS.

The Multiple Regression equation of MPS of Nepal Investment Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -948.47 + 4.46 DPS + 41.46 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -948.47. The constant for DPS is 4.46 meaning that when DPS increases by Re. 1, MPS will increase by Rs. 4.46 keeping EPS constant. In the same way, the constant for EPS equals to 41.46 means if DPS holds constant and EPS increases by Re. 1, MPS will increase by Rs. 41.46 and vice versa.

#### 4.1.13 Nepal SBI Bank Limited

The following table provides the information about the major financial performance of SBI Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been shown in the table.

#### **Table 4.31**

Year	MPS	DPS	BPS	EPS
2003/04	307	0	146.80	14.26
2004/05	335	0	159.54	13.29
2005/06	612	5	151.78	18.27
2006/07	1176	47.59	178.04	39.35
2007/08	1511	0	133.02	29.17
Mean	788.20	10.52	153.84	22.87
S.D.	477.66	18.64	14.87	9.98
C.V.%	60.60	177.19	9.67	43.66

Summary of the Financial Performance of SBI Bank

(Source: Annual Report of SBI Bank)

The above table presents the summary of financial performance of Nepal SBI Bank Limited for the last five years (2003/04 to 2007/08). The table shows that MPS of SBI bank increased almost five-fold in the five year period and in increasing order. The MPS ranged from Rs. 307 in the fiscal year 2003/04 to Rs. 1511 in the fiscal year 2007/08. However, the bank distributed dividend only two times within the period taken for research. SBI distributed highest dividend of Rs. 47.59 per share in the fiscal year 2006/07. Similarly, the BPS ranged from Rs. 133.02 in the fiscal year 2007/08 to Rs. 178.04 in the fiscal year 2006/07 and EPS ranged from Rs. 13.29 in the fiscal year 2004/05 to Rs. 39.35 in the fiscal year 2006/07. The volatility of DPS (177.19%) seems highest among other indicators. Likewise, volatility of MPS, BPS and EPS are 60.60%, 9.67% and 43.66% respectively.

The following line chart (Figure 4.13) shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

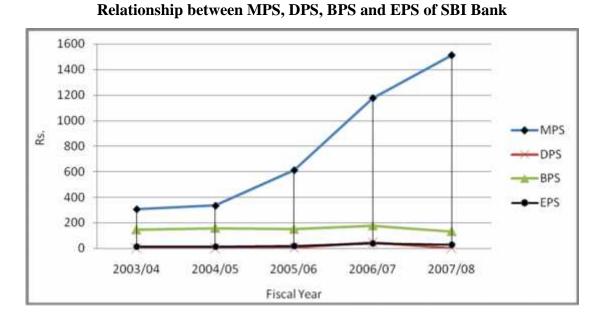


Figure 4.13

The relation of MPS with BPS, DPS and EPS has been presented in the following Table

#### **Table 4.32**

Relat	tionship	of BPS,	EPS and	l DPS with	MPS of S	SBI Ban	K
elation	r	$r^2$	t-cal	a-value	b-value	t-tab	Rem

Relation	r	$\mathbf{r}^2$	t-cal	a-value	b-value	t-tab	Remarks
MPS vs. DPS	0.3948	0.1559	4.12	681.76	10.12	1.86	Significant
MPS vs. BPS	-0.1266	0.0160	3.36	1413.97	-4.07	1.86	Significant
MPS vs. EPS	0.8489	0.7206	4.05	-140.56	40.61	1.86	Significant

(Source: Appendix IV)

4.32.

The table given above shows the relation of MPS with DPS, BPS and EPS. It reflects that MPS of Nepal SBI Bank is positively correlated with DPS and EPS and negatively correlated with BPS. It indicates that raise in DPS and EPS results the rise in MPS and vice versa and rise in BPS leads to fall in MPS. The simple correlation coefficient of DPS, BPS and EPS are 0.3948, -0.1266 and 0.8489. T-value of correlation with these indicators indicates that degree of correlation of MPS with DPS, EPS and BPS is significant at 95% level of confidence.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

#### **Table 4.33**

S.N.	Variables	<b>Regression Equation</b>
1	MPS vs. DPS	MPS = 681.76 + 10.12 DPS
2	MPS vs. BPS	MPS = 1413.97 - 4.07 BPS
3	MPS vs. EPS	MPS = -140.56 + 40.61 EPS

#### **Simple Regression Equation of SBI Bank**

(Source: Appendix IV)

The simple regression equation of MPS on DPS shows that there exist positive relation between MPS and DPS, and thus if DPS increases by Re. 1, MPS increases by Rs. 10.12, if the other variable, 681.76, remains uniform. Similarly, the regression equation of MPS on BPS reveals that per rupee increase in BPS causes Rs. -4.07 decrease in MPS, if the other variable, 1413.97 remains constant. Likewise, the simple regression equation of MPS on EPS signifies that per rupee increase in EPS causes Rs. 40.61 increase in MPS, if the other variable, -140.56, remains stable.

The Multiple Regression equation of MPS of Nepal SBI Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -709.05 - 23.28 DPS + 76.18 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -709.05. The constant for DPS is -23.28 meaning that when DPS increases by Re. 1, MPS will decrease by Rs. 23.28 keeping EPS constant. In the same way, the constant for EPS equals to 76.18 means if DPS holds constant and EPS increases by Re. 1, MPS will increases by Rs. 76.18.

#### 4.1.14 Siddhartha Bank Limited

The Table4.35 provides the information about the major financial performance of NCC Siddhartha Bank Limited with in the fiscal year 2003/04 to 2007/08.

Year	MPS	DPS	BPS	EPS
2003/04	-	0	90.75	-8.89
2004/05	-	0	110.83	20.08
2005/06	360	0	120.63	13.05
2006/07	778	15.79	132.28	15.88
2007/08	1090	15.79	129.03	17.29
Mean	445.60	6.32	116.70	11.48
S.D.	431.32	7.74	14.95	10.44
C.V.%	96.80	122.47	12.81	90.88

# Table 4.34Summary of the Financial Performance of SBL

(Source: Annual Reports of SBL)

Siddhartha Bank opened its share to the general public in the fiscal year 2003/04 for the first time. Due to the unavailability of MPS, complete analysis could not be made. The available data regarding EPS shows that the organisation was in loss in former year whereas it has progressed and succeeded to increase its EPS. The bank paid dividend only in the fiscal year 2006/07 and 2007/08 equivalent to R.s 15.79 per share in each year. The BPS of bank increased for the first four years, from Rs. 90.75 in the fiscal year 2003/04 to Rs. 132.28 in the fiscal year 2006/07 and finally decreased to Rs. 129.03 in the fiscal year 2007/08 compared to the previous year. The coefficient of variation of MPS, DPS, BPS and EPS are 96.80%, 122.47%, 12.81% and 90.88% respectively.

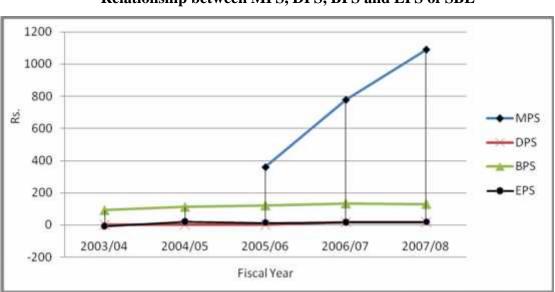


Figure 4.14 Relationship between MPS, DPS, BPS and EPS of SBL

# 4.1.15 Standard Chartered Bank Limited

The following table outlines the major financial performance of Standard Chartered Bank Limited over the past five years from 2003/04 to 2007/08. The relationship of MPS with DPS, BPS and EPS has been explained thereafter.

Table	4.35
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Summary of the Financial Performance of SCBL

Year	MPS	DPS	BPS	EPS
2003/04	1745	110	399.25	143.55
2004/05	2345	120	422.38	143.14
2005/06	3775	140	468.22	175.84
2006/07	5900	130	512.12	167.37
2007/08	6830	130	401.52	131.92
Mean	4119	126	440.70	152.36
S.D.	1970.93	10.20	43.47	16.47
C.V.%	47.85	8.09	9.86	10.81

(Source: Annual Reports of SCBL)

The above table presents the summary of financial performance of Standard Chartered Bank Limited from 2003/04 to 2007/08. From the table, it can be revealed that Market Price per Share is increasing trend and ranged from Rs. 1745 in the fiscal year 2003/04 to Rs. 6830 in the fiscal year 2007/08. However, the DPS, BPS and EPS have fluctuated over the period. The DPS ranged from Rs. 110 in the fiscal year 2003/04 to Rs. 140 in the fiscal year 2005/06. Similarly, BPS ranged from Rs. 399.25 in the fiscal year 2003/04 and Rs. 512.12 in the fiscal year 2006/07. Likewise, the EPS ranged from Rs. 131.92 in the fiscal year 2007/08 to Rs. 175.84 in the fiscal year 2005/06. In the same way, coefficient of variation of MPS, DPS, BPS and EPS are 47.85%, 8.09%, 9.86% and 10.81% respectively. It indicates that DPS is less volatile among all whereas MPS is most volatile one.

Figure 4.15 shows the linear relationship of Market Price per Share with BPS, DPS and EPS.

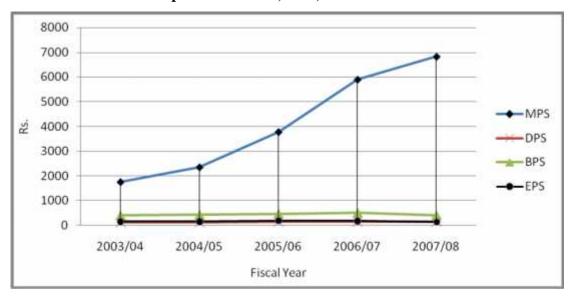


Figure 4.15 Relationship between MPS, DPS, BPS and EPS of SCBL

The relation of MPS with BPS, DPS and EPS has been presented in the following Table 4.36.

Table 4.36Relationship of BPS, EPS and DPS with MPS of SCBL

Relationship of DI 5, EI 5 and DI 5 with MI 5 of 50DL							
Relation	r	$r^2$	t-cal	a-value	b-value	t-tab	Remarks

	MPS vs. DPS	0.6147	0.3779	5.13	-10850.77	118.81	1.86	Significant
	MPS vs. BPS	0.3325	0.1105	4.72	-2524.72	15.08	1.86	Significant
	MPS vs. EPS	0.0032	0.00001	5.09	4061.28	0.38	1.86	Significant
(5	(Source: Appendix IV)							

The table 4.37 shows the relation of MPS with DPS, BPS and EPS. It reflects that MPS of Standard Chartered Bank is positively correlated with DPS, BPS and EPS. It means rise in these indicators results the rise in MPS and vice versa. The simple correlation coefficient of DPS, BPS and EPS are 0.6147, 0.3325 and 0.0032. Similarly, the t-value indicates that the relationship of MPS with DPS, BPS and EPS is significant at 95% level

of confidence as the calculated 't' value is greater than the tabulated 't' value.

The Simple Regression equation of DPS, BPS and EPS taking MPS as dependent variable is given below:

Table 4	4.37
---------	------

**Regression Equation of SCBL** 

S.N.	Variables	Regression Equation
1	MPS vs. DPS	MPS = -10850.77 + 118.81 DPS
2	MPS vs. BPS	MPS = -2524.72 + 15.08 BPS
3	MPS vs. EPS	MPS = 4061.28 + 0.38 EPS

(Source: Appendix IV)

The regression equation of MPS on DPS depicts that Re. 1 increase in DPS causes Rs. 118.81 increase in MPS, if the other variable, -10850.77, remains constant. Similarly, the regression equation of MPS on BPS signifies that Re. 1 increase in BPS leads to Rs. 15.08 increase in MPS, if the other variable, -2524.72 remains stable. Similarly, the regression equation of MPS on EPS indicates that if EPS increases by Re. 1, the MPS increases by Rs. 0.38, if the other variable, 4061.28, remains uniform. Among these three indicators, DPS is the most influencing determinants of MPS.

The Multiple Regression equation of MPS of Standard Chartered Bank Limited on DPS and EPS is represented by the following equation.

#### MPS on DPS and EPS

#### MPS = -8778.18 + 184.76 DPS - 68.14 EPS

The above equation gives the result on MPS due to the joint effect on DPS and EPS. MPS intercept i.e. multiple regression constant as shown in the equation equals to -8778.18. The constant for DPS is 184.76 meaning that when DPS increases by Re. 1, MPS will decrease by Rs. 184.76 keeping EPS constant. In the same way, the constant for EPS equals to -68.14 means if DPS holds constant and EPS increases by Re. 1, MPS will increase by Rs. 68.14.

#### **4.2 Primary Data Analysis**

For the purpose of collecting primary data, a questionnaire having a set of 12 questions were prepared and presented to 50 respondents. The respondents were selected randomly from the group of Share-Known personalities – especially from the Share buyer/purchasers in NEPSE floor and College Students. An attempt was made to collect the responses from Share Brokers as well but due to their uninterested and busyness, responses could not be collected. The questions contained variety in types. From Question No. 1 to 6, the degree of agreement over the statements was asked to mention, and according to their degree of agreement the score was provided from +2 to -2. Remaining questions were of Multiple Choice Type in which the respondents were asked to choose the best alternative from the list. The summary of the quantitative findings of questionnaire survey has been given in *Annex III*.

#### 4.2.1 Classification of Respondents

A total of 50 respondents were surveyed randomly from the floor of NEPSE to conclude the different behaviour of Share Price of Nepalese Commercial Banks. Among these, 32 respondents were professional investors of Share investment, 15 were potential investors who are willing to invest in Share but have not invested yet and rest 3 were market analyzer. To delineate the facts about the determinants that practically affect the share price, number of professional investors has been taken comparatively higher than the number of market analyzer and potential investors. Likewise, the respondents are classified in terms of their age and sex as given in Table 4.38.

# **Table 4.38**

S.N.	<b>Basis of Classification</b>	Male	Female	Number	Percentage		
	Occupation						
	Professional Investors	26	6	32	64		
1	Potential Investors	10	5	15	30		
	Market Analyzer	3	0	3	6		
	Total	39	11	50	100		
	Age						
	Below 25	5	2	6	12		
2	25 to 40	15	7	34	68		
	40 above	19	2	10	20		
	Total	39	11	50	100		
	Sex						
3	Male			39	78		
	Female			11	22		
	Total			50	100		

**Classification of Respondents** 

(Source: Field Survey, 2009)

As given in table, 78% of the respondents were male where as 22% were female. Similarly, 12% of the respondents were from the age group below 25 years, 68% were between 25 to 40 years and 20% were 40 above.

# 4.2.2 Purpose of Share Investment

The first question asked the respondents to declare their purpose of the investment. Table 4.39 shows the results of the responses shown in Annex-III.

## **Table 4.39**

# **Purpose of Share Investment**

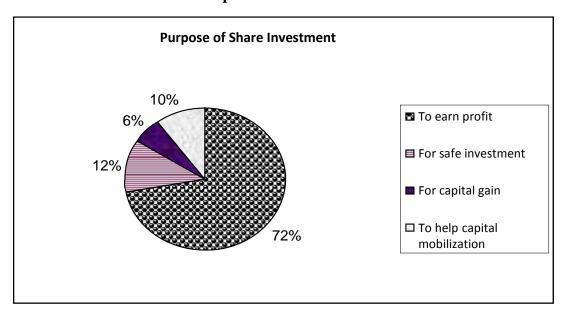
		No. o	f Responde	Total		
S.N.	Responses	Professional Investor	Potential Investor	Market Analyzer	Response	%
1.	To earn profit	25	9	2	36	72
2.	For safe investment	2	3	1	6	12
3.	For capital gain	2	1	0	3	6
4.	To help capital mobilization	3	2	0	5	10

Total	32	15	3	50	100

(Source: Field Survey, 2009)

The above table shows the number of respondents and their percentage relating the purpose of share investment in Nepalese Share Market. It clears that majority (72%) of Nepalese investors invest their savings for the purpose of earning maximum profit. They believe that share investment is an important way of earning profit and hence they invest. Only 12%, 6% and 10% of the respondents gave the response as they invest their savings for the purpose of making money safe, to earn capital gain and to help the capital mobilization respectively. It can be shown in pie-chart (Figure 4.16) as follows:

Figure 4.16 Purpose of Share Investment



#### 4.2.3 Reason of Public attraction in Commercial Banks

The reason for the attraction towards the investment in Commercial Banks of Nepal was as a next question. The responses were obtained as shown in Table 4.40.

# **Table 4.40**

		No.	Total			
S.N.	Responses	Professional	Potential	Market	Response	%
		Investor	Investor	Analyzer		
1.	Continuous Declaration	14	4	1	19	38
	of Dividend					
2.	Market Rumour	2	3	0	5	10
3.	Banks are better	16	8	2	26	52
	controlled/managed					
	Total	32	15	3	50	100

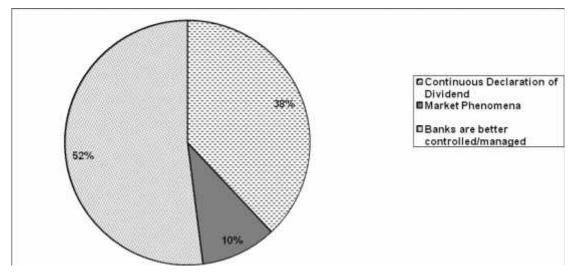
# **Reason of Public attraction in Commercial Banks**

(Source: Field Survey, 2009)

The above table shows the different reasons for the greater attraction of general public toward the investment in the Shares of Commercial Banks. It shows that a slight higher percentage (52%) - in comparison with others, of total respondents are convinced to declare that banks are better managed and hence they are being the attraction of all. Likewise, 38% of the total respondents stated that they tend to invest in Commercial Banks due to their continuous declaration dividend. And rest (10%) said that the market rumour is the main cause that attracts the general public for share investment in Commercial Banks. It has been shown in the following chart (Figure 4.17) as follows:

#### Figure 4.17

**Reason of Public attraction in the Shares of Commercial Banks** 



## 4.2.4 Public Awareness about Share Investment

The percentage of public awareness among the 50 respondents about share investment has been revealed in following table no.4.41.

Table	4.41
-------	------

		No. o	Total			
S.N.	Responses	Professional Investor	Potential Investor	Market Analyzer	Response	%
1.	Yes – They make	21	7	0	28	56
2.	No – They don't	8	5	2	15	30
3.	Can't Say	3	3	1	7	14
	Total	32	15	3	50	100

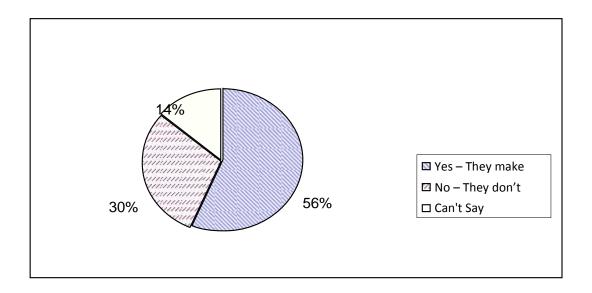
**Public Awareness about Share Investment** 

(Source: Field Survey, 2009)

It has been revealed from the study that 56% of the Nepalese investors are aware about the share market and the market phenomenon of the shares, 30% of the respondents said that they are investing in share with out proper knowledge about share. They said that they are investing in Share because they are influenced by some relatives or friends to earn profit. Rest 14% of the respondents wanted to say nothing about this. It has been shown in Pie- chart (Figure 4.18) as follows:

## Figure 4.18

#### **Public Awareness on Share Investment**



# 4.2.5 Status of Present Laws & Policies

The responses for the perfection of present laws and policies about buying and selling of share revealed the following results:

#### **Table 4.42**

# Status of Present Laws & Policies Number of Respondents

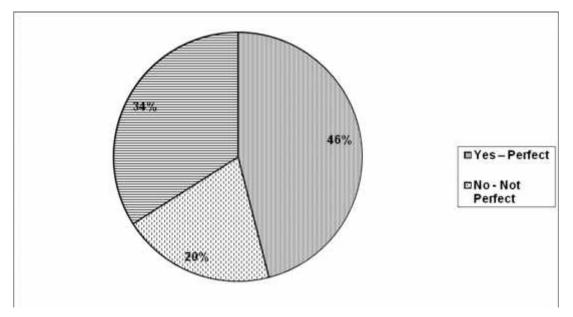
		Number	Total			
S.N.	Responses	Professional	Potential	Market	Responses	%
		Investor	Investor	Analyzer		
1.	Yes – Perfect	15	7	1	23	46
2.	No - Not Perfect	7	3	0	10	20
3.	Don't Know	10	5	2	17	34
	Total	32	15	3	50	100

(Source: Field Survey, 2009)

Table4.43 shows that almost half (46%) of the investors feel themselves that the prevailing laws and policies regarding buying and selling of share are perfect. About one fifth (20%) of the respondents said that they don't know anything about the laws and policies. And 34% of the respondents said the present laws and policies are not perfect to regulate the Share Market proficiently. It can be depicted in the form of Pie-chart below (Figure 4.19):

## Figure 4.19

## **Status of Present Laws and Policies**



## 4.2.6 Role of EPS in the Determination of Share Price

The responses for the question whether EPS is the main determiner of Share Price or not gave the following results:

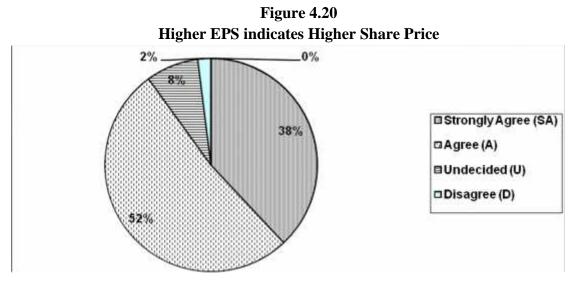
		No. of	f Responde	Total		
S.N.	Responses	Professional	Potential	Market	Responses	%
		Investor	Investor	Analyzer		
1.	Strongly Agree (SA)	14	5	0	19	38
2.	Agree (A)	16	8	2	26	52
3.	Undecided (U)	2	2	0	4	8
4.	Disagree (D)	0	0	1	1	2
5.	Strongly Disagree (SD)	0	0	0	0	0
	Total	32	15	3	50	100

Table 4.43Higher EPS indicates Higher Share Price

(Source: Field Survey, 2009)

Table 4.43 shows that most of the respondents agreed that EPS is the main determiner of Share Price. 38% of the total respondents who agreed the statement strongly were highly convinced that EPS is the main determiner whereas 52% stated they agree the statement. In this way, 90% of the total respondent agreed the statement. Only remaining 10% stated they were either undecided (8%) or disagree (2%). From this we can conclude that the investors think that EPS is the major tool for the Nepalese investors to analyze whether

the organisation is best enough to invest or not. It can be presented in chart as follows (Figure 4.20):





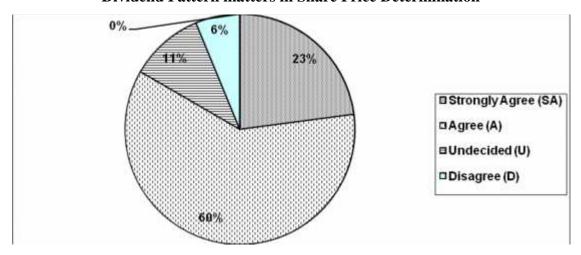
The responses of the respondents regarding the role of dividend pattern in the determination of share price are summarized and presented in Table 4.44.

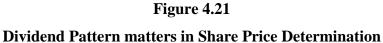
		Number	Total			
S.N.	Responses	Professiona	Potential	Market	Response	%
		l Investor	Investor	Analyzer	s	
1.	Strongly Agree (SA)	5	5	1	11	22
2.	Agree (A)	19	9	1	29	58
3.	Undecided (U)	5	1	1	7	14
4.	Disagree (D)	3	0	0	3	6
5.	Strongly Disagree (SD)	0	0	0	0	0
	Total	32	15	3	50	100

**Role of Dividend pattern in Share Price Determination** 

(Source: Field Survey, 2009)

Table 4.44 clears that Dividend pattern plays a great role on the determination of Share Price, 58% of the respondents agreed that higher rate of Dividend results the good Share Price, 22% of the respondents strongly agreed the statement that dividend pattern in Share Price determination. The remaining 16% percent stated that either they were undecided (14%) regarding the matter or disagree (6%). It has been presented in the form of Pie-chart (Figure 4.21) as follows:





# 4.2.8 Role of Company Assets Structure

The following table 4.45 shows the responses gained against the statement that Company Assets Structure indicates higher Share Price.

# **Table 4.45**

		No. of	Responde	Total		
S.N.	Responses	Professional	Potential	Market	Responses	%
		Investor	Investor	Analyzer		
1.	Strongly Agree (SA)	4	0	0	4	8
2.	Agree (A)	7	5	1	13	26
3.	Undecided (U)	14	7	2	23	46
4.	Disagree (D)	5	3	0	8	16
5.	Strongly Disagree (SD)	2	0	0	2	4
	Total	32	15	3	50	100

# **Role of Company Assets Structure in Share Price Determination**

(Source: Field Survey, 2009)

The above table shows that the Company Assets Structure plays no important role in the determination of Share Price in the view of respondents. That is why, almost half (46%) of the respondents neither agrees nor disagree the statement and choose to say undecided. Only 14% were strongly agreed whereas 26% choose to agree the statement. The

percentage of the respondents who choose disagree and strongly disagree were 16% and 4% respectively. Figure 4.22 shows the graphical explanation of the above result.

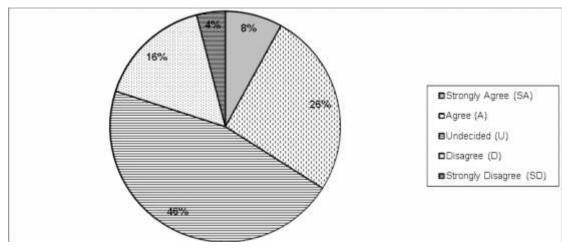


Figure 4.22 Role of Company Assets Structure in Share Price Determination

# 4.2.9 Role of Capital Structure

The responses of the respondents regarding the role of Capital Structure in the determination of share price are summarized and presented in the table given below:

# **Table 4.46**

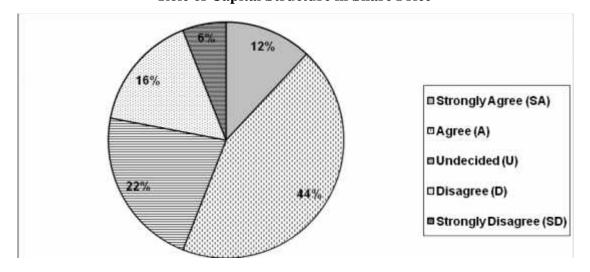
		No.	Total			
S.N.	Responses	Professional	Potential	Market	Response	%
		Investor	Investor	Analyzer	S	
1.	Strongly Agree (SA)	4	2	0	6	12
2.	Agree (A)	15	7	0	22	44
3.	Undecided (U)	3	6	2	11	22
4.	Disagree (D)	7	0	1	8	16
5.	Strongly Disagree (SD)	3	0	0	3	6
	Total	32	15	3	50	100

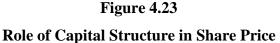
Good Capital Structure indicates higher Share Price

(Source: Field Survey, 2009)

The above table 4.46 shows that the Capital Structure of organisation is responsible to determine their share price. More than half (12% strongly agreed and 44% agreed) of the respondents agreed that better Capital Structure is responsible for the higher Share Price.

22% were undecided whereas 16% and 6% were disagreed and strongly disagree to the statement. It has been presented in graphical form in Figure 4.23.





# **4.2.10** Role of Political Fluctuation

The role of political fluctuation in Share Price was observed and found the results as shown in Table 4.47.

<b>Table 4.4 7</b>	]	Fable	e <b>4.</b> 4	17
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		No. of	Total			
S.N.	Responses	Professiona	Potential	Market	Responses	%
		l Investor	Investor	Analyzer		
1.	Strongly Agree (SA)	6	5	3	14	28
2.	Agree (A)	17	7	0	24	48
3.	Undecided (U)	3	3	0	6	12
4.	Disagree (D)	6	0	0	6	12
5.	Strongly Disagree (SD)	0	0	0	0	0
	Total	32	15	3	50	100

**Political Situation Change the Share Price** 

(Source: Field Survey, 2009)

The above table shows that the national political environment is also responsible on the determination of share price because more political fluctuation cause the decrease in Share Price. It was revealed that 14% of the total respondents agree the say that political

situation cause the change in share price whereas 28% strongly agreed it. 12% were undecided and 12% said to disagree the statement. It is presented in graphical form in Figure 4.24.

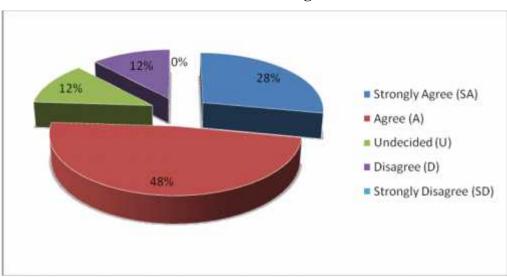


Figure 4.24 Role of Political Situation Change in Share Price

# 4.2.11 Effect of AGM and BOD Election in Share Price

The following table 4.48 shows the effect of Annual General Meeting and Election of Board of Director in Share Price.

# **Table 4.48**

		No. of	Total			
S.N.	Responses	nses Professiona Potential		Market	Responses	%
		l Investor	Investor	Analyzer		
1.	Strongly Agree (SA)	2	2	1	5	10
2.	Agree (A)	14	6	1	21	42
3.	Undecided (U)	4	7	0	11	22
4.	Disagree (D)	6	0	0	6	12
5.	Strongly Disagree (SD)	6	0	1	7	14
	Total	32	15	3	50	100

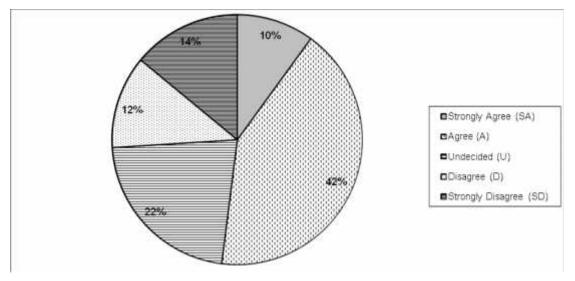
AGM and Election of BOD effect on Share Price

(Source: Field Survey, 2009)

The above table shows that the Annual General Meeting and election of Board of Directors influences the Share Price. It was observed that 42% of the total respondents

were agreed and 5% were disagreed. In the same way, 22% of the respondents were undecided and there were 12% and 14% respectively under disagreed and strongly disagreed group. It has been presented in pie-chart below (Figure 4.25):

# Figure 4.25 Effect of AGM and Election of BOD in Share Price



# 4.2.12 Company Risk vs. Share Price

The respondents gave the following results (Table 4.49) against the statement that whether the higher risk of the company results higher share price or not.

# Table 4.49

		No. of	Total			
S.N.	Responses	Professional Investor	Potential Investor	Market Analyzer	Responses	%
1.	Strongly Agree (SA)	0	0	0	0	0
2.	Agree (A)	7	0	0	7	14
3.	Undecided (U)	6	6	0	12	24
4.	Disagree (D)	12	9	3	24	48
5.	Strongly Disagree (SD)	7	0	0	7	14
	Total	32	15	3	50	100

Higher the risk, More the Share Price

(Source: Field Survey, 2009)

The above table (Table 4.49) shows that the Annual General Meeting and election of Board don't significantly influence the Share Price of the company. 48% of the respondents disagreed that the higher risk of company result increases in Share Price whereas 24% were undecided. Likewise, 14% agreed the statement and 7% strongly disagreed the statement.

The figure given below (Figure 4.26) shows the respondents response against the risk factor of share price change.

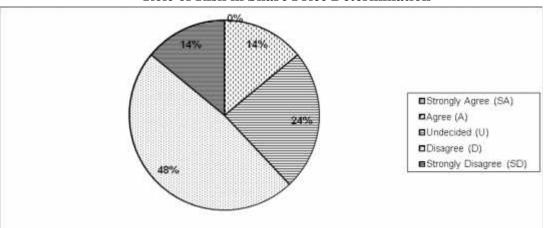


Figure 4.26 Role of Risk in Share Price Determination

# 4.2.13 Most Influential Determinant of Share Price

On the basis of the responses collected from the respondents, the different indicators which influence share price has been ranked as follows in the table no.50.

a N	S.N. Indicators	<b>D</b> •			Ra	nk			<b>T</b> ( )	Weight	Mean	Overall
<b>3</b> .1 <b>1</b> .		Basis	1	2	3	4	5	6	Total		Wt.	Rank
1		Total	25	18	4	2	0	1	50	87	1.74	1
	EPS	Professional Investor	17	13	1	1	0	0	32	50	1.56	1
		Potential Investor	6	4	3	1	0	1	15	33	2.20	2
		Market Analyzer	2	1	0	0	0	0	3	4	1.33	1
	DPS	Total	18	23	7	2	0	0	50	93	1.86	2
2		Professional Investor	11	14	5	2	0	0	32	62	1.94	2
4		Potential Investor	6	8	1	0	0	0	15	25	1.67	1
		Market Analyzer	1	1	1	0	0	0	3	6	2.00	2
3	Assets	Total	0	0	2	4	18	26	50	268	5.36	6
		<b>Professional Investor</b>	0	0	2	2	10	18	32	172	5.38	6
		Potential Investor	0	0	0	2	7	6	15	79	5.27	6

**Table 4.50** 

		Market Analyzer	0	0	0	0	1	2	3	17	5.67	6
4	Capital	Total	0	3	6	6	21	14	50	237	4.74	5
		<b>Professional Investor</b>	0	2	4	3	15	8	32	151	4.72	5
-	Capital	Potential Investor	0	1	2	2	6	4	15	70	4.67	5
		Market Analyzer	0	0	0	1	0	2	3	16	5.33	6
		Total	4	5	21	10	6	4	50	171	3.42	3
5	5 Political	Professional Investor	3	3	14	7	4	1	32	105	3.28	3
5		Potential Investor	1	1	6	3	2	2	15	55	3.67	4
		Market Analyzer	0	1	1	0	0	1	3	11	3.67	4
	6 AGM	Total	3	1	10	26	5	5	50	194	3.88	4
6		<b>Professional Investor</b>	2	1	6	16	3	4	32	125	3.91	4
U		<b>Potential Investor</b>	1	0	4	7	2	1	15	57	3.80	4
		Market Analyzer	0	0	0	3	0	0	3	12	4.00	4

(Source: Field Survey, 2009)

On the basis of above table, it is cleared that EPS is the most influential factor (ranked: 1) on the share price. Similarly, DPS (ranked: 2), Political Situation (ranked: 3), AGM/Election of Board (ranked: 4), Capital Structure (ranked: 5) and Assets (ranked: 6) are other factors that have impact on the share price of the financial institution.

# 4.3 Major Findings of the Study

On the basis of primary as well as secondary data analyzed, the major findings of the study can be summarized as below:

# **Major Findings from Secondary Data**

- ) MPS of BOK is much volatile in comparison to DPS, BPS and EPS. Bank of Kathmandu has positive correlation between MPS with DPS and EPS, but negative correlation between MPS with BPS. This indicates that they directly affect the Share Price of BOK.
- ) DPS, BPS and EPS are positively correlated with the MPS in the case of Everest Bank Limited. This indicates that increase in DPS, BPS and EPS increase the market price and vice versa. MPS is much volatile in comparison with DPS, BPS and EPS.
- ) In the case of Himalayan Bank Limited, MPS is positively correlated with DPS, BPS and EPS. The volatility of DPS, EPS and BPS seems to be less than MPS.

- ) Laxmi Bank has not distributed any dividend yet. Volatility of MPS seems to be more than EPS and BPS in the case of this bank. Similarly, DPS of Kumari Bank is more inconsistent than MPS, BPS and EPS of this bank, as dividend is paid only in three times throughout the period taken for research.
- J Lumbini Bank has not distributed dividend in the period of 2003/04 to 2007/08. The earning of this bank seems to be negative, meaning that the financial strength of this company is still not strong. Hence, the Book value in the two years has been negative and the total capitalization of the organisation has also been decreased.
- ) Machhapuchchhre Bank has positive correlation between MPS with BPS and EPS and negative relation with DPS. The trend of MPS, EPS and BPS shows that the company is in good trend in later years. The inconsistency of DPS is much more than other indicators like MPS, BPS and EPS as the bank paid dividend only in the fiscal year 2005/06 and 2006/07.
- ) NABIL Bank's MPS is more inconsistent than other indicators like DPS, BPS and EPS. The MPS of this Bank is positively correlated with DPS, BPS and EPS meaning these indicators influence their share price directly.
- ) The variability of BPS and EPS of NCC bank is very high. Due to the unavailability of required data on MPS, no relation of MPS can be observed for the NCC bank.
- ) MPS of Nepal Bangladesh Bank is negatively correlated with BPS and positively correlated with EPS. Also, the t-value indicated that the relationship of MPS with BPS and EPS is significant. The company did not pay any dividend within these five year period.
- ) For Nepal Industrial and Commercial Bank, MPS has low positive correlation coefficient with BPS and high positive correlation with EPS, and DPS. Similarly, the t-value indicated that the relationship is statistically significant. The volatility of DPS is higher than that of MPS, BPS and EPS.
- ) For Nepal Investment Bank, Market price is positively correlated with DPS, BPS and EPS. The volatility of DPS is higher than that of other indicators MPS, BPS

and EPS. The t-value showed the relationship of MPS with DPS, BPS and EPS is significant.

- ) The MPS of Nepal SBI bank is positively correlated with DPS and EPS, and negatively correlated with BPS. It shows that DPS and EPS are responsible to increase the MPS of the organisation and BPS is responsible to decrease the MPS. The inconsistency in DPS seemed to be more than that of other indicators.
- ) The variability of DPS of Siddhartha bank is very high in comparison with that of EPS and BPS, as the bank paid dividend in the fiscal year 2006/07 and 2007/08 only. Due to the unavailability of required data on MPS, no relation of MPS can be analysed for this bank.
- ) MPS of SCBL is positively correlated with DPS, BPS and EPS indicating that increase in these cause increase in MPS. In addition, the t-statistics shows that the relationship between MPS and BPS, MPS and DPS and MPS and EPS is significant.
- ) The correlation between MPS and other indicators are found to be significant for most of Banks. It shows that the indicators like BPS, DPS and EPS either increases or decreases MPS. Similarly, they individually influence very less but jointly they influence a lot. There can be other factors which influence the share price of the organisation.
- ) Dividend per Share is more volatile in case of most of the banks. The irregularity of paying dividend and lack of good dividend policy are the main cause behind this.

#### **Major Findings from Primary Data**

- ) Basically, most of the investors are intended to maximize their profit through share investment. They think share as a good sector of investment assuming that it gives a good return in short and long term.
- ) Investment in Nepalese Commercial Bank is the first choice of Share investors. It is because the banks are better controlled, and they distribute a good rate of dividend. It is found the investors think that banks are better managed hence

making good rate of profit. They distribute regular dividend which attracts them to invest in the commercial banks.

- ) The majority of the investors declare themselves as informed investors but still Nepalese investors lack the proper knowledge about the share market.
- The majority of Nepalese investors found to be either unknown about laws or like to say imperfect policies causing the problem in share market.
- ) The investors perceive the increase in EPS as better performance of the organisation and hence they increase the demand of Share which causes the increase in share price. Majority of the investors are convinced that higher EPS cause higher share price.

# CHAPTER - V

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

A rational investor would purchase equity shares with an anticipation of good returns in future. The return could be in the form of capital gains, dividends or growth in terms of share holding. The decision to purchase equity shares are mostly guided by the financial performance of the institution and other developments taking place in the market, the entire economy and the financial system.

The general understanding that share prices fluctuate with the financial performance of the institution may not always be true in the developing countries. The market imperfection, mainly due to distorted flow of information, lack of awareness of the investor, lack of skills to analyze the financial health and unhealthy market competition may lead to spurious decision while purchasing equity shares. There are evidences in our secondary market that stock prices of companies having less net worth and lower level of earnings per share are higher than those having higher net worth and higher earnings per share. This is not true in the developed economies. In such economies, the market price of a corporate share moves along with the profitability and earnings of that company, which in turn depends on overall economic performance and the future prospects. It is believed that market is efficient in pricing shares in such economies.

Investors invest their savings in the Common Stock of public companies through Primary and Secondary Markets. Generally, the investors aimed to maximize their profit from their investment. But due to the lack of proper knowledge and poor regulatory performance of Nepalese Capital Market, the investors may not achieve the returns as expected. Only the few educated city dwellers know what share market is and how they are regulated. Besides, government has not prioritized the development of capital market sufficiently. The prime objective of this study is to find out the major determinants of Share Price of Nepalese Commercial Banks. Hence, major commercial banks presently listed in NEPSE are taken in consideration for the purpose. Market Price of these banks has been analytically tested here to compare with other financial indicators like DPS, EPS and BPS. For such analysis secondary data has been gathered from the different sources and different statistical tools have been used to analyze these. Not only this, a set of question of presented to 50 respondents aiming to collect primary data related to share price of Nepalese commercial banks. The result of the responses has been analysed thoroughly in this thesis.

#### **5.2 Conclusion**

This study examines the relationship between share prices and the yield of the company – measured in the form of earning per share, dividend per share, and book value per share. It is assumed that good relation between share prices and these indicators would mean that stock market is efficient in fixing prices. Therefore this study has primarily focused on establishing interrelationship between market price of the equity share and the yield indicators.

From the analysis of data and major findings, it can be concluded that due to the inadequate knowledge regarding the share market among Nepalese investors, capital market of Nepal has not been well developed yet. The investors generally tend to earn profit from share and they think that EPS and DPS are prime factor to be analysed and to be considered on investing their savings on Share Price. Similarly, most investors are unknown to laws and policies regarding share market. Poor rules and regulations as well as ineffective regularity mechanism of market makers are the problems of Nepalese Capital Market.

Market Price per Share of Most of the Banks is significantly correlated with all the indicators (DPS, BPS and EPS) in most of the cases. This implies that increase or decrease in these indicators have significant effect on the price rise/fall of MPS. Also, they individually influence lees in the share price but they jointly influence a lot. There

can also be other factors which influence the share price. Likewise, EPS and DPS are the major influencer of the Share Price. Besides this, political situation, annual general meeting, assets structure and capital structure of the organisation also influence the share price of the company.

The commercial bank is the first choice of Nepalese investors. But the lack of systematized and managed regulatory system is required for the further improvement of share market. Also, the reputed and established commercial banks have very good trend of their financial performance whereas new banks are penetrating their market. Most of the banks are operating in profit in recent years though they suffered some losses during their initial stages. Still, the investors are positive towards the shares of these banks.

#### **5.3 Recommendations**

The following suggestions can be recommended on the basis of the data analysed in the previous sections:

- The findings of the study reveals that market prices of the equity shares are overvalued when compared to the earnings per share, which is the primary indicator of the financial status of the concerned financial institution. This was mainly due to ignorance and improper access to financial health of the company. It is recommended that the investors should be conscious while purchasing equity shares.
- ) Since general publics are unaware about the share and share market, an organised effort is necessary to aware the publics 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 and share market through different approaches like seminar, conference or print, air media.
- ) To control the speculation in share, an effective control mechanism is necessary. A clear system is to be employed to evaluate and punish such speculations so that no further influence can be observed in Share Price due to artificial reasons. The government should create a rational and sincere environment within share brokers and share traders for controlling such speculations.

- ) Government should formulate and implement a rigid rules and regulations for the further development of Share Market. A mechanism to take immediate action for the faulty company is to be established.
- ) The investors are recommended to receive a clear picture of their financial track before investing in the company. They should be alert and aware about the misconduct of relative company, brokers, NEPSE or government. They are required to boost their knowledge up regarding share and share market to get the expected returns from their investment.
- An open policy to encourage and promote foreign investors in share price would be fruitful to strengthen the share market of Nepal considering the fact of present globalization.
- ) For the clear and absolute result regarding the determinants of share price, a population study of whole share market for a longer study period is required. This gives the only factual information about the actual determinants of share price.
- ) The public companies should provide up-to-date information to the present and potential investors regularly so that they can be an informed investor.

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