

**PRICING BEHAVIOUR OF COMMON STOCK
OF SOME LISTED NEPALESE COMMERCIAL BANK**

(With Special Reference to SCBNL, NABIL, EBL, HBL and BOK)

Submitted by:

RAM CHANDRA PAUDEL

Shanker Dev Campus

Roll No: 638/2065

T.U. Registration No.: 7-2-31-828-2005

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RECOMMENDATION

This is to certify the thesis submitted by

Ram Chandra Paudel

Entitled

Pricing Behaviour of Common Stock

Of Some Listed Nepalese Commercial Bank

(With Special Reference to SCBNL, NABIL, EBL, HBL and BOK)

has been prepared as approved by this department in the prescribed format of the faculty of management. This thesis is forwarded for examination.

.....
.....
Shasi Kanta Mainali
Pradhan

(Thesis Supervisor)

Prof. Dr. Kamal Deep Dhakal

(Head, Research Department)

Asso. Prof. Prakash Singh

(Campus Chief)

.....
Rabindra Bhattarai

(Thesis Supervisor)

VIVA-VOCE SHEET

We have conducted viva-voce examination of the thesis prepared by

Ram Chandra Paudel

Entitled

Pricing Behaviour of Common Stock Of Some Listed Nepalese Commercial Bank

(With Special Reference to SCBNL, NABIL, EBL, HBL and BOK)

and found the thesis to be original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of requirement for the
Masters Degree in Business Studies (MBS)

Viva-Voce Committee

Chairperson, Research Department	
Member (Thesis Supervisor)	
Member (Thesis Supervisor)	
Member (External Expert)	

DECLARATION

I hereby declare that the work reported in this thesis entitled **Pricing Behaviour of Common Stock of Some Listed Nepalese Commercial Bank (With Special Reference to SCBNL, NABIL, EBL, HBL and BOK)** submitted to the Office of the Dean, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of requirement for the Master's Degree in Business Studies (MBS) under the supervision of **Mr. Shasi Kanta Mainali** and **Mr. Rabindra Bhattarai** of Shanker Dev Campus, Tribhuvan University.

.....

Ram Chandra Paudel

Researcher

Shanker Dev Campus

Roll No: 638/2065

T.U. Reg. No.: 7-2-31-828-2005

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Ram Chandra Paudel
Researcher

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CHAPTER I

INTRODUCTION

1.2 Background of study

To develop a country in a proper manner all the valuable resources should be optimally used. It needs proper study, better evaluation and healthy environment to utilize scarce resources. As the industrial and agriculture growth rate is slow, the pace of economic development of Nepal is sluggish.

Funds are required for the operation of the business. So concept of the capital market is developing in Nepal. Funds can be collected through the several ways like issue of debenture, shares and laughing back of profit, but the equity capital is the foremost taken as the primary sources of the funds for the organization. Common stock is a security issued by a company to raise equity capital. It is one of the major sources of long-term (permanent) capital. Funds provided by common equity are used to finance major portion of the firm's fixed assets such as land and building, plant and machinery, vehicle, etc. common stockholders of a company are its real owners. Their liability, however, is limited to the amount of their investment. Common stockholders have residual claim on income and assets. Shareholders, however, can sell their stocks in the secondary market. (*Gautam and Thapa, 2011: 116*). Financial sector play crucial role in the development of the country. They collect the immobilized funds from the market and invest them into productive sector. For the organized trading of the shares, security market plays a crucial role for gathering the unused small saving from the public and investing them the productive sector.

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

In Nepal, Nepal Stock Exchange (NEPSE) is the only one secondary market for trading of shares of the companies. As a recent days in NEPSE the trading of shares is increasing day by day and the price are also fixed in the floor each and everyday. The prices of shares of the listed companies have been affected on everyday as major or minor. The basis of change in price of shares could be the financial position of the company and other signaling effect due to the major events occurred in the country.

1.2 Financial Market in Nepal

Financial market is the place where the financial instruments are traded. Financial instruments include the shares, debentures, bond etc. The history of the financial market in Nepal is not so old and it is in the growth stage. Financial experts have mentioned it as a brain of the economic system. The financial market in Nepal is not different from the financial market in general. Financial market plays a vital role in the national units and organized the funds for the productive investment.

The system of collecting deposit and granting loans in the organized sector had started with the establishment of Nepal Bank Ltd. in 1994 B.S. The mobilization of fund by selling securities to the public had however started with the establishment of Biratnagar Jute Mill in 1993 B.S. The organized transaction of securities started in an organized way with the establishment of Security Marketing Center (present NEPSE) in 2033 B.S. Now a day the business activities are increasing rapidly. Many financial institutions have been established to fulfill the credit need of business firm and individual.

1.2.1 Classification of Financial Market

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

1.2.1.1 Money Market

Money market is also known as short-term financial market. The financial market in which funds are borrowed for short period is money market. The money market refers to borrowing and lending for period of a year or less. Generally, money market trades Commercial Paper, Short-term bond, Certificates of deposit and Government Treasury bill. Nepalese money market can be divided as the organized and un-organized sector. Under the organized sector Nepal Rastra Bank, Commercial Banks, Development Banks, Financial Companies & Other Financial Institutions are working and under un-organized sector, Creditors, Merchants, Land-lords and Friend and Relatives are working.

1.2.1.2 Capital Market

Capital market is the mechanism designed to facilitate the exchange of financial assets by order of buyers and sellers of securities together. Capital Market consists of financial and security market. It is the market where financial assets having a time to maturity more than one year are traded. Organized stock exchange, over the counter markets, third market and forth markets are major capital markets. Nepal desires for a rapid growth that needs additional capital formation and investment. An efficient capital market is an essential pre-requisite of economic development and development of capital market in an economy is depend upon the availability of saving, proper organization of intermediary institutions to bring the investors and business ability together for mutual interest, regulation of investment etc. It has been regulating the market under the Securities Act, 2006. The functions, duties and powers of SEBON as per the Act are as follows.

- To offer advice to Government on matters connected with the development of the capital market.
- To register the securities of corporate bodies established with the authority to make a public issue of its securities.
- To regulate and systematize the issue, transfer, sale and exchange of registered securities.
- To give permission to operate a stock exchange to any corporate body desirous of doing so, subject to this Act or the rules and bye-rules framed under this Act.
- To supervise and monitor the functions and activities of stock exchange.
- To inspect whether or not any stock exchange is executing its functions and activities in accordance with this Act or the rules and bye-rules framed under this Act, and to suspend or cancel the license of any stock exchange which is not found to be doing so.
- To supervise and monitor the functions and activities of securities-dealers.
- To grant permission to operate collective investment schemes and investment fund programs, and to supervise and monitor them.
- To systematize the task of clearing accounts related to transactions in securities.
- To supervise whether or not security dealers are behaving in the manner prescribed in this Act, or the rules and the bye-rules framed under this Act, while conducting business of dealing in securities, and suspend the license to conduct the business of dealing in securities in case any securities dealer is not found to be behaving accordingly.

- To make or ensure necessary arrangements to regulate the volume of securities transacted and the procedure of conducting such transactions in order to ensure the promotion, development and clean operation of stock exchanges.
- To make necessary arrangements to prevent insider trading or any other offenses relating to transactions in securities in order to protect the interest of investors in securities.
- To review or make arrangement for reviewing the financial statements submitted by the corporate bodies issuing securities and security dealers, and issue directives deemed necessary in that connection to the concerned corporate body.
- To establish coordination and exchange cooperation with the appropriate agencies in order to supervise and regulate matters concerning securities or companies.
- To discharge or make arrangements for discharging such other functions as are necessary for the development of securities and the capital market.

The Governing Board of SEBON is composed of seven members including one full time chairman appointed by the Government for a tenure of four years. Other members of the Board include joint secretary of Ministry of Finance, joint secretary of Ministry of Law, Justice and Parliamentary Affairs, representative from Nepal Rastra Bank, representative from Institute of Chartered Accountants of Nepal, representative from Federation of Nepalese Chambers of Commerce and Industries, and one member appointed by the Government from amongst the experts pertaining to management of securities market, development of capital market, financial or economic sector. (www.sebon.gov.np)

Securities Board of Nepal and Nepal Stock Exchange (NEPSE) are the main bodies to make the stock market as competent and efficient as possible. Actual efforts have been made to develop the Nepalese stock market with the promulgation of securities Transaction Act in 1983, which was subjected to frequent adjustments.

Securities Board of Nepal was established in June 7, 1993 A.D. Under the provision of securities Exchange Act 1983 A.D. (first amendment). Since its establishment, SEBON has been concentrating its effort to improve the legal and statutory framework, which one the bans for the healthy development of capital market. Securities Board of Nepal protects and promotes the interest of investor by regulating the securities market.

In Nepal, Nepal Stock Exchange Limited (NEPSE) is the only organized stock market facilitating the trading of corporate securities, mainly common stocks. It opened its flower for trading of corporate securities on the 13th of January 1994. Prior to the establishment of NEPSE in 1994, secondary market was opened over the counter facility managed by Securities Exchange Center (SEC).

In Nepal, NEPSE is only organized stock exchange where stock is traded through registered brokers under the set of rules and regulations. For the development of the capital market, Nepal Security Exchange Center was established in 1976 and later converted into NEPSE in 1993. NEPSE is a non-profit making organization operating under security exchange Act. 1983. The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor through market intermediaries such as brokers, market makers etc. NEPSE opened its trading floor on 13th January 1994 through licensed members. Government of Nepal, Nepal Rastra Bank, Nepal Industrial Development Corporation and the licensed members are the shareholders of NEPSE. (www.nepalstock.com) It has helped to collect the fund required for mega projects from small investors by means of stock investments. It has a crucial role for making investment environment for the large number of middle class families and to collect the scattered lifeblood for industrial development i.e. capital.

Capital market can be classified into two markets. First one is securities market and second one is non-securities market. Under the securities market shares, debentures, and bonds are traded by the government and reputed organizations where as under the non-securities market financial institutions period the long-term loan to the industries and business. Under the securities market there are mainly six types of markets. They are stock market, bond market, business securities market, government securities market, primary market and secondary market,

• Primary Capital Market

The new securities are issued by the company to trade in the capital market. Here the securities of the business firms are issued for the first time are bought and sold. The issuer (company) collect amount and invest in the productive sector to earn the profit. A market that issues new securities on an exchange. Companies, governments and other groups obtain financing through debt or equity based securities. Primary markets are facilitated by underwriting groups, which consist of investment banks that will set a beginning price range for a given security and then oversee its sale directly to investors (www.investopedia.com)

• Secondary Capital Market

The stocks are traded second time in the agreement of buyer and seller in the stock market. Secondary market provides the liquidity and marketability opportunity to the stock market. It is also referred as "after market". The securities initially are issued in the primary market, and then they enter into the secondary market. All the securities are first created in the primary market and then, they enter into the secondary market (www.finance.mapsofworld.com). Stock market may be registered or Over-The-Counter (OTC). Secondary market can be subdivided into two parts:

Registered Stock Market

Organized securities exchanges are the physical locations where trading of securities is done under a set of rules and regulations. A company must list its securities in the exchange for trading. Investors usually purchase securities in the secondary market by calling securities brokers. In the secondary market investors buy and sell securities themselves, the issuer never gets any cash flow from the trades. This type of market is registered in the government agency. In Nepal, Nepal Stock Exchange is only registered stock exchange. Here, transactions of only listed companies are made. (*Bhattarai 2010:37*)

Over the Counter (OTC) Market

OTC market is also a secondary market. This market has been created to trade securities which are not listed in organized stock exchange and de-listed from the organized stock exchange. Nepal Stock Exchange (NEPSE) is an organized stock exchange. To trade securities in the organized stock exchange, a company must list its securities. Investor can trade securities through registered brokers. (*Bhattarai, 2010: 44*) So, the market where the securities of the companies not listed in the stock exchange or delisted from there are traded is called Over-The-Counter market.

1.3 Statement of Problem

Nepal is one of the least developed countries of the world with the very lower per capita income. According to the economic survey, 25.16 % of the Nepalese that are under absolute poverty.

Share price is the function of the several factors. The stock price fluctuates time to time and stock exchanges react to the environmental changes. However, some environmental changes, the stock exchange no effect. This study will try to identify the determinations of stock price and find out the degree of affection of those determinants. More specifically, this study is expected to answer the following research questions:

- What are the major determinants of the stock price in NEPSE?
- What is the effect of the dividend to the stock price of the company in the stock exchange?
- How earning and book value affect to the stock price of the company in NEPSE?
- Is there lack of favorable business environment that influences in growth of capital market in Nepal?

- Can political scenario affect the share price?

1.4 Objectives of the Study

New investors are often interested in purchasing a company's stock but are not sure where to begin. Investors require the proper knowledge of share price. The primary objective of the study is to analyze the performances of stock market and the behavior of share price of listed commercial banks. However, the specific objectives of the study are as follows:

- To analyze the share price behavior of the commercial banks listed in NEPSE.
- To identify quantitative factors affecting the stock price in stock market.
- To evaluate the effect of earning and book value to the stock price in NEPSE.
- To evaluate the effect of dividend to the stock price in NEPSE.

1.5 Significance of the study

Time and risk are most crucial decision as the future level which is not certain. Expected return on share investment can be divided into dividend and capital gained but these both components is not certain under having uncertain environment. An investment in shares is more risky than other investments in terms of fixed income. In this study, researcher intends to carry out the basic variables through opinion and feelings of listed companies themselves. The findings of the study will be more to the investors, government, students, and teachers to address the pricing behaviors in the developing countries. Planers, researchers, students and policy makers to meet their personal and organizational objectives. This study attempts to construct the relation of MPS of the Nepalese commercial banks to the major financial indicators EPS, BPS and DPS etc.

1.6 Limitations of the Study

This study tries to explore the factor determining the stock price in NEPSE. Both primary and secondary data are analyzed. Due to various reasons this research work is not able to study the whole Nepalese capital market in detail. However, this study may face the following limitations during the course of research:

- Takes into account a 5 of selected commercial banks from among the listed companies in NEPSE.
- Most of the primary data are based on research questioner and accompanied by personal interview and email small sample size (60).
- This study is based on only five years data i.e. fiscal year 2006/07 to 2010/11.
- This study is based upon the secondary data and information mostly. Hence, the result may not be true cent percent.
- Statistical tools will be used by the researcher wherever needed. Hence, drawbacks and weakness of those tools are also the limitation of the study.

1.7 Organizations of the Study

This study will be classified into five different chapters to find out the pricing behavior of common stock in Nepal. Introduction, Review of Literature, Research Methodology, Data Presentation & Analysis, and Summary, Conclusion & Recommendations.

Chapter I Introduction

Chapter one deals with major issues to be investigated along with background of the study, financial market in Nepal, statement of problem, significant of the study, objective of the study and limitations of the study.

Chapter II Review of Literature

The second chapter Review of Literature enables the reviews of the previous studies with respect to the study. This is also devoted to the theoretical analysis and the brief reviews of the related journals, literature, and articles.

Chapter III Research Methodology

In third chapter Research Methodology, Research Design, Population and Sample, Nature & Sources of the Data, Data Collection & Analysis Procedures and Analytical tools used for the study have been included.

Chapter IV Data Presentation and Analysis

The fourth chapter is concerned with the presentation and analysis of data. This chapter deals attempts to analyze and evaluate data with the help of analytical tools and interpret the result obtained.

Chapter V Summary, Conclusion & Recommendations

The last chapter Summary, Findings, Conclusion & Recommendations will contain the findings, summary & conclusion and necessary recommendations of the overall research study.

CHAPTER II

REVIEW OF LITERATURE

This chapter consists of review of previous study and references of the related subject. Review of literature is the fundamental part of research work which describes what research studies have been conducted in the past and what remains to be done. It provides a useful knowledge of the status of the research topic. In this study various books, journals and articles, some previous dissertation are reviewed. These have been helpful in accomplishing the research work and fulfill the objective of the study.

2.1 Conceptual Frame Work

“A conceptual framework is a tool researchers use to guide their inquiry; it is a set of ideas used to structure the research, a sort of map that may include the research question, the literature review, methods and data analysis. Researchers use a conceptual framework to guide their data collection and analysis.” (<http://www.ehow.com>) Before getting into the core subject matter of the share price behavior of common stock in the market it is imperative to be acquainted with the general concepts of the share and other related matters sub section will be explaining the conceptual matters of the capital market.

2.1.1 Common Stock

A share of stock is the smallest unite of ownership in a company. If anybody owns a share a company's stock, s/he is a part owner of the company. Common stock represents the majority of stock held by the public. It is a source of long term financing. Common stock certificates are legal documents that evidence ownership (for equity) in a company that organized as a corporation; they are also marketable financial instruments. Common stock is a share of ownership in a company that can be easily sold by its holders. Common stock is that they are highly liquid for the most part. Small and/or obscure company may not trade frequently, but most of the larger companies traded daily creating an opportunity to buy or sell shares. Sole proprietorships and partnerships are other forms of business organizations, but only corporation can issue common stock. There is often stated value on each stock certificate called the par value. The par value of each share of most common stock in Nepal is Rs. 100. The book value of each common stock is equal to the net worth, or common equity, consisting of the sum of common stock retained earnings, and paid in capital, divided by number of shares common stock outstanding. The corporate charter of a company specifies the number of authorized shares of common stock, that the company can issue maximum without amending its charter.

“Common stock is a security issue by a company to raise equity capital. It is one of the major sources of long-term (permanent) capital. Funds provided by common equity are used to finance major portion of the firm’s fixed assets such as land and building, plant and machinery, vehicle, etc. common stockholders of a company are its real owners. Their liability, however, is limited to the amount of their investment. Common stock certificates are legal documents that evidence ownership of the holders in a company. Common stockholders have residual claim on income and assets. Common stock dividend is paid after payment of interest to the creditors, tax to the government, preferred dividend to the preferred stockholders. Similarly, in the event of liquidations, common stockholders have residual claim on the assets of the company after the claim of all creditors and preferred stockholders settled in full. Common stock does not have a maturity date. Shareholders, however, can sell their stocks in the secondary market. Hence, the company which needs funds for indefinite period issues shares of common stock”. (*Gautam and Thapa, 2011: 116*).

“Generally, each share of common stock entitles the holder to one vote in the election of directors and in other major decision. Common stockholders can attend at the annual general meeting and cast vote in person or by means of a proxy. A proxy is a legal document giving one person the authority to represent on behalf of others. Common stockholders also have preemptive right. The preemptive right gives the existing shareholders right to purchase any new shares issue by the company at subscribed price on pro-rata basis. Preemptive rights allow common stockholders to maintain their proportionate ownership and control in the company”. (*Gautam and Thapa, 2011: 116*).

“The common stocks are issued by the firms to raised ownership capital and the investors buy them with the expectation that they receive a share of profit periodically. The common stocks legally represent the equity of business firms, and the holders are the owners who share all the profit and losses of the business. They enjoy all earning after meeting the obligations of interest on debt 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*).

At last, common stocks represent ownership in a publicly traded company and carry certain rights and privileges, including voting rights for board of directors and sharing of profits/dividends. ”Common stock represents equity of an ownership position in a corporation. It is a residual claim, in the sense that creditors and preferred stockholders must be paid as scheduled before common stockholders can receive any payments. In bankruptcy, common stockholders are in principle entitled to any value remaining after all other claimants have been satisfied (However, in practice, courts sometimes violet this principle). The great advantage of the corporate form of organization is the limited liability of its owners. Common stocks are generally ‘full paid and non assessable’ meaning that common stock holders may lose their initial investment, but not more”. (*Sharp, F.W 1998: 501*)

2.1.1.3 Common Stocks Values

I) Par Value

“Par value is stated price in common stock certificates. The corporate charter specifies the par value of share of common stock. In Nepal, Company Act, 2063 (2006 A.D.) has given flexibility to set a par value. A company can set a par value of Rs. 50 each or any other higher amount divisible by the figure ten as provided in the memorandum of association and articles of association. A company should not issue common stock at a price less than par value, because any discount from par value is considered to be a contingent liability of the owners to the creditors of the company. In the event of liquidation, the shareholders would be legally liable to the creditors for any discount from par value. But in Nepal, Company Act, 2063 has prohibited issuing shares at discount” (*Gautam and Thapa, 2011: 116*)

ii) Book Value

“Book value is an accounting concept. The firm’s book value of equity includes common stock, share premium (additional paid-in capital) and retained earning. It represents owners contribution to the firm, hence is known as the net worth of the firm. Book value is simply the amount per share of common stock to be received if all of the firm’s assets are sold for their exact book value and all liabilities (including preferred stock) are paid. Book value per share is computed by dividing total book value or total net worth by number of shares outstanding” (*Gautam and Thapa, 2011: 117*)

iii) Market Value

“Market value of a security (common stock) is the current (actual) price at which the stock is being traded in market. Company’s future growth, earnings power, level of risk etc. are reflected in market price of the security. Therefore common stock’s price fluctuates widely. Market value per share is expected to be higher than book value and liquidation value per share for profitable and growing firms” (*Gautam and Thapa, 2011: 117*)

2.1.1.4 Classification of Common Stock on the basis of their features

Companies have different characteristics that make their stock prices react differently to economic data. Consequently, you should know the types of stocks that you invest in. Blue-chip stocks pay dividends, and growth stocks generally do not pay dividends. Stocks can be classified into various categories, which is useful for investors because different types of stocks vary with regard to their returns, quality, stability of earnings and dividends, and relationship to the various risks affecting the companies and the market.

I) Blue-Chip Stocks

“Blue-chip stocks refer to companies with a long history of sustained earnings and dividend payments. These established companies have developed leadership positions in their respective industries and, because of their importance and large size, have stable earnings and dividend records. Most companies in the Dow Jones Industrial Average are considered to be blue-chip companies. However, some financially troubled stocks such as AT&T, for example, cut their dividends and were removed from the Dow and replaced with other, more solid companies” (<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

ii) Income Stocks

“Income stocks have high dividend payouts, and the companies are typically in the mature stages of their industry life cycles. Stocks of companies that have established a pattern of paying higher-than average dividends can be defined as income stocks. Income stocks tend not to appreciate in price as much as blue-chip stocks do because income stock companies are more mature and are not growing as quickly as are blue-chip companies. This statement does not mean that income stock companies are not profitable or are about to go out of business. On the contrary, they have stable earnings and cash flow, but they choose to pay out much higher ratios of their earnings in dividends than other companies do” (<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

iii) Growth Stocks

“Growth stocks are issued by companies expected to have sustained high rates of growth in sales and earnings. These companies generally have high price/earnings (P/E) ratios and do not pay dividends. Growth stocks are often referred to as high P/E ratio stocks because their greater growth prospects make investors more willing to buy them at higher prices. Investors do not receive returns in the form of dividends, so they buy these stocks for their potential

capital appreciation” (<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

iv) Cyclical Stocks

“Cyclical stock prices move with the economy. Cyclical stocks often reach their high and low points before the respective peaks and troughs of the economy. When the economy is in recession, these stocks see a decline in sales and earnings. During periods of expansion, these stocks grow substantially in sales and earnings. Examples of cyclical stocks are stocks issued by capital equipment companies, home builders, auto companies, and companies in other sectors tied to the fortunes of the economy as a whole”

(<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

v) Defensive Stocks

“Defensive stocks are the stocks of companies that tend to hold their price levels when the economy declines. Generally, these stocks resist downturns in the economy because these companies produce necessary goods (food, beverages, and pharmaceutical products).

However, during periods of economic expansion, defensive stocks move up more slowly than other types of stocks. Defensive stocks are the stocks of companies whose prices are expected to remain stable or do well when the economy declines because they are immune to changes in the economy and are not affected by downturns in the business cycle”

(<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

vi) Speculative Stocks

“Speculative stocks have the potential for above-average returns, but they also carry above-average risk of loss if the company does poorly or goes bankrupt. Speculative stocks are stocks issued by companies that have a small probability for large increases in the prices of their stocks. These companies do not have earnings records and are considered to have a high degree of risk. In other words, these companies are quite likely to incur losses and not as likely to experience profits, so they have a higher possibility of larger price gains or losses than other types of stocks. Speculative stocks are more volatile than the other stock types”.

(<http://www.mistakesintrading.com/wiki-stocks/types-of-common-stock.php>)

2.1.1.3 Features of common stocks (shares)

Common stocks are the most common form of stocks an investor will encounter in the financial market. It represents a certificate of ownership of a company. Following are the five most important features associated with common stocks:

(1) Limited Liability

“Common stockholders have limited liability, in other words, their liability is limited to those stocks. They cannot be forced to pay anything out of their own money in the event of bankruptcy. They are fully protected against any financial obligations incurred by the organizations. Although the common shareholders are the actual owner of the company and have residual claim on all assets their liability in case of the liquidation/bankruptcy is limited to the amount of their investment. But shareholders liability will equal to par value if paid up capital is less than par value” (*Gautam and Thapa, 2011: 118*)

(2) Liquidation Rights

“If a company goes bankrupt and liquidates all its assets, the common stockholders have the right to receive their share of sale proceeds. However they are the last to receive money after the creditors, bondholders and preference stockholders are paid.”

(<http://www.articlesbase.com>)

(3) Preemptive Rights

“Common stockholders also have preemptive right. The preemptive right gives the existing shareholders right to purchase any new shares issue by the company at subscribed price on pro-rata basis. Preemptive rights allow common stockholders to maintain their proportionate ownership and control in the company” (*Gautam and Thapa, 2011: P118*)

(4) Voting Rights

“Common stockholders have the rights to vote in general meeting of the company. Each stock carries the right to one vote. Stockholders can exercise control by electing the board members, who will oversee the major decisions and policies implemented by the management. Common stockholders can attend at the annual general meeting and cast vote in person or by means of a proxy. A proxy is a legal document giving one person the authority to represent on behalf of others”. (*Gautam and Thapa, 2011: 118*)

(5) Dividend Payments

“Common stockholders are entitled to a share of the profits in the form of dividend. However the amount of dividend payments is not based on a fixed percentage rate, it is recommended and decided by the board of directors”. (<http://www.articlesbase.com>)

2.1.1.4 Market index calculation

Market index is a single figure obtained from averaging the prices of selected securities, which reflects the overall investment performance of a particular market for financial assets for a particular point of time. Index can be constructed in various ways. There are three weighting methods of construction of market index, which are most often used.

i) Price weighted market index

“A market index in which, the contribution of a security to the value of the index is a function of the securities current market price. It is calculated by summing the price of stocks that are included in the index, and dividing this sum by a constant (the divisor). So price weighting index is calculated summing the prices of stocks that are included in the index and dividing by divisor (or constant). The world’s popular index DJIA is calculated on the basis of price weighting”. (*Bhattarai 2010:79*)

ii) Value weighted index

“It a market index, in which the contribution of a security to the value of the index is a function of the securities market capitalization. It is calculated by multiplying the price of the stocks in the index and their respective number of share outstanding and then dividing the corresponding figure for the day the index was started (i.e. base period). The resulting number is multiplied by any base that may be 10, 1000, 10000 etc. NEPSE has adopted value weighted index method till the date; 13th Feb 1994 is the base period for construction of the index. NEPSE multiplies index by 100 as base where as India and USA multiply the same figure by 1000 and 10 respectively”. (*Bhattarai 2010:80*)

iii) Equal weighted index

“The third method of constructing market index is equal weighted. This is computed daily by multiplying the level of the index on the previous day to the arithmetic mean of the daily price relative (today’s price divided by yesterday price) of the different individual stocks which are included in the construction on index”. (*Francis, 1992: 73-75*)

2.1.2 Behavior of Stock Market Prices

“Securities prices are the function of various factors. Changes in any factor affect the prices of the securities. So it can be said that the securities prices fluctuate and it is not for a short period but for over a century. Many theories and mathematical models have been developed but the fluctuation and behavior of the securities prices movement. Holbrook (1950s) articulated the notion that securities prices fluctuated around there intrinsic value. Economists have developed many models and theories to describe the behavior of stock prices”. (*Bhattarai 2010:344*) There are three approaches to explain the behavior’s of stock market prices. They are Technical Analysis, Fundamental Analysis and Efficient Market Theory. Technical and Fundamental Analysis are related to the conventional approach where Efficient Market Hypothesis is based on country approach. However, all theories explain with the behavior of stock market prices.

2.1.2.4 Technical Analysis

There are two main approaches to analyzing securities-technical and fundamental analysis. A technical analyst, or technician, is a security analyst who believes it is not productive to work

through all the fundamental facts about the issuing corporation the company earnings, its products, forthcoming legislation that might affect the firm. Instead, technical analysts believe that these innumerable fundamental facts are summarized and presented by the market prices of the security. Technical analysts focus most of their attention on charts of security market prices and on related summary statistics about security transactions. As a result, technical analysts are sometimes called chartists. Most technical analyst prepare and study charts of various financial variables in order to make forecasts about security prices but an increasing number use quantitative rather than graphical tools. Technical analysis is based on the widely accepted that security prices are determined by the supply of, and demand for, securities. The tools of technical analysis are therefore designed to measure certain aspects of supply and demand. Typically, technical analysts record historical financial data on charts, study these charts in search of patterns that they find meaningful, and endeavor to use the patterns to predict future prices.

“A classical book by Edwards and Magee articulated the basic assumptions underlying technical analysis as follows:

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

The technician usually attempts to predict short term price movements and thus make recommendations concerning the timing of purchase and sales of either specific stocks or groups of stocks”. (*Francis Jack Clark, 6th edition 521-522*)

2.1.2.5 Fundamental Analysis

“Fundamental analysis theory claims that at any point of time an individual stock has an intrinsic value, which is equal to the present value of the future cash flows from the security discounted at appropriate risk, adjusted discount rate. The value of the common stock is

simply the present value of all the figure income, which the owner of the share will receive”.
(Clark, 1991: 398)

“In the simplest form, fundamental analysis begins with the assertion that the true value of any financial asset equals the present value of all cash flows the owner of the assets expects to forecast the timing and the size of these cash flows and then converts the cash flows to their equivalent present value using an appropriate discount rate”. (Gorden, 2000: 12)

“In the fundamental approach, the security analyst or prospective investor is primarily interested in analyzing factors and pertinent company information such as product demand, earnings, dividends and management in order to calculate an intrinsic value for the firm’s securities. The fundamentalist reaches an investment decision by comparing this value with the current market price of the security. He tends to look forward and is concerned with such matters like future earnings and dividends” (Gorden, 1999: 844)

The objectives of the fundamental analysis are to appraise the intrinsic value of the security. The intrinsic value is the true economic work of the financial assets. It is sometimes said fundamental analysis is designed to answer the questions ‘what?’ The shareholders would like to maximize the return by buying the shares of the undervalued company and selling shares of the over-valued company. Buying pressure would increase the price of the undervalued company and selling pressure would decrease the price of over-valued company until the equilibrium price is restored. “If the intrinsic value is below the market price, the security should be sold before its price drops. Underpriced is purchase until their price down until it equals the value and overpriced stocks are sold, which drives the price down until it equals the value.” (Francis, 1986:399)

“Fundamental analysis use different models like top down versus bottom up forecasting, probabilistic forecasting, econometric models, financial statement analysis etc. to estimate the value of security”. (Sharpe, Alexander and Bailey, 1999: 853)

2.1.2.6 Efficient Market Theories

“The (now largely discredited) theory that all market participants receive and act on all of the relevant informationally as soon as it becomes available. If this were strictly true, no investment strategy would be better than a coin toss. Proponents of the efficient market

theory believe that there is perfect information in the stock market. This means that whatever information is available about a stock to one investor is available to all investors (except, of course, insider information, but insider trading is illegal). Since everyone has the same information about a stock, the price of a stock should reflect the knowledge and expectations of all investors. The bottom line is that an investor should not be able to beat the market since there is no way for him/her to know something about a stock that isn't already reflected in the stock's price. Proponents of this theory do not try to pick stocks that are going to be winners; instead, they simply try to match the market's performance. However, there is ample evidence to dispute the basic claims of this theory, and most investors don't believe it". (<http://www.investorwords.com>).

“An efficient market is one where shares are always correctly priced and where it is not possible to outperform the market consistently except by luck. In an efficient capital market, current market prices fully reflect available information. The role of markets in a competitive economy is to allocate scarce resource between competing ends in a way that leads to the scarce resources being use must productively. This means that the highest bidder for the resources gets to use to them. When this occurs, markets are said to be allocative efficient. The role of capital a securities market is to allocate inventible resources in a way that is allocative efficient. Market efficiency can be defined in various ways: locative, operational, organizational and informational efficiency. Market efficiency refers to the ability of financial assets to quickly adjust and reflects all information that’s that is relevant to the value in its price”. (Balake, 1992: 240)

As efficient market is concerned with the pricing mechanism of securities market, it has two dimensions of price adjustment. One is the type of information reacting to and another is the speed and quality of adjustment of security to the information. As any random infusion of information instantaneously and correctly adjusted in prices, there will be no subsequent dependencies or lag that are profitable. Pricing not only should be instantaneous, but also should discount accuracy of information so that the prices fluctuate closely around its intrinsic value. So Kean pointed out, “it would be clearly on add interpretation of efficiency if a doubling in price of a share were regarded as an efficient reaction to new information, simply because the movement was instantaneous, if the information in fact warranted a substantial reduction in price.” (Kean, 1983: 198) “Agreeing with this, Francis and Taylor

noted market efficiency to the ability of financial assets to quickly adjust and reflect all information that is relevant to value in its price.” (*Francis, 1986: 72*) Therefore, it assumes, that any given time, the market correctly prices all securities. The result; or so theory advocates, is that securities can’t be over-priced or under-priced for a long enough period to profit there from.

Level of Market Efficiency

There are levels of market efficiency depending upon type of information set impounded into the price. In other words, the forms of markets are determined on the basis of how publicly available information is reflected in the market price of shares. The statements that price reflect all available information represents the highest order of market efficiency. As Fama suggested, it is useful to distinguish three level of market efficiency.

Forms of Efficiency Set of Information Reflected in Securities Price.

Weak	Previous price of securities
Semi-strong	All publicity available information
Strong	All information both public and private

“The weak forms of the Efficient Market Hypothesis asserts that stock prices reflect all the information that can be derived by examining market trading data such as the history of past price and trading volume. A strong body of evidence supports weak-form efficiency in the major U.S. securities markets. For example, tests results suggest that technical trading rules do not produce superior return after adjusting for transaction costs and taxes”. (*Bhattacharai; 2010: 220*)

“The semi strong form states that a firm’s stock price reflects all publicly available information about a firm’s prospects. Examples of publicly available information are company annual reports and investment advisory data. Evidence strongly supports the notion of semi-strong efficiency, but occasional studies (e.g., those identifying market anomalies such as the small-firm-in-January or book-to-market effects) and events (such as the stock market crash of October 19, 1987) are inconsistent with this form of market efficiency.

However, there is a question concerning the extent to which these “anomalies” results from data mining”. (Bhattarai; 2010: 220)

The strong form of the Efficient Market Hypothesis holds that current markets prices reflect all information (whether publicly available or privately held) that can be relevant to the valuation of the firm. Empirical evidence suggests that strong-form efficiency does not hold. If this form were correct, prices would fully reflect all information. Therefore even insiders could not earn excess returns. But the evidence is that corporate officers do have access to pertinent information long enough before public release to enable them to profit from trading on this information.

“In summary, the Efficient Market Hypothesis holds that the market appears to adjust so quickly to information about both individual stocks and the economy as a whole that no technique of selecting a portfolio using either technical or fundamental analysis can consistently outperform a strategy of simply buying and holding a diversified portfolio of securities, such as those comprising the popular market indexes”. (Bhattarai; 2010: 220)

2.2 Review of Journals and Articles

Review of articles, journals and bulletins are important for research. “Reviews are short articles that give brief information regarding the work done in a particular area over a period of time. Reviews are commonly published in journals, year’s books, handbooks and encyclopedias. Reviewers select research articles of their interest, organize them context wise, criticize their findings and offer their own suggestions and conclusions. The review of articles and journals gives a clear insight on the developments and updates in the area of research”. (Joshi; 2010: 142-146) In this section, articles and journals related to Nepalese stock market and its behavior is reviewed.

Robert and Nardin (2010) published an articles on “*Commonality in the Determinants of Expected Stock Returns*”, they presented with evidence that the determinants of the cross section of expected stock return were stable in their identify and influence from period to period and from country. The determinants were related to risk, liquidity, price level, growth potential and stock price history. Out of sample predications of expected returns, using moving average values for the pay-offs to these firm characteristics were strongly and

consistently accurate. Two findings, however, distinguished their paper from others in the contemporary literature. First, the stock with higher expected and realized rate of return was unambiguously of lower risk than the stocks with lower returns. Second, they found that the important determinants of expected stock returns were strikingly common to the major equity markets of the world. Given the nature of the texts, it was highly unlikely that those results may be attributed to bias or data snooping. Consequently, the result seems to reveal a major failure in the efficient market hypothesis.

Shrestha (2011) published an article entitled "*NRB Monetary Policy and Stock Market Impact*". According to him monetary policy directly affects stock prices. Taking all example of monetary policy announcement in 2004/05, he writes "NRB Monetary Policy had an impact on the performance of stock market as investors were lured into buying shares of commercial banks at higher market price with the expectation that banks would issue bonus shares to increase its capital base to Rs. 100 million. As a result, there had been tremendous demand for shares of commercial banks in every day transaction raising stock market index to unexpected highs."

Kadariya, (2012) published articles on "*Factors Affecting Investor Decision Making: A Case of Nepalese Capital Market*". The financial market has been suffering from the unforeseen and sudden economic turbulences that have been directly or indirectly contributing for the stock returns from the past decades. The study primarily analyzes the market reactions to tangible information and intangible information in Nepalese stock market and to examine the investors' opinions in Nepalese stock market issues. The sample size is 185 stock investors and the response rate is 27 percent. The major findings of the study are the capital structure and average pricing method is one factor that influences the investment decisions, the next is political and media coverage, the third factor is belief on luck and the financial education, and finally the fourth component for stock market movement is trend analysis. Thus, it is concluded that both the tangible and intangible information are essential to succeed in Nepalese capital market.

Specifically, in Nepalese context, the study is primarily designed to fill the absence of similar studies. The evidence of efficiency of stock market is controversial and inclusive, some evidence suggest that Nepalese stock market is inefficient whereas others find it is inefficient in short-run and efficient in long-run. The central idea is that it is not efficient and there is possibility of outperformance in the market. The educated and well aware investors could score better than others. The market without clear reasons experience the bearish trend and it has gradually deteriorates the investors' sentiments towards the market reversal in near future. The so-called market crash, because most of the listed stock became overpriced, has sharply decline holding capacities of most of the investors and forced them to supply regardless of minimum trading prices in the market. The significant increase in the supply side of the securities and the absence of explain the variations in stock returns. These variables are taken

as explanatory variables for the study that help to confirm the existence of similar results in Nepalese context. The primary analysis includes the demographic features of the respondents, their perception towards the capital market issues as well as the specific analysis identified the four major components that are used to analyze prior to making the investment decisions. The summary of the major findings of the researcher study are as follows:

- The primary data analysis shows that Nepalese stock market starts to attract younger investors in recent period as the majority of the stock investors are younger.
- The proportion of educated investors is high in the market; most of them are self-employed and small.
- Investors have strong voice in the Nepalese stock market.
- The limited investors use their own skills and analytical power in investment decision.
- The most influencing factors for decision making are media and friends.
- Majority of the stock investors prefer capital gain rather than the usual cash dividends and seasonal issues.
- Banking and finance sector remains the most popular investment sector among the Nepalese investors.
- The most used methods of investment are fundamental analysis, and the market noise, media and informal talks.
- Investors believe on their ability when they earn and blame for market when they incur losses.
- The tangible components such as dividends, earnings, number of equity, and book-to-market ratio and the intangible component like political party led government are considered the top five most important factors for investment decisions as per the opinion of individual stock investors.
- The capital structure and average pricing method is one factor that influence the investment decisions, the next is political and media coverage, the third factor.

Pradhan, (2006) conduct a research on *“Effect of Dividends on Common Stock Prices: The Nepalese Evidence”* the major purpose of this paper is to explain share price, dividends and retained earnings relationship in the context of Nepal. It attempts to ascertain the effect of dividend payment and retained earnings on market price of share. This paper examined the valuation of firms whose shares are traded in the Nepalese stock market. Using pooled cross section data of 29 companies from 1994 to 1999 with a total of 93 observations, it attempts to

determine relative importance of dividends and retained earnings in determining market price of share. The finding indicates that share value is affected by dividend payments. This finding is consistent with the existence of net preference for current dividends as opposed to capital gains. There is an indication that a somewhat higher investor valuation may be placed on dividends than on retained earnings. To the extent that this conclusion is valid, it is possible that management might be able, at least in some measure, to increase stock prices by raising dividends. However, the opposite may be true in growth companies where management might be able to increase share price by greater relation of earning that could not be revealed by this study.

Thus it may be pointed out that dividend payment is more important as compare to retained earnings in Nepal. If the company retains more earnings, the market price of share may decline. In this connection, it may be interesting to conduct a similar study at different points in time to ascertain whether importance of retain earnings has increased over a period of time. Similarly, an industry wise analysis may also be very rewarding as such study can reveal the degree of importance of dividend or retained earnings in different industries.

2.3 Review of Thesis

Several researchers have conducted research on different aspects of share price behavior. Out of many thesis, some of the relevant thesis on share price behavior which have been reviewed are as:

Adhikari, (2004). Studies the behavior of share in the market in his thesis entitled “*Share Price Behavior of Joint Venture Banks in Nepal*”. The main objective of the research was

- To examine the price trend of stocks
- Examine the risk and return analysis of joint venture banks
- Examine the effect of dividend on the price of the stocks
- To examine the market price of stocks are over or under priced.

In this study he has taken seven joint venture commercial banks as a sample for examining the relationship as well as for using different indicators. The study concludes that

- The shares of publicly quotated joint venture commercial banks were less risky as compared to other average stocks traded in Stock Exchange.

- Good track record of the financial position, market penetration and continuous declaration of dividends encouraged the potential investors to buy the share of joint venture commercial banks.
- The share of joint venture commercial banks under study were under priced and the potentiality of each banks in gaining in the market remained prevalent.

Subba, (2008) conducted a study on “*Stock Price Behavior of Selected Companies Listed in NEPSE*”, taking 16 different companies to the sample.

Her main objective of the study was

- To examine the movement of stock market price
- To examine the sector wise behavior of NEPSE index.

The major findings of her study are:

- The coefficient of correlation between earning per share and between dividend per share and also between the net worth per share of observed market value of share were computed.
- There is dominant presence of banking sub-sector in the financial sector, it has been felt that there is an equal need for the development of non-banking sub sector. On the non banking sector, there is need to strengthen transaction.

In this connection, the present initiation of listing government issued securities in the Stock Exchange needs to be institutionalized and for strengthening equity and bond market further legal and other reforms are necessary. The listing of the share of manufacturing enterprises and secondary market has not yet expanded and still remains challenge. It is necessary to promote stock market so that investor can reduce their risks exposure by diversifying their investment portfolio. While privatizing the public enterprises, maximum uses of stock market should be made so that general public get investment opportunities. It is necessary agencies to keep an eye on the relationship between financial position and the price of share of listed companies.

Maharjan, (2008), conducted a study on “*Share Price Behavior of Listed Commercial Banks*”. Her study was conducted with the main objective are

- To analyze the share price behavior of listed commercial banks.
- To identify the quantitative factor affecting the stock price in stock market.
- To examine the NEPSE performance.

Capital market is basically a place or platform where transfer of funds takes place from the savers to the borrowers. The major findings are:

- The Nepal Stock Exchange is a weak form of the market and the share price behavior of commercial banks walk randomly; market share analysis and analysis of financial sector have been employed.
- Different ratios like interest margin, net margin, assets utilization, return on assets, profit to total income, total cost to profit ratio and earning to price ratio were utilized.
- The market and growth rates of different banking indicators used are not completely captured by the market value of these banks. The established banks have good track record of their financial position and the newly established banks are penetrating the market.
- All the banks are operating the market. All the banks are operating in the profit, although some of them suffered from losses during their initial stage.
- The investor's attitude towards the shares of these banks seems to be positive.
- Nepal Stock Exchange Limited being a major operative body in the area of secondary market should keep on developing the different parameters related to the congenial functioning of the stock market. It needs to get into the modernization and further to this it needs to develop efficient and effective channels of information related to investment and companies listed with it.

Dawadi, (2010), conducted a study on *“Stock Market Efficiency and Stock Price Behaviour in Nepal”*. His study was conducted with the main objective are:

- To analyze the behavior of stock price of listed commercial banks in NEPSE.
- To analyze the behavior of stock market.
- To determine whether the successive price changes of stocks are dependent or independent.

His major finding where:

- Commercial banking sector is highly sensitive in the Nepalese stock market.

- The relation between the commercial banks and total capital market is vary strong. That is change in prices of commercial banks stock lead to change in the overall performance of overall capital market.
- According to the trading performance of the sampled commercial banks, highest number of transition has been secured by BOK. Likewise, highest traded amount among the sampled commercial banks belong to BOK and HBL, has dominated on both total paid-up capital and total market value.

His major recommendations were:

- Objective of the volatility indicates that most of the sampled stock have large variations in their share price. They cannot perform well. Hence, the concerned authorized of the sampled banks are advice to maintained the cases of variations.
- The stock market makers should try to find out the causes of inefficiency of market.
- The government should make such a rules that can make the capital market operate efficiently in free environment.

Thapa (2011) has conducted a study entitled “*An impact of stock price behavior in Nepal Stock Exchange*” based upon the data of five years. The major objectives of his study are

- To identify factor affecting share price,
- To analyze correlation among various financial indicators,
- To identify qualitative factor affecting the stock price listed in NEPSE.

The study reports that the capital market of Nepal is in a growing stage. Average people, ruler people and also some qualified investor have not proper ideas about the capital market, share, book value, par value, market price, pricing mechanism and the factor affecting the market price of shares. He focused on the determinations of stock price in commercial banks.

The major findings of his study are

- The market price per share has high degree of positive relationship with EPS in all sample banks and MPS largely depends on EPS.
- The price behaviors of the selected sample size are random as the hypothesis is accepted by run test analysis.

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

He recommend that the government must have to establish a separate body to analyze strengths and weakness of public companies, which should disclosed right information and suggestions to public investors about investment risk. This will help the investors to take proper investment decision at right time to avoid or minimize the level of risk.

Research Gap

The review of past dissertations and studies shows that similar research on the share price behavior has been conducted by different researches in the past. The review shows that most of the studies were focused on different listed companies and not particularly on the commercial bank. And only take two or three bank as a sample. During the review of previous thesis, it is found that no researcher have been conducted by taking these sample companies, which researcher has selected in this research.

Keeping in view the above research gap, this research has analyze the share price behavior of the commercial banks in which commercial banks such as Standard Chartered Bank Nepal Limited, Nabil Bank Limited, Himalayan Bank Limited, Everest Bank Limited and Bank of Kathmandu Limited has been use as sample bank.

The price of common stock is affected by many factors. The rise and fall of share price is different in present period than that in past. The many factors like politics, economy and earning power of consumer have been changed. So, what was considered good in past may not be favorable at present. The investing concept of people has also changed. Hence, this study is expected to give new dimension in the study of pricing behavior of common stock.

This research is helpful in different area. The finding of previous research are equal important. The main focused of the research is analyzed the behavior of share price of commercial bank. This topic will help to those investors who want to know and invest about share price behavior of commercial banks.

CHAPTER III

RESEARCH METHODOLOGY

Human nature is always curious to learn, understand or investigate about the phenomenon by raising questions like why, how, what, when etc. The knowledge has something to do with knowing. Knowing may be through acquaintance or through description of characteristics of certain things. The things with which we can be acquainted are the things of which we are directly aware of direct awareness may come through perception and sensation. (*joshi, Puspa Raj, 2010: 1*)

Research methodology is the process of arriving to the solutions of the problem through planned and systematic dealing with the collection, analysis and interpretations of facts and figures. The research methodology includes the nature and sources of data, its presentation, and the analysis techniques. The study depends upon both secondary and primary sources of data. It is descriptive as well as exploratory research because the study explains the various theories related to stock behavior and concept of capital market.

3.1 Research Designed

Research design is the overall framework of the activities to be undertaken for the course of research study. It is a strategy for the research work. It guides about the collection and analysis of data, the research instruments to be employ and the sampling plan to be followed. The research design describes about the general work plan for collection, interpretation, analysis and the evaluation of collected data. It is the core integrated system that is employed for overall research work. Thus, research design is a plan for the collection and analysis of data. It presents a series of guide posts to enable the researchers to progress in the right direction in order to achieve the goal. (*joshi, Puspa Raj, 2010: 33*).

This study will analyze the share price as well as banking price movement in the NEPSE. Moreover, the study will also examine the inter relationship of the market price per share of the selected commercial bank with its various financial indicators and the degree of risk involved in investment in the shares of these selected banks.

3.2 Population and Sample

The large group about which the generalization mode is called the population under study. Because of the large group size, it is fairly difficult to collect detail information from each member of population. Rather than collecting detail information from each member, the small person is chosen as representation of the population is called the sample. Altogether twenty five commercial banks operating in Nepal are considered to be the total population of the

study. Due to lack of time and resource factor, it is not possible to study all of them. Hence, the four commercial banks have been taken as sample which are listed and doing share transition in NEPSE from population.

Out of 210 listed companies, NEPSE classified 117 companies (55.71 percent) consisting of 23 commercial banks, 24 development banks, 53 finance companies, 14 insurance companies 2 hydropower and 1 hotel company under group "A" and the rest under group "B", as per the provision of "Securities Listing Bye-laws", 1996. As per the provision of "Securities Listing Bye-laws, 1996" those listed companies which must be profit since last three years, book value per share must not be less than its paid value, the paid of capital of the company must be at least Rs.20.00 million, the number of common shareholders must be at least 1000, the company must have made the public flotation as per bye-laws (4) and submission of the financial statement to NEPSE within six months from the closer of the fiscal year falls on category "A". The commercial banks which fall on category "A" are given below

Table 3.1

Listed Commercial Banks under Group "A"

S.N.	Name of the sample banks
1	Bank of Asia Nepal Ltd.
2.	Bank of Kathmandu Ltd.
3.	Citizen bank International Ltd.
4.	DCBL bank Ltd.
5.	Everest Bank Ltd.
6.	Global Bank Ltd.
7.	Himalayan Bank Ltd.
8.	Kist Bank Ltd.
9.	Kumari Bank Ltd.
10.	Laxmi Bank Ltd.
11.	Lumbini Bank Ltd.
12.	Machhchapuure Bank Ltd.
13.	NABIL Bank Ltd.
14.	Nepal Bangladesh Bank Ltd.

15.	Nepal Credit & Commerce Bank Ltd.
16.	Nepal Industrial & Co. Bank Ltd.
17.	Nepal Investment Bank Ltd.
18.	Nepal SBI Bank Ltd.
19.	NMB Bank Ltd.
20.	Prime Commercial Bank Ltd.
21.	Sanina Bikash (Bank) Ltd.
22.	Siddhartha Bank Ltd.
23.	Standard Chartered Bank Ltd.

(Source: NEPSE Annual Trading Report 2010/11)

The sample selections for this study are:

- Standard Chartered Bank Nepal Limited
- Nabil Bank Limited
- Himalayan Bank Limited
- Everest Bank Limited
- Bank of Kathmandu Limited

As this study will try to explore the objectives set in the previous chapter, it is except that this study will help analyze the stock market scenario in NEPSE. This study is also aimed at producing tested effect of historical information on future price movement.

3.3 Nature & Sources of Data

The research study is primarily based on the already published data i.e. secondary data collected. But during the study, primary data are also referred. This research study specially comprises the secondary data for the overall study and analysis. The data used in this study consist of daily closing price of each of the listed commercial banks in NEPSE. Necessary secondary data has been collected through the following various sources:

- Annual reports, brochures and newsletters of the selected banks
- Articles published in news papers, journals and souvenirs
- NRB guidelines, acts and laws
- Unpublished thesis and reports
- Bank websites and other related websites

3.4 Method of Data Analysis

The necessary data collected from the different sources are presented and analyzed systematically. Data are presented simply and understood able pattern through different charts, diagrams, graphs & tables. For the purpose of analysis of collected data, appropriate mathematical, financial as well as statistical tools have been used where necessary. Following financial tools have been used for the study:

3.4.1 Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of a firm by properly establishing relationship between the items of the financial statements. So it is used to measure financial performance of the organization from long term as well as short term point of view is called financial tools. Following financial tools have been used for the study:

3.4.1.1 Market Price per Share (MPS)

Market value of a security (common stock) is the current (actual) price at which the stock is being traded in market. Company's future growth, earnings power, level of risk etc. are reflected in market price of the security. Therefore common stock's price fluctuates widely. Market value per share is expected to be higher than book value and liquidation value per share for profitable and growing firms (*Gautam and Thapa, 2011: P117*). Market price is just one of the numbers of ways of establishing the monetary value of a goods or a transition. It is the prevailing or the actual price of the share paid in market transition. For the study, yearend closing price of NEPSE is taken as a Market Price per Share.

$$\text{Market Price per Share (MPS)} = \frac{\text{Total Market Capitalization}}{\text{No.of Outstanding Shares}}$$

3.4.1.2 Earning Per Share (EPS)

Earning per share is a company's total earnings divided by the total number of shares outstanding. It is calculated using annual earnings, usually after interest and taxes and after deducting the preference shares dividends, so as to compute the portion of total profit which is attributable to the ordinary shareholders. In this case, total earnings would be divided by the total number of ordinary shares outstanding. Earning per Share decides how much of a company's profit is allotted to the Companies outstanding stocks. So it's like if you have earnings for a company they divide it by number of shares available in that company to find out how much it's earned per share.

$$(\text{Earning Per Share}) \text{ EPS} = \frac{\text{Total Earning of a Company}}{\text{No.of Outstanding shares}}$$

3.4.1.3 Dividend per Share

The dividend per share is defined as the total of declared dividends for each share of stock issued. Dividends are essentially profit-sharing mechanisms allowing the distribution of company profits to the shareholders who actually own the company. Generally announced on a quarterly basis, the dividend per share is important both to shareholders who expect to realize financial gain from dividends paid and to financial analysts and investment brokers who often use the dividend per share as an indicator of a company's overall financial profitability. Although **dividends per share** are typically announced quarterly, investors and analysts rely on the **annual dividend per share** figure as a more reliable indicator of economic health.

The general method used to **calculate dividend per share** is relatively straightforward. The sum of dividends for a defined period (usually one year) is determined, with any special dividends subtracted from this total, and then divided by the number of shares of stock outstanding. The formula is:

$$\text{Dividend per Share (DPS)} = \frac{\text{Dividend available to ordinary shareholders}}{\text{No of Outstanding Shares}}$$

3.4.1.4 Book Value Per Share (BVPS)

The book value of equity per share is a financial measure which indicates a per share estimation of the minimum value of an entity's equity. Although the book value of equity per share is a factor that can be used by the investors to determine the value of stock, it presents only a limited value of the firm's situation. In simple words, book value per equity share gives a snap shot of a firm's present situation not including the future considerations of a firm. http://www.readyratios.com/reference/analysis/book_value_of_equity_per_share_bvps.html

The book value of equity per share is calculated by linking the original value of the common stock of a firm, adjusted for any outflow and inflow modifiers to the amount of outstanding shares. This value is calculated as:

$$\text{Book Value per Share (BVPS)} = \frac{\text{Value of Common Equity}}{\text{Number of Shares Outstanding}}$$

3.4.2 Statistical Tools

Statistical analysis is one of the particular languages, which describes the data and makes possible to talk about the relations and the differences of the variables. Statistical tools are the mathematical techniques used to analyze, communicate and interpret the numerical parts of the data. So a statistical tool means the mathematical tools which are used to collect, present, analyze and interpret quantitative information in a clear and crisp form. There are various statistical tools that can be used to present and analyze data. In this study, the main statistical tools used are as follows.

3.4.2.1 Average (Mean)

An average is a single value (observation) related from a group of value (observation) to represent them i.e. a value is supposed to stand for whole group. There are various type of averages like arithmetic mean, simple and weighted, median, mode, geometric mean and harmonic mean are the major types of averages. The most popular and widely used mean is arithmetic mean. The value of arithmetic mean can be calculated by adding together all the items and dividing this total by the number of items.

Mathematically,

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

Where, $\bar{X}$ = Arithmetic Mean

ΣX = Sum of all the values of the variable X

n= number of observations/items

3.4.2.2 Standard Deviation:

Standard deviation is a statistical measurement that sheds light on historical volatility. For example, a volatile stock will have a high standard deviation while the deviation of a stable blue chip stock will be lower. A large dispersion tells us how much the return on the fund is deviating from the expected normal returns. (<http://www.investopedia.com>). The standard deviation (σ) measures the absolute dispersion. The greater the standard deviation, greater will be the magnitude of the deviation of the values from their mean. Small standard deviation means a degree of uniformity of the observations as well as homogeneity of a series and vice versa. The following formula is applied to calculate the standard deviation using historical returns.

Mathematically,

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

Where, σ = Standard Deviation

X = Number in X-series

$\bar{X}$ = Mean

n= Number of Observation in a Sample

3.4.2.3 Coefficient of Variation

Coefficient of variation is the measure of the dispersion of the data around the mean. It is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other. The coefficient of variation allows the investor to determine the amount of volatility (risk) involved in the investment as compared to the amount of return expected. The coefficient of variation is measured as a ratio of the standard deviation to the mean.

Mathematically,

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

Where, CV = Coefficient of Variation

σ = Standard Deviation

$\bar{X}$ = Mean

3.4.2.4 Correlation Coefficient

Correlation coefficient refers to the degree of relationship existing between the two variables. The value of correlation coefficient determines the associations between the dependent and independent variables. It is the geometric mean of the two regression coefficients. When the change in the value of one variable is accompanied by the change in another variable, then the variables are said to be correlated. Meaning that, increase and decrease in one variable cause increase or decrease in another variable, then such variables are said to be correlated. The value of correlation coefficient is denoted by 'r'. The value of 'r' describes only the degree of relationship but it does not explain about the cause and effects of the relationship. Therefore the correlation is a tool which is designed to measure the relationship between two or more variables and correlation analysis measures the strength or degree of linear relationship between two or more variables. If the change in the value of the one variable results the change in the value of another variable, then we say that the variables are correlated. (Katuwal and Yadev, 2065: 333).

The Karl Pearson's coefficient of correlation measures the degree of linear relationship between two variables. Let X and Y are two variables, the Karl Pearson's coefficient of correlation between X and Y is defined as:

Mathematically,

$$\text{Correlation Coefficient } (r) = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

3.4.2.5 Coefficient of Determination

The coefficient of determination is defined as the proportion of the variance in the dependent variable that is explained by regression equation. It measures the contribution of independent variables in predicting the dependent variable. It can range in value from 0 to 1, with 1 indicating perfect fit. It is more appropriate while verifying the results than the correlation coefficient and is computed by square of the correlation coefficient as shown below: (Gupta; 1982: 10-29)

$$\text{Coefficient of Determination} = r^2$$

Where, r = coefficient of correlation.

3.4.2.6 Regression Analysis

The term 'regression' literally means stepping back towards the average. It was first used by British biometrician Sir Francis Galton (1822-1911), who studied the heredity characteristics of people, was the first scientist to discover the concept of average relationship or regression. Regression analysis concerned with the study of the dependence of one variable, dependent variable, on one or more other variables, the independent variable with a view to estimating the average value of the dependent variable from the known values of the independent variable. Regression is the statistical tool, with the help of which we can predict the unknown value of one variable from known value of any other variable. Regression analysis is a branch of statistical theory that is widely used in almost all the scientific disciplines. One of the most frequently used techniques in economics and business research, to find a relation between two or more variables that are related casually is regression analysis. (*Katuwal and Yadav; 2065: p347-351*) The regression analysis can be classified as follows:

(a) Simple Regression Analysis

In simple regression we study the mathematical relationship between a dependent variable and only one independent variable. The main objective of simple regression is to predict the value of dependent from the known value of the single independent variable. The regression equation of X on Y can be calculated as follows:

$$Y = a + bX \quad \dots\dots (1)$$

X and Y are the independent and dependent variables respectively.

a= Numerical constants measure the distance of the fitted line directly above or below the origin or Y-intercept.

b= Numerical constant which measures the changes in Y per unit change in X or slope of the line. Note that "a" and "b" are also called parameters of the line.

$$\sum Y = Na + b\sum X \quad \dots\dots (2)$$

$$\sum XY = a\sum X + b\sum X^2 \quad \dots\dots\dots (3)$$

Where, N = Number of pairs of observations.

Solving the two normal equations (1) and (2)

We get,

$$a = Y - bX$$

$$b = \frac{N\sum XY - \sum X \sum Y}{N\sum X^2 - (\sum X)^2} \dots\dots\dots (4)$$

The constant “b” is called regression coefficient of Y on X and also denoted by b_{xy} and the estimates the change in Y corresponding to unit change in X. (Katuwal and Yadav; 2065: p347-351)

(b) Multiple Regression Analysis:

Multiple regression is defined as the statistical device which is used to estimate for the value of one dependent variables when the values of two or more independent variables are given. It means it is the statistical technique to find out the relationship between one dependent variable and two or more than two independent variables at the same time. Multiple regression equation describes the average relationship between one dependent variable with other two independent variables which is used to forecast the value of dependent variable.

$$\text{Here, } X_1 = a + b_1X_2 + b_2X_3 \dots\dots\dots [1]$$

Where,

X_1 is dependent variable

X_2 and X_3 are the independent variables and it is called the a regression equation of X_1 on X_2 and X_3

a = intercept on Y-axis. It gives the value of dependent variable when all the independent variables are zero.

b_1 = slope of the regression line of X_1 on X_2 keeping X_3 as a constant. It measures the change in X_1 for unit change in X_2 keeping X_3 as a constant.

b_2 = slope of the regression line of X_1 on X_3 keeping X_2 as a constant. It measures the change in X_1 for unit change in X_3 keeping X_2 as a constant.

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

$$\sum X_1 = Na + b_1\sum X_2 + b_2\sum X_3 \dots\dots\dots (a)$$

$$\sum X_1 X_2 = a \sum X_2 + b_1 \sum X_2^2 + b_2 \sum X_2 X_3 \dots (b)$$

$$\sum X_1 X_3 = a \sum X_3 + b_1 \sum X_2 X_3 + b_2 \sum X_3^2 \dots (c)$$

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

3.4.2.9 Test of Hypothesis

In testing of hypothesis, an assumption is made about the population parameter. Simply, a quantitative statement about the population parameter is called hypothesis. It is one of the important application of statistical inference is test of hypothesis. To test whether the assumption or hypothesis is right or not or the hypothesized value or test is significantly difference or indifference. Smaller difference, the sample mean is close to the hypothesized value and larger the difference the hypothesized value has low chance to be correct. The objective of the hypothesis testing is not to question about the computed value of sample statistic, but the difference between the sample statistic and population parameter.

Null hypothesis: The assumption or hypothesis is set that there is no significantly difference between the sample mean and the population mean is called “null hypothesis” And it is denoted by

$$H_0 : \mu = \mu_0$$

(For example, the earnings is not related to the market price of the share)

Alternative Hypothesis: Contrary of the null hypothesis, if there is significant difference between the sample mean and population mean or null hypothesis is rejected it is called alternative hypothesis. And it is denoted by

$$H_1 : \mu \neq \mu_0 \text{ (two tailed)}$$

The earning is effect the market price of the share. (*Katuwal and Yadav; 2065: 183-192*)

3.4.2.10 Small Sample Test (t-distribution)

If the sample size is less than 30, then the sampling distribution of the sample mean follows student's t-distribution. William S. Gosset used to write under pseudonym of ‘students’ in the

beginning of 20th century. It was first published as ‘student’s distribution’ and later it was extended by R.A. Fisher. Therefore, the sample distribution is called ‘student’s distribution or the t-distribution’. The t-distribution is similar to normal distribution but it is not exactly normal. The curve of t-distribution is a little bit flatter. As the sample size increases more than the t-curve becomes more and more like a normal curve.

The t-distribution also tests the significance of an observed correlation coefficient. If the observed correlation coefficient of population has to be tested as significant or insignificant (zero or uncorrelated), the following formula is applied.

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

Where,

r= correlation coefficient

n= Sample size

In summary the t-distribution is one of the most useful statistics available to a behavioral scientist. In this tutorial, you were shown how to conduct a one sample t-test, an independent sample t-test, and a paired sample t-test. The t-test can be adapted to many other statistical questions that have not been covered. For example, a t-test is also used to assess if correlation coefficients and regression coefficients are significantly different from zero. In short, a behavioral scientist must have good working knowledge of the various uses of the t-statistic because its use is so prevalent. Part of this good working knowledge understands the assumptions that one makes when using a particular t-test. For example, to use the independent samples t-test presented above, it must be assumed that the variance in Population 1 is equal to the variance in Population 2.

3.4.2.11 Diagrammatic and Graphical Presentation

Collected data are presented through different charts and diagrams. These are the visual aids that give a bird eye view of a given set of numerical data. Diagrams and charts are presented here so that the collected data could be read in a simple and readily manner. Lots of Bar Diagrams, Histograms, and Trend Lines are used for the presentation and analysis of the data.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This chapter is devoted to the presentation, analysis, interpretation and scoring the empirical finding out of the study through definite course of research methodology. To achieve the stated objective of the study and also to make the reader easier to understand the findings qualitative as well as quantitative data and information has been analyzed. The first part of the chapter includes the analysis of secondary data and second part primary data.

4.1 Analysis of Financial Indicators

The analysis of financial indicators shows that the comparative analysis of MPS, EPS, DPS and BVPS of each sample commercial bank.

4.1.1 Comparative analysis of MPS

Market value of a security is the current (actual) price at which the stock is being traded in market. Company's future growth, earnings power, level of risk etc. are reflected in market price of the security. Therefore common stock's price fluctuates widely. Market value per share is expected to be higher than book value and liquidation value per share for profitable and growing firms.

Table 4.1

Calculation of Mean, Standard Deviation and Coefficient of Variance of MPS (in Rs)

Fiscal Year	SCBNL	NABIL	EBL	HBL	BOK
2006/07	5900	5050	2430	1740	1375
2007/08	6830	5275	3132	1980	2350
2008/09	6010	4899	2455	1760	1825
2009/10	3279	2384	1630	816	840
2010/11	1800	1252	1094	575	570
Mean	4763.8	3772	2148.2	1374.2	1392
S.D.	1902.729	1639.473	710.1083	565.6771	645.8994
C.V.	0.399414	0.434643	0.33056	0.411641	0.464008

Source: Appendix I

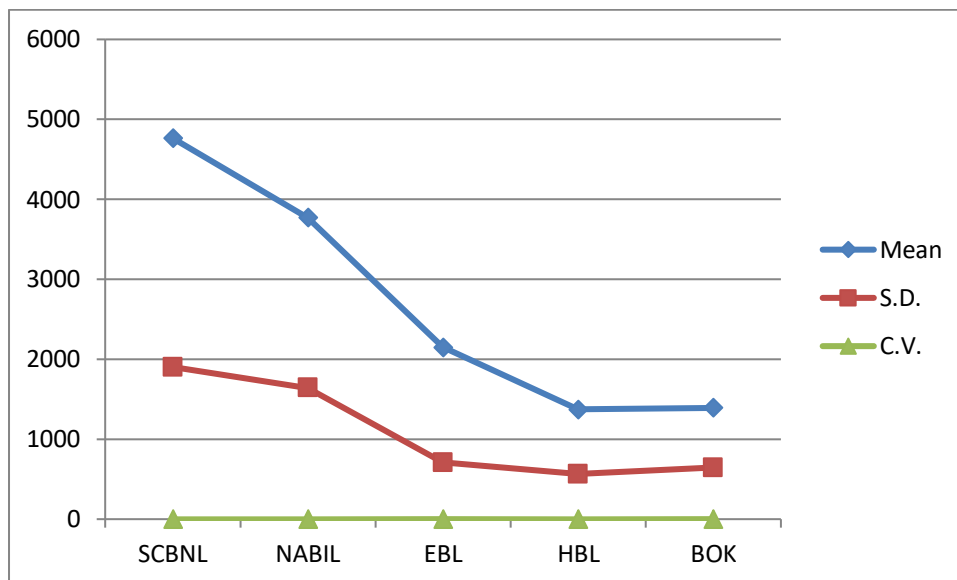
Table 4.1 and figure 4.1 present the fluctuating trend of MPS of all five commercial banks viz: SCBNL, NABIL, EBL, HBL and BOK under the study period. The average MPS of SCBNL,

NABIL, EBL, HBL and BOK is Rs.4763, 3772, 2148, 1374 and 1392 respectively.

In the comparative analysis of MPS of these banks, MPS of SCBNL is higher than other four banks in an average. This indicates that the effective performance of SCBNL regarding the MPS. However, in the consistency of statistical measurement, SCBNL's CV is higher than EBL which indicates the riskier than EBL i.e. moderate risk. Similarly, HBL has the lowest i.e. Rs.1374 MPS that means its performance is not good as compared to four other sample banks. C.V. of EBL is lowest i.e. 0.3306 or 33.06% among the sample banks which shows the consistency in MPS i.e. it has lower risk in fluctuation of MPS. Similarly the C.V. of BOK is highest than other it shows that the BOK's MPS was more fluctuated than other sample banks during the period. All bank's MPS are bullish trend in the fiscal year 2007/08.

Figure 4.1

Mean, Standard Deviation and Coefficient of Variance of MPS



4.1.2 Comparative analysis of EPS

Earning per share is a company's total earnings divided by the total number of shares outstanding. It is calculated using annual earnings, usually after interest and taxes and after deducting the preference shares dividends, so as to compute the portion of total profit which is attributable to the ordinary shareholders.

Table 4.2**Calculation of Mean, Standard Deviation and Coefficient of Variance of EPS (in Rs)**

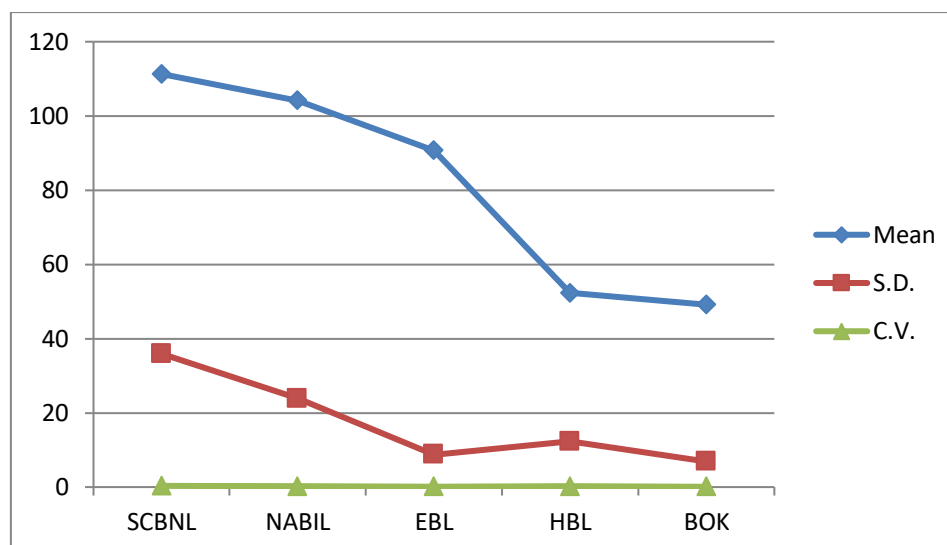
Fiscal Year	SCBNL	NABIL	EBL	HBL	BOK
2006/07	167.37	137.08	78.42	60.66	43.5
2007/08	131.92	115.86	91.82	62.74	59.94
2008/09	109.99	113.44	99.99	61.9	54.68
2009/10	77.65	83.81	100.16	31.8	43.08
2010/11	69.51	70.67	83.18	44.6	44.51
Mean	111.288	104.172	90.714	52.34	49.142
S.D.	35.9151	23.84297	8.7681	12.25214	6.889146
C.V.	0.322722	0.228881	0.096657	0.234088	0.140189

Source: Appendix I

Table 4.2 and figure 4.2 reflects the fluctuating trend of Earning Per Share (EPS) of five sample commercial banks viz: SCBNL, NABIL, EBL, HBL and BOK during the study period. The average EPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.111.28, 104.17, 90.71, 52.34 and 49.14 respectively. In the comparative analysis, the average EPS of SCBNL is higher than other four sample bank which is Rs.111.28. among the sample banks, the EPS of BOK was lowest which Rs.49.14 . EPS of SCBNL and NABIL is decreasing trends. On the other hand the EPS of EBL, HBL and BOK are fluctuated trend over the five year period. The coefficient of variance of EPS of EBL is lower than that of other four banks. It means the EBL has more consistency in EPS, i.e. 0.0966 or 9.66%. On the other hand the C.V. of SCBNL has highest which is 0.3227 or 32.27%. the cause of this volatile of SCBNL is also the cause of highest MPS which leads to also change in earning price of share.

Figure 4.2

Mean, Standard Deviation and Coefficient of Variance of EPS



4.1.3 Comparative analysis of DPS

The dividend per share is defined as the total of declared dividends for each share of stock issued. Dividends are essentially profit-sharing mechanisms allowing the distribution of company profits to the shareholders who actually own the company. Generally announced on a quarterly basis, the dividend per share is important both to shareholders who expect to realize financial gain from dividends paid and to financial analysts and investment brokers who often use the dividend per share as an indicator of a company's overall financial profitability.

Table 4.3

Calculation of Mean, Standard Deviation and Coefficient of Variance of DPS

Fiscal Year	SCBNL	NABIL	EBL	HBL	BOK
2006/07	130	140	30	40	20
2007/08	130	100	30	45	42.11
2008/09	100	85	30	43.56	47.37
2009/10	70	70	30	36.84	30
2010/11	50	30	10	36.84	34.75
Mean	96	85	26	40.448	34.846
S.D.	32	36.05551	8	3.365747	9.52379
C.V.	0.333333	0.424183	0.307692	0.083212	0.273311

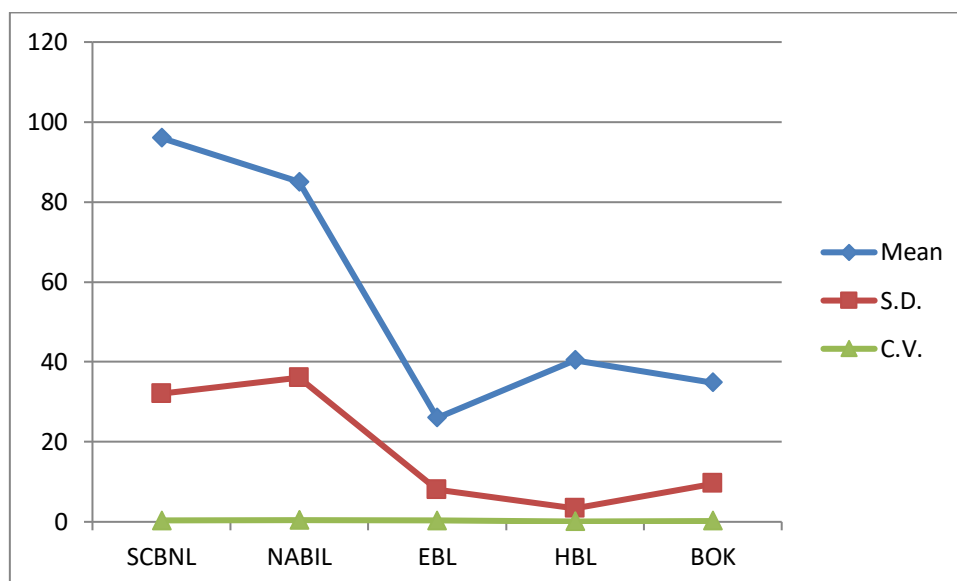
Source: Appendix I

Table 4.3 and figure 4.3 reflects the fluctuating trend of Dividend Per Share (DPS) of five sample commercial banks viz: SCBNL, NABIL, EBL, HBL and BOK. During the study

period, the average DPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.96, 85, 26, 40.44 and 34.85 respectively. In the comparative analysis, SCBNL has the highest DPS and EBL has lowest which is Rs.96 and 26 respectively. Thus, SCBNL has paid more dividend than other sample banks during the last five year period. Likewise, NABIL bank has paid higher dividend than other three banks as stood second.

Figure 4.3

Mean, Standard Deviation and Coefficient of Variance of DPS



Similarly, HBL, BOK and the Everest Bank Limited has paid lower dividend during the period. By the statistical measurement of C.V. analysis, CV of HBL is lower than that other sample bank i.e. 0.0832 or 8.32%. It means the HBL has less fluctuation or more consistency in DPS over the five years period. Likewise the C.V. of NABIL is highest which is 0.4242 or 42.42%. This indicates that NABIL has less consistency or less uniformity in DPS during last five fiscal years.

4.1.4 Comparative analysis of BVPS

The book value of equity per share is a financial measure which indicates a per share estimation of the minimum value of an entity's equity. Although the book value of equity per share is a factor that can be used by the investors to determine the value of stock, it presents only a limited value of the firm's situation. In simple words, book value per equity share gives a snap shot of a firm's present situation not including the future considerations of a firm.

Table 4.4**Calculation of Mean, Standard Deviation and Coefficient of Variance of BVPS**

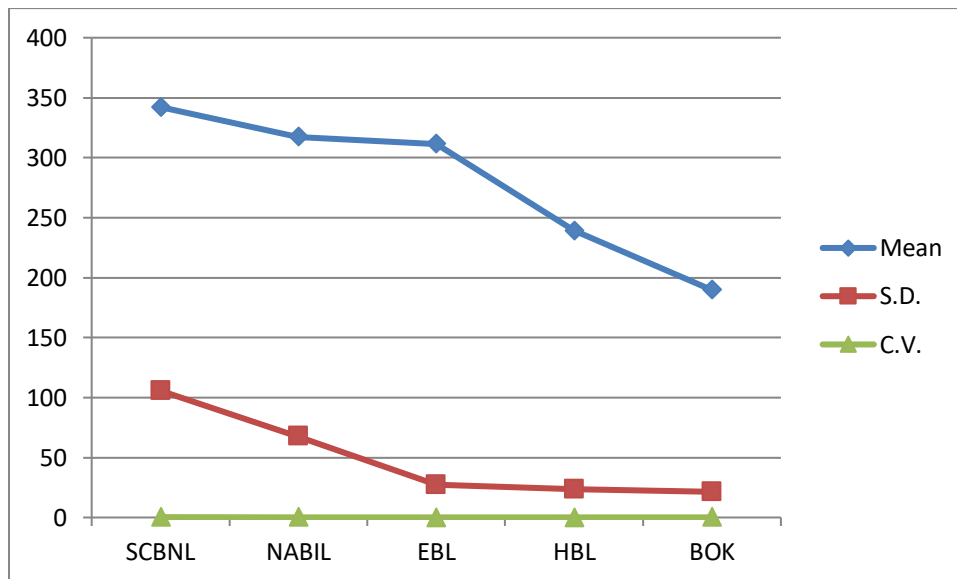
Fiscal Year	SCBNL	NABIL	EBL	HBL	BOK
2006/07	512.12	418	280.82	264.74	164.68
2007/08	401.52	354	321.77	247.95	222.51
2008/09	327.53	324	345.23	256.52	206.25
2009/10	240.95	265	332	226.79	175.4
2010/11	228.41	225	277.91	199.77	179.19
Mean	342.106	317.2	311.546	239.154	189.606
S.D.	105.6471	67.50822	27.32389	23.39897	21.40703
C.V.	0.308814	0.212825	0.087704	0.097841	0.112903

Source: Appendix I

Table 4.4 and figure 4.4 states the fluctuating trend of Book Value Per Share (BVPS) of five sample commercial banks viz: SCBNL, NABIL, EBL, HBL and BOK. During the study period, the average BVPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.342.11, 317.2, 311.55, 239.15 and 189.61 respectively. In the comparative analysis, SCBNL has the highest BVPS and BOK has lowest which is Rs.342.11 and 189.61 respectively. The BVPS of SCBNL is highest the cause of this is also reflected by highest market price and paying more dividend to its investor. Likewise, the measurement of consistency, C.V. of EBL is 0.0877 or 8.77%, which indicates that there is more consistency or less fluctuation in BVPS during the study period. On the other hand, SCBNL has highest BVPS which is 0.3088 or 30.88%. this is also the cause of fluctuation of MPS. However the CV of NABIL, HBL and BOK is 0.2128 or 21.28%, 0.0978 or 9.78% and 0.1129 or 11.29% respectively.

Figure 4.4

Mean, Standard Deviation and Coefficient of Variance of BVPS



4.2 Correlation Analysis

The correlation is a tool which is designed to measure the relationship between two or more variables and correlation analysis measures the strength or degree of linear relationship between two or more variables. If the change in the value of the one variable results the change in the value of another variable, then we say that the variables are correlated.

4.2.1 Correlation Analysis of SCBNL

Table 4.5

Correlation Coefficient and t-statistic of sum of variables of SCBNL,

	EPS	DPS	MPS	BVPS
EPS Pearson Cor.(r)	1	0.9396	0.8151	0.9979
Sig.(2 tailed)		4.7548**	2.437*	26.684 **
N	5	5	5	5
DPS Pearson Cor. (r)	0.8151	1	0.9487	0.6417
Sig.(2 tailed)	4.7548**		5.1970**	4.1546 **
N	5	5	5	5
MPS Pearson Cor. (r)	0.8151	0.9487	1	0.7809
Sig.(2 tailed)	2.437*	5.1970**		2.1653 *
N			5	

	5	5		5
BVPS Pearson Cor. (r)	0.9979	0.9230	0.7809	1
Sig.(2 tailed)	26.684	4.1546 **	2.1653 *	
N	**	5	5	5
	5			

*Correlation is insignificance at 5% level for two tailed t-test

**Correlation is significance at 5% level for two tailed test

Source: Appendix-II

Table 4.5 presents the correlation matrix of SCBNL. The following correlations are highlighted. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between EPS with DPS, MPS, and BVPS with the coefficient of 0.9396, 0.8151 and 0.9979 respectively. The interesting correlation prevails between the DPS with MPS and BVPS is 0.9487 and 0.9230. Here, the correlation between DPS and MPS is moderate but in positive. Likewise, the correlation between BVPS and MPS is 0.7809. Thus, it concludes that the simple correlation analysis revealed that the MPS is positively correlated with all the independent variables (i.e. DPS, BVPS & EPS) which indicates that on increasing DPS, BVPS and EPS, MPS also increases and vice versa. MPS is more correlated to EPS than the DPS and BVPS.

Even though, the MPS is affected by DPS, BVPS and EPS, the degree of correlation are not significant MPS with BVPS and EPS, at 5% significance for two tailed test at 3 degree of freedom for t-test. By testing hypothesis, the simple correlation of coefficients of EPS with DPS and BVPS are significant at 5 percent level of significance (95 confidence level) for two tailed test.

In the context of insignificant relationship between MPS with EPS since the calculated value of t (2.437) is less than tabulated' at 5% significance level at 3 degree of freedom (3.182) for two tailed test. Since, the calculated value of 't' is less than tabulated t it concludes that there is insignificance relationship between MPS and EPS. Likewise, there is also insignificant relation between MPS and BVPS since the calculated value of t (2.1653) is less than tabulated' at 5% significance level at 3 degree of freedom (3.182) for two tailed test. Likewise, there is significance relationship between EPS and BVPS since the calculated value of 't' (26.689) is greater than tabulated t (3.183) for two tailed test at 3 degree of freedom.

4.2.2 Correlation Analysis of NABIL

Table 4.6

Correlation Coefficient and t-statistic of sum of variables of NABIL,

		EPS	DPS	MPS	BVPS
EPS	Pearson Cor. (r)	1	0.9616	0.9351	0.9893
	Sig. (2 tailed)		6.0685**	4.5703**	11.7448**
	N	5	5	5	5
DPS	Pearson Cor. (r)	0.9616	1	0.9487	0.8641
	Sig. (2 tailed)	6.0685**		5.1971**	2.9736*
	N	5	5	5	5
MPS	Pearson Cor. (r)	0.9351	0.9487	1	0.7809
	Sig. (2 tailed)	4.4703**	5.1971**		2.1653*
	N	5	5	5	5
BVPS	Pearson Cor. (r)	0.9893	0.8641	0.7809	1
	Sig. (2 tailed)	11.7448**	2.9736*	2.1653*	
	N	5	5	5	5

*Correlation is insignificance at 5% level for two tailed t-test

**Correlation is significance at 5% level for two tailed test

Source: Appendix-II

Table 4.6 presents the correlation matrix of NABIL. The following correlations are highlighted. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between EPS with DPS, MPS, and BVPS with the coefficient of 0.9616, 0.9351 and 0.9893 respectively. It means there is strong positive relationship between EPS with DPS, MPS and BVPS. On the other hand correlation between MPS with EPS, DPS and BVPS are 0.9351, 0.9487 and 0.7809 respectively. There is also strong positive relationship between MPS with EPS, DPS and BVPS. The simple correlation analysis revealed that the MPS is positively correlated with the independent variables DPS, BVPS and EPS which indicates that on increasing DPS, BVPS and EPS, MPS also increases and vice versa. In the test of hypothesis of NABIL there is significant relation between DPS with EPS, MPS with EPS, MPS with DPS and EPS with BVPS. In this case there is calculated t-value is higher than critical t-value, it means the correlation between MPS, DPS, EPS and BVPS is significant.

4.2.3 Correlation Analysis of EBL

Table 4.7

Correlation Coefficient and t-statistic of sum of variables of EBL,

		EPS	DPS	MPS	BVPS
EPS	Pearson Cor. (r)	1	0.4296	0.1129	0.9585
	Sig. (2 tailed)		0.8240*	0.1968*	5.8233**
	N	5	5	5	5
DPS	Pearson Cor. (r)	0.4296	1	0.7423	0.6155
	Sig. (2 tailed)	0.8240*		1.9188*	1.3527*
	N	5	5	5	5
MPS	Pearson Cor. (r)	0.1129	0.7423	1	0.3772
	Sig. (2 tailed)	0.1968*	1.9188*		0.7054*
	N	5	5	5	5
BVPS	Pearson Cor. (r)	0.9585	0.6155	0.3772	1
	Sig. (2 tailed)	5.8233**	1.3527*	0.7054*	
	N	5	5	5	5

*Correlation is insignificant at 5% level for two tailed t-test

**Correlation is significant at 5% level for two tailed test

Source: Appendix-II

Table 4.7 shows the correlation matrix of EBL. The following correlations are highlighted. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between MPS with EPS, DPS, and BVPS with the coefficient of 0.1129, 0.7423 and 0.3772 respectively. It means there is strong positive relationship between MPS and DPS; on the other hand there is low degree of positive relationship between MPS with EPS and BVPS. Likewise the correlation between EPS with DPS and BVPS are 0.4296 and 0.9585. It means there is strong positive relationship between EPS and BVPS. While EPS and DPS there is low degree of positive relationship.

By testing hypothesis, the simple correlation of coefficients of EPS, DPS and BVPS with MPS are not significant at 5 percent level of significance (95 confidence level) for two tailed test. Likewise there is significant relationship between MPS with EPS. There is significant relationship between EPS and BVPS, there is critical value $t_{0.05,3}$ 3.182 is lower than calculated value 5.8233. Hence we conclude that the correlation between EPS and BVPS in the population is significant.

4.2.4 Correlation Analysis of HBL

Table 4.8

Correlation Coefficient and t-statistic of sum of variables of HBL,

		EPS	DPS	MPS	BVPS
EPS	Pearson Cor. (r)	1	0.8507	0.8854	0.7180
	Sig. (2 tailed)		2.8031*	3.2992**	1.7867*
	N	5	5	5	5
DPS	Pearson Cor. (r)	0.8507	1	0.9130	0.6840
	Sig. (2 tailed)	2.8031*		3.8763**	1.6241*
	N	5	5	5	5
MPS	Pearson Cor. (r)	0.8854	0.9130	1	0.9031
	Sig. (2 tailed)	3.2992**	3.8763**		3.6248**
	N	5	5	5	5
BVPS	Pearson Cor. (r)	0.7180	0.6840	0.9031	1
	Sig. (2 tailed)	1.7867*	1.6241*	3.6248**	
	N	5	5	5	5

*Correlation is insignificant at 5% level for two tailed t-test

**Correlation is significant at 5% level for two tailed test

Source: Appendix-II

Table 4.8 shows the correlation matrix of HBL. The following correlations are highlighted. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between MPS with EPS, DPS, and BVPS with the coefficient of 0.8854, 0.9130 and 0.9031 respectively. It means there is strong positive relationship between MPS with EPS, DPS and BVPS. On the other hand there is also positive relationship between DPS with EPS and BVPS and also EPS with DPS and MPS. It means there is strong positive relationship between EPS and BVPS.

By testing hypothesis, the simple correlation of coefficients of EPS, DPS and BVPS with MPS are significant at 5 percent level of significance (95 confidence level) for two tailed test. Likewise there is insignificant relationship between EPS with DPS and BVPS and DPS with BVPS. There is significant relationship between EPS and MPS, there is critical value $t_{0.05,3}$ 3.182 is lower than calculated value 3.2992. Hence we conclude that the correlation between EPS and MPS in the population is significant.

4.2.5 Correlation Analysis of BOK

Table 4.9

Correlation Coefficient and t-statistic of sum of variables of BOK,

		EPS	DPS	MPS	BVPS
EPS	Pearson Cor. (r)	1	0.7968	0.8985	0.9798
	Sig. (2 tailed)		2.2840*	3.9003**	8.4862**
	N	5	5	5	5
DPS	Pearson Cor. (r)	0.7968	1	0.5003	0.8705
	Sig. (2 tailed)	2.2840*		1.0008*	3.0635*
	N	5	5	5	5
MPS	Pearson Cor. (r)	0.8985	0.5003	1	0.8036
	Sig. (2 tailed)	3.9003**	1.0008*		2.3386*
	N	5	5	5	5
BVPS	Pearson Cor. (r)	0.9798	0.8705	0.8036	1
	Sig. (2 tailed)	8.4862**	3.0635*	2.3386*	
	N	5	5	5	5

*Correlation is insignificance at 5% level for two tailed t-test

**Correlation is significance at 5% level for two tailed test

Source: Appendix-II

Table 4.9 presents the correlation matrix of BOK. The following correlations are highlighted. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between EPS with DPS, MPS, and BVPS with the coefficient of 0.7968, 0.8985 and 0.9798 respectively. The interesting correlation prevails between the EPS with BVPS is 0.9798. Here, the correlation between DPS and MPS is moderate but in positive. Likewise, the correlation between BVPS and MPS is 0.8036. Thus, it concludes that the simple correlation analysis revealed that the MPS is positively correlated with all the independent variables (i.e. DPS, BVPS & EPS) which indicates that on increasing DPS, BVPS and EPS, MPS also increases and vice versa. MPS is more correlated to EPS than the DPS and BVPS.

Even though, the MPS is affected by DPS, BVPS and EPS, the degree of correlation are not significant MPS with BVPS and DPS, at 5% significance for two tailed test at 3 degree of freedom for t-test. By testing hypothesis, the simple correlation of coefficients of EPS with MPS and BVPS are significant at 5 percent level of significance (95 confidence level) for two tailed test.

In the context of significant relationship between MPS with EPS since the calculated value of t (3.9003) is higher than tabulated t at 5% significance level at 3 degree of freedom (3.182) for two tailed test. Since, the calculated value of ' t ' is higher than tabulated t it concludes that there is significance relationship between MPS and EPS. Likewise, there is insignificant relation between MPS and BVPS since the calculated value of t (2.2.386) is less than tabulated t at 5% significance level at 3 degree of freedom (3.182) for two tailed test. Likewise, there is significance relationship between EPS and BVPS since the calculated value of ' t ' (8.4862) is greater than tabulated t (3.183) for two tailed test at 3 degree of freedom.

Finally the firms MPS, are performing strongly in a bull market, it passes a optimistic message to the general investors who tend to invest more in the market and firms. On the other hand without having any productive and profitable investment project in hand no firm will be able to influence its share prices in the market. So, EPS with BVPS are also significance and rise in positive way. Likewise, increasing MPS gives the positive message to the investors the company/firm is in profit and capable to give the dividend and leads to increase price earnings ratio also. Company future growth, earning, earning power, level of risk etc. are reflected in market price of the security. Therefore, common stock's price fluctuates widely. Market value per share is expected to be higher than the book value and liquidation value per share for profitable and growing firms. Statistically in significant relationship makes little sense. One cannot draw inference from a statistically in significant result, so this study has avoided to draw inferences based on these results.

4.3 Regression Analysis

Regression is the statistical tool, with the help of which we can predict the unknown value of one variable from known value of any other variable. Regression analysis is a branch of statistical theory that is widely used in almost all the scientific disciplines. One of the most frequently used techniques in economics and business research, to find a relation between two or more variables that are related casually is regression analysis. Here we find out the relationship to the MPS with EPS, DPS and BVPS, to analyze the share price. To analyze the relationship between EPS, DPS and BVPS to MPS, it is assumed that the market price of share

changes with the changes in EPS, DPS and BVPS. So, MPS is the dependent variable; whereas BVPS, EPS & DPS are independent variables. Here in this section, relationship of EPS, DPS & BVPS with MPS is determined separately to each of the sampled listed companies. 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.

4.3.1 Simple Regression Analysis

1. MPS on EPS

Table 4.10

Regression Coefficient

Bank	Regression Constant (a)	Regression Coefficient (b)	R^2
SCBNL	37.997	0.01538	0.6643
NABIL	52.7045	0.01359	0.8744
EBL	87.7172	0.00139	0.0127
HBL	25.9855	0.01917	0.7839
BOK	35.8010	0.009548	0.8073

Source Appendix III

Table 4.10 shows the simple regression analysis between MPS and EPS of selected commercial banks. The correlation of MPS and EPS of all banks are positive. The regression coefficient of SCBNL, NABIL, EBL, HBL and BOK are 0.01538, 0.01359, 0.00139, 0.01917 and 0.009548 respectively. It indicates that holding other variable constant one rupee increase in EPS leads to an average of about Rs 0.01538, 0.01359, 0.00139, 0.01917 and 0.009548 increases in stock price of SCBNL, NABIL, EBL, HBL and BOK respectively.

The coefficient of multiple determinations is 0.6643, 0.8744, 0.0127, 0.7839 and 0.8073 of SCBNL, NABIL, EBL, HBL and BOK respectively. The R^2 of EBL is lowest among other banks. It indicates that 0.0127 or there is no variation in MPS is explained by EPS. This value is highest in case of NABIL, which indicates that 87.44% variation in MPS explained due to change in EPS of the bank. Similarly 66.43%, 78.39 and 80.73% variation in MPS is explained due to change in EPS of SCBNL, HBL and BOK respectively. It can be concluded that the MPS of these bank is highly affected by EPS except EBL.

The value of constant (a) is 37.997, 52.7045, 87.7172, 25.9855 and 5.8010 of SCBNL, NABIL, EBL, HBL and BOK respectively. The values of constant of all banks are positive. This shows that MPS of these all banks are highly affected by other factors besides the EPS of the banks.

2. MPS on DPS

Table 4.11

Regression Coefficient

Bank	Regression Constant (a)	Regression Coefficient (b)	R^2
SCBNL	19.998	0.0159	0.90003
NABIL	281.1704	0.014514	0.72846
EBL	8.0367	0.00836	0.55101
HBL	32.9819	0.0054	0.83356
BOK	24.5772	0.00737	0.25030

Source Appendix III

Table 4.11 shows the simple regression of MPS on DPS of selected commercial banks. The correlation of all bank are positive and regression coefficient of SCBNL, NABIL, EBL, HBL and BOK is 0.0159, 0.014514, 0.00836, 0.0054 and 0.00737 respectively. It indicates that holding other variable constant, one rupee increase in DPS leads to an average about Rs 0.0159, 0.014514, 0.00836, 0.0054 and 0.00737 increases in stock price of SCBNL, NABIL, EBL, HBL and BOK respectively.

The value of constant (a) is 19.998, 281.1704, 8.0367, 32.9819 and 24.5772 of SCBNL, NABIL, EBL, HBL and BOK respectively. The regression constant of all banks are positive. This shows that MPS of these all banks are highly affected by other factors besides the DPS of the banks.

The coefficient of determination of SCBNL, NABIL, EBL, HBL and BOK is 0.90003, 0.72846, 0.55101, 0.83356 and 0.25030 respectively. This means 90.003%, 72.846%, 55.101%, 83.356% and 25.030% variation in MPS of SCBNL, NABIL, EBL, HBL and BOK respectively are explained by the change in DPS of the respective bank.

3. MPS on BVPS

Table 4.12

Regression Coefficient

Bank	Regression Constant (a)	Regression Coefficient (b)	R^2
SCBNL	153.538	0.04336	0.6098
NABIL	18.2356	0.01877	0.8053

EBL	281.704	0.01451	0.1422
HBL	187.8221	-0.03735	0.8156
BOK	152.5315	0.02664	0.6458

Source Appendix III

The table 4.12 shows the simple regression analysis between MPS and BVPS of selected commercial banks. The regression coefficient of SCBNL, NABIL, EBL, HBL and BOK are 0.04336, 0.01877, 0.01451, -0.03735 and 0.02664 respectively. It indicates that holding other variables constant one-rupee increase in BVPS leads to an average of about Rs 0.04336, 0.01877, 0.01451 and 0.02664 increase in MPS in case of SCBNL, NABIL, EBL and BOK and average about Rs 0.03735 decrease in MPS in case of HBL.

The coefficient of multiple determinations (R^2) of SCBNL, NABIL, EBL, HBL and BOK are 0.6098, 0.8053, 0.1422, 0.8156 and 0.6458 respectively. The R^2 of EBL is lowest and HBL has the highest among the sample banks. It indicates that the variation of MPS 60.98%, 80.53%, 14.22%, 81.56% and 64.58% are explained by the variation in BVPS of respective banks.

The value of constant (a) is 153.538, 18.2356, 281.704, 187.8221 and 152.5315 of SCBNL, NABIL, EBL, HBL and BOK respectively. The value of constant of EBL shows that MPS of respective bank is highly affected by other factor besides BVPS of the bank. The result shows that other banks MPS are also affected by other factor beside BVPS.

4.3.2 Multiple Regression Analysis

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

Where,

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

Regression equation:

Table 4.13

Multiple Regression Analysis of MPS on EPS and DPS

Bank	Regression Constant (a)	Regression Coefficient	
		b_1	b_2
SCBNL	5619.029	23.3744	81.0577
NABIL	4893.029	20.7458	72.057

EBL	4683.079	20.688	66.157
HBL	4793.029	19.458	68.037
BOK	4659.029	18.758	60.057

Sources: Appendix –IV

The table 4.13 shows the result of multiple regression analysis of selected commercial banks, which MPS depends on EPS and DPS. As far as regression coefficient is concerned the beta coefficient b1 for EPS and b2 for DPS.

Under the study of SCBNL, the equation implies that the multiple regression constant (a) is 5619.029 which suggest that when DPS and EPS are zero, MPS would be 5619.029. The constant for DPS is 23.3774 implies that when Dividend Per Share increases by Rs. 1, Market Price Per Share increases by Rs. 23.37, and the constant for EPS is 81.0577, implies that when EPS increases by RS. 1, MPS increases by Rs.81.06 and vice versa, remaining intervening variables constant.

In the study of NABIL, the equation implies that the multiple regression constant (a) is 4893.029 which suggest that when DPS and EPS are zero, MPS would be 4893.029. The constant for DPS is 20.7458 implies that when Dividend Per Share increases by Rs. 1, Market Price Per Share increases by Rs. 20.75, and the constant for EPS is 72.057, implies that when EPS increases by RS. 1, MPS increases by Rs.72.057 and vice versa, remaining intervening variables constant.

Similarly the study of EBL, The equation implies that the multiple regression constant (a) is 4683.079 which suggest that when DPS and EPS are zero, MPS would be 4683.079. The constant for DPS is 20.688 implies that when Dividend Per Share increases by Rs. 1, Market Price Per Share increases by Rs. 20.688, and the constant for EPS is 66.157, implies that when EPS increases by RS. 1, MPS increases by Rs.66.157 and vice versa, remaining intervening variables constant.

Under the study of HBL the equation implies that the multiple regression constant (a) is 4793.029 which suggest that when DPS and EPS are zero, MPS would be 4793.029. The constant for DPS is 19.458 implies that when Dividend Per Share increases by Rs. 1, Market Price Per Share increases by Rs. 19.458, and the constant for EPS is 68.037, implies that when EPS increases by RS. 1, MPS increases by Rs.68.037 and vice versa, remaining intervening variables constant.

The study of BOK the equation implies that the multiple regression constant (a) is 4659.029 which suggest that when DPS and EPS are zero, MPS would be 4659.029. The constant for DPS is 18.758 implies that when Dividend Per Share increases by Rs. 1, Market Price Per Share increases by Rs. 18.75, and the constant for EPS is 60.057, implies that when EPS increases by RS. 1, MPS increases by Rs.60.05 and vice versa, remaining intervening variables constant.

4.4 Primary Data Analysis

This thesis involves primary data also which were collected through questionnaire. During the course of collecting primary data, the researcher visited the private commercial banks, NEPSE, SEBON as well as security brokers. Categorically, Yes, No question, multiple choice and Open End question are taken.

4.4.9 Investor's decision making to invest in shares in the secondary market

For the primary analysis, investor's decision making to invest in shares mostly in the securities market is clear from the following table 4.14 and figure 4.5

Table 4.14

Investor's decision making to invest in shares in the secondary market

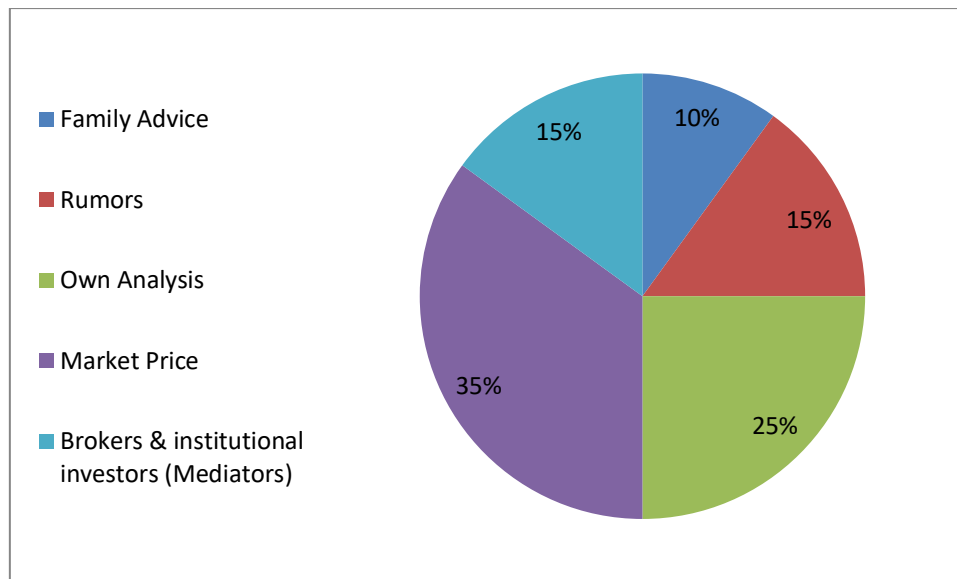
S.N	Variables	No of Response	(%)aggregate
A	Family Advice	6	10.00
B	Rumors	9	15.00
C	Own Analysis	15	25.00
D	Market Price	21	35.00
E	Brokers & institutional investors (Mediators)	9	15.00
Total		60	100

Source: Field survey 2012

From the above table 4.14 and figure 4.5 Indicates the primary responses through questionnaire. It is found that Investor's decision making to invest in shares in the secondary market is highly affected by market price which is 35% out of 60 respondents. Likewise, Investor's decision making to invest in shares in the secondary market is affected by family advice, rumors; own analysis and brokers and institutions are 10%, 15%, 25%, and 15% respectively.

Figure 4.5

Investor's decision making to invest in shares in the secondary market



4.4.10 What are the factors affecting the determinants of stock price?

Table 4.15 shows the responses against the factors affecting the determinants of stock price.

Table 4.15

Factor affecting the determinant of Stock price

S.N	Variables	No of Response	(%)aggregate
A	Brokering influence	9	15.00
B	Status of profit & loss of listed company	30	50.00
C	Regular holding of general meeting	6	10.00
D	Dividend declaration	12	20.00
E	Risk Factor on share price	3	5.00
Total		60	100

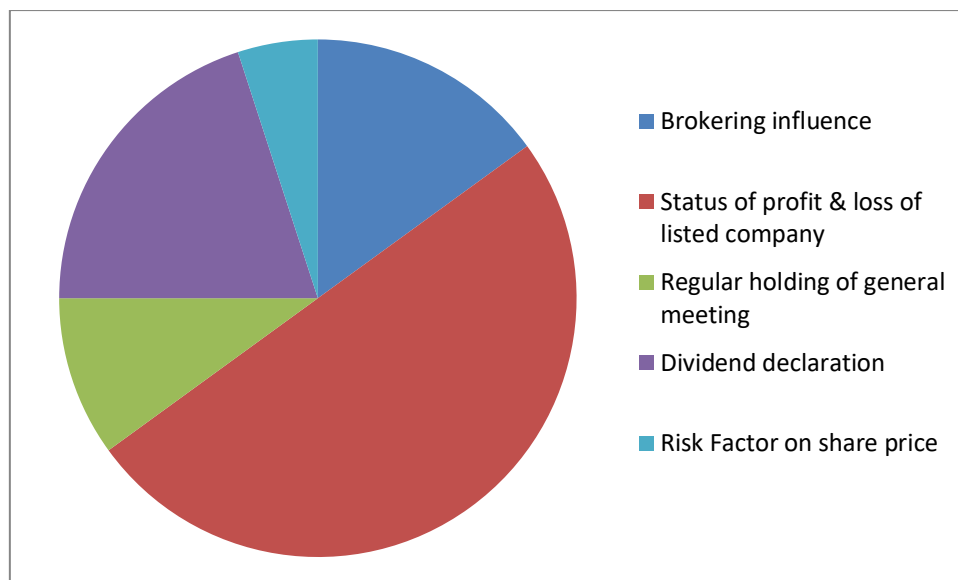
Source: Field survey 2012

Out of 60 respondents, it is found that 15 percent of the respondents were said that (S.P) Stock price affected by brokering service, 50 percent of the respondents were said that Stock price is affected by status of profit and loss of listed companies, 10 percent of the respondents

were said that S.P affect by regular holding of general meeting, 20 percent of the respondents were said that S.P affect by dividend declaration, 5 percent of the respondents were said that S.P affect by risk factor on the share price. It is more clear from the following table 4.15 and 4.6

Figure 4.6

Factor affecting the determinant of Stock price



3) **4.4.3 What is the reason for owing the share of listed companies?**

Table 4.16

Reasons for owing the share of the company

S.N	Variables	No of Response	(%)aggregate
a	Regular Income	33	55.00
b	Social status	12	20.00
c	Trading or short sell	12	20.00
d	All of above	3	5.00
Total		60	100

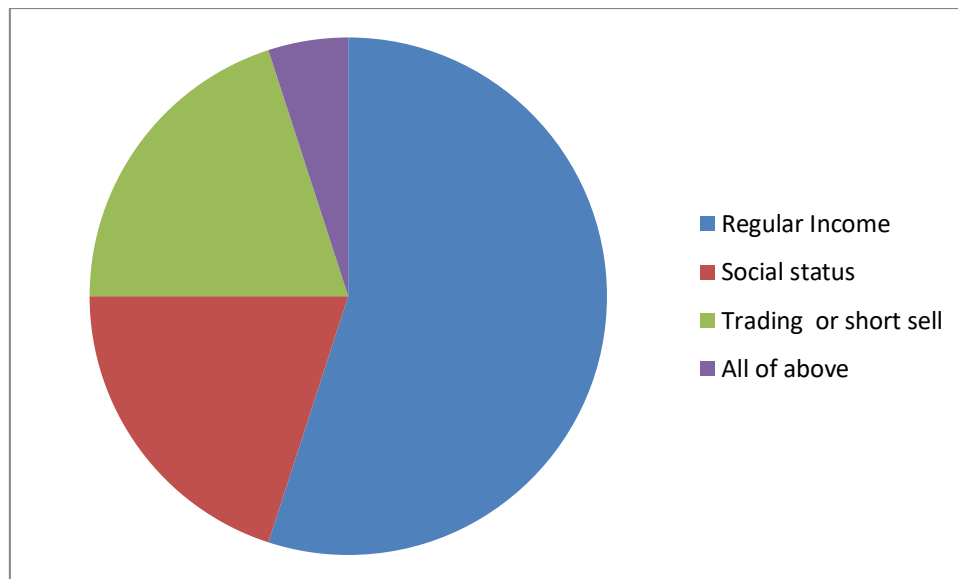
Source: Field survey 2012

Different parties were asked their interest for owing the share of the company if they were

interested with income, social status, and marketing and above all. Out of 60 respondents, it is found that 20 percent of the investor said as social status, 55 percent of the income, 20 percent of the investor said as trading or short sell and 5 percent of the investor as above all. Above table 4.16 and following figure 4.7 represents the clear picture of above analysis.

Figure 4.7

Factor affecting the determinant of Stock price



4.4.4 Which is the following factors, in your opinion, is the most important factor to select securities to invest in?

Table 4.17

The most important factor to select securities to invest

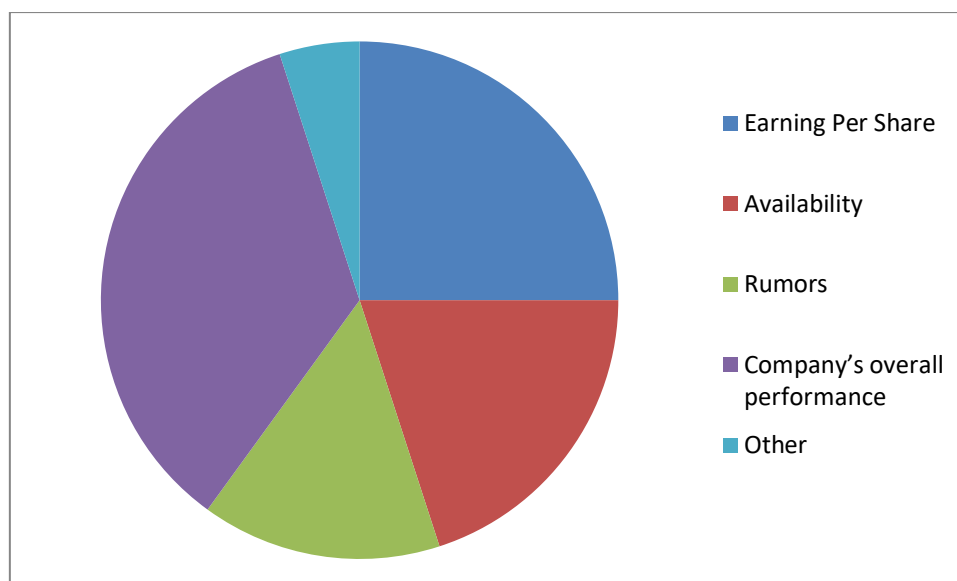
S.N	Variables	No of Response	(%)aggregate
a	Earning Per Share	15	25.00
b	Availability	12	20.00
c	Rumors	9	15.00
d	Company's overall performance	21	35.00
e	Other	3	5.00
Total		60	100

Source: Field survey 2012

Out of 60 respondents, it is found that 25 percent of the investor said as Earning, 20 percent of Availability, 15 percent of the investor said as rumor and 35 percent of the investor as Company's overall performance and 5 percent of the investor as other. Following table 4.17 and figure 4.8 represents more clear of above analysis.

Figure 4.8

The most important factor to select securities to invest



4.4.5 Responsible for hike of stock pricing

Table 4.18

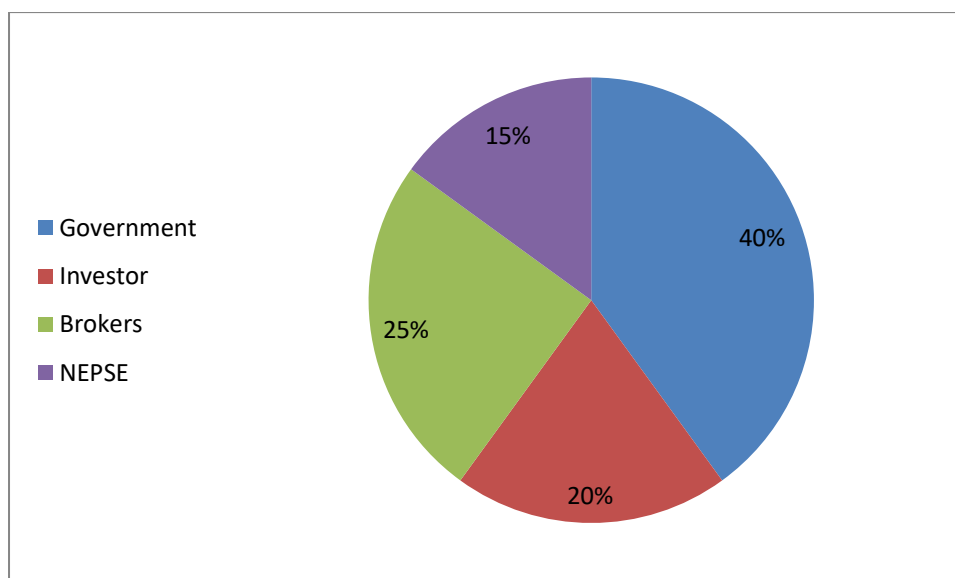
Responsible for hike of stock pricing

S.N	Variables	No of Response	(%)aggregate
a	Government	24	40.00
b	Investor	12	20.00
c	Brokers	15	25.00
d	NEPSE	9	15.00
Total		60	100

Source: Field survey 2012

Out of 60 respondents, it is found that 40 percent said as government, 20 percent of investor, 25 percent said as brokers and 15 percent as NEPSE. Following table 4.18 and figure 4.9 represents more clear of above analysis

Figure 4.9
Responsible for hike of stock pricing



4.4.6 In which sector's share do you like to invest most?

Table 4.19
Sector for investment point of view

S.N	Variables	No of Response	(%)aggregate
a	Banking and financial institutions	42	70.00
b	Insurance	3	5.00
c	Hotels	2	3.00
d	Manufacturing and Processing	3	5.00
e	Trading	1	2.00
f	Other	9	15.00
Total		60	100

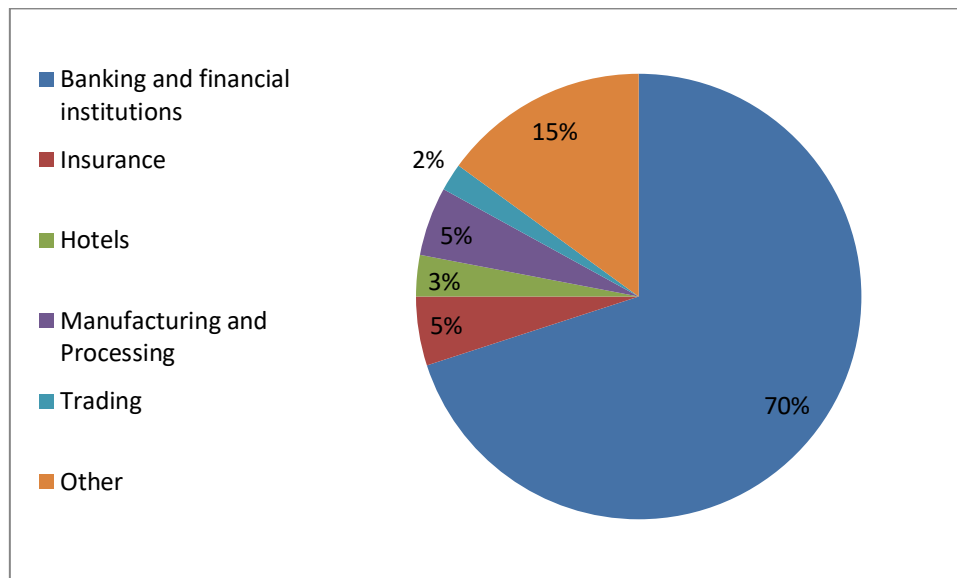
Source: Field survey 2012

Regarding the sector of investment the investors are asked whether the investor are interested in which sector they are interested to invest, 70 percent of the investor are interested with banking and financial sector, 5 percent in manufacturing & processing sector, 3 percent in

hotels, 5 percent in Insurance, 2 percent in trading sector, 15 percent other sector out of 60 respondents. The above table 4.19 and following figure 4.10 present the clear picture:

Figure 4.10

Sector for investment point of view



4.4.7 What are the factors that affect, while analyzing the stock of particular company?

Table 4.20

Factors that affect while analyzing the stock of particular company

S.N	Variables	No of Response	(%)aggregate
a	Analyzing the stock management	12	20.00
b	Regular payment dividend	18	30.00
c	Signaling affect	15	25.00
d	Growth of company	12	20.00
e	Scope of the company	3	5.00
Total		60	100

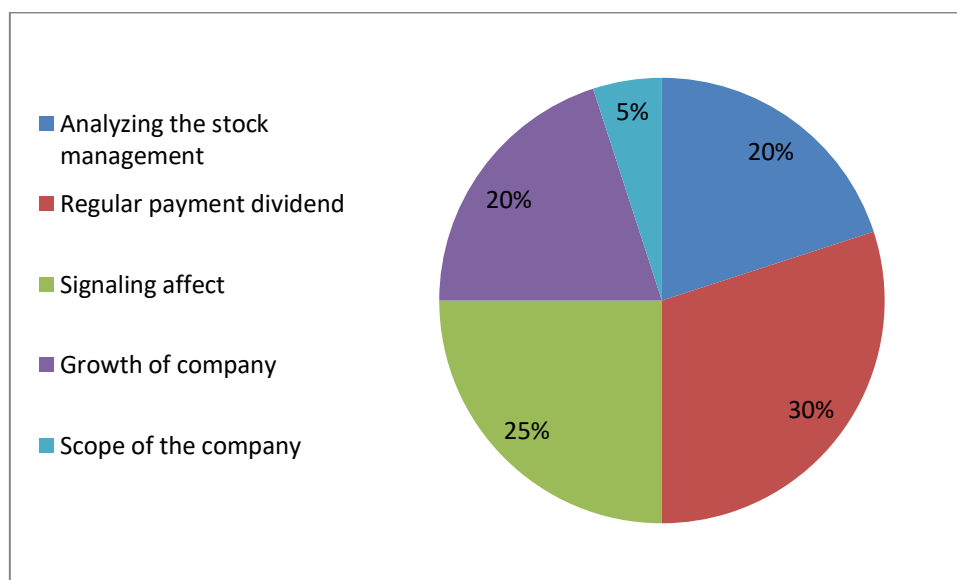
Source: Field survey 2012

The responses of the respondents for this question is 20 percent is said that to analyze Stock management is essential factor, 30 percent said that regular dividend payment is essential, 25 percent said signaling factor affect it, 20 percent said that it was affected by

growth of the company, 5 percent said that it was affected by size or scope of the company. The above table 4.20 and following figure 4.11 present the facts more clearly.

Figure 4.11

Sector for investment point of view



4.4.8 Environmental factors that affect the price of share

Table 4.21

Environmental factors that affect the price of share

S.N	Variables	No of Response	(%)aggregate
a	Political scenario	33	55.00
b	Companies reports & market trend	18	30.00
c	Economic	8	13.00
d	International	1	2.00
Total		60	100

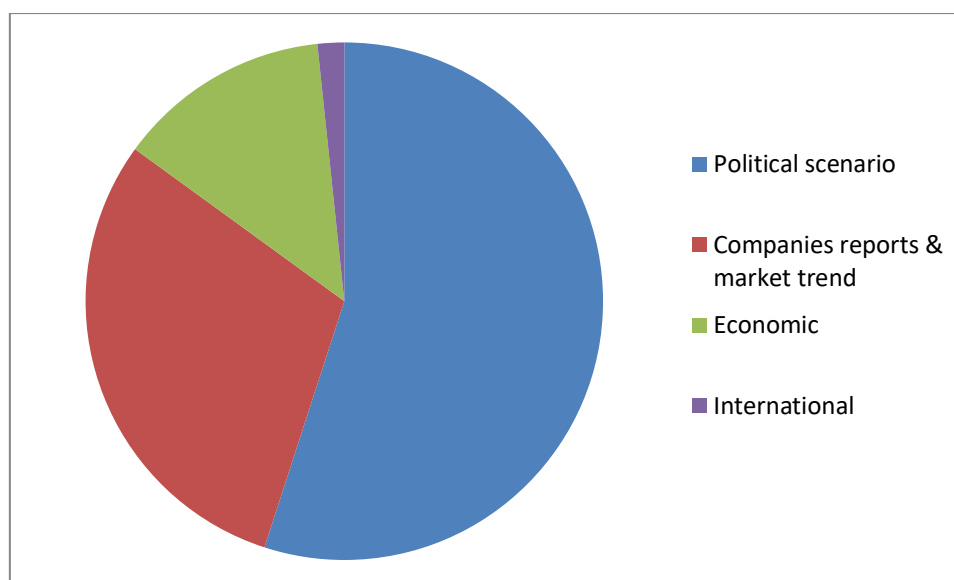
Source: Field survey 2012

About the environmental factors that affect the Nepalese stock market or not, different individual investors, institutional investors, brokers, NEPSE staff and SEBON staff gave their own idea, among 60 respondents, mostly 55 percent is affected by political, 30 percent companies reports & market trend, 13 percent economic, and 2 percent international causes.

It is clearer from the above table 4.21 and following figure 4.12

Figure 4.12

Environmental factors that affect the price of share



4.4.9 Investors awareness in the Nepalese stock market

Table 4.22

Investors Awareness Analysis

S.N	Variables	No of Response	(%)aggregate
a	Aware	15	25.00
b	Not aware	39	65.00
c	Don't know	9	15.00
Total		60	100

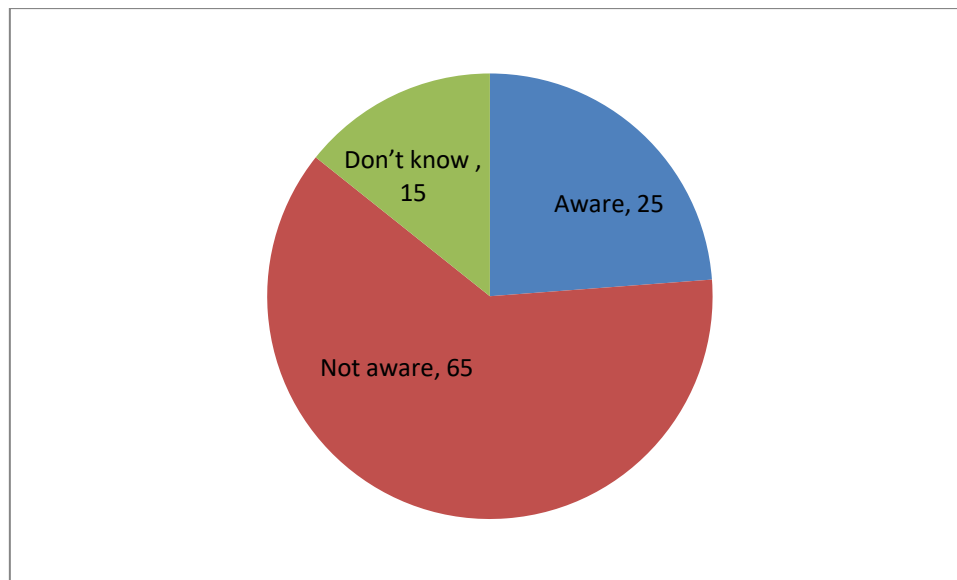
Source: Field survey 2012

In this question the investors whether they are aware or not in the Nepalese stock market most of them i.e. 25 percent replied that they are aware about this, 60 percent replied that they are not, 15 percent doesn't know about this. Regarding the awareness most of the investors said that they were not familiar with stock market, brokers, trading mechanism.

The following 4.22 and figure 4.13 depicts the facts more clearly.

Figure 4.13

Investors Awareness Analysis



4.5 Major Findings of the study

In this study both of the primary as well as secondary data are analyzed. The researcher, with the help of research questionnaire, gathered primary data which helped to identify the pricing behavior of listed companies. Similarly, with the help of secondary data, the relationship of market price per share with dividend, earning as well as book value was determined. Here, the empirical findings from both of the secondary as well as primary data analysis are presented separately below:

4.5.1 Findings of Secondary Data Analysis

The analysis of secondary data of listed commercial banks i.e. sample of five commercial banks gives the following results:

- The average MPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.4763, 3772, 2148, 1374 and 1392 respectively. In the comparative analysis of MPS of these banks, MPS of SCBNL is higher than other four banks in an average. This indicates that the

effective performance of SCBNL regarding the MPS.

- In the consistency of statistical measurement, SCBNL's CV is higher than EBL which indicates the riskier than EBL i.e. moderate risk. HBL has the lowest i.e. Rs.1374 MPS that means its performance is not good as compared to four other sample banks. C.V. of EBL is lowest i.e. 0.3306 or 33.06% among the sample banks which shows the consistency in MPS i.e. it has lower risk in fluctuation of MPS. Similarly the C.V. of BOK is highest than other which indicates that BOK's MPS was more fluctuated than other sample banks. MPS of all sample banks are bullish trend in the fiscal year 2007/08.
- The average EPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.111.28, 104.17, 90.71, 52.34 and 49.14 respectively. In the comparative analysis, the average EPS of SCBNL is higher than other four sample bank which is Rs.111.28. among the sample banks, the EPS of BOK was lowest which Rs.49.14. EPS of SCBNL and NABIL is decreasing trends. On the other hand the EPS of EBL, HBL and BOK are volatile during the five year period.
- The coefficient of variance of EPS of EBL is lower than other four banks. It means the EBL has more consistency in EPS, i.e. 0.0966 or 9.66%. On the other hand the C.V. of SCBNL has highest which is 0.3227 or 32.27%. The volatile of SCBNL is also the cause of highest MPS which leads to also change in earning price of share.
- The average EPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.111.28, 104.17, 90.71, 52.34 and 49.14 respectively. In the comparative analysis, the average EPS of SCBNL is higher than other four sample bank which is Rs.111.28.
- Among the sample banks, the EPS of BOK was lowest which Rs.49.14. EPS of SCBNL and NABIL is decreasing trends. On the other hand the EPS of EBL, HBL and BOK are fluctuated trend over the five year period. The coefficient of variance of EPS of EBL is lower than that of other four banks. It means the EBL has more consistency in EPS, i.e. 0.0966 or 9.66%. On the other hand the C.V. of SCBNL has highest which is 0.3227 or 32.27%.
- During the study period, the average BVPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.342.11, 317.2, 311.55, 239.15 and 189.61 respectively. In the comparative analysis, SCBNL has the highest BVPS and BOK has lowest which is Rs.342.11 and 189.61 respectively. The BVPS of SCBNL is highest the cause of this is also reflected by highest market price and paying more dividend to its investor.

- C.V. of EBL is 0.0877 or 8.77%, which indicates that there is more consistency or less fluctuation in BVPS during the study period. On the other hand, SCBNL has highest BVPS which is 0.3088 or 30.88%. this is also the cause of fluctuation of MPS. However the CV of NABIL, HBL and BOK is 0.2128 or 21.28%, 0.0978 or 9.78% and 0.1129 or 11.29% respectively.
- Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between EPS with DPS, MPS, and BVPS with the coefficient of 0.7341, 0.9174 and 0.9627 respectively. The interesting correlation prevails between the DPS with MPS and BVPS is 0.9281 and 0.6417. Here, the correlation between DPS and MVPS is moderate but in positive. Likewise, the correlation between BVPS and MPS is 0.8408. Thus, it concludes that the simple correlation analysis revealed that the MPS is positively correlated with all the independent variables (i.e. DPS, BVPS & EPS) which indicates that on increasing DPS, BVPS and EPS, MPS also increases and vice versa. MPS is more correlated to EPS than the DPS and BVPS.
- By testing t-statistic, MPS is affected by DPS, BVPS and EPS, the degree of correlation are not significant MPS with BVPS, EPS with DPS and DPS with at 5% significance for two tailed test at 3 degree of freedom for t-test. By testing hypothesis, the simple correlation of coefficients of EPS with MPS and BVPS are significant at 5 percent level of significance (95 confidence level) for two tailed test.

4.5.2 Findings of Primary Data Analysis

Analyzing the primary data, following result ate revealed:

- Investor's decision making to invest in shares in the secondary market is highly affected by market price which is 35% out of 60 respondents. Likewise, Investor's decision making to invest in shares in the secondary market is affected by family advice, rumors; own analysis and brokers and institutions are 10%, 15%, 25%, and 15% respectively.
- Out of 60 respondents, it is found that mostly 50 percent of the respondents were said that Stock price is affected by status of profit and loss of listed companies and only few 5 percent of the respondents were said that S.P affect by risk factor.
- Investor's interest for owing the share of the company if they were interested with regular income, social status, and marketing and above all. Out of 60 respondents, it is found that mostly 55 percent owing the share of the company is affected through

income.

- Investor is mostly interest in securities with Company's overall performance.
- Pricing of stock are mostly affected by government policy which is 45 percent.
- Regarding the sector of investment, 70 percent of the investors are interested with banking and financial sector and only few 2 percent in trading sector, out of 60 respondents.
- Regarding the other factors, mostly 30 percent said that regular dividend payment is essential which affect the share price.
- About the environmental factors mostly 55 percent is affected by political scenario, 30 percent companies reports & market trend, 13 percent economic, and 2 percent international causes.
- Regarding the awareness most of the investors said that they were not familiar with stock market, brokers, trading mechanism.
- Many of the investors said that there are many difficulties while trading share in Nepalese market lowering the BVPS doesn't higher the share price it was found while analyzing primary data.
- No, the listed companies are not making available information related to the performance and future planning on time and appropriately it was found while analyzing the primary data.

CHAPTER – V

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

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

5.1 Summary

Financial market is the place where the instrument like share, debenture, and bond are traded. There are two types of financial market capital market and money market. The history of securities market began with the floatation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Introduction of the Company Act in 1964, the first issuance of Government Bond in 1964 and the establishment of Securities Exchange Centre Ltd. in 1976 were other significant development relating to capital markets.

Security exchange center was established on 26 may 1993 with the objectives of promoting and protecting the interest of investors by regulating the securities market. It also has responsibility for development of securities market in the country. Before conversion into stock exchange it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services.

The securities market plays a strong role in bringing into contact the firm and the individuals. So it can be said that the confidence of the public depends heavily on the functioning and the implementation of regulations of SEBON. Securities Board Nepal is the regulatory body of Nepalese stock market. Stock Exchange Limited is the trading body. Before going to the public, the company must be approved from SEBON. After getting approval, issuing company must give its information to the Nepal stock Exchange Limited and Company Register's Office.

Nepal Government, under a program initiated to reform capital markets converted Securities Exchange Centre into Nepal Stock Exchange in 1993. Nepal Stock Exchange, in short NEPSE, is a non-profit organization, operating under Securities Exchange Act, 1983.

The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through member, market intermediaries, such as broker, market makers etc. NEPSE opened its trading floor on 13th January 1994. is Majesty's Government Nepal Rastra Bank Nepal industrial Development Corporation and members are the shareholders of the NEPSE.

Nepalese capital market is still in primary stage. Most of the citizens are not aware of the basic knowledge regarding security market. It is concentrated only in urban area only. As a result they have not been able to make investment and if even invested; are being exploited in the absence of proper knowledge. In spite of poor condition of the security market in Nepal, government of Nepal has not given priority in its current tenth five year plan. Government has not been able to create basic infrastructures, sound policies and laws and their effective implementation, for the capital market development. As a result, there is not transparency in the performance of the listed companies and the capital market due to which capital market is struggling to mature. Existing economic imbalance, political instability, ineffective implementation of liberal economic policy of the country have generated negative symbols in the economy. After the restoration of democracy in 1990, NG initiated privatization and economic liberalization, the industrial development as well as the capital market development process took a pace.

The main objective of research is to identify the pricing behavior of common stock of some listed Nepalese commercial banks in NEPSE. By this Determinant of stock price in Nepalese capital market is also known. The research methodology includes research Design, Population and Sampling, Source and Collection Techniques. In this research many financial and statistical tools were used.

To meet the desire objectives, the researcher identified the effect of quantitative and qualitative factors. The effect of quantitative factors, DPS, BVPS & EPS with MPS by correlation and regression analysis of secondary data, whereas, to identify the qualitative factors affecting the share price, the researcher used the questionnaire approach. On the one hand, from the secondary data analysis it is found that BVPS and EPS of SCBNL are in the decreasing trend from FY 2006/07 to 2010/01. DPS and EPS are also decreasing volatile with 33.33 percent coefficient of variation (CV) of EPS and 32.27 percent CV of DPS. The average MPS of SCBNL, NABIL, EBL, HBL and BOK is Rs.4763, 3772, 2148, 1374 and 1392 respectively. In the comparative analysis of MPS of these banks, MPS of SCBNL is higher than other four banks in an average. This indicates that the effective performance of SCBNL regarding the MPS. In the consistency of statistical measurement, SCBNL's CV is higher than EBL which indicates the riskier than EBL i.e. moderate risk. HBL has the lowest i.e. Rs.1374 MPS that means its performance is not good as compared to four other sample banks. C.V. of EBL is lowest i.e. 0.3306 or 33.06% which shows the consistency in MPS.

Similarly the C.V. of BOK is highest which means MPS was more fluctuated. MPS of all sample banks are bullish trend in the fiscal year 2007/08. In the comparative analysis, the average EPS of SCBNL is higher than other four sample bank which is Rs.111.28. among the sample banks, the EPS of BOK was lowest which Rs.49.14. EPS of SCBNL and NABIL is decreasing trends. On the other hand the EPS of EBL, HBL and BOK are volatile during the five year period. The coefficient of variance of EPS of EBL is lower than other four banks. The volatile of SCBNL is also the cause of highest MPS which leads to also change in earning price of share. Among the sample banks, the EPS of BOK was lowest which Rs.49.14. EPS of SCBNL and NABIL is decreasing trends. On the other hand the EPS of EBL, HBL and BOK are fluctuated trend over the five year period. The coefficient of variance of EPS of EBL is lower than that of other four banks. On the other hand the C.V. of SCBNL has highest which is 0.3227 or 32.27%. In the comparative analysis, SCBNL has the highest BVPS and BOK has lowest which is Rs.342.11 and 189.61 respectively. The BVPS of SCBNL is highest the cause of this is also reflected by highest market price and paying more dividend to its investor. C.V. of EBL is 0.0877 or 8.77%, which indicates that there is more consistency or less fluctuation in BVPS during the study period. However, SCBNL has highest BVPS which is 0.3088 or 30.88%. CV of NABIL, HBL and BOK is 0.2128 or 21.28%, 0.0978 or 9.78% and 0.1129 or 11.29% respectively. Obviously, there is the strong correlation between the various economic/financial market indicators like the correlation between EPS with DPS, MPS, and BVPS with the coefficient of 0.7341, 0.9174 and 0.9627 respectively. Likewise, the correlation between BVPS and MPS is 0.8408. Thus, it concludes that the simple correlation analysis revealed that the MPS is positively correlated with all the independent variables (i.e. DPS, BVPS & EPS) which indicates that on increasing DPS, BVPS and EPS, MPS also increases and vice versa. MPS is more correlated to EPS than the DPS and BVPS. By testing t-statistic, MPS is affected by DPS, BVPS and EPS, the degree of correlation are not significant MPS with BVPS, EPS with DPS and DPS with at 5% significance for two tailed test at 3 degree of freedom for t-test Whereas EPS with MPS and BVPS are significant at the same.

It is found that when BVPS, EPS, DPS increases MPS increases and vice versa. Besides DPS, BVPS, EPS there are several others qualitative factors which effect the share price.

Brokering service, status of profit and loss of the companies, size of the company, external and internal environmental factors, trend of stock price. Among other environmental factors affecting the share price are political stability, cease fire and peace talks, strikes/Banda, rumors and whims, national economy, demonstrations, demand and supply situations.

Even though DPS, BVPS & EPS affect the MPS positively, there are several other factors in the internal as well as external environment that affect the share price significantly.

Theoretically, when earnings, dividends and book value per share increases, the market price per share also increases and vice versa. But in case of NEPSE, this theory does not seem

to be true hundred percent meaning that there are various other factors too that affects the share price. While analyzing the effects of interest rate, retention ratio, stock dividend, cost of equity, tax rate, value of US \$ exchange rate, gold price, global economy, market liquidity, season, day of the week, size of the organization, change in the management etc, it is found that these factors have nominal effects on share price.

During the course of research work, it was understood that, there is not good regulatory mechanism in the NEPSE for the listed companies to protect shareholders interests. The listed companies other than banks and financial companies, are not able to conduct the AGM in time, submit their report to SEBON and give the detail information to the shareholders. Thus, it seems that, on the one hand, listed companies are not able to protect the shareholders interests properly and on the other hand, there is lack of effective implement rules and regulations.

Talking about the listed companies in the NEPSE, most of the companies are unable to meet organizational objectives. In the present context the only the satisfactory sector is banking and financial institutions, service industries and manufacturing industries are suffering loss due to unbalance political situation of our country.

5.2 Conclusion

Based on the above summary and findings of the research, the following conclusions have been drawn: Adequate knowledge and information regarding the capital market is lacking in Nepalese investors. This is precisely the reason why they are cheated by the concerned companies and the NEPSE shows rather irrational behavior. Most of the listed companies do not provide sufficient and timely information to NEPSE as well as their shareholders. And even the supplied information does not have similarity among NEPSE, Annual Report and their particular websites. Meaning that they try to attract potential investors by providing exaggerated information regarding their performances. From the secondary data analysis it is revealed that, pricing behavior differs company to company. Even though, DPS, BVPS and EPS jointly have significant effect on the share price, individually they do not have consistent relationship with MPS. Primary analysis also shows that there may be other major factors influencing and determining the share price significantly. Whereas analysis of primary data (from view point of respondents) summarizes, company performance (EPS, book value, DPS, risk), information disclosed, timely AGM, other political and economic factors such as political stability, national economy, peace, strikes/ bandhas, demand and supply situation of the share, cease-fire etc. are the some important factors having significance influence on the share price i.e. pricing behavior of listed companies.

Similarly, other relevant factors, interest rate, tax rate, seasonal factors, day of the week effect, gold price, global economy, value of US\$, cost of equity, market liquidity, size of the firm and change in management do not have significant effect. Due to poor rules and regulations as well as effective regularity mechanism, on the one hand, shareholders are not confident enough to invest in the share whereas on the other hand, capital market has not been growing as per expectation. Similarly, lack of political stability, peace has constrained the smooth development of security market.

The study concludes that the Nepalese stock market is in infancy stage. There is a gap between the theory and practice of investment in Nepalese stock market due to lack of proper study/analysis of stock market. Professionalism is lacking. In spite of the several constraints, the NEPSE has been growing gradually. The commercial banking sector is the best performer among the listed companies. Hence, one can't undermine the truth that with the presence of peace and political stability, the capital market gets far better soon.

5.3 Recommendations

Based on the research summary, finding and conclusions, the researcher has made the following recommendations:

- Perfect markets require that all information concerning future risks and returns of securities be readily available to all investors. Because of the lack of technical knowledge, majority of the investors is unable to analyze the available information. As such, a single buyer and a single seller can affect the price of securities. NEPSE has to insure listed companies relevant information. Similarly, NEPSE can expand its service to regional and local level so that it gives the equal opportunity to all the potential investors. NEPSE should monitor the activities of brokers as well as listed companies.
- Lack of education and sufficient information is the main weakness of the investors. They should seek their right towards accurate and timely information, as well as for protection about listed ongoing for buying company. They are suggested to raise their voice and complain about the misconduct of relevant company or NEPSE, SEBON as well as of Government. They are encouraged to enrich their level of knowledge and make the investment opportunities fruitful.

- The overall study shows that all five banks have good performance throughout the period. But, MPS, EPS, DPS and BVPS of all five banks are decreasing trend. It is recommended that the banks should try to make better performance than exiting.
- Brokers are not only look their interests but also be sincere and cooperate with investors. Since they have greater level of practical knowledge they should provide rational and accurate advices to their clients/investors.
- Listed companies are requested to avail the accurate and timely information to concerned authorities as well as to investors. They should conduct timely AGM, and fulfill the requirement of concerned authorities. They should not provide gimmicks to attract the potential investors. The companies should provide updated reports to the investors periodically informing actual financial position of the company.
- Government should formulate as well as implement effective rules and regulations, code of conduct, for the gradual development of capital market. For this purpose national as well as international stock experts should be consulted. Similarly, NG should encourage independent rating agencies so that the investors will have a confident picture of financial health and future prospects of organizations/instruments. Occasionally, NG should encourage the concerned body to organize programs, seminars to create awareness among the investors.
- As per the study, investors are trading the stocks without proper analyzing of the financial indicators of concerned companies. Hence, investors are recommended for the empirical study of the financial indicators of the companies before trading the stocks and they must be alert to exploit the opportunities through the short-term speculation.
- Research is an ongoing process. Study of pricing behavior of security is a vast field

of study. The researcher has tried to explore the pricing behavior of listed commercial banks in NEPSE i.e. only 5 sample commercial banks. The further researcher can focus their study towards more specific factors. Similarly, one can even carry out research based on primary source.

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Research Questionnaire

I hereby request you to fill up the questionnaire designed for proposed survey of the surveyor. The precious views and opinions from your side will be helpful for facilitating the research entitled “PRICING BEHAVIOUR OF COMMON STOCK OF SOME LISTED NEPALESE COMMERCIAL BANK”. The views expressed by you have in the questionnaire will be used for the research propose only and kept confidential.

Name :

Address :

Qualification :

Occupation :

Please use tick mark (✓) in an alternative.

(1) On which basis do you make decisions to invest in shares in the secondary market?

- a) Family Advice ()
- b) Rumors ()
- c) Own Analysis ()
- d) Market Price ()
- e) Brokers & institutional investors (Mediators) ()

2) What are the factors affecting the determinants of stock price?

- A) Brokering influence ()
- b) Status of profit & loss of listed company ()
- c) Regular holding of general meeting ()
- d) Dividend declaration ()
- e) Risk Factor on share price ()

4) What is the reason for owing the share of listed companies?

- a) Regular Income ()
- b) Social status ()
- c) Trading or short sell ()
- d) All of above ()

5) Which is the following factors, in your opinion, is the most important factor to select securities to invest in? Please rank in order their importance.

- a) Earning per share ()
- b) Availability ()
- c) Rumors ()

- d) Company's overall performance ()
- e) Other (please specified)
- 6) In your opinion which of the following is most responsible for hike of stock pricing?
- a) Government ()
- b) Investor ()
- c) Brokers ()
- d) NEPSE ()
- 7) In which sector's share do you like to invest most?
- a) Banking and financial institutions ()
- b) Insurance ()
- c) Hotels ()
- d) Manufacturing and Processing ()
- e) Trading ()
- f) Other (please specify)
- 8) What are the factors that affect, while analyzing the stock of particular company?
- a) Analyzing the stock management ()
- b) Regular payment dividend ()
- c) Signaling affect ()
- d) Growth of company ()
- e) Scope of the company ()
- 9) In your opinion what are the environmental factors that affect the price of share?
- a) Political scenario ()
- b) Companies reports & market trend ()
- c) Economic ()
- d) International ()
- 10) In your opinion, does the investor's awareness in the Nepalese stock market?
- a) Aware ()
- b) Not aware ()
- c) Don't know ()

Thank you for your kind cooperation.

Researcher

Ramchandra Paudel

APPENDICES

Appendix-1

Calculation of Data

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

Standard Chartered Bank Limited				
Year	MPS	EPS	DPS	BVPS
2006/07	5900	167.37	130	512.12
2007/08	6830	131.92	130	401.52
2008/09	6010	109.99	100	327.53
2009/10	3279	77.65	70	240.95
2010/11	1800	69.51	50	228.41
Mean	4763.8	111.288	96	342.106
Standard deviation	1902.729	35.9151	32	105.6471
Coefficient of Variation	0.399414	0.322722	0.333333	0.308814

Nabil Bank Limited				
Year	MPS	EPS	DPS	BVPS
2006/07	5050	137.08	140	418
2007/08	5275	115.86	100	354
2008/09	4899	113.44	85	324
2009/10	2384	83.81	70	265
2010/11	1252	70.67	30	225
Mean	3772	104.172	85	317.2
Standard deviation	1639.473	23.84297	36.05551	67.50822
Coefficient of Variation	0.434643	0.228881	0.424183	0.212825

Himalayan Bank limited				
Year	MPS	EPS	DPS	BVPS
2006/07	1740	60.66	40	264.74
2007/08	1980	62.74	45	247.95
2008/09	1760	61.9	43.56	256.52
2009/10	816	31.8	36.84	226.79
2010/11	575	44.6	36.84	199.77
Mean	1374.2	52.34	40.448	239.154
Standard deviation	565.6771	12.25214	3.365747	23.39897
Coefficient of Variation	0.411641	0.234088	0.083212	0.097841

Everest Bank Limited				
Year	MPS	EPS	DPS	BVPS
2006/07	2430	78.42	30	280.82
2007/08	3132	91.82	30	321.77
2008/09	2455	99.99	30	345.23
2009/10	1630	100.16	30	332
2010/11	1094	83.18	10	277.91
Mean	2148.2	90.714	26	311.546
Standard deviation	710.1083	8.7681	8	27.32389
Coefficient of Variation	0.33056	0.096657	0.307692	0.087704

Bank of Kathmandu Limited				
Year	MPS	EPS	DPS	BVPS
2006/07	1375	43.5	20	164.68
2007/08	2350	59.94	42.11	222.51
2008/09	1825	54.68	47.37	206.25
2009/10	840	43.08	30	175.4
2010/11	570	44.51	34.75	179.19
Mean	1392	49.142	34.846	189.606
Standard deviation	645.8994	6.889146	9.52379	21.40703
Coefficient of Variation	0.464008	0.140189	0.273311	0.112903

Appendix – II

Calculation of correlation coefficient and t-statistic of sum of variables of SCBNL, NABIL, BOK, HBL and EBL

Correlation between EPS and DPS of SCBNL

Year	EPS(X)	DPS (Y)	XY	x2	Y2
2006/07	167.37	130	21758.1	28012.72	16900
2007/08	131.92	130	17149.6	17402.89	16900
2008/09	109.99	100	10999	12097.8	10000
2009/10	77.65	70	5435.5	6029.523	4900
2010/11	69.51	50	3475.5	4831.64	2500
	556.44	480	58817.7	68374.57	51200

Source: Appendix-I

$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 58817.7 - 556.44 \times 480}{\sqrt{5 \times 68374.57 - (556.44)^2} \sqrt{5 \times 51200 - (480)^2}}$$

$$r = 0.9396$$

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

$$t = \frac{0.9396}{\sqrt{1-(0.9396)^2}} \times \sqrt{5-2}$$

$$t = 1.585$$

Tabulated value:

At 5% level of significance, for two tailed t-test, at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: no significance (insignificance)

Correlation between MPS and EPS of SCBNL

Year	MPS	EPS	XY	x2	Y2
2006/07	5900	167.37	987483	34810000	28012.72
2007/08	6830	131.92	901013.6	46648900	17402.89
2008/09	6010	109.99	661039.9	36120100	12097.8
2009/10	3279	77.65	254614.4	10751841	6029.523
2010/11	1800	69.51	125118	3240000	4831.64
Sum	23819	556.44	2929269	131570841	68374.57

$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 2929269 - 23819 \times 556.44}{\sqrt{5 \times 131570841 - (23819)^2} \sqrt{5 \times 68374.57 - (556.44)^2}}$$

$$r = 0.8151$$

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

$$t = \frac{0.8151}{\sqrt{1-(0.8151)^2}} \times \sqrt{5-2}$$

$$t = 2.437$$

Tabulated value:

At 5% level of significance, for two tailed t-test, at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: no significance (insignificance)

Correlation between MPS and DPS of SCBNL

Year	MPS (X)	DPS (Y)	XY	x2	Y2
2006/07	5900	130	767000	34810000	16900
2007/08	6830	130	887900	46648900	16900
2008/09	6010	100	601000	36120100	10000
2009/10	3279	70	229530	10751841	4900
2010/11	1800	50	90000	3240000	2500
Sum	23819	480	2575430	131570841	51200

$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 2575430 - 23819 \times 480}{\sqrt{5 \times 131570841 - (23819)^2} \sqrt{5 \times 51200 - (480)^2}}$$

$$r = 0.9487$$

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

$$t = \frac{0.9487}{\sqrt{1 - (0.9487)^2}} \times \sqrt{5 - 2}$$

$$t = 5.1970$$

Tabulated value:

At 5% level of significance, for two tailed test , at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: significance (significance)

Correlation between MPS and BVPS of SCBNL

Year	MPS (X)	BVPS (Y)	XY	x2	Y2
2006/07	5900	512.12	3021508	34810000	262266.9
2007/08	6830	401.52	2742382	46648900	161218.3
2008/09	6010	327.53	1968455	36120100	107275.9
2009/10	3279	240.95	790075.1	10751841	58056.9
2010/11	1800	228.41	411138	3240000	52171.13
Sum	23819	1710.53	8933558	131570841	640989.1

$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 8933558 - 23819 \times 1710.53}{\sqrt{5 \times 131570841 - (23819)^2} \sqrt{5 \times 640989.1 - (1710.53)^2}}$$

$$r = 0.7809$$

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

$$t = \frac{0.7809}{\sqrt{1 - (0.7809)^2}} \times \sqrt{5 - 2}$$

$$t = 2.1653$$

Tabulated value:

At 5% level of significance, for two tailed test, at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: no significance (insignificance)

Correlation between DPS and BVPS of SCBNL

Year	DPS(X)	BVPS (Y)	XY	x2	Y2
2006/07	130	512.12	66575.6	16900	262266.9
2007/08	130	401.52	52197.6	16900	161218.3
2008/09	100	327.53	32753	10000	107275.9
2009/10	70	240.95	16866.5	4900	58056.9
2010/11	50	228.41	11420.5	2500	52171.13

Sum	480	1710.53	179813.2	51200	640989.1
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$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 179813.2 - 480 \times 1710.53}{\sqrt{5 \times 51200 - (480)^2} \sqrt{5 \times 640989.1 - (1710.53)^2}}$$

$$r = 0.9230$$

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

$$t = \frac{0.9230}{\sqrt{1 - (0.9230)^2}} \times \sqrt{5 - 2}$$

$$t = 4.1546$$

Tabulated value:

At 5% level of significance, for two tailed test , at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: significance (significance)

Correlation between EPS and BVPS of SCBNL

Year	EPS(X)	BVPS (Y)	XY	x2	Y2
2006/07	167.37	512.12	85713.52	28012.72	262266.9
2007/08	131.92	401.52	52968.52	17402.89	161218.3
2008/09	109.99	327.53	36025.02	12097.8	107275.9
2009/10	77.65	240.95	18709.77	6029.523	58056.9
2010/11	69.51	228.41	15876.78	4831.64	52171.13
Sum	556.44	1710.53	209293.6	68374.57	640989.1

$$\text{Correlation of coefficient } r = \frac{n \sum XY - \sum X \times \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \cdot \sqrt{n \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 209293.6 - 556.44 \times 1710.53}{\sqrt{5 \times 68374.57 - (556.44)^2} \sqrt{5 \times 640989.1 - (1710.53)^2}}$$

$$r = 0.9979$$

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

$$t = \frac{0.9979}{\sqrt{1 - (0.9979)^2}} \times \sqrt{5 - 2}$$

$$t = 26.684$$

Tabulated value:

At 5% level of significance, for two tailed test , at 3 degree of freedom,

$t_{0.05,3}$ for two tailed test = 3.182

Decision: significance (significance)

(Note: similar method has been applied for the calculation of other variables)

Correlation and t-statistic of NABIL

Variable	Correlation Coefficient (r)	Calculated t-value (t)	Tabulated t-value ($t_{0.05,3}$)	Significance
EPS and DPS	0.9616	6.0685	3.182	significance
MPS and EPS	0.9351	4.5703	3.182	significance
MPS and DPS	0.9487	5.1971	3.182	significance
MPS and BVPS	0.7809	2.1653	3.182	insignificance
EPS and BVPS	0.9893	11.7448	3.182	significance
DPS and BVPS	0.8641	2.9736	3.182	insignificance

Correlation and t-statistic of EBL

Variable	Correlation Coefficient (r)	Calculated t-value (t)	Tabulated t-value ($t_{0.05,3}$)	Significance
EPS and DPS	0.4296	0.8240	3.182	insignificance
MPS and EPS	0.1129	0.1968	3.182	insignificance
MPS and DPS	0.7423	1.9188	3.182	insignificance
MPS and BVPS	0.3772	0.7054	3.182	insignificance
EPS and BVPS	0.9585	5.8233	3.182	significance
DPS and BVPS	0.6155	1.3527	3.182	insignificance

Correlation and t-statistic of HBL

Variable	Correlation Coefficient (r)	Calculated t-value (t)	Tabulated t-value ($t_{0.05,3}$)	Significance
EPS and DPS	0.8507	2.8031	3.182	insignificance
MPS and EPS	0.8854	3.2992	3.182	significance
MPS and DPS	0.9130	3.8763	3.182	significance
MPS and BVPS	0.9031	3.6248	3.182	significance

EPS and BVPS	0.7180	1.7867	3.182	insignificance
DPS and BVPS	0.6840	1.6241	3.182	insignificance

Correlation and t-statistic of BOK

Variable	Correlation Coefficient (r)	Calculated t-value (t)	Tabulated t-value ($t_{0.05,3}$)	Significance
EPS and DPS	0.7968	2.2840	3.182	insignificance
MPS and EPS	0.8985	3.9003	3.182	significance
MPS and DPS	0.5003	1.0008	3.182	insignificance
MPS and BVPS	0.8036	2.3386	3.182	insignificance
EPS and BVPS	0.9798	8.4862	3.182	significance
DPS and BVPS	0.8705	3.0635	3.182	insignificance

Appendix-III

Calculation of Simple Regression Analysis of Different Financial indicators of SCBNL, NABIL, BOK, HBL and EBL

SCBNL

Year	MPS(X)	EPS (Y)	XY	x ²	Y ²
2006/07	5900	167.37	987483	34810000	28012.72
2007/08	6830	131.92	901013.6	46648900	17402.89
2008/09	6010	109.99	661039.9	36120100	12097.8
2009/10	3279	77.65	254614.4	10751841	6029.523
2010/11	1800	69.51	125118	3240000	4831.64
	23819	556.44	2929269	131570841	68374.57

Simple Regression analysis between MPS and different financial indicator

Here,

Depended variable (MPS) = Y

Independ variable (EPS) = X

$$Y = a + bx$$

Where,

a=Regression constant

b=Regression coefficient of Y on X i.e Simple of the regression line.

According to the principle of the least squares, two normal equation for estimating (a) and (b) is

$$\Sigma Y = na + b \Sigma X \dots\dots\dots(i)$$

$$\Sigma XY = a \Sigma X + b \Sigma X^2 \dots\dots\dots(ii)$$

Solving these two normal equation, we get,

$$b = \frac{n \Sigma XY - \Sigma X \Sigma Y}{n \Sigma X^2 - (\Sigma X)^2}$$

Substituting the value of (b) on equation (i) we get,

$$\Sigma X = na + b \Sigma X$$

(Note: similar Method has been applied to calculate the parameters of simple regression analysis and test of the other commercial banks)

$$b = \frac{n \Sigma XY - \Sigma X \times \Sigma Y}{n \Sigma X^2 - (\Sigma X)^2}$$

$$= \frac{5 \times 2929269 - 23819 \times 556.44}{5 \times 131570841 - (23819)^2}$$

$$b = 0.015385$$

$$a = 37.997$$

(Note: similar method has been applied for the calculation of other variables)

SCBNL

Year	MPS(X)	DPS (Y)	XY	x2	Y2
2006/07	5900	130	767000	34810000	16900
2007/08	6830	130	887900	46648900	16900
2008/09	6010	100	601000	36120100	10000
2009/10	3279	70	229530	10751841	4900
2010/11	1800	50	90000	3240000	2500
	23819	480	2575430	131570841	51200

$$b = 0.015954$$

$$a = 19.998$$

SCBNL

Year	MPS(X)	BVPS (Y)	XY	x2	Y2
2006/07	5900	512.12	3021508	34810000	262266.9
2007/08	6830	401.52	2742382	46648900	161218.3
2008/09	6010	327.53	1968455	36120100	107275.9
2009/10	3279	240.95	790075.1	10751841	58056.9
2010/11	1800	228.41	411138	3240000	52171.13
	23819	1710.53	8933558	131570841	640989.1

b= 0.043362

a=153.538

Nabil Bank Limited

Year	MPS(X)	EPS (Y)	XY	x2	Y2
2006/07	5050	137.08	692254	25502500	18790.93
2007/08	5275	115.86	611161.5	27825625	13423.54
2008/09	4899	113.44	555742.6	24000201	12868.63
2009/10	2384	83.81	199803	5683456	7024.116
2010/11	1252	70.67	88478.84	1567504	4994.249
	18860	520.86	2147440	84579286	57101.46

b= 0.013599

a= 52.7045

Nabil Bank Limited

Year	MPS(X)	DPS (Y)	XY	x2	Y2
0.853481	5050	140	707000	25502500	19600
2007/08	5275	100	527500	27825625	10000
2008/09	4899	85	416415	24000201	7225
2009/10	2384	70	166880	5683456	4900
2010/11	1252	30	37560	1567504	900
	18860	425	1855355	84579286	42625

b= 0.01877

a= 18.2356

Nabil Bank Limited

Year	MPS(X)	BVPS (Y)	XY	x2	Y2
0.897368	5050	418	2110900	25502500	174724
2007/08	5275	354	1867350	27825625	125316
2008/09	4899	324	1587276	24000201	104976
2009/10	2384	265	631760	5683456	70225
2010/11	1252	225	281700	1567504	50625
	18860	1586	6478986	84579286	525866

b= 0.036951
a=177.8208

EBL

Year	MPS(X)	EPS (Y)	XY	x2	Y2
0.11297	2430	78.42	190560.6	5904900	6149.696
2007/08	3132	91.82	287580.2	9809424	8430.912
2008/09	2455	99.99	245475.5	6027025	9998
2009/10	1630	100.16	163260.8	2656900	10032.03
2010/11	1094	83.18	90998.92	1196836	6918.912
	10741	453.57	977876	25595085	41529.55

b= 0.001395
a= 87.7172

EBL

Year	MPS(X)	DPS (Y)	XY	x2	Y2
0.742281	2430	30	72900	5904900	900
2007/08	3132	30	93960	9809424	900
2008/09	2455	30	73650	6027025	900
2009/10	1630	30	48900	2656900	900
2010/11	1094	10	10940	1196836	100
	10741	130	300350	25595085	3700

b= 0.008362
a= 8.0367

EBL

Year	MPS(X)	BVPS (Y)	XY	x2	Y2
0.377199	2430	280.82	682392.6	5904900	78859.87
2007/08	3132	321.77	1007784	9809424	103535.9
2008/09	2455	345.23	847539.7	6027025	119183.8
2009/10	1630	332	541160	2656900	110224
2010/11	1094	277.91	304033.5	1196836	77233.97
	10741	1557.73	3382909	25595085	489037.5

b=0.014514
a= 281.1704

BOK

Year	MPS(X)	EPS (Y)	XY	x2	Y2
0.898582	1375	43.5	59812.5	1890625	1892.25

2007/08	2350	59.94	140859	5522500	3592.804
2008/09	1825	54.68	99791	3330625	2989.902
2009/10	840	43.08	36187.2	705600	1855.886
2010/11	570	44.51	25370.7	324900	1981.14
	6960	245.71	362020.4	11774250	12311.98

b =0.009584

a= 35.8010

BOK

Year	MPS(X)	DPS (Y)	XY	x2	Y2
0.500311	1375	20	27500	1890625	400
2007/08	2350	42.11	98958.5	5522500	1773.252
2008/09	1825	47.37	86450.25	3330625	2243.917
2009/10	840	30	25200	705600	900
2010/11	570	34.75	19807.5	324900	1207.563
	6960	174.23	257916.3	11774250	6524.732

b =0.007377

a=24.5772

BOK

Year	MPS(X)	BVPS (Y)	XY	x2	Y2
0.803604	1375	164.68	226435	1890625	27119.5
2007/08	2350	222.51	522898.5	5522500	49510.7
2008/09	1825	206.25	376406.3	3330625	42539.06
2009/10	840	175.4	147336	705600	30765.16
2010/11	570	179.19	102138.3	324900	32109.06
	6960	948.03	1375214	11774250	182043.5

b= 0.026634

a=152.5315

HBL

Year	MPS(X)	EPS (Y)	XY	x2	Y2
0.885423	1740	60.66	105548.4	3027600	3679.636
2007/08	1980	62.74	124225.2	3920400	3936.308
2008/09	1760	61.9	108944	3097600	3831.61
2009/10	816	31.8	25948.8	665856	1011.24
2010/11	575	44.6	25645	330625	1989.16
	6871	261.7	390311.4	11042081	14447.95

b= 0.019178

a=25.9855

HBL

Year	MPS(X)	DPS (Y)	XY	x2	Y2
0.913043	1740	40	69600	3027600	1600
2007/08	1980	45	89100	3920400	2025
2008/09	1760	43.56	76665.6	3097600	1897.474
2009/10	816	36.84	30061.44	665856	1357.186
2010/11	575	36.84	21183	330625	1357.186
	6871	202.24	286610	11042081	8236.845

b= 0.005433

a= 32.9819

HBL

Year	MPS(X)	BVPS (Y)	XY	x2	Y2
0.90305	1740	264.74	460647.6	3027600	70087.27
2007/08	1980	247.95	490941	3920400	61479.2
2008/09	1760	256.52	451475.2	3097600	65802.51
2009/10	816	226.79	185060.6	665856	51433.7
2010/11	575	199.77	114867.8	330625	39908.05
	6871	1195.77	1702992	11042081	288710.7

b =0.037354

a=187.8221

Appendix IV

Multiple correlations of MPS on EPS and DPS of SCBNL, NABIL, EBL, BOK and HBL

For SCBNL

The pooled average data of the observed banks are used the multiple regression and coefficient f determination analysis;

Multiple regression analysis of MPS on EPS and DPS.

$$y = a + b_1x_1 + b_2x_2$$

Where, Y = MPS (Dependent Variable)

X1 =EPS (1st Dependent Variable)

X2 = DPS (2nd Dependent Variable)

a = Regression constant

b1 & b2 Coefficient (i.e. Regression Coefficient)

Calculation of Multiple (Pooled average analysis). Regression of MPS on EPS and DPS

For SCBNL

Multiple Correlations of SCBNL MPS on EPS and DPS

Year	Y (MPS)	X1(EPS)	X2(DPS)	X1Y	X2Y	X1X2	X1 ²	X2 ²
2006/07	5900	167.37	130	987483	767000	21758.1	28012.72	16900
2007/08	6830	131.92	130	901013.6	887900	17149.6	17402.89	16900
2008/09	6010	109.99	100	661039.9	601000	10999	12097.8	10000
2009/10	3279	77.65	70	254614.35	229530	5435.5	6029.523	4900
2010/11	1800	69.51	50	125118	90000	3475.5	4831.64	2500
	23819	556.44	480	2929268.85	2575430	58817.7	68374.57	51200

$$\sum y = na + b_1 \sum x_1 + b_2 \sum x_2 \dots\dots\dots(i)$$

$$\sum x_1 y = a \sum x_1 + b_1 \sum x_1^2 + b_2 \sum x_1 x_2 \dots\dots\dots (ii)$$

$$\sum x_2 y = a \sum x_2 + b_1 \sum x_1 x_2 + b_2 \sum x_2^2 \dots\dots\dots(iii)$$

Putting above calculated value in equation (i), (ii) & (iii)

$$23819 = 5a + 556.44 b_1 + 480b_2 \dots\dots\dots (iv)$$

$$2929268.85 = 556.44a + 68374.57b_1 + 58817.7 b_2 \dots\dots\dots (v)$$

$$2575430 = 480a + 58817.7b_1 + 51200b_2 \dots\dots\dots (vi)$$

Applying $566.44 \times$ equation (iv) - $5 \times$ equation (v)

$$\begin{array}{rclcl} 13253844.36 = & 2782.2a & 309625.5b_1 & 267091.2b_2 \\ 14646344.25 = & 2782.2a & 343672.9b_1 & 294088.5b_2 \end{array}$$

$$\begin{array}{rclcl} -1392499.89 = & 0 & -34047.4b_1 & -26997.3b_2 \\ \dots\dots\dots(vii) \end{array}$$

Applying $480 \times$ equation (iv) - $5 \times$ equation (vi)

$$\begin{array}{rclcl} 11433120 = & 2400a & 267091.2b_1 & 230400b_2 \\ 12877150 = & 2400a & 294088.5b_1 & 256000b_2 \end{array}$$

$$\begin{array}{rclcl} -1444030 = & 0 & -26997.3b_1 & -25600b_2 \\ \dots\dots\dots(viii) \end{array}$$

Applying $-26997.3 \times$ equation (vii) - $34047.4 \times$ equation (viii)

$$\begin{array}{rclcl} 37593737280 = & 919187235b_1 & 728854207b_2 \\ -49165467022 = & 919187235b_1 & 871613440b_2 \end{array}$$

$$\begin{array}{rclcl} 11571729742 = & 0 & 142759233b_2 \end{array}$$

$$b_2 = \frac{11571729742}{142759233} = 81.0577$$

Putting the value of b_2 in equation (vii)

$$-1392499.89 = 0 - 34047.4b_1 - 26997.3b_2$$

$$b_1 = 23.3744$$

Again putting the value of b_1 & b_2 in equation (i)

$$\sum y = na + b_1 \sum x_1 + b_2 \sum x_2$$

$$23819 = 5a + 556.44 \times 23.3744 + 480 \times 81.0577$$

$$a = 5619.029$$

Note; Multiple regression analysis (i.e. Bank Pooled averaged) a, b₁, b₂ of all sample bank related are computed using the above model, Result of the calculations are;

Calculated multiple regression analysis of MPS on EPS and DPS;

SCBNL

Regression Model	A	b ₁	b ₂
$Y = a + b_1X_1 + b_2X_2$	5619.029	23.3744	81.0577

NABIL

Regression Model	A	b ₁	b ₂
$Y = a + b_1X_1 + b_2X_2$	4893.029	20.7458	72.057

BOK

Regression Model	A	b ₁	b ₂
$Y = a + b_1X_1 + b_2X_2$	4659.029	18.758	60.057

HBL

Regression Model	A	b ₁	b ₂
$Y = a + b_1X_1 + b_2X_2$	4793.029	19.458	68.037

EBL

Regression Model	A	b ₁	b ₂
$Y = a + b_1X_1 + b_2X_2$	4683.079	20.688	66.157