

**STOCK PRICE BEHAVIOR AND ITS DETERMINANTS OF
NEPALESE COMMERCIALBANKS LISTED IN NEPSE**



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RECOMMENDATION

This is to certify that the thesis:

Submitted by:

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Entitled

Stock price behavior and its determinants of Nepalese commercial banks listed in Nipse has been prepared as approved by this department in the prescribed format of faculty of management. This thesis is forwarded for examination.

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STOCK PRICE BEHAVIOR AND ITS DETERMINANTS OF NEPALESE COMMERCIAL BANKS LISTED IN NEPSE and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for Master's Degree in Business Studies (M.B.S.)

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DECLARATION

I hereby declare that the work reported in this thesis entitled" **Stock Price Behaviour and its Determinants of Nepalese Commercial Banks Listed in Nepse**" e submitted to Office of the Dean, Faculty of Management, Tribhuvan University is my original work. It is done in the form of partial fulfillment of the requirements of the Master of Business study (MBS) under the supervision and guidance of respected Prof Snehalata Kafle and Lec.Pitri Raj Adhikari.

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This Thesis entitled on " **Stock Price Behavior and its Determinants of Nepalese Commercial Banks Listed in Nepse** " has been carried out on behalf of the Fulfillment of the partial requirement of the Master's in Business study (MBS) on the course of completion of this thesis study, I was able to gain and share a lot of sweet memorable moments as well as better experiences. However, I got acquainted with the various terminologies, literatures and different personalities from different sectors as well.

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ACRONYMS

IPO	:	Initial Public Offering
SENO/N	:	Security Board of Nepal
NEPSE	:	Nepal Stock Exchange Ltd.
CO	:	Company
†	:	Standard Deviation
r	:	Correlation
y	:	Dependent variables
x	:	Independent variables
Σ	:	Total Sum
SEO	:	Security Exchange Board
SCB	:	Standard Chartered Bank
PGA	:	Peer Group Average
PGI	:	Peer group industry
NR BANK	:	Nepal Rastriya Bank
EPS	:	Earning Per Share
RHW	:	Random Walks Hypothesis
PFCs	:	Point and Figure Charts
Ltd	:	Limited
EMH	:	Efficient Market Hypothesis
NPV	:	Net present value
SEC	:	Security Exchange Centre
GM	:	General Manager
Fig	:	Figure
Avg.	:	Average

CHAPTER: I

INTRODUCTION

1.1. General Background

The primary and fundamental economic objectives of the state shall be to transform the national economy into an independent self-reliant system by preventing the available means and resources of the country from being concentrated within a limited section of society by making arrangements for the equitable distribution of economic gains on the basis of social justice, by making such provisions as will prevent economic exploitation of any class or individual and by giving preferential treatment and encouragement to national enterprises both private and public. There should be a favorable environment for rapid and accelerating economic development of the country. Such kind of environment depends upon many factors. Development and expansion of capital markets are essential for the rapid economic development of the country. Capital markets play a vital role in mobilizing a constant flow of savings and channeling those financial resources for expanding productive capacity in the countries.

Capital market in the broad sense which includes primary markets, secondary markets, term lending institutions; banks, investors, who are engaged in providing long term capital which is debt and equity.

The stocks or securities market can be seen as sources of finance. It is a place of bringing together buyers and sellers of financial assets in order to facilitate trading. It facilitates the price discovery process, which is possible through the demand and supply of securities from the investors. As the owner of a business idea, plan or company one holds ownership of a subjective value called equity. The equity of any type of property, whether intellectual or physical is the value someone is willing to pay for it, minus any liability attached. Once the owner and investors determine the valuation of this equity, the owner can then sell parts of the equity in order to raise capital. There are a variety of methods to raise equity capital, the most popular ones being the issue of shares and debentures. The equity capitalists are owners of the company. They are now effectively owners of the company and partners with active roles in the company.

On the other hand, raising capital through debt financing doesn't entail selling equity but instead works by borrowing against it. Debt financing is only available to business owners who have something of value that the lender can instantly liquidate the debt finance company is not interested in becoming a partner. It is in the business of making money from its money by letting it for periods of time.

“The financial and capital markets allows the government and companies to collect long term fund for their projects allows people to trade their money for more profitable securities such as share and debentures. Securities are a type a transferable interest representing a financial value and are often represented by a certificate. The exchange of securities and money between investors and a company is what form the basis for the markets”(Sharma; 1996:45)

In Nepal, primary market is managed by issue managers, who are licensed by the securities Board of Nepal (SEBON), if a company wants to go public after meeting SEBON required criteria, they have to merit a referral form the issue managers, who are responsible for verifying and attesting all information presented in the prospectus. Only then SEBON endorses the application and send for the company's registration with the central registrar's office SEBON which has just been empowered by the government with the regulations is a financial regulator. It has the responsibility and authority to ensure that investors are protected against miss selling and fraud. Once registered, the company can now be listed with the stock exchange the most prominent form of secondary markets.

“Stock markets promote the primary issuance of shares. Because investors participate in the issuance of share market for they can get back the fund easily. The primary market is positively and highly elastic with stock price and the liquidity in the secondary market” (Sharma, 1996:48). Stock market has got its own pros but the main concern is to be proper materialization. It is practice to achieve maximum benefit. Nepal capital market is a developing one in comparison to other big and developed capital market. The development of stock market is not possible if there are no any favorable aspects of stock market and if the government do not provide better investment environment with clear policy.

Nepalese economy is in developing phase. So financial sectors may have plays vital role and they accumulated the capital market of the country is the main driving forces, to the economic growth at the country as a result such institutions shares are being traded amount the investors in the secondary market in larger volume every day.

1.2. Focus of the study

In Public companies funds is raised from the public investors through financial and capital market. The long run objective of every firm is to maximize shareholder wealth position where as the investors invest their money with the hope of getting higher returns in the future.

In Nepalese context investors, there is the lack of wider investment opportunities, which gives good return to investor. So, there has still been a hung amount of utilization saving funds with public. But most of the public investors are not well informed about the real financial strength and weakness of the public companies in which they are investing or going to invest their funds. Further they cannot well analyze and interpret the real financial position of a company on the basis of available data and information to reach the right conclusion.

This study may help investors to think about restructuring their investment portfolio. Similarly, potential investors may take better timely investment decision on the basis of the findings of the study.

1.3. Statement of problem

Investors are the main sources of capital and backbone of the securities market, none of the effective organized program had been introduced to initiate and develop the price awareness of the stock to the investor in Nepal. Beside the theories and principles related to the stock market and share price value calculation are also based on some assumption. This may not be able to represent the practical situations in an authentic way.

There is a lack of professional investors in Nepalese stock market. The market is totally captured by individual investors who buy very little number of shares and therefore they do not bother analyzing the data and information before buying and

selling the stock. These investors hold the view of making profit by speculation, which is one of the main causes of price fluctuation.

Since, objectives of the firm are wealth maximization and the achievement of organizational economy. It is important to determine the factors affecting the stock price in NEPSE. This study will try to identify the determinants of stock price and to find out the degree of affection of those determinants.

The stock or share price fluctuations time to time and stock exchange reacts to the environmental change either positively or negatively. For some environmental changes the stock exchange has no effect. More specifically the study is expected to answer the following research questions:

- i. What is a company wise stock market performance?
- ii. Whether the price changes are the random phenomenon or not?
- iii. Stocks price move randomly or reasonably?
- iv. What are the major determinants of stock price in NEPSE?
- v. How dividend, retained earning and EPS per share affects to the stock price of company listed in NEPSE?

1.4. Objectives of the study

This study is attempted to examine the efficiency at the stock market in Nepal. The primary objective of this study is analyzing the stock price behavior in Nepalese securities market. The most specific objectives are as follows:

- i. To study the efficiency of stock market.
- ii. To observe the stock price behavior of commercial bank of Nepal.
- iii. To outline the factors that affects the stock price of commercial bank of Nepal.

Iv To study and analysis stock price on secondary market(NEPSE).

1.5. Significant of the study

In Nepal financial assets investment practices and procedures in Nepal under the organize stock exchange are still in a primal stage. Investment in secondary stock market plays important role in financial sector of the national economy. Stock market being one of the major sources of economic development, try to attract its potential investor who are their biggest resources. In Nepalese context, the

government has initiated liberal economic policies. Since mid 1980s the financial system has undergone repaired structural change in the last two and half decades. After the political change of 1990s public participation in securities investment has increased significantly. But due to investor's inadequate knowledge, it has not been able to achieve. It expected target public companies obtain funds from the public investors through financial market. The long run objective of every company is to maximize shareholders' wealth position there by producing good return for the investors' stocks.

In Nepal investor and general public seems to have hung amount of unutilized saving funds due to lack of which investment opportunities which could provide them an attractive rate of return. However some of the investors have been attracted by increasing trend of share price, a specially of the commercial banks there are investing their saving funds on the common stock of public companies with the expectation of higher capital gain in the future. But most of the private of individual investors (existing and potential) are not aware of public financial companies' real financial strength and weakness when they have invested their funds. Similarly, they may not be able to carry out empirical analysis and interpretation as the companies' real financial position on the basis and available data and information to reach the final decision.

Varies studies have been conducted in the past to measure the performance of the companies listed in the securities market. Some studies have also conducted separately to find the stock price behavior and stock price movement in Nepalese securities market. This study may be useful to people from different walks of life movement and its impact with respect to change in financial position of their respective firms. The study will also add literates which could be useful to conduct other researchers on the topics alike.

1.6. Limitation of study

This thesis have some boundary, beside this the topic concentration is not diversified. So this study has certain limitation and constraints which are as follows:

- i. The research is based upon the data availed by the NEPSE and selected bank's data.
- ii. Primary data are not used for propose of study.
- iii. Study being totally dependent on the secondary data.
- iv. This study is confined to five listed commercial bank in Nepal Stock Exchange (NEPSE).
- v. This study covers all the relevant data and information only for 5 years from 2004/05 to 2008/09 as study start since 2009.
- vi. This study is based on stock price movement of commercial bank of Nepal.

1.7 Organization of Study

1.7.1 Chapter one: Introduction

This chapter incorporates general background of the study, statement of the problem, objectives of the study, limitation of study, significant of the study and organizational of the study.

1.7.2. Chapter two: Review of Literature

These chapters cover the conceptual framework and post research literatures on stock market behavior and factors of the stock market.

1.7.3. Chapter three: Research Methodology

This chapter deals with the methodology which followed to achieving the objectives of the study, which include research design, nature and sources of data, population and sample, data collection technique and analytical tools.

1.7.4. Chapter four: data presentation and analysis

This chapter deals with presentation, analysis and interpretation of data.

Data which obtained have no meaning unless they are arranged and presented in the systematic way. We here used different tools such as correlation coefficient, coefficient of determination, regression analysis, testing of hypothesis and chart to analyze the study and achieve the objectives.

1.7.5. Chapter five: summary, conclusions and recommendation

This study attempts three sections summary, conclusion and recommendation to analyze the stock price movement in stock market of Nepal. This chapter deals

with the conclusion rived from the study of share price movement of commercial bank listed in NEPSE based on the analysis of secondary data and findings.

CHAPTER: II

REVIEW OF LITERATURE

This chapter implies the review of literature related to the study the objectives of this chapter is to review some basic literature on share price behavior concerning theories including review of the empirical evidence of previous studies.

This chapter has been divided into two sections the first section of this chapter is to contains the review of previous studies like books, articles, journals, thesis etc.

2.1. Conceptual Frameworks

Before getting into the core concept of factor determining the stock price it is logical to be familiar with some technical term which are in frequent use in research in capital market and finance so in this section some of the technical terms related to capital market are defined.

2.1.1. Theories of Stock Price Behavior

There are two approaches to explain share price fluctuation market efficiency is the basis for the both approaches have considered that market is inefficient which include technical analysis theory and fundamental analysis theory. Contrary approach has argued market is efficient market hypothesis, 'Prior to the development of the efficient market theory investors were generally divided in to two groups' fundamentalists and technical" (*Reilly; 1986: 346*). Based on incorporation of various types of information set with speed and accuracy in pricing stock there are three form of efficient market theory such as weakly efficient market or random walk, semi strongly efficient and strongly efficient market theory.

2.1.2. Fundamental Analysis Theory

Fundamental analysis theory taken in to account financial economic and statistics information relation to a financial institution has been past record and present position and then uses informed judgment to project future results Fundamental analysis rest on the assumption that each stock has an intrinsic value where intrinsic value may be defined as a present value of the future stream of income occurring to a financial company. Stock is considered under or over valued depending up on whether the share price is below or above its intrinsic value.

“In the fundamental approach the security analyst or prospective investor is primarily interested in analyzing factors such as economic influence, industry factors and parent company information such as product demand, earning dividend and management in order to calculate and intrinsic value for the forms securities they reach on as investment decision by comparing this value with the current market price of the security. The fundamental analysis tend to look forward fundamentalists are concerned with such matter at future earnings and dividends” (*Sharpe, Alexander and Bailey;1999: 751*) Some investment organization that employs fiscal analysts follows a sequential top-down forecasting approach , with this approach the financial analyst are first involved in making forecasts for the economy and intern a company’s forecast are based on the forecasts for both its industry and the economy.

“Other investment organizations begin with estimate of the prospects for companies and then build to estimates of the prospects for industry and ultimately the economy. Such bottom up forecasting may unknowingly involves inconsistent assumptions.” (*Sharpe, Alexander and Bailey; 1999: 751*). “Fundamentalists forecast stock price on the basis of economy industry and company statistics. The principle design variable ultimately takes form of earning and value with a risk return framework based upon earning power and economic environment. Fundamental analysis delay in to company’s earnings, its management economic outlook competitor’s market condition and many other factors.” (*Clark, Francis; 1997: 398*) “Fundamental analysis attempt to find under or over securities by analyzing fundamental information such as earning assets values etc., to uncover yet undiscovered information about future of the business they look ahead trying to forecast future information”. (*Mathew Will; 1999: 148*) Fundamental theory assumes that knowledge about the future of companies is not perfect some stocks are under priced and others are overpriced. The investors task in to study certain fundamental factors may enable them to select undervalued stock for purchase and sell overvalued stock. These fundamental are the historical profitability of the industry the leading companies in the industry the economic outlook for the profitability of the industry as a whole and the outlook for general economy. The

potential investors then estimate the history and expected future of this company with competing firms; such companies are base on much objectives information.

2.1.2.1. Securities Market in Nepal

“The securities market is a place where people buy and sell financial instruments. These financial instruments may be in the forms of government bonds, corporate bond or debenture ordinary shares performance share etc. so for securities market is concerned. It is important constituent of capital market. It has a wide form embracing the buyer and seller of securities and all the agencies and institution that assist the sell and resale of corporate securities.” (*Rugh; 1966: 50*) The securities market can be defined as a mechanism of bringing together buyers and sellers of financial assets. The securities market is a place where share of listed companies are traded or transferred from one hand to another at a fair price through the organized brokerage system. The major function of securities market is to provide ready and continues market for purchase and sell of securities at a competitive price there by, importing future market ability and liquidity to then.

SEBON was established on June 7, 1993 with the objectives facilitate the orderly development of dynamic and competitive capital market and maintain, its credibility fairness efficiency under the securities exchange act, 1983. Moreover, SEBON frames the policies and programmes required monitor the securities market, provide license to operate stock exchange business and stock brokers and superglues and monitors the stock exchange oppression and securities. Businesspersons, generally there are classified in to ways:-

On the basis of span of securities:

- Money market
- Capital market

On the basis of securities traded:-

- Primary market
- Secondary market

2.1.2.2. Money Market

It is a type of market which is meant for a short term and for highly liquid debt securities. A money market typically involved financial assets that have a life span of one year or less. Money market instrument include short term marketable, liquid and low risk securities. Money market instruments sometimes are also cash equivalents or just cash.

2.1.2.3. Capital Market

Capital market is a significant mechanism for the development of rational economy. It provides best opportunities by transferring the funds from surplus saving to need best sectors through the transaction of financial instruments. Financial instruments are traded in securities market. Stock market is the largest financial market all over the world, where stocks of various business organizations are traded. It has greatest role in the development of financial system.

Capital markets are the market meant for long term securities issued by the government or a corporation. Capital market typically involves financial assets that have life span of greater than one year.

2.1.2.4. Primary Market

Markets in which corporations raise a new capital are known as primary markets. For example Nepal Credit and Commerce (NCC) Bank, a few years ago issued share to raise fund which was a primary traction primary markets. Thus, are basically concerned with the accumulation of fund.

2.1.2.5. Secondary Market

Market where existing already outstanding securities are traded among investors is called secondary market. Here already issued securities are traded. Its provides the liquidity and marketability opportunities to the stock market either by OTC(over the counter market) or register market NEPSE is the example of secondary market.

2.1.2.6. OTC Market

“Over the counter market is not an organization but an intangible market for the purchase and sellers of securities not listed by the organized exchanges. It neither requires membership for trading of securities for trading intermediates and

authorized dealers became the head in such kinds of securities transaction. This market is known as the proceeds from the sale of securities in the secondary market. Here the buyers don't go to organizational issuers. Instead, goes to the initial owner and securities". (*Chandra; 1994: 98*)

2.1.2.7. Organized Securities Exchange

Organized securities exchange are the physical locations where trading of securities is done under a set of rules and regulations. Investors usually purchase securities in secondary market by calling securities brokers. Nepal Stock Exchange provides such types of facilities to buy and sell of the companies share for the general public.

2.1.2.8. Nepal Stock Exchange Limited (NEPSE)

NEPSE is a non-profit organization, operating under securities exchange act, 1993. The basic objectives of NEPSE is to impact free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through market intermediaries such as brokers and market makers etc. NEPSE opened its trading floor at January in 1994 through its new appointed license members and has adopted an open outcry system for the transactions of securities. In NEPSE the T + 3 concepts have adopted, allows for transactions and payments to be settled in 3 days of agreement. The trading floor is restricted to listed corporate securities and government bonds with market intermediaries in buying and selling of such securities.

2.1.2.9. Securities Board of Nepal (SEBON)

Securities Board of Nepal was established by the government of Nepal June 7, 1993 as an apex regulator of securities market in Nepal. It has been regulating the market under the securities exchange act 1993. 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 issue licenses to conduct the business of dealing in securities, subject to this Act, or the rules and the bye-rules framed under this Act, to companies or institutions desirous of conducting the business of dealing in securities.
- 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 approve the bye-rules concerning transactions in securities framed by stock exchanges and institutions engaged in the business of dealing in securities, and, for the purpose of making necessary provisions concerning the development of the capital market and protecting the interests of investors investing in securities, issue orders to have necessary alterations made in such bye-rules of stock exchange and institutions engaged in the business of dealing in securities.
- 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 systematize and make transparent the act of acquiring the ownership of a company or gaining control over its management by purchasing its shares in a single lot or in different lots.
- 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 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.

There are seven departments and sixteen sections in the organization of SEBON. Under the Management Department, there are two divisions namely Human Resources Section and Finance Section. There are also four sections under the

Planning and Development Department namely Research Section, Training Section, Information Technology Section and International Affairs Section. There are also two sections under the Corporate Finance Department namely, Public Issue Section and Collective Investment Scheme Section. Likewise, Under the Regulation Department, there are two sections namely, Stock Exchange Regulation Section and Market Intermediaries Regulation Section. There are also four sections under the Surveillance Department namely, Stock Exchange Surveillance Section, Market Intermediaries Surveillance Section, Trading Surveillance Section and Corporate Surveillance Section. Finally, under Legal Department, there are two sections Research and Investigation Section and Enforcement Section.

The major financial sources of SEBON are the government grant, transaction fee from the stock exchange and registration fee of corporate securities. Other financing sources include registration and renewal of stock exchange and market intermediaries and the income from mobilization of its revolving fund.

2.1.2.10. Nepal Stock Exchange Board

Securities exchange Board act 2063 has come into effect since January 14, 2007 after substituting the securities exchange ordinance 2062. The act defined the jurisdiction of Nepal stock exchange board that enable the board to regulate and monitor vital activities for the activities for the development if capital market and function for the benefit as the investors. Drafting of Nepal Stock Exchange board regulations, share market operation rules and share dealers (securities brokers and share traders) rules are in progress required for the effective execution of the security act 2063. In addition, share registration and issue rules, merchant banking rule and group investment plan. Rules are in the drafting stage.

Transaction of government bond in the secondary market through Nepal stock exchange started since December 15. 2006. Installation of computerized system if transaction in Nepal stock exchange limited and management information system in company register office, under corporate finance and governance project executed by government of Nepal with the coordination of Nepal Stock Exchange (Economic Survey 2008:66). Nepal Stock Exchange market limited has initiated

some important measures towards stabilizing share transaction prices. Such measures started since July 2006, include prohibition of matching transaction in share of the listed commercial bank, beginning of trading half system through application of circulate breaker. In addition, it has also taken steps towards managing blank transfer practices.

With the view to update with true information as possible a separate, counting and publication of NEPSE sensitive index of class “A” companies has been started since January 2007. Nepal stock exchange market limited has also started to publish annual report as secondary market based on analysis, to incorporate additional information in the web page, publication of annual report with added information for annual general meeting. These initiatives are expected to help upgrade the process of information dissemination. As per the provision of the securities listing regulations 2006, a total number of 78 listed companies have been classified as category A institutions in FY 2008/09. (Economic Survey 2008:66)

2.1.3. Technical Analysis Theory

Technical analysis theory involves of the past volume and price date of the stock of predicts future price fluctuations. This approach studies varies graphs and charts of the past share price and deduce from the analysis about future price movement by seeking to interpret past pattern in the assumption that history tends to repeat itself. “Technical analysis is based on widely accepted premise that security price are determined by the supply of and the demand for securities. The tools technical analysis is therefore designed to measure certain aspects of supply and demand. Typically technical analysis record historical financial data on charts, study these charts in search of pattern to predict future prices. Some charts are used to predict the movements of single security to other are used to predict the movement of market index and still other are used to predict the action of both individual assets and the market. In essence, technical analysis believes that past patterns of market action will recur in future and can therefore be used for predictive purpose.” (*Jack, Clark, Francis; 1997:197*) Technical analysis is a method of evaluating securities by analyzing statistics generated market activity, past prices and volume. Technical analysts do not attempt to measure a securities intrinsic value; instead

they look at stock charts for pattern and indicators that will determine a stock future performance.

“Technical analysts attempt to find pattern in security price movement and trade accordingly. Their trading tends to quickly offset any price trend and keep the market efficient. Technical analysts are studying past price working for predictable patterns.” (*Mathew Will; 1999:148*) Technical analysis theory involves study of the past volume and price data of the securities to predict future price fluctuations. Technical analysis theory of share price behavior is based on the past market price information. On the assumption that history tends to repeat itself, it is believed that knowledge of past patterns of share price will help to predict the future price under similar circumstances. It involves the study of past market behavior with reference to various financial and economic variables to forecast the future. The change occurs in financial and economic variables are to be adjusted in the light of the present situation. Technical analyst or chartist, as they are commonly called, believed that they can discern patterns in prices or volume movement and they by observing and studying the past behavior patterns of given stock. They can use this accumulated historical information to predict the future price movements in the security. Technical analysts comprise many different subjective approaches but all have one thing in common that belief that these past movements are very useful in predicting future movements. Technical analyst's believes in the theory behind charts information and pattern. They read charts much like ancient astrologers read the stars looking for head and shoulder formation. They believe reflect the patterns of buying and selling accumulation and distribution or market psychology.

Technical analysis has become increasingly popular over the past several years, as more and more people believe that the historical performance of a stock is a strong indication of future performance. The use of past performance should come as no surprise. Technical analyst believes that securities moves according to very predictable trends and patterns. These trends continue until something happens to change the trends and until this change occur prices levels are predictable. (*Francis; 1996: 522*) Technical analysts also believe that important information about future stock price movements can be obtained by studying his historical

price movement of stock prices. Financial data are recorded on graph paper and the data are sanitized in search of repetitive patterns. Technical analysts base their buy and sell decision on the charts they prepare. (*Francis; 1996: 523*)

2.1.3.1. Technical Analysis Tools

Mainly technical tools or modes are as follows:-

- A. The Venerable Dow Theory
- B. Bar Charts
- C. The Odd lot Theory
- D. Short – sales Contrary Opinion Theory

A. The Venerable Dow Theory

The Dow Theory proposed by Charles Dow, after the turn of the century and extended is one of the oldest technical tools still widely followed. There are many versions of this theory, but essentially it consists of three types of market trends or intermediate trends and minor movements. The determination of major market trend is the most important decision to the Dow trader.

The Dow Theory is the oldest and most famous technical tool it was originated by Charles Dow founder of Dow Jones Company and editor of the *Wall Street Journal* around 1900. Mr. Dow died in 1902 and the Dow Theory was developed further and given its name by a staff member at the *Wall Street Journal*. Today many versions of the theory exist and are used it is the basis for much of the work done by technical analysis. The Dow Theory is used to delineate trends in the markets as a whole or in individual securities. “The market is analyzed as having three movements all going at the same time. The first is the narrow movement from day to day. The second is the short swing running from weeks to a month or more, the third is the main movement covering at least four year duration. (Quoted from *Wall Street Journal* by Francis)” (*Francis; 1996:523*)

The Dow Theory views the movement of market prices as occurring in three categories:

- a. **Primary movements/Trends:** These are called bull and bear markets. Bull market are where price move in an upward manner for several years. Bear

markets, on the other hand, are price move in a downward manner, delineating primary trends is the primary goal of the Dow Theory.

- b. **Secondary movements:** These are up and down movement and stock prices that last for a few months and are called corrections.
- c. **Testing moves:** These are simply the daily fluctuation. The Dow Theory asserts that daily fluctuations are essentially meaningless random wiggles nonetheless the chartists should plot the assets price or the market average each day in order to trace out the primary and secondary trends.

B. Bar Charts

Line charts and bar charts usually have bar graphs along the bottoms of the chart showing the volume of share traded at each date. Next to the price trading volume is the second most important statistics technician follow. Technical analysts have described numerous and patterns that they believe will indicate the direction of future price movement. Minorities of chartist employ every complex charts and/or search for very intricate patterns. Points and figure charts and the Elliot wave theory are the name of some of these more elaborate charting techniques. In addition, someone with a rich imagination can conceive new patterns and interpret them as they see fit at any time. (*Francis; 1996:526*) Technical analyst is also known as chartists because they decide by and sell on the basis of charts. Bar charts have a series of vertical bar chart representations each day's prices movement. Each bar has a range from the day's lowest price to the day's highest price. Technical analyst employs different charting techniques. Each bar spans the distance from the day's highest price and the day's lowest price and the small cross on each bar marks that day closing price.

C. The Odd-Lot Theory

Odd lot trading volume is reported in the financial sections of many large newspapers. The odd lot statistics are broken down in to the number of share purchased and sold. Most odd lot theorists chart the ratio of odd lot sales to odd lot purchases week by week. The odd lot purchase sales index is typically plotted concurrently with market index, if it used by some chartists as the leading indicator of market prices. High odd lot purchase sale ratios are presumed to forecast falls in

market prices and low purchase sales ratio are presumed to occurred towards the end of bear market. (*Francis; 1996: 527*) The Odd – Lot transaction are measured by odd lot changes in index. Odd lots are stocks transactions of less than 100 shares. The odd lot ratio is sometimes efforts to as a yardstick of uniformed sentiment or an index of contrary opinion because the odd lot theory assumed that small buyers and sellers are not very bright especially at tops and bottoms when they need to brightest.

Therefore when the odd lot purchases are relatively high, stock prices are likely to fall and when the odd-lot sales are low. The end of bear market is supposed to be closed at hand.

D. Short – Sales Contrary Opinion Theory

Several chartists follow short sales trading statistics. Some short sales follows uses aggregate statistics as an indicator of overall market sentiment and some follow the short sales for individual securities in search of information about those securities. However both groups interpret a high level of outstanding short sales (and uncovered short positions or short interest, as it is variously called) as a sign of increase future demand for securities that will bid up their prices. In starting contrast to the follower of the short sales is believes that short sellers tend to be more sophisticated than the average investor. This second group assists that when short sales for the market as a whole or for an individual securities are high, sophisticated investors expected a price decline and if should therefore follow shortly, (*Francis; 1996: 529*). Short sales are done by investors, who borrow the securities from a broker and sell them. The short seller and hope to profit by replacing the borrowed securities at lower price then what they sold them for contraries believe that short sellers are usually wrong, indicating a bearish attitude about the market, contraries takes a bullish attitude about the market.

2.1.3.2. Efficient Market Theory

Among the various theory of stock market behavior another theory is efficient market hypothesis. The efficient market hypothesis states that securities are typically in equilibrium or that they are fairly priced. Current securities prices fully reflect all available information because in an efficient market all on exploited

profit opportunities are eliminated.” The efficient market theory holds that makes prices fully and instaneously reflect all available information. In this sense share prices are said to be correct and priced accurate signals for resource allocation. Considerable controversy sounded the concept of efficient market during the 1960s and 1970s and even today. The considerable doubt expressed by professional and amateur investors. Empirical evidences however come down, firmly on the side market efficiency and it can now be regarded as the accepted model of share price behavior. (*Firth and Khane; 1986:486*)

Capital market efficiency has been divisional in to three levels: -

a) Weak Form Market Efficiency:

Where no excess returns can be earned by utilizing investment strategy based on historical share price or other financial data. If tactical independence is found (price change are random), this provides evidence in support of market efficiency as it signifies that no profitable investment trading strategy can be formulated based on dependencies in past market prices. In an efficient market current share prices are the best, unbiased estimate of the value of the security. These prices will only change when new information arrives, and as new information is, by definition, unpredictable, so share price changes will unpredictable and will behave as if generated by a random process. Strictly we right expect to see some small upward movement in share prices over time due to future dividends becoming nearer. Expected returns on a share generally incorporated both dividends income and share price appreciation, because we might expect to see some small level of statistical dependence. For weak form efficiency the important factor is weather dependency in price can be exploited to earn excess returns. If there is substantial dependence in price changes this suggests that it may be possible to earn excess returns forms using a simple trading rule.

Early test of weak from market efficiently failed to find any evidence that as normal profit could be earned trading on information related to past price. That is knowing how security price had moved on the past could not be translated into accurate predictions of future security prices. These tests generally concluded that technical analysis, which relies on forecasting securities prices on the basis of past

price, was ineffective. More recent studies however have indicated that investor may overreact to certain types of information, driving security price temporarily away from their investment values. As a result it may be possible to earn as normal profit buying securities whose prices have been bid up excessively. It should be pointed out, however, that these observations are debatable and have not been universally accepted.” (*Sharpe, Alexander and Bailey ;1996: 103*)

b) Semi-strong Form Market Efficiency

“The semi strong efficient where share price adjusted instantaneously and in an unbiased fashion to available new information, so that no excess return can be earn by trading on that information. This hypothesis specifies that markets are efficient for price to reflect all publicly available information or public information has its effect on market prices, only those insiders who have access to valuable information is semi-strong efficiency have been mixed. Most event study have failed to demonstrate sufficient to overcome transaction costs, however various market ‘anomalies’, have been discovered where by securities with certain characterizes or during certain time periods appear to produces abnormally high returns”. (*Sharpe, Alexander and Bailey; 1996: 104*). “The semi-strong form efficiency requires that share prices fully and instantaneously reflect all publicly available information. Publicly available information not includes past share prices (examine in weak form tests), but also a whole host of the economic data that are relevant in influencing prices movements. Example of data have been examined included announcements of mergers, new share prices issues, stock splits, earnings, large share deal and discount rate changes. Most of the tests under semi-strong form banner have involves measuring the adjustment of share price to the release of information. The share price adjustment measured in the semi strong form is the research is the difference between actual share prices and share price that would have been observed had on new information arrived”. (*Firth & Khane; 1986: 8*)

c) Strong Form Market Efficiency

The strong form efficient market hypothesis exists in stock prices reflects all information that is not available to the public. Private information often called

inside information is made public to ensure rational and competitive behavior of the stock market under strong form of market efficiency.

The strongly efficient market hypothesis assumed that all information is reflected in security price. It claims that no one can buy and hold strategy by trading and short term security price movements. If markets are strongly efficient, even those who possess inside information would not have investment information of any value. Security market can be strongly efficient if rates of stocks prices changes are independent random variable and none of the market participants use inside information.

Strong form market efficiency says that all information, whether publicly available or not is instantaneously reflected in share prices and that no market participant can earn excess returns except by chances. Thus, under strong form efficiency we would not expect to find investors who have consistently earned excess returns over a long period and likewise, investors who have advance knowledge of information would not be earning excess returns. The major research studies examining for semi strong efficiency have investigate the investment performance of managed funds (unit trusts, investment trusts, pensions funds) and of investors with access to advances or non public information. If funds manage to earn excess return consistently, market is not strong form efficient. Excess returns will mean that funds manager have superior abilities in interpreting exiting knowledge or that they have excess to and utilized advance knowledge. The publicly given to and the monitory of insider dealing reduced the extent to which advance knowledge is utilized by insiders (*Firth & Khane; 1986: 10-12*).

One would expect that investors with excess to private information would have an advantage over investors who trade only on publicly available information. In general corporate insider and stock exchange specialists, who have information not readily available to the investing public, have been shown to be able to earn abnormally high profit less clear is the ability of security analysts to produce such profits. At items, these analysts have direct access private information and in a sense they also manufacture their own private information through their efforts. Some studies have indicated that curtains analysts are able to discern mispriced

securities but whether this ability is due to skill or chance is an open issue (*Sharpe, [Alexander and Bailey;2000: 103]*). “The efficient market theory implies that security market prices represented fair value. Some argue this cannot be for price goes up and down and that fair value should change very little market value change without information about the future cash flow associated with a security. It implies that portfolio manager’s work in a very competitive market with little or no added advantage over the next portfolio managers. They makes few extra ordinary returns not become they are idem potent, but because the market are so competitive and there are few easy profits”. (*Mathew Will ;1999: 458*) Strong form suggests that securities price reflect that all available information even private information. The strong form does not hold in a world with in uneven playing field. The semi strong form of EMH asset that security price reflect all publicly available information. There are no undervalued or overvalued securities and thus trading rules are incapable of producing superior returns. When new information is released, it is fully incorporate in to the price rather speedy.

2.1.3.3. Financial Market and Capital Market (Security Market)

Security markets are mechanism for channeling saving to the ultimate investors in real assets. The role of financial market and financial institutions, channel the flow of funds in the economy.

Security market exists in order to bring together buyers and sellers of securities measuring that they are mechanism create to facilities the exchange of financial assets. They are many ways in which securities market can be distinguished one way has already been mentioned primary and secondary market. “The key distinction is whether the securities are being offered for sale by the issuer. Another way distinguishing between securities markets consider the life span of financial assets. Money market typically involves financial assets that expire in one year or less. Whereas capital markets typically involves involve in financial asset with life span of greater than one year. The Treasury bills are traded in a money market.” (*Sharpe, Alexander and Bailey; 2000: 10*). Financial intermediates also known, as financial institutions are organization that issues financial claims against themselves, they sell financial assets representing claims

on themselves in returns for cash and used the proceeds from this issuance to purchase primarily the financial assets of others.

A primary issue is the offering of stocks or bonds that have never been previously issued a primary market. The offering may be made in two ways: direct placement and underwritten placement. Under the direct placement, a bond or stock issue may be placed directly with the individuals or company who will own the security. Again under the underwritten placement offering may be made by a corporation through an investment banker, a principle who act as the middleman between the issuer and the public. In this role, the investor banker is a underwriter of the offering, who brings together a group of other investment banker to underwrite or purchase the entire offering. Once the underwriting syndicate has made the purchase, it will resell the securities to verities to a verity of individuals and institutions through a mechanism of the over counter the market. Another secondary market, securities that have been previously issued are traded, which includes the organized exchanged the over the counter market. Dealers and brokers aid the trading. (*Hampton; 1989: 36-37*). The terms of secondary markets are:-

Dealers: Dealers are acts as principles and buy for their own accounts and sell securities from their own inventories.

Brokers: Brokers do not buy and sell securities, from their own investors of securities. They acts as agents for other and receives a commission for assisting a transactions.

Over the counter market:

Over the counter market is an informally organized grouping of broker and dealers. It handles both primary and secondary transaction and is the largest securities market.

Securities market sets a price for the securities are trades and makes it easy for people to trade them. Securities market facilitates the sell and resell of transferable securities. The securities market can be defined as a mechanism for bringing together buyer and seller of financial asset to facilitate trading. Security market is classified into two parts: the market to which new securities are sold is called the primary market and the market in which existing securities are resold is called the

secondary market. Brokers, dealer and market makers create secondary markets. Brokers bring buyer and seller together themselves actually buying and selling, dealer sets prices at which they themselves are ready to buy and sell (bid and ask price respectively). “Brokers and dealers come together organized market or stock exchange” (*Gitman; 1992: 457*). The stock market is one of the most important sources for companies to raise money. This allows business to be publicly traded or raise additional capital for expansion by selling share of ownership of the company in public market. The liquidity that an exchange provides affords investors the ability to quickly and easily sell securities. This is an attractive feature of investing in stock, compared to other less liquid securities / investment such as real assets.

2.2. Stock Exchange and Stock Price

The stock exchange is an institution where quoted securities are exchanged between buyers and sellers. The stock exchange provides a market in a wide range of traded securities generally of medium to long-term maturities issued by companies, government and public organization.

Most of the investors are attracted to the equity share because of its marketability and liquidity. One may like to buy more shares or sell existing shares from time to time when he is in need of money or when he wants to shuffle his portfolio. So, the stock exchange is a place where a large number of buyers and sellers congregate. The investors can convert his share into cash at the prevailing market prices readily. The existence of a stock exchange facilitates all their functions without which it is almost impossible to do so.

The key functions of securities exchange are to create a continuous market for securities at a price that is not very different from price at which they were previously sold. The continuity of securities market provides the liquidity necessary to attract investment funds. Without exchanges, investors might have to hold debt securities to maturity and equity securities indefinitely. It is doubtful that many people would be willing to invest under such conditions. A continuous market also reduces the volatility of security price further enhancing liquidity. (*Gitman; 1992: 458*). The securities exchange help to allocate scarce funds to the

best uses. That is by disclosing the price behavior of securities and requiring the disclosure of certain corporate financial data: they allow investors to access the securities risk and return and to more their fund in to the promising investments. Stock exchange have a lot of function such as ready market and continuing market evaluation of securities, safety of transaction and widening the share ownership etc., besides these functions there are there thins a security exchange must do:

- Determine a fair price for the securities is trades are price discovery function.
- Enable transaction to be made at as low cost possible or minimization of transaction cost.
- Enable transaction to be made at this quickly and easily or provision for liquidity.

Main Function of Stock Exchange: Price Discovery

Price discovery is the process of arising at fair prices for securities. Fair value indicates the compromise between fair offer prices (lowest price at which any well informed trader willing to sell) and fair offer price (higher price any which any well informed buyer is willing to pay). Different markets do this in different way and different ways of organizing a market affect how closely the market approaches the ideal of fair prices. However a very important fact that should not be forgotten is the concept of ideal market or market efficiency, which also the necessary pre condition for approaching to the fair price. In an ideal market value of securities equal its price of securities and prices reflects all available information about the market.

The stock exchange produces through its continuous process of evaluation prices of securities, as close as possible to investment value based on present and future income yielding prospect of various enterprises, capitalized at national rate of interest the rate which will prevail if and when well the liquid saving are employed into productive purpose.

Security is a legal representation of the right to receive future benefits under conditions. Its value depends on expectation of the amount of those benefits and evaluation of risk involved. Expectation and evaluation reflect both the information available and the conclusions people draw from that information.

Since the market may quite big no signal buyer and seller can influence the price of a share to any significant extent.

2.2.1. Price Determination

The share price is determined in the floor by the interaction of market forecasting demand and supply. The price is determined by the point of equilibrium by demand and supply, the shifting of this balance results in incessant adjustment price in search of the ever changing new equilibrium. Then market price would upward and downward, there are many other reasons that cause the stock price fluctuation, major of them are economic and non economic market factors.

Dividend is the most important factors on the determination of the stock price. Dividends are strongly influenced by the earning power of the firm. There is a close relationship between corporate earnings and dividends. The most fundamental factor, stock price fluctuation lies in change in corporate earnings, which together interest rates are and business cycle trends, contributes to making up the economic factors influencing stock prices.

The next influencing factors are non-economic factors, including changes in political condition, such as administrative changes, change in the weather and natural conditions and cultural conditions such as technological development. Similarly, the other influencing factors are market factors or internal factors of the market considering of the tone of the market and supply demand relationship may be cited as the third category, which influence the stock price. Besides these factors the stock prices influenced by the corporate performance of the company, company's policy regarding the capitalization of earnings as well as governments rule and signaling effect of the market.

2.2.2. Common Stock

The common stocks represent equity or an ownership position in a corporation. The holder of common stocks called shareholders or stockholders are the legal owner of the company. It is residual claim in the sense that creditors and preferred stock holder must be paid as scheduled before common stock holder can any payments." In bankruptcy common stockholder are in principle entitled to any value remaining after all other dominants have been satisfied." (*Sharpe,*

Alexander and Bailey; 2000: 457). The common stocks are the permanent and vital sources of capital since they do not have a maturity date. The principles contributed by shareholders by purchasing common stocks are entitled to dividends. Company's board of directors fixes the amount or rate of dividend. "The common stock is, therefore, known as the variable income security. Being the owner of the company, the stockholder bears the risk of ownership they are entitled to dividends after the claims of others have been satisfied. Similarly, when the company is wound up, they can exercise their claim on assets after the claims of other suppliers of capital have been met". (*Pandey; 1995:905*). The firms to raise ownership capital issue the common stocks and investors buy them with the expectation that they receive a share of profit periodically along with appreciation in the value of their investment. The common stocks legally represent the equity of business firm and the holders are the owners who share all the profits and losses of the business. They enjoy all earnings after meeting the obligations of interest on debts and dividends on preferred stocks. Thus they enjoy all net profits of the business by assuming the risk of losing their profit.

2.2.3. Stock Certificates

The ownership of the firm's stock has typically been represented by a single certificate with the number of shares held by the particular investors noted on it, such a stock certificate is usually registered with the name, address and holding of the investor included on the corporation's book. Dividend payments, voting materials, annual and other mailings are then sent directly to the investors, taking into account the size of his or her holding. (*Sharpe, Alexander and Bailey; 2000: 458*). Shares of stock held by investors may be transferred to a new owner with assistance of either the issuing corporation or more commonly its designated transfer agent. This agent will cancel the old stock certificate and issue a new one in its place made out to the owner frequently a register will make sure that this canceling and issuing of certificates have been done properly. Usually, bank and trust companies act as transfer agents and registers. Many stockholders have chosen to avoid these rather cumbersome procedures. Instead, depositing management systems are used which substitute computerized records for embossed certificates.

2.2.4. Stock Price

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

A. Par value

When a corporation is first chartered, it is authorized to issue up to a stated number of shares of common stock, each of which will often carry a specified par value. “Legally a corporation may be precluded from making payment to common stockholders if doing so would reduce the balance sheet value of stockholders’ equity below the amount represented by the par value of outstanding stock. For this reason the par value is typically low relative to the price for which the stock is initially sold. Some corporations issue no par stock. In that case, the stated value must be recorded in place of the par value. The initial offering price of share may vary from its par value if stocks are issued on premium or discount.” (*Sharpe, Alexander and Bailey; 2000: 461*)

B. Book value

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

Cumulative retained earnings + Capital contributed in excess of par + Common stock = **Book value of equity.**

The book value of share is obtained by dividing the book value of the equity by the numbers of share outstanding. (*Sharpe, Alexander and Bailey; 2000: 461-462*)

C. Earning per share

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

D. Dividend

The percentage of earning of firms pays in cash to its shareholders is known dividend. The dividend, of course, reduces the amount of earnings retained in the firm and effect the total amount of internal financing. Nothing is more important than dividends to stockholders. They buy share of firm with the hope of sharing profit earned by firms. The role motive of stockholders is to receive return on their investment, nothing pleases them than knowing the firm's earning and more profits mean more dividends coming in. Financial companies mainly paying two type of dividend:-

a) Cash dividend

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

b) Bonus share (stock) dividend

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

E. Market price per share (MPS)

A share of common stock can be authorized either with or without par value. Par value is the recorded figure in the corporate charter. Generally, par value of must

stocks are set at fairly low figures with compare to their market values and the market value per share is the current price at which the stock is traded. Market value per share of common stock is the function of the current and expected future dividends of the company and the perceived risk of the stock on the part of investors.

Common stockholders are sometime referred to as a residual owner since in essence he or she receives what is left the residual after all other claims on the firms income and asset have been satisfied. All the companies issue common stock; Common stockholders are true owners of business firm. They invest money with expectation of getting high return. “The return from common stock is usually from the capital gain earned. If they increase value after public by them, that’s why price for common share can be more volatile. They move up and down due to the factors like economy and company performance.” (*Gitman; 1991: 573*)

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

The index of stock gives the surrogate of market price of share. NEPSE index is the surrogate of all the listed companies in NEPSE. So it is one of the indicators of stock prices in NEPSE. There are various indexes to analyze the stock behavior in

the world capital market. Stock market indexes are pure numbers used for making comparison between index numbers in the same series or other index number.” An index is usually a ratio tabulated from average of different securities. Typically a time series of index numbers is constructed from the same base data and base value (usually set at 100 or 10 or 1) to make time directly comparable. Some past year is selected as the base year from which index base value is calculated to order to impart time perspectives to the index”. (*Francis; 1991:183*). Since the market price of share is very much sensitive to the environment forces, the share price increased if there is favorable environment and vice versa. This increase share price is based on the market mechanism or market forces that are demand and supply. If the earning and dividend of an organization increases, than the investors has positive perception toward the organization and they like to buy share of that organization, as a result demand increase; on the other hand the supplier like to hold the shares and supplies decreases, and there is gap between demand and supply so the market price of shares increase. The investors determined the price they would to receive by selling share based on their assumptions toward the organization and future expectations vary from individual to individual. Since different analyzes the same situation differently with their limited knowledge.

2.3. Review of Previous Studies

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

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

2.3.1. Foreign Context

Adams (1997) presented a working paper on “Determinants of Stock Prices: The Case of Zimbabwe”. The working paper examined the general relationship between stock prices and macroeconomics variables in Zimbabwe, using the error correction model and multi factor return-generating model. Despite the large fluctuation in stock prices since 1991, the analysis indicated that the Zimbabwe

Stock Exchange functioned quite consistently during that period. Whereas sharp increase in stock price during 1993-1994 were mainly due to the shift of the risk premium that was caused by partial capital account liberalization and the movements of monetary aggregates and market interest rate explained the rapid increase of 1990's in stocks prices.

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

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

Gupta (1985) analyzed the equity share price behavior in India during the period from January 1971 to March 1976 and extensively tested the RWH. He used daily and weekly price of 39 individual shares of two indices. He employed the autocorrelation analysis and run test and found the evidence in support of the RWH. He also concluded that the random walk model appeared to be an appropriate model even for less developed country like India to describe the share price behavior.

Miller and Modigliani studies in 1961 on “dividend policy, Geiwth and the Valuation of Shares” have concluded that dividend payout ratio (dividend policy) does not affect the wealth of shareholders or on the share price of the firm. It argues that the value of the firm is determined by the earning power of the firms’ assets or its investment policy and that the manner in which the earning stream is split between dividend and retained earnings do not matter. But this study is based on the assumptions as mentioned below:

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

Walter (1965) argues that dividend policies almost always affect the value of the enterprises. The investment policy of the firm cannot be separated from its dividend policy, which is just the opposite of what MM said. The key argument in the support of the relevant proposition of the model is the relation between the return of the firm investment or its internal rate \otimes and its cost of capital (K), the stock price will be enhanced by retention and will very inversely with dividend payout.

The basic assumptions of the model are:

- The firm’s finances all investment through retained earnings there is the firm does not use debt or equity financing.
- The firms ‘r’ and ‘k’ are constant.
- The firm distributor its entire earning or retains it for investment immediately.
- There are no change values or earning per share and dividend per share.
- Perpetual life of the firm.

Based on the above assumptions, Walters's formula to determine the market price per share is as follows:

$$P = \frac{DPS}{k} + \frac{\frac{r}{k}(EPS - DPS)}{k}$$

$$P = \frac{DPS}{k} + \frac{r(EPS - DPS)}{k^2}$$

Where,

P = Prices of shares

EPS = Earning per shares

r = Internal rate of return

k = Cost of capital

Gordon(1974) in his study, "*The Investment, Financing and Valuation Of Corporation*" concludes that the dividend policy of a firm affects its value. Unlike Walters model, he argues that the dividend policy affects the value of share even in a situation in which the return on investment is equal to the capitalization rate that is ($r = k_e$). It is assumed that investors have a preference for present dividends for future capital gains under the condition of uncertainty. This argument insists that an increase in dividend payout ratio leads to an increase in the stock prices for the reason that investors consider that the dividend yield (d_1/P_0) is less risky than expected capital gain. The basic assumptions of this model are as follows:

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

- The market value of a share is equal to the present value of the future streams of dividends. A simplified version of Gordon's model can be symbolically expressed as,

$$P = \frac{EPS(1 - b)}{k_e - (b \times r)}$$

Where,

P = Price of share

EPS = Earnings per share

b = Retention ratio

1-b = Dividend payout ratio

k_e = Capitalization rate or cost of capital

$b \times r$ = Growth rate

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

He further examined by using run test analysis to testify whether price changes were likely to be followed by more price changes in the same time. In fact, he found that the actual and expected runs are not significantly different was not significant. The largest difference exists for daily changes, but the difference was not significant. However, the difference for the 4 day, 9 days and 16 day intervals was very small. In all cases the departure from random walk hypothesis was

negligible. On the basis of these tests, Fama concludes that there was little evidence, either from serial correlation or from run tests of any large degree of dependence in the daily, 4 days 9 days and 16 days prices changes.

2.3.2 Review of Journals and Articles

Mr.K.C. (2000: 25) There are many loopholes in our exchange act, investors secure here. A few years back there was a company called Nimrod Pharmaceuticals Company that floated in shares but where is it now? Similarly, it has been more than a year that Bansbari leather has allotted its shares, but why didn't the company list its share in the market? It has been three years that Gorakhkali Rubber Udhog hasn't called for its AGM. Government remains silent in all these cases. This is why the general public as well as the institutional buyers is not feeling secure in investing in stock market. Investment in the capital market now has become very uncertain, sending the investors in search of avenues of more certain returns. The equity investment is considered riskier than investment in bonds; preferred stock etc. the secondary market is not performing well. The NEPSE index is covering around 208 and 215 since long. After great slump Nepal stock market in FY 2000/01, dissatisfaction has increased in the mind of investors. A study conducted by Pradhan and Balampaki (2004), on the title of "Fundamentals of stock return" has given some important insight regarding nature of stock return in Nepal. This study deals with fundamental of stock returns. It examines of dividend yield, capital gain yield and total yield are related to earning yield, size, book to market ratio and cash flow yield. The study is based on pooled, cross-sectional data of 40 enterprises whose stocks are listed in Nepal stock exchange Ltd. and traded in the stock market. The study reveals that earning yield and cash flow yield have significant impact on dividend yield.

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

Capital gain yield is positively influenced by earning yield and size, whereas the same is negatively influenced by book to market value and cash flow yield. Book

to market value has been found to be statically strong in predicting capital gain yield. Similarly, total yield is positively determined by earning yield and size whereas the same negatively determined by book to market value has been found to be more informative than other variables.

Mr. KC (2004) has conducted a study entitled “Development of stock market and economic growth in Nepal” based upon the data of ten years. The study reports that the relationship between financial development and economic growth with focus on the development role of stock markets has been in debate for sometime in the past. Empirical studies suggest that financial development does matter and stock market do super economic growth. Unfortunately, in Nepal, despite a history of about half decade of planned economic activities to develop real sectors of the country, little attention was paid on the development of financial sectors. In the past one and half decade, financial sector despite, many problems have developed significantly in Nepal. However, most of the developments were confined to the banking sectors. Stock market has virtually remained stalled because of this priority in the government financial reform politics. Various measure of stock market deployment indicates that the stock market in Nepal is underdeveloped and has failed to show impact on the overall national economy. Small market size has made it vulnerable to manipulation and price rigging. Low turnover ratio and value traded ratio to volatility, and high concentration ratio indicate that the stock market in Nepal is highly liquid and risky. Investors tend to avoid stock market in Nepal is highly liquid and risky. Investors’ tend to avoid stock market because they do not have option to it since stock market is less reliance source of raising funds to them. Due to this, financial system of Nepal has remained basically bank dominated.

Review of Master’s Thesis

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

Dhamala (2005) studied on Determinants of share price in Nepalese financial market taking 10 public companies i.e. 5 from commercial bank and 5 from financial companies covering related data and information for 5 years from 1996 to

2001 he found in his study that the Nepalese stock market is not efficient enough to determine MPS in accordance with the respective financial performance. The market price of share in Nepal is not indicative of a company's financial performance. The market price of share in Nepal is not indicative of a company's financial performance in stock market and the share market is imperfect and is not efficient and is liable to manipulation. Basically value of share price is to be determined by the future perspective of the company on the basis of past financial indicators.

Mainali (2006) has also conducted the study on "*share price behavior of listed commercial banks*". The prime objective of his study was to analyze the performance of stock market and the behavior of share price of listed commercial banks. The other specific objectives were to provide glimpse of NEPSE, examine the risk involved in the common stock investment of the sample commercial banks and discuss the movement of the stock market price. He used parametric and non parametric test to explore the randomness of stock return. He used standard deviation coefficient of variation beta coefficient for individual stock to test the friskiness of share. The result of estimate serial correlation was found to have deviated significantly from the expected value zero i.e. serially correlated. So that the results obtained from the serial correlation test tend to invalidate the hypothesis of dependence. The results of run tests also consistence with the results of serial correlation tests. He found that past and present price changes can screen out some valuable information in predicting future price changes. So there exists sufficient amount of opportunity for sophisticate investors. The statistical analysis is regarding the risk and return of sampled stock showed that most of the banks are offering cash dividends every year, which may not be applicable to other non-banking firms.

Ban (2007), also conducted the study on "*valuation of stock in stock market with reference to banking, finance and insurance companied listed in NEPSE*". He applied statistical tools, financial tools and financial parameters. The objectives of his study to predict trends and significant development of stock in NEPSE analyze size and return of securities and compare with market return, examine the relation

between market capitalizations with other determinants variables. He found that banking sectors occupy 62.18% whole transaction of NEPSE. So the rate of stock market depends on performance of banking sector. The participant of people is market due to higher return. The average return of financial and insurance is 13.86% and coefficient of correlation is 29.03%. The risk associated with finance and insurance sector is higher than banking sectors. Similarly, in the case of finance and insurance sectors, EPS has found significant relationship with market capitalization.

Giri (2007) has conducted a study on “*Behavior of Share Price of Listed Commercial Bank*” by taking 10 sample commercial banks. She used statistical tools, financial tools and financial parameters. The objectives of her study were to provide glimpse of Nepalese stock market, analyze the share price behavior of listed commercial banks, to examine the risk involved in the common stock investment on those listed commercial banks. She found that weakly efficient market hypothesis does not offer a satisfactory explanation to these speculative price series. The information of the past price changes is helping in predicting future change. So, sufficient opportunities are available to institution and individual investors to make higher expected profit in future. Most of the stocks seemed to be risky than the average stock. She found that most of the banks are offering cash dividends every year. According to her it is not applicable in the other type of non-banking industries.

Regmi (2008), undertake his study on “*Share Price Behavior in Nepal*”. His major objective was to assess equity share price behavior in Nepal. The other specific objectives were to test random walk or weak form efficient market hypothesis, examine whether successive prices change are independent or not, conduct the opinion survey financial executives regarding the various aspects of the share prices behavior in Nepal. He found that both the tests serial correlation and run tests analysis do not support the independence assumption of random walk model. Share price movements are caused by flow of several kinds of information in the market. The existence of weak form efficient of market hypothesis slightly accepted by the financial executives of Nepalese securities market.

Another study on stock price movement and financial performance of Nepalese listed companies conducted by Dhungel (2007) derive the conclusions as the invisible factors causes the ups and downs movement of monthly share volume, price and market capitalization throughout each fiscal year, the fluctuation trends is not in order and there is no correlation between volume and price of stocks. The larger stocks have the lower price earning ratios, larger market value to book value ratio and lower ratio of dividend per share to market price per share, higher and less variables leverage and lower profitability.

Shrestha (2008) conducted thesis on "An analysis on the factors of volatility of price in Nepal stock market". Major objective of study was to examine volatility of stock price .Other specific objectives were to highlight the factors affecting share price, examine sensitivity of MPS with various financial indicators and to determine effect of earning dividend and net worth to the stock. Shrestha found that five majors' factors of volatility such as NRB bank guidance, earning price trend information and net worth .Shrestha used run test and concluded that stock price randomly fluctuated

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

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

CHAPTER: III

RESEARCH METHODOLOGY

Research means to study repeatedly and find out new fact knowledge principle and scientific manner. A systematic research study required a paper methodology to achieve a set of objective, which helps to discover find out proposed information, systematic collection, recording, analysis, interpretation and reporting of information. This chapter provides the methodology followed to achieve the objectives stated in this research works. This chapter contains the research design, sample size, data collection procedure, data processing tools and techniques variables etc.

3.1. Research Design

Research design is the conceptual structure plan or strategy of investigation within which research is conducted. This is a system that guides the researchers in formulating, implementing and controlling the study. This also helps to make easy to identifying the problem to report writing with the help of collection, tabulation, analysis and interpretation of data. This is logical and systematic planning and directing of a price of research.

In this study, historical as well as descriptive research design is adopted to determine the effect of earning, dividend book value and other factors in the stock price. Historical research design is commanded along with correlation and regression analysis and to identify the qualitative factors affecting stock price the descriptive research design is commanded. It follows descriptive and analytical designs in the sense that it tries to find some fact about the Nepalese stock market and the Nepalese investors.

3.2. Population and Samples

The total observation is generally called population. There are 31 commercial banks at present in the market so this is the number of population. Due to the lack of time and resource factor, it is not possible to study all of them. Hence, the 5 commercial banks have been taken as sample which are listed and doing share transaction in NEPSE. The sampling method used is the judgmental sampling.

Sample banks:

1. Bank of Katmandu Ltd.
2. Everest Bank Ltd.
3. Nepal Industrial and Commercial Bank Ltd.
4. Kumari Bank Ltd.
5. Machhapuchhre Bank Ltd.

3.3. Sources and nature of data

The sources of information are generally classified as secondary data. Secondary data are used to find out the relationship between different variables like share price earning, share price, liquidity ratio, share price turnover etc. the source of secondary data are annual report of related Banks, SEBON, NEPSE, Financial statistics reports, Journals, Unpublished Thesis reports, newspaper and Internet Websites.

3.4. Data Collection Techniques

This study is based on secondary data. Since the nature is different so the data collection procedure also varies. The secondary data are collected from published material are viewed in various spots like books websites, journals, online library, NEPSE, SEBON, TU Central Library, SEBON Library.

3.5. Data Processing

The data have no meaning if they are not arranging and presenting in a systematic way to be verified and simplified for the purpose of analysis.

The relevant data have been interested in meaningful tables and figures. It helps to find out the conclusion from the available data, with the helps of various statistical as well as financial tools. Those data are unnecessary which are excluded from the study and tables.

3.6. Data Analysis Tools

The collected data has no meaning if such data are not analyzed, in this study various statistical and financial tools have been used to analyze the data. The data collected from various sources lead to the logical conclusion, only if the appropriate tools and techniques are adopted for analysis for such data.

Mean is the value of central part of the distribution which gives us representatives of data. It depicts the characteristics of the whole group. The value of arithmetic mean lies in between the two extreme observations of the entire data. The value of AM is obtained by adding together all the items and by dividing this total by the number of items which is given by:

$$\text{Arithmetic mean } (\bar{X}) = \frac{\sum x}{N}$$

Where,

\bar{X} = Arithmetic mean

$\sum x$ = Sum of all value of the variables X

N = Number of observations

3.6.2. Standard Deviation (σ)

The standard deviation measures the absolute description, if the standard deviation will be greater the magnitude of the deviations also greater. A small standard deviation means a higher degree of true fact and vice versa, which is given by:

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

3.6.3. Coefficient of Variations (CV)

Coefficient of variation (CV) compares the variability between two or more series.

This is more relevant and appropriate statistical tools, which is given by:

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

3.6.4. Correlation Coefficient (r)

Correlation coefficient helps to measure the qualitative nature of data. This statistical tools discovering and measuring the relationship and expressing of analyzed data. If the value of the variables are directly proportional the correlation is positive but the values of variables are inversely proportional the correlation is negative. The correlation coefficient always lies between +1 to -1.

For example,

The two variables x and y are given by:

$$r_{xy} = \frac{Cov(x,y)}{\sigma_x \sigma_y}$$

$$r_{xy} = \frac{N \sum xy - \sum x \sum y}{\sqrt{N \sum x^2 - (\sum x)^2} \sqrt{N \sum y^2 - (\sum y)^2}}$$

Where,

r_{xy} = correlation coefficient between two variables x and y.

When r is +1, there is perfect positive correlation and if -1 there is perfect negative correlation but rise zero is no correlation.

3.6.5. Coefficient of Determination (R^2)

The coefficient of determination is more appropriate statistical tools while verifying the result. It is the way to measure the contribution of independent variables in predicting the dependent variables. This is computed by square of the correlation coefficient which is given by,

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

3.6.6. Regression Analysis

This tool helps to identify the unknown value of one variable from the known value of any other variable. The variable, those value is given is known as dependent variables and the variable those value is to be predicted is known as dependent variable. So the regression analyses determine the average probable change in one variable based on a creation amount of change in another. It is used to determine the dependent variable is influenced by the given independent variable is influenced by the given independent variable or not. So the regression analysis is mostly useful technique for economic and business research to find out the relationship.

The regression analysis can be classified into two categories which is given follows:

- i) Simple Regression Analysis

ii) Multiple Regression Analysis

i) Simple Regression Analysis

This analysis used to describe the average relationship between variable which helps to estimate the most probable value of dependent variables, on the basis of one or more independent variables.

In this study following simple regression has been analyzed which is given by,

$$\text{MPS} = a + b \text{ EPS} \dots\dots\dots (i)$$

$$\text{MPS} = a + b \text{ DPS} \dots\dots\dots (ii)$$

$$\text{MPS} = a + b \text{ BVPS} \dots\dots\dots (iii)$$

ii) Multiple Regression Analysis

This is defined as statistical device which is used to predict the most probable value of dependent variable on the basis of known value of two or more dependent variables, so this is a logical extension of the simple regression.

In this study, following multiple regression equation is analyzed.

$$\text{MPS} = a + b_1 \text{ EPS} + b_2 \text{ DPS} + b_3 \text{ BVPS}$$

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

{Note: Both regression analyses were calculated by SPSS Software.}

CHAPTER: IV

DATA PRESENTATION AND ANALYSIS

4.1. Introduction

This chapter deals with data presentation, analysis and interpretation following the research methodology presented in the third chapter. This chapter is the main body of this study. The data are collected in unprocessed form. Such collected data are presented in systematic format and analyzed using different appropriate tools and techniques in this chapter. The secondary data collected from different sources are presented in an understandable presentation and analyzed separately using both quantitative and qualitative measures whenever are appropriate.

4.2. Analysis of Market Price

It is also important technique to summarize and analysis the market price as a whole for year to know about the stock price behaviors Nepal stock market. The annual market price of each sample banks are supposed as a dozing price of close date of respected year for this purpose tabular as well as graphical measure are consider for presenting and analyzing data.

Table 4.1.
Yearly Market Price per Share

Years	Banks								
	BOK	EBL	KBL	MBL	NICBL	Total	Mean	SD	CV
2004/05	430.00	870.00	369.00	256.00	366.00	2291.00	458.20	213.41	46.58
2005/06	850.00	1379.00	443.00	320.00	496.00	3488.00	697.60	383.56	54.98
2006/07	1375.00	2430.00	830.00	620.00	950.00	6205.00	1241.00	643.57	51.86
2007/08	2350.00	3132.00	1005.00	1285.00	1284.00	9056.00	1811.20	804.94	44.44
2008/09	1825.00	2455.00	700.00	420.00	1126.00	6526.00	1305.20	744.87	57.07
Total	6830.00	10266.00	3347.00	2901.00	4222.00				
Mean	1366.00	2053.20	669.40	580.20	844.40				
SD	681.38	815.08	237.00	373.31	356.08				
CV	49.88	39.70	35.41	64.34	42.17				

Source: Annual report of related Commercial Bank and Annex 1

From the table 4.1 it is clear that the end of FY 2004/2005 to 2007/2008 is increasing trend and after that the end of FY 08/09 is decreasing trend. In the FY 2004/05 to 2005/06 is sharply increased but in the FY 2006/07 and in the FY 2008/09 is slowly decreasing. Overall market price of this sample banks are increasing trend up to FY 2007/08 and in the FY 2008/09 is decreasing trend due to different factors. According to coefficient of variation is 54.23% in FY 2005/06 which is highest CV during study period. This CV indicate that overall during the study period, it is moderate risk involved in the commercial bank but in FY 2007/08 have least CV which is 36.23%.

Similarly, from the above table, if it is analyzed under company wise MBL have highest CV, which is 61.44% it indicate that there is high degree of risk is involved but EBL have less CV which is 33.77%. It shows that EBL have less risk involved during the study period.

Figure 4.1.

Yearly Average Market Price of Share



Analyzing the figure 4.1 market price of overall sample commercial banks has increasing trend in FY 2004/05 then up to FY 2007/08 which is increasing trend. In this situation the investor and shareholder should sell the stock and in the FY 2008/09 the market price is decreasing trend, in this situation the investor and shareholder should purchase the stock. In the FY 2004/05 the market price is Rs. 458.2 but in FY 2005/06 this price is sharply increase and reach up to Rs. 702.00. After the FY 2005/06 or End of FY 2006/07 and FY 2007/08 the market price is highly increase.

4.3. Analysis of EPS

In this study the market price are determine the relationship between historical price movement and economic variables and to measure the risk involved for individual sample banks. In this study, the price of stocks goes up and down in the particular company, due to the EPS or not. This analysis helps to know the individual financial position for the investors and shareholders. Standard deviation and coefficient of variation help to identify the risk involved in the particular company. This analysis usually used for the price movement to predict future movement in the stock market.

Table 4.2.
Analysis of Yearly Bank wise EPS

Years	Banks								
	BOK	EBL	KBL	MBL	NICBL	Total	Mean	SD	CV
2004/05	31.1	54.2	17.6	15.4	22.8	141.1	28.2	14.1	49.9
2005/06	43.7	62.8	16.6	18.8	16.1	157.9	31.6	18.7	59.2
2006/07	43.5	78.4	22.7	9.0	24.0	177.7	35.5	24.1	67.8
2007/08	59.9	91.8	16.4	10.4	25.8	204.2	40.8	30.7	75.2
2008/09	54.7	100.0	22.0	8.3	27.8	212.9	42.6	32.4	76.1
Mean	46.6	77.4	19.1	12.4	23.3				
SD	10.0	17.1	2.7	4.0	4.0				
CV	21.5	22.1	14.4	32.7	17.1				

Source: Annual report of NEPSE and related Commercial Banks.

From the above table it is clear that during the study period the EBL average earning is Rs. 77.45 the standard deviation is 17.15 and coefficient of variation is 22.14. The 22.14 of CV indicates that there is less risk involved in the earning capacity of this Bank.

Under the study of BOK the mean and standard deviation of EPS of this bank is Rs. 46.58 and 10.02 respectively. The 21.51 CV shows that there is less risk involved in the earning capacity of this bank during the study period.

Under the study period of KBL, the mean and standard deviation of EPS of this bank is Rs. 19.05 and 2.75 respectively. The coefficient of variation (CV) is 14.43%. The 14.43% CV shows that there is very low risk involved in the earning capacity of this bank during the study period.

During the study period MBL average earning is Rs. 12.38. The standard deviation is 4.04 and coefficient of variation is 32.66. The 32.66 of CV indicates that there is less risk involved in the earning capacity of this Bank.

During the study period NICBL average earning is Rs. 23.29. The standard deviation is 3.98 and coefficient of variation is 17.09. The 17.09 of CV indicates that there is very low risk involved in the earning capacity of this Bank.

Figure 4.2.

Yearly Average EPS



From the above figure, during the study period the overall average EPS of the Banks is in increasing trend. In fiscal year 2004/05 the average EPS is 28.22 and in Fiscal Year 2008/09 the average EPS is 42.57. This is increasing trend of capital market as average EPS increases from 28.22 to 42.57 during the study period.

4.3. Analysis of DPS

In the study, the market prices are determining the relationship between historical price movement and economic variables and to measure the risk involved for individual sample banks. In this study the price of stock go up and down in the particular company due to the DPS or not. This analysis help to know the individual financial position of for the investor and shareholders standard deviation and coefficient variation helps to indentify the risk involved in the particular company. This analysis usually used the price movement in the stock market.

Table no. 4.3.**Analysis of DPS**

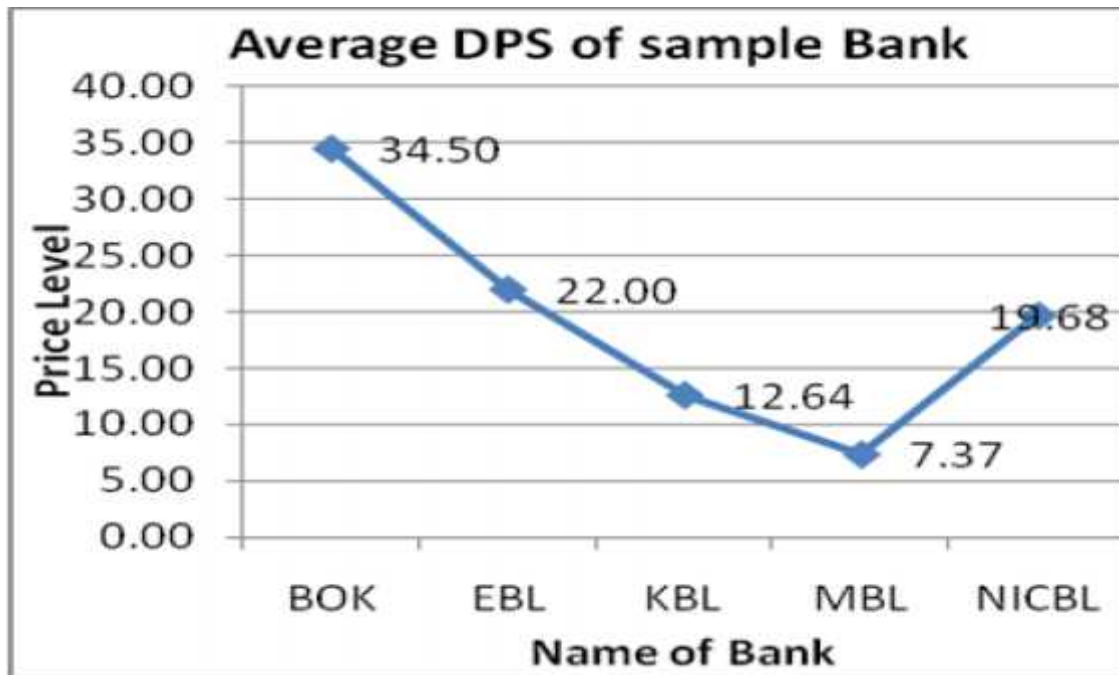
Years	Banks								
	BOK	EBL	KBL	MBL	NICBL	Total	Mean	SD	CV
2004/05	15.0	20.0	0.0	0.0	30.0	65.0	13.0	11.7	89.7
2005/06	48.0	0.0	21.1	15.8	10.5	95.4	19.1	16.1	84.2
2006/07	20.0	30.0	21.1	0.0	21.1	92.1	18.4	9.9	53.7
2007/08	42.1	30.0	10.5	21.1	21.1	124.7	24.9	10.6	42.4
2008/09	47.4	30.0	10.6	0.0	15.1	103.7	20.7	16.4	79.3
Mean	34.5	22.0	12.6	7.4	19.7				
SD	14.1	11.7	7.9	9.2	6.5				
CV	40.9	53.0	62.3	124.5	32.9				

Source : Annual report of related commercial Banks

The EBL average DPS is Rs. 22.00, standard deviation 11.66 and 53.01 coefficient of variation. 53.01 CV indicate the more risk involved in dividend paying. This bank has average and constant DPS among all sample banks. So these banks have constant DPS they have low price fluctuation. Hence the EBL is low riskier asset for investors and shareholders because this has no more change in dividend per share. But the BOK the mean and standard deviation of DPS of this bank is Rs. 34.5 and 14.1 respectively. The 40.9 CV shows that there is less risk involved in the DPS of the bank. Similarly KBL's mean and standard deviation of DPS is Rs. 12.6 and 7.9 respectively. The coefficient of variation (CV) is 62.3%. The 62.3% CV shows that there is high risk involved in the riskier asset because this have more degree of risk involved in DPS. During the study period MBL average DPS is Rs. 7.4, which has paying dividend only two (second and fourth) years to his investors and shareholders. The standard deviation is 4.04 and coefficient of variation is 124.5. The 124.5 of CV indicates that there very-very higher risk involved in the dividend paying of this Bank.. In the study period NICBL average DPS is Rs. 19.7. The standard deviation is 6.8 and coefficient of variation is 32.9. The 32.9 of CV indicates that there is very low risk involved in the earning capacity of this Bank.

Thus the DPS plays the vital role for the price fluctuation of capital market. If the investors and shareholders hope the positive and constant return from their assets and they attracted to that kinds of assets. In this period BOK and NICBL has smoothly constant

Figure 4.3.
Yearly average DPS



On the above figure, it is cleared that BOK has highest DPS i.e. 34.50. In a same way DPS of EBL, KBL, MBL and NICBL are 22.00, 12.64, 7.37 and 19.68 respectively. The MBL has the lowest DPS i.e. 7.37. In this sense market price of dividend are not run in same trend in the commercial Banks, so Commercial Banks do not have same rate and ratio for paying dividend, They are paying dividend as per their earning,

Table 4.4.

Correlation analysis of MPS and DPS of Banks

Variables	Correlation(r)	Coefficient of determinants (r^2)	Probable Error	6 P.E.	Remarks
MPS & DPS	0.62	0.3844	0.2768	0.0766	Significant

Source: Appendix 2

The correlation between MPS and DPS is 0.62. It shows that MPS is significantly positively correlated with EPS. It indicates that when the DPS increase MPS is also increases and vice versa. The coefficient of determinates is 0.3844 which indicates that nearly 38.44% of the total change in MPS is due to the effect of DPS and remaining 61.54% change in MPS is due to other factors.

The probable of error (P.E.) of correlation coefficient is 0.2768 and 6 P.E. is 0.0766. It indicates that the value of 'r' is significant or correlation is significant. It helps to analyze the measurement of reliability of the computed value of the correlation coefficient 'r'. This is significant because 'r' value is greater than that of 6 P.E. values.

4.3.3. Analysis of BVPS

In the study, the market prices are determining the relationship between historical price movement and economic variables and to measure the risk involved for individual sample banks. In this study the price of stock go up and down in the particular company due to the BVPS or not. This analysis help to know the individual financial position of for the investor and shareholders standard deviation and coefficient variation helps to indentify the risk involved in the particular company. This analysis usually used the price movement in the stock market.

Table 4.5.
Yearly Bank wise BVPS

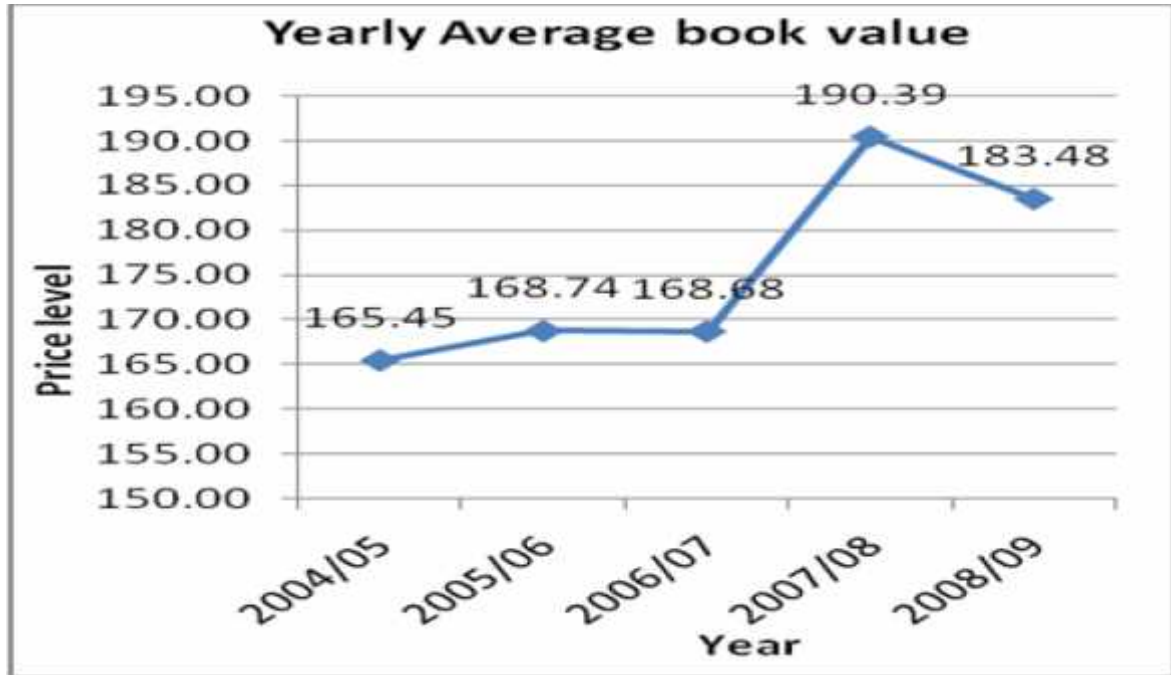
Years	Banks								
	BOK	EBL	KBL	MBL	NICBL	Total	Mean	SD	CV
2004/05	213.6	219.9	141.0	116.0	136.8	827.3	165.5	42.8	25.9
2005/06	230.7	217.7	149.0	130.2	116.1	843.7	168.7	46.6	27.6
2006/07	164.7	280.8	137.0	121.7	139.2	843.4	168.7	57.7	34.2
2007/08	222.5	321.8	128.0	141.6	138.1	952.0	190.4	73.9	38.8
2008/09	206.3	313.6	137.0	114.9	145.6	917.4	183.5	71.8	39.1
Mean	207.5	270.8	138.4	124.9	135.2				
SD	23.0	44.6	6.8	10.0	10.0				
CV	11.1	16.5	4.9	8.0	7.4				

Source: Annual report of NEPSE and related Commercial banks

Under the study of BOK the average BVPS is Rs. 207.54 and standard deviation is 22.95. The coefficient of variation is 11.06. The 11.06 CV explains that there is very less risk involved in the book value price fluctuation in this bank.. So this bank is less risky investment opportunities for the investors and shareholders. The EBL banks also have the mean BVPS Rs. 270.76 and standard deviation is 44.6. The CV of this bank is 16.5, the 16.5 CV indicate that there is very less risk involved .Under the study the KBL banks have the mean BVPS Rs. 138.4 and standard deviation is 6.8. The CV of this bank is 4.9. The 4.9 CV indicate that there is very less risk involved in fluctuation of BVPS of this bank.. Under the study of MBL the average BVPS is Rs. 124.89 and standard deviation is 10.00. The coefficient of variation is 8.00. The 8.00 CV explains that there is very less risk involved in the book value price fluctuation.. So this bank is less risky investment opportunities for the investors and shareholders. The NICBL also have the mean BVPS Rs. 135.20 and standard deviation is 10.00. The CV of this bank

is 7.4, the 7.4 CV indicate that there is very less risk involved as fluctuation of BVPS of this bank is low.

Figure 4.4.
Yearly Average BVPS



From the above figure we observed that the average book value per share is in increasing trend. The average BVPS during the year 2004/05 is 165.45. The average BVPS reach maximum i.e.190.39 during the year 2007/08 and decrease there after and become Rs 183.48 in 2008/09.

Table 4.6.
Correlation analysis of MPS and BVPS

Variables	Correlation(r)	Coefficient of determinants (r^2)	Probable Error	6 P.E.	Remarks
MPS & BVPS	0.99	0.9801	0.0081	0.0486	Significant

Source: Appendix 2

The correlation of MPS and BVPS is 0.99. Correlation between MPS and BVPS shows that there is also high degree of positive relationship. It indicates that when

the BVPS increase MPS also increase and vice versa. The coefficient of determinants between MPS and BVPS is 0.9801. It explains that nearly 98.01% of total change in MPS is due to the effects of BVPS and remaining 1.09% change in MPS is due to the effects of other factors.

The probable of error (P.E.) of correlation coefficient is 0.0081 and 6 P.E. is 0.0486. It indicates that the value of 'r' is significant or correlation is significant. It helps to analyze the measurement of reliability of the computed value of the correlation coefficient 'r'. This is significant because 'r' value is greater than that of 6 P.E. values.

4.4. Regression Analysis

The regression analysis is carried out to determine whether the dependent variables are influence by the given independent variables or not. In this analysis MPS is Dependent variables and DPS, EPS and BVPS are the independent variables.

4.4.1. Simple Regression Analysis

Regression analysis is the statistical tool, which presents the linear relationship between two or more variables. If one or more independent variables are change and then it results the change in the value of dependent variables. Statistically, such variables can be presented in mode of linear equation. This analysis is done with simple regression analysis to find out the existence are non existence of any relationship between MPS with EPS, DPS and BVPS.

Simple regression equation of MPS in different situation in expressed as:

$$\text{MPS} = a + b \quad (\text{different situation})$$

$$\text{Where, } a = \bar{y} + b\bar{x}$$

Table 4.7.

Regression analysis on MPS with EPS

Bank	Constant (a)	Regression Coefficient (b)	Correlation coefficient (r)	Coefficient of multiple determinants (r ²)
BOK	-1681.79	65.434	0.9619	0.925
EBL	-1228.33	42.372	0.891	0.795
KBL	280.896	20.392	0.236	0.056
MBL	1119.818	-43.602	-0.472	0.223
NICBL	-684.981	65.672	0.734	0.539

Source: Appendix 4

Above table shows that, the simple regression analysis between MPS and EPS of selected commercial bank.

The correlation between MPS and EPS of all sample banks are positive except MBL. So this bank's regression coefficient is negative. The regression coefficient of BOK, EBL, KBL, MBL and NICBL are 65.434, 42.372, 20.392, -43.602 and 65.672 respectively. It indicates that holding other variables constants one rupee increase in EPS leads to an average of about Rs. 65.434, 42.372, 20.392 and 65.672 increases in stocks price of BOK, EBL, KBL, MBL and NICBL respectively. But incase of MBL, it has negative regression coefficient. The regression coefficient of MBL is -43.602; it indicates that holding other variable constant one rupee decrease the EPS leads to an average of about Rs. 43.60.

The value of constant is -16841.79, -1228.23, 280.896, 1119.818 and -684.981 of BOK, EBL, KBL, MBL and NICBL respectively. In case of BOK, EBL and NICBL have negative regression constant which indicates MPS of these banks are deeply related with the EPS but the regression constant KBL and MBL have positive regression which indicates that the MPS of banks are highly affected by other factors besides EPS.

The coefficients of multiple determinants are 0.925, 0.795, 0.056, 0.223 and 0.539 BOK, EBL, KBL, MBL and NICBL respectively. Coefficient of determinants of

KBL is lowest among other sample banks. It indicates that only 5.6% variation of MPS is explained by EPS. The coefficient of determinants of BOK is highest among the banks. It indicates that 92.5% variation in MPS is explained due to the change in EPS of this bank. Similarly 0.795, 0.223 and 0.539 variation in MPS is explained due to change in EPS of other banks EBL, MBL and NICBL respectively. It can be concluded that the MPS of these banks are highly affected by EPS.

Table 4.8.

Simple Regression analysis on MPS with BVPS

Bank	Constant (a)	Regression Coefficient (b)	Correlation coefficient (r)	Coefficient of multiple determinants (r ²)
BOK	1669.664	-1.463	-0.0493	0.002
EBL	-2627.79	17.288	0.946	0.896
KBL	4823.076	-30.012	-0.861	0.741
MBL	-3131.52	29.721	0.793	0.629
NICBL	-1996.66	21.02	0.589	0.033

Source: Appendix 4

Above table shows that the correlation between MPS and BVPS of all sample banks are positive except BOK and KBL. If correlation coefficient is negative, regression coefficient is also negative and vice-versa. The regression coefficient of BOK, EBL, KBL, MBL and NICBL are -1.463, 17.288, -30.012, 29.721 and 21.02 respectively. It indicates that holding other variables constants one rupee increase in BVPS leads to an average of about Rs. 17.288, 20.392 and 21.02 increases in stocks price of EBL, KBL and NICBL respectively. These banks have positive correlation between MPS and BVPS. But in case of BOK and MBL, they have negative regression coefficient. The regression coefficient of BOK and MBL are -1.463 and -30.012; it indicates that holding other variable constant one rupee decrease the EPS leads to an average of about Rs. 1.463 and 30.012 in the stock

price of BOK and MBL respectively. If BVPS is decrease by Rs. 1.00 from the analysis explain that BVPS plays vital role to determine the MPS.

The value of constant is 1669.664, -2627.79, 4823.076, -3131.52 and -1996.66 of BOK, EBL, KBL, MBL and NICBL respectively. In case of EBL, MBL and NICBL have negative regression constant which indicates MPS of these banks are deeply related with the EPS but the regression constant BOK and MBL have positive regression which indicates that the MPS of banks are highly affected by other factors besides EPS.

The coefficients of multiple determinants of BOK, EBL, KBL, MBL and NICBL are 0.002, 0.896, 0.741, 0.629 and 0.033 respectively. Coefficient of determinants of BOK is lowest among other sample banks. It is indicates that only 0.2% variation of MPS is explained by EPS. The coefficient of determinants of EBL is highest among the banks. It is indicates that 89.6% variation in MPS is explains due to the change in EPS of this bank. Similarly 0.741, 0.629 and 0.033 variation in MPS is explained due to change in EPS of other banks KBL, MBL and NICBL respectively. It can be concluded that the MPS of these banks are highly affects by EPS.

Table 4.9.

Regression analysis on MPS with DPS

Bank	Constant (a)	Regression Coefficient (b)	Correlation coefficient (r)	Coefficient of multiple determinants (r ²)
BOK	515.94	24.642	0.5105	0.261
EBL	1016.029	47.144	0.675	0.455
KBL	568.543	7.978	0.265	0.070
MBL	392.452	25.482	0.626	0.392
NICBL	1041.863	-10.032	-0.182	0.033

Source: Appendix 4

Above table shows that, the simple regression analysis between MPS and DPS of selected commercial bank.

The regression coefficient of BOK, EBL, KBL, MBL and NICBL are 24.642, 47.144, 7.978, 25.482 and -10.032 respectively. The correlation between MPS and DPS of BOK, EBL, KBL and MBL are positive and NICBL has negative correlation. Those banks have positive regression coefficient between MPS and DPS. BOK, EBL, KBL and MBL have positive regression coefficient. It indicates that holding other variables constants one rupee increase in DPS leads to an average of about Rs. 24.642, 47.144, 7.978 and 25.482 increases in stocks price of BOK, EBL, KBL and MBL respectively. These banks have positive correlation between MPS and DPS. But NICBL has negative regression coefficient of -10.032; it indicates that holding other variable constant, one rupee decrease the EPS leads to an average of about Rs. 10.032 in the stock price of NICBL. It means that, there is positive correlation between MPS and DPS of bank positive which has positive regression coefficient and negative correlation between MPS and DPS which banks has negative regression coefficient.

The value of constant is 1669.664, -2627.79, 4823.076, -3131.52 and -1996.66 of BOK, EBL, KBL, MBL and NICBL respectively. In case of EBL, MBL and NICBL have negative regression constant which indicates MPS of these banks are deeply related with the EPS but the regression constant BOK and MBL have positive regression which indicates that the MPS of banks are highly affected by other factors besides EPS.

The coefficients of multiple determinants of BOK, EBL, KBL, MBL and NICBL are 0.002, 0.896, 0.741, 0.629 and 0.033 respectively. Coefficient of determinants of BOK is lowest among other sample banks. It is indicates that only 0.2% variation of MPS is explained by EPS. The coefficient of determinants of EBL is highest among the banks. It is indicates that 89.6% variation in MPS is explains due to the change in EPS of this bank. Similarly 0.741, 0.629 and 0.033 variation in MPS is explained due to change in EPS of other banks KBL, MBL and NICBL respectively. It can be concluded that the MPS of these banks are highly affects by EPS.

4.4.2. Multiple Regression Analysis

Multiple regression analysis two or more independent variables are used to estimate the value of a dependent variables. In other words multiple regressions help to establish the functional relationship between more than two variables and thereby provide a mechanism for estimation. However, multiple regression analysis is applied here in order to analyze the combined effect of EPS, BVPS and DPS on MPS of the sampled banks.

The multiple regression equation is:

$$MPS = a + b_1.EPS + b_2. BVPS + b_3.DPS$$

Multiple regression analysis Bank of Kathmandu Limited

Multiple regression equation for BOK:

$$MPS = a + b_1.EPS + b_2. BVPS + b_3.DPS$$

Table 4.10.

Multiple regression analysis BKL

Regression Constant (a)	Regression coefficient (b)			Multiple correlation (r)	Coefficient of determinants (r ²)	Standard error of the estimate
	b ₁	b ₂	b ₃			
-1931.08	85.004	-0.011	-19.129	0.999	0.9998	22.6286

Source: Appendix - 31

The above summaries results of multiple regression analysis produced by using SPSS Software for determining the combined effect of EPS, BVPS and DPS on MPS of Bank of Kathmandu (BOK) for the five year study period. The regression constant a in multiple regression that MPS on EPS DPS and BVPS is -1931.08. The regression constant is negative so it indicates that MPS of this bank is highly affected by other factors besides EPS, BVPS and DPS in the bank. The regression coefficient b₁ represented that one rupee increase in EPS leads to an average increase in MPS by 85.004 if other two factor BVPS and DPS are kept constant. Similarly, the regression coefficient b₂ measure the average effect of BVPS on MPS. The value of b₂ -0.011 indicates that one rupee increase in BVPS leads to a

decrease in MPS by Rs. 0.011, holding the two other variables constant. Likewise the coefficient b_3 measure the average affect of DPS on MPS. The value of b_3 which is equal to -19.129 indicates that an average decrease in MPS by Rs. 19.129. The multiple correlation coefficients between MPS, EPS, BVPS and DPS are 0.999. It explains that there is high degree of closeness. The coefficient of determination (r^2) explain that 99.98% variation in MPS is accounted for by the variation in EPS, BVPS and DPS and 0.02% variation in MPS is due to the other irrelevant factors. The estimation of MPS might be inaccurate by Rs. 22.6286 as the standard error of estimate.

Multiple regression analysis Everest Bank Ltd.

Multiple regression equation for EBL:

$$\text{MPS} = a + b_1 \cdot \text{EPS} + b_2 \cdot \text{BVPS} + b_3 \cdot \text{DPS}$$

Table 4.11.

Multiple regression analysis EBL

Regression Constant (a)	Regression coefficient (b)			Multiple correlation (r)	Coefficient of determinants (r^2)	Standard error of the estimate
	b_1	b_2	b_3			
-4861.51	-42.32	40.61	-36.53	0.978	0.957	376.204

Source: Appendix - 3

The above summaries results of multiple regression analysis produced by using SPSS Software for determining the combined effect of EPS, BVPS and DPS on MPS of EBL for the five year study period. The regression constant a in multiple regression that MPS on EPS DPS and BVPS is -4861.51. The regression constant is negative so it indicates that MPS of this bank is highly affected by other factors besides EPS, BVPS and DPS in the bank. The regression coefficient b_1 represented that one rupee increase in EPS leads to an average decrease in MPS by Rs. 42.32 if other two factor BVPS and DPS are kept constant. Similarly, the regression coefficient b_2 measure the average effect of BVPS on MPS. The value of b_2 40.61 indicates that one rupee increase in BVPS leads to a increase in MPS by Rs. 40.61, holding the two other variables constant. Likewise the coefficient b_3 measure the

average affect of DPS on MPS. The value of b_3 which is equal to -36.53 indicates that an average decrease in MPS by Rs. 36.53. The multiple correlation coefficients between MPS, EPS, BVPS and DPS are 0.978. It explains that there is high degree of closeness. The coefficient of determination (r^2) explain that 95.70% variation in MPS is accounted for by the variation in EPS, BVPS and DPS and 4.30% variation in MPS is due to the other irrelevant factors. The estimation of MPS might be inaccurate by Rs. 376.204 as the standard error of estimate.

Multiple regression analysis Kumari Bank Ltd.

Multiple regression equation for KBL:

$$MPS = a + b_1.EPS + b_2. BVPS + b_3.DPS$$

Table 4.12.

Multiple regression analysis KBL

Regression Constant (a)	Regression coefficient (b)			Multiple correlation (r)	Coefficient of determinants (r^2)	Standard error of the estimate
	b_1	b_2	b_3			
-1931.08	-1.742	-34.88	15.94	0.999	0.997184	28.12055

Source: Appendix - 3

The above summaries results of multiple regression analysis produced by using SPSS Software for determining the combined effect of EPS, BVPS and DPS on MPS of KBL for the five year study period. The regression constant a in multiple regression that MPS on EPS, DPS and BVPS is 5328. The regression constant is positive so it indicates that MPS of this bank is highly affected by EPS, BVPS and DPS in the bank. The regression coefficient b_1 represented that one rupee increase in EPS leads to an average decrease in MPS by -1.742 if other two factor BVPS and DPS are kept constant. Similarly, the regression coefficient b_2 measure the average effect of BVPS on MPS. The value of b_2 -34.88 indicates that one rupee increase in BVPS leads to a decrease in MPS by Rs. 40.61, holding the two other variables constant. Likewise the coefficient b_3 measure the average affect of DPS on MPS. The value of b_3 which is equal to 15.94 indicates that an average increase

in MPS by Rs. 36.53. The multiple correlation coefficients between MPS, EPS, BVPS and DPS are 0.999. It explains that there is high degree of closeness. The coefficient of determination (r^2) explain that 99.70% variation in MPS is accounted for by the variation in EPS, BVPS and DPS and 0.30% variation in MPS is due to the other irrelevant factors. The estimation of MPS might be inaccurate by Rs. 28.12 as the standard error of estimate.

Multiple regression analysis Machhapuchhre Bank Limited

$$\text{MPS} = a + b_1 \cdot \text{EPS} + b_2 \cdot \text{BVPS} + b_3 \cdot \text{DPS}$$

Table 4.13.

Multiple regression equation for MBL

Regression Constant (a)	Regression coefficient (b)			Multiple correlation (r)	Coefficient of determinants (r^2)	Standard error of the estimate
	b_1	b_2	b_3			
-4073	-47.34	42.67	-12.17	0.978766	0.957983	171.1058

Source: Appendix - 3

The above summaries results of multiple regression analysis produced by using SPSS Software for determining the combined effect of EPS, BVPS and DPS on MPS of MBL for the five year study period. The regression constant a in multiple regression that MPS on EPS, DPS and BVPS is -4073. The regression constant is negative so it indicates that MPS of this bank is highly affected by other factors besides EPS, BVPS and DPS in the bank. The regression coefficient b_1 represented that one rupee increase in EPS leads to an average decrease in MPS by -47.34 if other two factor BVPS and DPS are kept constant. Similarly, the regression coefficient b_2 measure the average effect of BVPS on MPS. The value of b_2 42.67 indicates that one rupee increase in BVPS leads to a increase in MPS by Rs. 42.67, holding the two other variables constant. Likewise the coefficient b_3 measure the average affect of DPS on MPS. The value of b_3 which is equal to -12.17 indicates that an average decrease in MPS by Rs. 36.53. The multiple correlation coefficients between MPS, EPS, BVPS and DPS are 0.979. It explains that there is high degree of closeness. The coefficient of determination (r^2) explain

that 97.90% variation in MPS is accounted for by the variation in EPS, BVPS and DPS and 3.10% variation in MPS is due to the other irrelevant factors. The estimation of MPS might be inaccurate by Rs. 171.11 as the standard error of estimate.

Multiple regression analysis Nepal Industrial and Commercial Bank Ltd.

Multiple regression equation for NICBL:

$$MPS = a + b_1.EPS + b_2. BVPS + b_3.DPS$$

Table 4.14.

Multiple regression analysis of NICBL

Regression Constant (a)	Regression coefficient (b)			Multiple correlation (r)	Coefficient of determinants (r ²)	Standard error of the estimate
	b ₁	b ₂	b ₃			
4310	226.6	-62.84	-12.66	0.928678	0.862442	295.3041

Source: Appendix - 3

The above summaries results of multiple regression analysis produced by using SPSS Software for determining the combined effect of EPS, BVPS and DPS on MPS of NICBL for the five year study period. The regression constant a in multiple regression that MPS on EPS, DPS and BVPS is 4310. The regression constant is positive so it indicates that MPS of this bank is highly affected by EPS, BVPS and DPS in the bank. The regression coefficient b₁ represented that one rupee increase in EPS leads to an average decrease in MPS by 226.6 if other two factor BVPS and DPS are kept constant. Similarly, the regression coefficient b₂ measure the average effect of BVPS on MPS. The value of b₂ -62.64 indicates that one rupee increase in BVPS leads to decrease in MPS by Rs. 62.64, holding the two other variables constant. Likewise the coefficient b₃ measure the average affect of DPS on MPS. The value of b₃ which is equal to -12.66 indicates that an average decrease in MPS by Rs. 12.66. The multiple correlation coefficients between MPS, EPS, BVPS and DPS are 0.9287. It explains that there is high degree of closeness. The coefficient of determination (r²) explain that 92.87%

variation in MPS is accounted for by the variation in EPS, BVPS and DPS and 7.13% variation in MPS is due to the other irrelevant factors. The estimation of MPS might be inaccurate by Rs. 295.30 as the standard error of estimate

CHAPTER: V

SUMMARY, CONCLUSION AND RECOMMENDATION

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

This chapter also focused on its targeted and meets objectives of the study. The objectives of the studies are observe the stock price behavior of commercial bank of Nepal, find out the factors that affects the stock price of commercial bank of Nepal, study the efficiency of stock market, present feedback towards institutional development of efficient market and study and analysis stock price on the secondary market.

Like blood is necessary for human beings, finance is for business organization and financial management. Financial management is enhancing value and wealth. Proportion of investment and utilization of financial resource is necessary for economic development of any country. For this financial market plays vital role in utilizing financial resource for expanding productive sectors in the country. It mobilizes unproductive and utilized financial resources toward productive sectors.

5.1. Summary

Nepal has one of the poor countries of the world, where the majority of the people are fighting for the problem of hand to mouth. There is a wide gap in the distribution of income and wealth and, idle class families are in significant numbers. After the restoration of democracy in 1990, than Nepalese government initiation privatization and liberalization; the industrial development as well as the capital market development processes took a place. But it could not accelerate.

Nepal is adopting economic liberalization strategy to introduce foreign as well as Nepalese private sectors capital in development program to boost up the economic development of the nation. But a huge amount of capital being remained idle with average Nepalese citizens without getting any investment opportunities. We can use that idle fund in development activities and industries by means of issuing share from the capital market. For this the capital market development should be highly prioritized. Nepalese government has to take initiation for that. So that we

can exploit our opportunities with local fund and avoid the outgoing resources form the country.

Nepalese capital market is a growing stage. Average citizens and investors have not proper ideas about the capital market, share, book value, par value, market price, pricing mechanism and the factors affecting the market price of shares. They are willing to invest, but are not able to do so due to lack of knowledge, in this subjects. In spite of that, the listed companies in the capital market are suffering. Government is not able to create basis infrastructure, sound policies and laws and their effective implementation for the capital market development. As a result there no transparency in the performances of the listed companies and the capital market due to which the capital market is struggling to become matured. The stock investors have not proper education and information to speculate the share price.

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

To meet the desired objectives, the correlation of the quantitative factors, EPS, DPS and BVPS with MPS by correlation analysis is identified. The regression analysis of factors EPS, DPS and BVPS with MPS were employed for the analysis and interpretation of the collected secondary data.

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

The MPS has high correlation with EPS, significant relationship. The MPS largely depends on EPS. The correlation with DPS and BVPS is significant. The correlation of MPS shows the positive correlation between all the variables in the consideration.

The simple regression analysis of MPS on EPS shows that regression coefficient (b) is positive for all sample banks except MBL. The r^2 of BOK is highest and is lowest for MBL which is negative. This means MPS of BOK is highly affected by EPS than the other Bank.

Simple regression analysis of MPS on DPS shows that regression coefficient (b) of all sample banks except NICBL are positive and negative for NICBL. The r^2 of EBL is highest which means MPS of EBL is highly affected by DPS than other Bank.

Simple regression analysis of MPS on BVPS shows that regression coefficient (b) of EBL, MBL and NICBL are positive and negative for BOK and KBL. The r^2 of EBL is highest which means MPS of EBL is highly affected by BVPS than other Bank.

Similarly, to find out the impact of the combined effect if EPS, DPS and BVPS, multiple regression analysis has been conducted with help of SPSS software. For this purpose (r^2) has been calculated which denoted the combined effect of EPS, DPS and BVP. As per the calculation, the highest coefficient of determination (r^2) of BOK is 99.98% which means the MPS of EBL is mostly influenced by the combined effect of EPS, DPS and BVPS among the all selected listed commercial banks during the study period. Only 0.02% variation in MPS is due to the other extraneous factors. Similarly the lowest coefficient of determination (r^2) is 86.24% of NICBL which is indicate that the MPS of the NICBL is least influenced by combined effect of EPS, DPS and BVPS among the all selected listed commercial banks, 13.74% variation in MPS of the company is influenced by the other external factors. The coefficient of determination (r^2) of whole selected commercial banks which are above in 86.24%, shows that the MPS of commercial banks are high influenced by the combined effect of EPS, DPS and BVPS and this relationship is also statistically significant at 5% level.

The decision for investment largely depends on the information, about the performance of the company in general, most investors prefer to buy shares of those companies whose earning are very attractive and divined payout ratio is high. However, rational investor analyzes not only earnings, they analyzes various information regarding the companies' management and their dividend policy, economic situation, market condition and many other factors before actually making an investment.

Under the first objectives of the study, stock price of sample commercial banks are the increasing-decreasing trend. In fiscal year 2004/05 has mean MPS is Rs. 458.20, fiscal Year 2007/08 it was highly increased by Rs. 1811.20 and in fiscal Year 2008/09, this price will reach in 1305.20. This is increasing trend of capital market. Again, under the second objectives of the study, stock market has various factors that affect the stock price of commercial bank of Nepal, like as EPS, DPS, BVPS and many other factors.

5.2. Conclusions

The study shows that in average market price of share of the sampled commercial banks are seems to e influenced by the combined effect among the analyzed financial indicators like EPS, BVPS and DPS. However MPS of fiscal year 2007/08 is highest position reach up to Rs. 1811.20 of the study period and fiscal year 2008/09 decreased to Rs. 1305.20. But these indicators are not alone to influence the price of share and there are other external factors such as Nepalese economic growth, economic situation, political situation, government change, global crisis and other factors are major events occurred in the country are also responsible for the pricing behavior of the stock of the sample Banks. Overall the securities market of Nepal is in increasing trend and positive growth and market price per share has high degree of positive relationship with EPS in all sample banks and MPS is largely depends on EPS.

5.3. Recommendation

The finding of the study may be important information for those who concern, directly with the stock market activities. Thus the following recommendations can be outlined for the concerned:

1. The Nepalese stock market (SEBON and NEPSE) should take some effective initiatives to control random fluctuation of MPS and establish the system of regular monitoring and evaluation of stock market.
2. There is the necessity of separate body to analyze strength and weakness of public companies which should disclose right information and suggestions to public investors about investment risk. This will help the investors to take proper investment decision at the right time to avoid or minimize the level of

risk. The NEPSE and SEBO should be able to protect the investor's interest effectively.

3. People in Nepal have shown the tendency to run after those companies which have allocate higher bonus, probably at the cost of future growth and opportunities. People invest their hard money on the basis of rumors and hearsay that are spread in financial market rather than intuitive rational financing thinking. Therefore there is need of credit rating agencies and investment banks to analyze the companies.
4. The companies should provide updated reports to SBI periodically informing actual financial position of the company.

The ultimate objectives of any firms are to maximize the wealth position of its investors, which largely depends upon the proper trends of EPS DPS BVPS and other dominant variables. These realities should be well imparted to the investors in order to make them rational in the field of investments for which the public companies themselves should frequently launch their well designed awareness campaigns.

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