CHAPTER - I INTRODUCTION

1.1 General Background of the Study

Capital is the lifeblood of the business organizations. Every business enterprise requires short term, intermediate and long term capital for the smooth operation and expansion of the organizational activities. Among these types of fund, the long term funds plays highly significant role for future growth and prosperity of the organizations. Most business organizations gather long term funds from financial market (Vanhorn, 2000:448).

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

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

Money Market can be defined as short term financial market, which facilitates liquidity and marketability of securities. It is the market for short term marketable instruments having less than one year maturity period. Money markets are sometimes defined as organized and unorganized money markets. The organized or formal money markets provide an institutional mechanism for the transactions of short term securities commercial banks, finance companies and other saving/credit unions are the players in the money market. Local merchants, indigenous bankers and relatives come under the informal or the unorganized sector.

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

Capital Markets also play a vital role in the national economy. Capital market facilitates the allocation of funds between the savers and borrowers. This allocation will be optimum if the capital market has efficient pricing mechanism. If the capital market is efficient, the current share price of the company fully reflect the available information and there will be no question of the share price being over or under priced. Capital market is concerned with the long term finance. The funds collected in the market are raised and traded by long term financial instruments such as equities and bonds.

"Stock Exchange is a market for long term capital where both new capitals can be raised by companies and where existing shares can also be bought and sold. By providing a second hand market for investors to sell their shares, it facilitates the raising of new capital on the new issues market. The stock exchange also provides a market for government loans and securities, and increasingly involved in the buying and selling of securities in the overseas companies. On the market, the main operators are the market makers who trade in a group of share, and the stock brokers who act as agents for their clients, who are the investors who are actually buying and selling shares" (Gem Collins, 2002). New York Stock Exchange (NYSE), London Stock Exchange, Tokyo Stock Exchange, Paris Stock Exchange, Frank fruit Exchange , Toronto Stock Exchange are the biggest stock Exchanges of the world. Mumbai Stock Exchange is the largest stock and Nepal Stock Exchange (NEPSE) is the only organized stock exchange of Nepal.

1.1.1 Constituent of Capital Market in Nepal Security Board, Nepal (SEBO/N)

Security Board, Nepal was established on May 26, 1993, under the provision of the Security Exchange Act, 1983. It was established with the objectives of the promoting and protecting the interests of investors by regulating the securities market. It also assumes the responsibility of development of securities market in the country, besides the regulatory role. Security Board has identified the policy development, legal and regulatory reform, stand arising disclosers, bringing enforcement to insure compliance and promoting broad based market as priority area to reform. The private sector has also been participating equally in establishing a sound system of security exchange. In private sector – investors, listed companies, financial and market intermediaries and in government sector – Ministry of Finance, Registrar of Companies (Ministry of Industry, Commerce and Supply), Nepal Rastra Bank, Nepal Stock Exchange, Federation of Nepalese Chamber of Commerce and Industries (FNCCI), Institute of Chartered Accountants of Nepal (ICAN) and

Associations of Chartered Accountants have been playing vital role in promoting the capital market of the country.

The objectives of the Board are to promote and protect the interest of the investors by regulating the issuance, sale and distribution of securities and purchase, sale or exchange of securities, to supervise, look after and monitor the activities of the stock exchange and other related firms on securities business, and to render contribution to the development of the capital market by making securities transactions fair, healthy, efficient and responsible (Sebon Annual Report 2000/01).

Nepal Stock Exchange (NEPSE)

Along with the formation of Security Exchange Board, His Majesty's Government converted the Securities Exchange Centre Ltd. into Nepal Stock Exchange Ltd. (NEPSE) in 1993 with a view to reform the Capital market. It is a non-profit making organization operating under Securities Exchange Act 1983. Brokers and market makers operate on the trading floor as per the Securities Exchange Act rules and bylaws of NEPSE. Nepal Stock Exchange started its trading operation on 13 January 1994 through its licensed members. The Securities Board was constituted in 1993 under Sec. 1 of the Securities Exchange Act 1983.

Its main objective is to provide essential policy direction for the systematic and regular exchange of securities and develop competitive stock exchange market by protecting and promoting the interest of the investors. Nepal Stock Exchange is a trading (operational) institution, whereas Securities Board is the regulatory body. Before the Board came into existence, the Securities Exchange Centre carried on both the functions. Though any corporate body desirous to carry out the transaction of securities can submit application to the Board for obtaining the license, till now Nepal Stock Exchange Ltd. alone is representing the securities market in the country.

At present, there are 22 valid member brokers (out of 27 brokers in whom 7 of them are either not working or suspended) and 142 listed companies. NEPSE

has adopted an "Open Out Cry" system. It means, transactions of securities are conducted on the open auction principle on the trading floor, where the price is determined when bid and offer price match. The rate of brokerage on equity transactions ranges from 1 to 1.5 percent depending on the traded amount. (www.nepalstock.com)

Similarly the basic objectives of the NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions on its trading floor through market intermediaries such as brokers, market makers etc. Nepal Stock Exchange (NEPSE) is the only organized stock exchange of Nepal.

1.1.2 Securities Market

In simple sense, securities market is the place where people buy and sell financial instruments. These financial instruments may be in the form of government bonds, corporate bonds or debentures, ordinary share, preference share etc. So far security market is concerned; it is an important constituent of capital market. It has a wide term embracing the buyers and sellers and all the agencies and institutions that assist the sell and resell of corporate securities. (Rugh.D.Patric,1996, pg-50) Although security market is concerned in few locations, they refer more to mechanism rather than to place designed to facilitate the exchange of securities. Security market can be defined as a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading. In order to allocate capital efficiently to maintain higher degree of liquidity in securities, the securities market should be efficient enough in pricing the shares solely by economic considerations based on publicly available information.

An efficient market is one where current price of the shares gives the best estimate of its true worth. Thus, the securities market is a place where shares of listed companies are traded or transferred from one to another a fair price through the organized brokerage system. The major function of securities market is a competitive price thereby, importing future market ability and liquidity. It is a medium through which scattered savings and scarce resources are transferred to productive areas that ultimately help in the economic development and industrialization of the nation.

The first public floatation of shares in the securities market was initiated by Biratnagar Jute Mills Ltd. in 1937. There were very few companies in Nepal issuing shares to the general public until another company Act came into operation in 1951. In the absence of developed security market in Nepal, the government was the sole issuing authority of Development Bonds and National Saving Certificates. Therefore, the securities generally in the market were mainly the government securities. Government securities are fully traded under the management and supervision of Nepal Rastra Bank (NRB). . Institutional Development of securities market in Nepal started from the year 1976 when Securities Exchange Centre (SEC) was established under the Companies Act with the joint Capital contribution of Nepal Rastra Bank and Nepal Industrial Development Corporation. The Industrial Policy of the Government also encouraged the promotion of securities exchange activities in Nepal. The main objective of the establishment of the Centre was to mobilize public savings and encourage the people to participate in the ownership of industries and business enterprises. As a securities market intermediary, its role was to organize and provide marketing facilities of channeling securities exchange business through the centre. Its activities included the purchase, underwrite and sale, directly or through the licensed brokers or sub-brokers of the Centre, the shares, stocks and debentures of public limited companies and also Development bond as well as Treasury bills issued by the Government.

Securities market can be further categorized into two groups as Primary Market and Secondary Market.

Primary Market denotes the market mechanisms for the original sale of securities time of their initial issuance. In other words, a market for newly issued securities is called primary market. Corporate bodies issue new securities in the primary market. Securities available for the first time are offered through the primary security market. The issuer may be a brand new company or one that has been in business for years. The securities offered might be a new type for the issuer or additional amount of security – used frequently in the past. The key is that these securities absorb new funds for the coffers of the issuer (Gitman J. Lawrence, 2000:33-34).

All the securities whether in the money market or capital market, are initially issued in the primary market. This is the only market in which the corporate or government issuer is directly involved in the transaction and receives direct benefit from the issue, that is, the company actually receives the proceeds from the sale of securities.

Secondary Market is the market in which securities are traded that has been issued at some previous point of time. In other words, where outstanding securities are traded is referred to as the secondary market or more popularly known as the stock market. Share or stock is the major component of the securities market. Stock market is the medium through which corporate sector mobilizes funds to finance productive projects by issuing shares in the market. The efficient collection of small amounts of savings and transferring funds into the completive and efficient uses requires a well functioning capital market to facilitate the process (Mahat S.R, 1981). Thus, Secondary market deals with previously issued shares mainly traded through stock exchange, over the counter market or direct selling.

Secondary market in simple sense, are markets in which existing, already outstanding securities are traded between investors. It is the market that creates the price and allow for liquidity. If the secondary market do not exists, the investors would have no place to sell the assets. Without liquidity many people would not invest at all. The function of the security market is to provide liquidity for the securities purchased in the primary market.

1.2 Focus of the Study

NEPSE is an organized stock exchange for trading stocks (shares) in secondary market. Although small investors can invest their money by purchasing shares of companies in primary market (during initial public offering) or in the secondary market, they (general public or investors) lack effective knowledge of capital market and its mechanism. The price of the stock is the function of several factors.

Investing in stock is highly risky as being ownership capital. It represents only a final claim while in liquidation. Stock price is determined by a number of factors. Some factors are quantitative whose effect can be quantified whereas other factors are qualitative whose effect on share price can't be quantified. This study focuses to the sensitivity of stock price on NEPSE with special focus to *Commercial Banks* towards various factors. In other words, this study intends to determine the factors affecting the price (i.e. market value) of the stock.

1.3 Statement of the Problem

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

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

-) What are the major determinants of the stock price in NEPSE?
- How earning and book value affect to the stock price?
-) What is the effect of the dividend to the stock price?

1.4 Objective of the Study

Investors require proper knowledge of share price i.e. how it is formed, why does it fluctuate, what factors are responsible for the determination of its price and so on. A few studies have been made regarding securities listed in NEPSE, however, most of the studies made up to present n capital market are related to the financial performance evaluation, capital structure analysis, dividend policy, risk and return etc. But sufficient researches have yet not been done to provide core perspective on the determinants of stock price, Thus, the present study will be very much important to the investors, planners, researchers, student and policy makers to get a deep insight into the concerned field of the study. Therefore, this study aims to identify the factors responsible for determinants of stock price, so that it will give a better insight into the stock price.

Furthermore, this study is proposed to meet the following objectives:

) To identify qualitative as well as quantitative factors affecting the stock price in NEPSE with focus to commercial banks

To determine the effect of earnings and book value to the stock price To determine the effect of dividend to the stock price

) To make appropriate recommendations/suggestions for the betterment of the stock market and so on.

1.5 Limitations of the Study

This study tries to explore the factors determining the stock price in Nepal Stock Exchange. Both primary and secondary data are analyzed. However, this study may face the following limitations during the course of research:

-) Time constraints,
-) Takes into account a few number of selected organizations [i.e. nine listed private commercial banks] from among the listed companies,
- Most of the primary data are based on research questionnaire and
- Takes into account the only latest available six years

1.6 Organizations Under Study

This study basically concentrates on specific sector i.e. *Private Commercial Bank sector*. The commercial banking sector is the most efficient sector among the others. There are eleven listed banks in NEPSE where almost all of these banks fall under category 'A'. However, due to lack of sufficient data, the researcher takes into account only five banks; thus, this research study basically focuses on those commercial banks

1.6.1 Overviews of Sampled Commercial Banks

i) Standard Chartered Bank

Standard Chartered Bank Nepal limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation as a Grindlays Bank. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status the largest international bank currently operating in Nepal.

With 11 points of representation (7 Branches) and 9 ATMs across the Kingdom and with over 300 local staff, Standard Chartered Bank Nepal Ltd. is in a position to service its customers through a large domestic network. In addition to which the global network of Standard Chartered Group gives Bank the unique opportunity to provide truly international banking in Nepal.

ii) Nabil Bank Limited

Nabil bank limited commenced its operation on 12th July 1984 as the first joint venture bank in Nepal. Dubai bank limited, Dubai (later acquired by Emirates Bank International limited, Dubai) was the first joint venture partner of Nabil. Currently, NB (international) Limited, Ireland is the foreign partner. Nabil bank Limited had the official name Nepal Arab Bank Limited till 31st December 2001. The bank was listed in NEPSE in the year 1985 A.D. The paid up capital of the bank in fiscal year 1996/97 was only Rs 261.64 million. It has 25 branches all over the Nepal.

iii) Bank of Kathmandu

Bank of Kathmandu was established in Nepal in 2051(1994) under joint investment of Siam Commercial bank, Thailand. Nepalese managers, from the very beginning to till date are managing this bank. In vary competitive and

small market of Nepalese commercial bank; BOK is struggling for the betterment. The SIAM commercial bank diluted its holdings to the Nepalese citizens in 1998. After the Nepalese public hold 97.72% of the equity shares of BOK and the remaining shareholding is done by Financial Institutions (0.9%) and organized institutions (1.38%). Thus, BOK is regarded as the bank of Nepalese.

iv) Himalayan Bank Limited

Himalayan Bank Limited was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with employees' provident fund and Habib bank limited, One of the largest commercial banks of Pakistan. Bank operation was commenced from 18th January 1993. It is the first commercial bank of Nepal with maximum shares holding by Nepalese private sector. Beside commercial activities, the bank offer industrial and merchant banking. The initial authorized capital was 240 millions rupees, issued capital 120 millions rupees and paid up capital 120 millions rupees. HBL is committed to be as "Banking with a Difference" its motto is to satisfy customer.

v) Everest Bank Limited

Everest Bank Limited was registered on November 17, 1992 and come into operation on October 18, 1994 with an objectives of extending professionalized and efficient banking services to various segments of the society. The bank had an initial paid up capital of Rs 3 Crore. Today the bank has grown to become one of the leading banks in Nepal. PNB joined hands with EBL as a Joint Venture in 1997 and turned it around to a highly profitable bank. There has been no looking back since then. PNB provides top management support under the Technical Service Agreement. Punjab National Bank (PNB), our joint venture partner one of the largest nationalized bank in India having 114 years of banking history, holds 20% equity.

1.7 Organization of the Study

The first chapter is the introduction chapter. This chapter consists of general background of the study with the reference to the existing economic and political scenario of Nepal, introduction of capital market and Nepal stock exchange. Beyond these, this chapter comprises of focus, significance, and objectives of the study, statement of problems, a research hypothesis, a brief introduction to the sample listed companies and the limitation of the study.

Second chapter is the review of literature. This chapter reviews the relevant previous studies made on the stock price determinants and the principle set on stock market. This chapter includes the conceptual framework on common stock, stock certificates, securities as well as security markets, stock price etc. Except that, this chapter reviews the published books, journals, and unpublished thesis reports separately.

The third chapter is the research methodology. This chapter includes the detailed framework of study such as data collection and analysis techniques.

Fourth chapter of this research is concerned with the presentation and analysis of data. In this chapter, the primary and secondary data collected from different sources are presented in systematic formats (like: tables, charts, figures) and analyzed using different analytical tools for instance; average, standard deviation, coefficient of variation, correlation, regression). In addition to that, the major findings of the study are drawn out.

Eventually, fifth chapter involves the summary, conclusions and recommendation of the study and concludes the reports with the major recommendations/suggestions to the investors, listed commercial banks and government about the stock price determination.

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CHAPTER - II REVIEW OF LITERATURE

2.1 Introduction

Review of literature is one of the most significant parts of research. It will be better to review some fundamental aspects of relevant literature before doing analysis. So, it is attempted to present brief glimpses on the common stock as well findings of the related previous studies. The review of literature has been divided into two broad categories which are as follows:

2.2 Conceptual Framework [Review of Books]

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

2.2.1 Common Stocks [Shares]

The common stocks represent ownership in a company. The holders of common stocks, called the shareholders or stockholders, are the legal owners of the company. The common stocks are the permanent and vital source of capital since they do not have a maturity date. For the capital contributed by the shareholders by purchasing commons stocks, they are entitled to dividends. The amount or rate of dividend is fixed by company's Board of Directors. The common stock is, therefore, known as variable income security. Being the owners of the company, the stockholders bear 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 claims on assets after the claims of the other suppliers of capital have been met. The common stocks are issued by the firms to raise ownership capital and the investors buy them with the expectation that they receive a share of profit periodically. The common stocks legally represent the equity of business firm, and the holders are the owners who share all the profits and losses of the business. They enjoy all earnings after meeting the obligation of interests on debts and dividends on preferred stocks. Thus, they enjoy all net benefits of the business by assuming the risk of losing their capital.

2.2.2 Stock Certificates

"The ownership of a firm's stock has typically been represented by a single certificate, with the number of shares held by the particular investor noted on it. Such a stock certificate is usually registered, with the name, address, and holding of the investor included on the corporation's books. Dividend payments, voting materials, annual and quarterly reports and other things are then sent directly to investor, taking into account the size of his or her holdings.

Shares of stock held by an investor may be transferred to a new owner with the assistance of either the issuing corporation or, more commonly, its designated transfer agent. This agent will cancel the old stock certificate and issue a new one in its place, made out of the new owner. Frequently, a register will make sure that this canceling and issuing of certificate has been done properly. Usually, banks and trust companies act as transfer agents and registrars. Many stock holders have chosen to avoid these rather cumbersome procedures. Instead, depository trust companies are used which substitute computerized records for embossed certificates." (Sharpe, Alexander & Bailey, 2000:458)

2.2.3 Securities

"When someone borrows money from a pawnbroker, he or she must leave some item of value as security. Failure to repay the loan (plus interest) interest means that the pawnbroker can sell the pawned item to recover the amount of the loan (plus interest) and perhaps make a profit. The terms of agreements are recorded via pawn tickets. When a college student borrows money to buy a car, the lender usually holds formal title to the car until the loan is repaid. In the event of default, the lender can repossess the car and sell it to recover his/her costs. In this case, the official certificate of title, issued by the state, serves as the security for the loan. A person who borrows money for a vacation may simply sign a piece of paper promising repayment with interest. The loan is unsecured, in the sense that there is no collateral, meaning that no specific assets have been promised to take the borrower to court to try to recover the amount of the loan. Only a piece of paper called a promissory note stands as evidence of such loan.

When a firm borrows money, it may not offer collateral. For example, some loans may be secured (backed) with specific pieces of property (building or equipment). Such a loan are recorded by means of mortgage bonds, which indicate the term of repayment and the particular assets pledged to the lender in the event of default. However, it is much more common for corporation to simplify pledge all of its assets, perhaps with some provision for the manner in which the division will take a place in the event of default. Such a promise is known as debenture bond.

Finally, a firm may promise a right to share in its profits in return for investor's funds. Nothing is pledged, and no irrevocable promises are made. The firm simply pays whatever its directors deem reasonable from time to time.

However, the investor is given the right to participation in the determination of who will be the members of the board of directors. The right protects the investors against serious malfunctions. The investor's property right is represented by a share of common stock, which can be sold to someone else, who will then be able to exercise the right. The holder of common stock is said to be as owner of the corporation and can, in theory, exercise over its operation through the board of directors.

Generally, only a piece of paper represents the investor's right to certain prospects or property and the conditions under which he or she may exercise those rights. This piece of paper, serving as evidence of property rights, is called a security. It may be transferred to another investor, and with it will go all rights and conditions. Thus everything from pawn ticket to share of GM common stock is a security."

2.2.4 Security Market

The security market is known as the market where all types of securities are traded. The security market is a broad term embracing a number of markets in which securities are bought and sold. Securities markets includes how an individual investor goes about the business of placing any order to buy or sell, how the order is executed, the process of setting the payment and transfer costs, and one hope the payment of federal personal income taxes on the profits from the transactions (Fisher, 1992:16). These securities include common shares, preference shares and debentures.

The security market may be divided into two categories:

Primary Markets

In the primary market the original issuance of the financial instruments of the company is traded. The company should sell its approved share through the authorized issue and sales agent. The company has to register its shares in the SEBO to get the valid authority to the issuance of shares. Primary markets provides as important allocate function by channeling the funds to those who can make the best use of them – presumably, the most productive.

Secondary Markets

In the secondary market the share once issued in the primary market are traded. So, the secondary market liquidates the shares and provides the opportunity between the investor and the seller of the securities. The company must list the securities in the security market for the transaction purpose.

"If the owner of 100 shares sells his/her stocks, the trade is said to have occurred in the secondary market. Thus, the market for outstanding shares or the used share is the secondary market. The company receives no new money when sales occur in this market" (Brigham, Gapenski C& Ehrhardt, 1999:37).

In the secondary market existing securities are traded and thus enabling disposal of these securities whenever the owner wishes. An active secondary market is, therefore, a necessary condition for an effective primary market, as no investor wants to feel 'locked in' to an investment.

Relation between Primary & Secondary Market

The primary market and the secondary market have a symbolic relationship. While the primary market creates long term securities, the secondary market provides liquidity through marketability of those institutions.

Fresh capital issues are influenced by the level and trend in stock prices at the time of issue. Actually, new activity in the primary market adds depth to the

secondary market by enlarging the supply of instruments for trading and investment in the secondary market. Stock prices in turners are influenced by the large size and bunching of new issues. Besides, primary and secondary market is indispensable ingredients of the capital market and is the basis to meet the financial requirements of corporate bodies.

2.2.5 Stock Market & Stock Exchanges

"Secondary markets are those in which outstanding previously issued securities are traded. By far the most active secondary market, and the most important one to financial managers, is the stock market. It is here that price of firm's stock are established, and since the primary goal of financial management is to maximize the firm's stock price, knowledge of the market in which this price is established is essential for anyone involved in managing a business.

There are two basic types of stock market – the organized stock exchanges, which include the New York Stock Exchange [NYSE], The American Stock Exchange [AMEX], and several regional exchanges, and the less formal overthe –counter markets. Since the organized exchanges have actual physical market location and are easier to describe and understand, we shall consider them first.

The organized security exchanges are tangible physical entities. Each of the larger one occupies its own building, has specially designated members, and has an elected governing body-its board of governors. Members are said to have "seats" on the exchange, although everybody stands up. These seats, which are bought and sold, give the holder the right to trade on the exchange.(Western & brigham,1987:78)

2.3 Stock Price

Stock price is the amount of money that one has to pay to purchase/receive a stock of a company. If A buys10 shares of the Bank of Kathmandu from B, s/he pays Rs. 2000 for these 10 shares, and then the price of share is Rs. 200 [i.e. Rs. 2000/10]. Thus, stock price is the amount of money paid by a buyer to buy one stock or the amount received by the seller by selling a stock. The stock price is determined in 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.

2.3.1 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 payments 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, a stated value must be recorded in place of the par value]"(Sharpe,Aleander,2000,461) The initial offering price of the share may vary from the par value if stocks are issued on premium or discount.

2.3.2 Earning Per Share [EPS]

Accounting earnings that represent the difference between revenues and expenses, including the expenses associated with non-equity source of funds (such as interest to debt, dividend to preference shares) is also known as total earnings available for common stock. If this portion of income is divided by number of outstanding shares, we get earning per share. (Sharpe, Alexander & Bailey,2001:62

2.3.3 Dividend per Share [DPS]

The percentage of earnings the firm pays in cash to its shareholders is known as dividend. The dividends, of course, reduce the amount of earnings retained in the firm and affect the total amount of internal financing.

Nothing is more important than dividends to shock holders. They buy shares of the firm with the hope of sharing profits earned by firms. The sole motive of stockholders is to receive return on their investment; nothing pleases them more than knowing the firm's earnings and more profits mean more dividends coming in.

Krishnaman opines that of two stocks with identical earnings record and prospect, but the one paying a large dividend than the other, the former will undoubtedly command higher price merely because stockholders prefer present to future values. Stockholders often act upon the principle that a bird in the hand is worth two in the bush and for this reason that are willing to pay a premium for the stock with the higher dividend rate.

Forms of Dividend

Cash Dividend

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

Bonus Share (Stock Dividend)

An issue of bonus share represents a distribution of shares in addition to cash dividend (known as stock dividend in USA) to the existing stockholders. This practice has the effect of increasing the number of outstanding shares of the company, which are distributed proportionate ownership of the company.

2.3.4 Net Worth Per Share [NWPS]/ Book Value Per Share [BPS]

A corporation will generate income, much of which is paid out to creditors (as interest) and to shareholders (as dividends). Any remainder is added to the amount shown as cumulative retained earnings on the corporation's books. The sum of cumulative retained earnings and other entries (such as common stock and capital contributed in excess of the par value) under shareholder's equity is the book value of the equity. The book value per share is obtained by dividing the book value of the equity by the numbers of share outstanding (Sharps, Alexander & Bailey, 2001:506).

The book value of the equity reflects the historical costs of – brick and meterthe physical assets of the company. A well run company with strong management and an organization that functions effectively should have a market value greater that the historical book value of its physical assets.(Western & copland,1992:695)

Cumulative Retained Earnings + Capital Contributed in Excess of Par + Common Stock = Book Value of Equity.

The accounting value of share of common stock equal to the common equity of the firm (common stock plus retained earnings) divided by the number of shares outstanding (Western & Brigham, 1987:674).

Book value is generally considered to be relatively unimportant in determination of the value of the company, since it represents only the historical investments made in the company- investment that may have little relation to current value of price (Western &Copeland, 1992:111).

2.3.5 Market Price per Share [MPS]

A share of common stock can be authorized either with or without par value. Par value is the recorded figure in the corporate charter. Generally, par values of most of stocks are set at fairly low figures with compare to their market value, 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 dividend of the company and the perceived risk of the stock on the part of investors (Van Horne & Wachowicz, 2000:546).

"Common stock holders are sometimes referred as the residual owner since in essence s/he receives what is left the residual after all other claims on the firm's income and assets have been satisfied. All the companies issue common stock. Common stock holders 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 in value after public buy them. That's why price for common shares can be more volatile. They move up and down due to the factors like economy and company performance" (Gitman, 1991:573).

The market price of 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 the stock of company. The market piece of shares varies from one company to other. Since,

the common stock holders are the owner of the organization and have least priority to claim in liquidation, the share price is highly volatile and very sensible to environmental factors. An organization has two types of environment, i.e. internal & 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 environmental factors are not within the control of the organization, but such forces highly affect the market price of share. So, the firm tries to adjust themselves according to the changing environmental forces, and such adjustments are indented to maximize the share price of the value of the firm.

Since the market price of shares is very much sensitive to the environmental forces, the shares price increases if there is favorable environment and vice versa. This increase in share price is based on the market mechanism or market forces, i.e. demand and supply. If the earning and divided of an organization increases, then the investors have positive perception towards the organization and they like to buy the shares of the organization, as a result demand increases; on the other hand, the supplier like to hold the shares and supply decreases, and there is gap between demand and supply, so, the market price of the shares increase. The investors determine the share price they would like to pay for the shares of an organization and the sellers determine the price they would like to receive by selling shares based on their assumptions towards organization and future expectation. Such assumptions and expectations vary from individual to individual. Since different person analyses the same situation differently with their level of knowledge.

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 consists one of the indicators of stock price in NEPSE. There are various indexes to analyze the stock behavior in the world's capital market. "Stock market indexes are "pure numbers" used for making comparison between index number in the same series of the index number. An index is usually a ratio tabulated from average of different securities. Typically, a time series of index number is constructed from the same base date and base value (usually set 100 or 10 or 1) to make time directly comparable. Some past year is selected as the base year from which index's base value is calculated in order to impart time perspective to index (Francis ,1991:183).

In this section of Review of literature, the well-established principles for the valuation of common stock in global contexts are reviewed from various books. The share price is somehow set with the valuation of stock. The internationally set principles are viewed and the abstracts of such principles are presented here.

2.4 Method of Valuation

2.4.1 Capitalization of Income Method of Valuation

The capitalization of income method of valuation states that the "true" or "intrinsic" value of any assets is based on the cash flow that the investors expect to receive in the future from owing the assets. Because these cash flows are expected in future, they are adjusted by a discount rate to reflect not only the time value of money but also the friskiness of the cash flows.

Angelically, the intrinsic value of an asset is equal to the sum of present values of the assets expected cash flows:

Where, Ct denotes the expected cash flow associated with the asset at time t, and k is the appropriate discount rate for cash flows of this degree of risk. In this equation the discount rate is assumed to be the same for all the periods (Sharpe, Alexander & Bailet, 2000:523-524)

2.4.2 Net Present Value

At the current time (t=0), if the cost of purchasing an assets is P, then its net present value (NPV) is equal to the difference of its intrinsic value (V) and cost.

I.e.
$$NPV = V - P$$

X
$$\int_{tXI} \frac{Ct}{(\Gamma k)I} Z p$$
(2.2)

Simply, NPV is the excess of present values of al the cash flows over the present values of cash outflows (investments). Positive NPV is favorable and vice versa.

2.4.3 Internal Rate of Return

IRR approach for the investment decision making is similar to NPV approach. IRR (K*) is the discount rate, which makes the NPV of the investment equal to zero.

I.e. 0 X
$$\Big|_{t_{XI}} \frac{Ct}{(1\Gamma k)^t} Zp$$
.....(2.3)

For rational decision making, the investment is viewed favorably of $k^* > k$, and unfavorably if $k^* < k$

2.4.4 Stock Valuation

Securities analysts study companies' earnings and their managements, the economic outlook, the firm's competition, market conditions, and many other factors. Then their research findings are used in the accepted models to estimate value of an equity share. If the security's price is less than its estimated value, ten it appears to be a good buy or at least worthy for further investigation. Such valuation models are presented here:

2.4.4.1 Single Price Valuation Model

"An investor who buys a share of the Avery Corporation's stock for \$ 50 and then sold it for \$55 a year later, after collecting a cash dividend of \$ 2.50, earned a rate of earning of 15 percent.

If the stock market is efficient, then 15% is an equilibrium rate of return for Avery's stock...... The single period valuation model is given by,

Figuring out the risk adjusted discount rate to use in the valuation model is an important part of the valuation process.

A fundamental principle of valuation says that in perfectly efficient markets, all securities in an equivalent risk class should be priced to yield the same rate of return. This principle implies that Avery's equilibrium rate of return of 15 percent should be used as the risk adjusted discount rate to find the present value of Avery's stock" (Francis,1991:524).

Where,

 p_1 = market price of a security at period 1

 d_1 = dividend per share for period of 0 to 1 year

 $p_0 = present value of stock$

r = single period rate of return

1.4.4.2 Dividend Discount Model [DDM]

J. B. Williams and M. J. Gordon have developed a model relating the value of an equity share to its cash dividends. They hypothesized that the value V of a share of stock equals the present value of the infinite (t = -) Stream of dividend to be received by that stock's owner, this model is known as dividend discount model [DDM].

$$V X \frac{D1}{(1\Gamma k)1} \Gamma \frac{D2}{(1\Gamma k)2} \Gamma \dots \Gamma \frac{D}{(1\Gamma k)} X \stackrel{|}{} \frac{D1}{(1\Gamma k)1} \dots (2.5)$$

2.4.4.2.1 The Zero Growth Model

If the dividend amount per share paid over the past year D0 will also be paid over the next year D1 and year after D2, and the year after that D3 and so on; that is:

 $\mathbf{D}_0 \mathbf{X} \mathbf{D}_1 \mathbf{X} \mathbf{D}_2 \mathbf{X} \mathbf{D}_3 \mathbf{X} \dots \mathbf{D}_n$

This is equivalent to assuming that the dividend growth rates are zero because if g = 0, then $D_t = D_t - 1$: The present value of stock with zero –growth is (from equation 2.5)

 $V0XD0 \stackrel{|}{\underset{(1\Gamma k)1}{|}} \frac{1}{(1\Gamma k)1}$ (2.6)

Using the property of indefinite series from mathematics, if K>0, then,

$$\int_{tX1}^{1} \frac{1}{(1\Gamma k)^{1}} X \frac{1}{k} \dots (2.7)$$

So, $V X \frac{D}{K} \dots (2.8)$

2.4.4.2.2 The Constant – Growth Model

"The next type of DDM to be considered is one that assumes that dividends will grow from period to period at the same rate forever and is therefore known as the constant growth model. Specifically, the dividends per share that were paid over the previous year D_{0} are expected to grow at given rate 'g' so that the dividends expected over the next year D_1 are expected to be equal to D_0 (1+g). The dividends the year after that are again to grow by the same rate g, meaning that:

 $D_2 = D_0 (1+g)^2$ and in general:

 $D_{t} X D_{t} Z 1(1 \Gamma g)$(2.9)

 $D_t X D_0 (1 \Gamma g)^1$(2.10)

Now, in the equation (2.5) substituting D $_{t}$ by D $_{0}$ (1+g) 1 , we get,

V X
$$\int_{t_{XI}}^{1} \frac{D_0 (1\Gamma g)^1}{(1\Gamma k)^1}$$
.....(2.11)

For zero growth models, the equation (2.12) can be simplified by noting that D_0 is a fixed dollar amount, so it can be written outside the summation sign:

V X D₀
$$\stackrel{|}{\underset{tX1}{\overset{}}} \frac{(1 \ \Gamma \ g)^{1}}{(1 \ \Gamma \ k)^{1}}$$
(2.12)

If K > g, the equation (2.11) follows a property of infinite in series from mathematics.

Then,

$$\int_{tXI}^{I} \frac{(1\Gamma k)^g}{(1\Gamma k)^1} X \frac{1\Gamma g}{k Z g} \dots (2.13)$$

Substituting the equation (2.13) into equation (2.12) results in the valuation formula for the constant growth model:

$$V X \frac{1\Gamma g}{D_0(k Z g)} \dots (2.14)$$
Or, $\stackrel{|}{}_{tXI} \frac{(1\Gamma g)^1}{(1\Gamma k)^1} X \frac{(1\Gamma g)^1}{(1\Gamma k)^1} \dots (2.15)$

$$V X \frac{D_1}{k Z g} \dots (2.16)$$

Because,
$$D_1 = D_0 (1+g)$$

The equation (2.14) can be reformulated to determine the required rate of return (K) as,

$$K X \frac{D_1}{P} \Gamma g....(2.17)$$

Where, 'V' is substituted by 'P', the current price of the security.

2.4.4.2.3 The Multiple – Growth Model

"A more general DDM for the valuing the common stock is the multiplegrowth, with this model, the focus is on time in the future (T), after which dividends are expected to grow at a constant rate 'g'. Although the investor is still concerned with forecasting dividends, these dividends do not need to have any specific pattern of constant growth. The dividends up to T (D1, D2, D3,D t) will be forecast individually by the investor. Thereafter, dividends are assumed to grow by a constant rate 'g' that the investor must also forecast, meaning that:

 $D_{t}+1 = D_{t}(1+g)$

 $D_t + 2 = D_t + 1 (1+g) = D_t (1+g)^2$ $D_t + 3 = D_t + 2 (1+g) = D_t (1+g)^3$ and so on.

2.4.4.3 Valuation Based On Infinite Holding Period

The capitalization of income method valuation involves discounting all dividends that are expected throughout the future. But when an investor plans to sell the stock in a year, then the cash flows that the investor expect to receive from purchasing a share of stock of the are equal to the dividends expected to be paid one year from now and the expected selling price of the stocks. The intrinsic value of the stock to the investor is given by discounting these two cash flows at the required rate of return as follows:

Where D_1 and P_1 are the expected dividend and selling price at t = 1, respectively.

"To use equation (2.18) the price of the stock at t = 1, should be expected. The simplest approach assumes that the selling price will be based on the dividends that are expected to be paid after selling date. Thus the expected selling price at t = 1 is:

Form (2.18) & (2.19) we get,
V X
$$\left[\frac{D_1}{(1\Gamma k)}\Gamma \frac{D_2}{(1\Gamma k)^1}\Gamma \frac{D_3}{(1\Gamma k)^2}\Gamma \frac{D_4}{(1\Gamma k)^3}\Gamma \dots \right] \frac{1}{1\Gamma k}$$

Or,
$$V X \frac{D_1}{(1\Gamma k)} \Gamma \frac{D_2}{(1\Gamma k)^1} \Gamma \frac{D_3}{(1\Gamma k)^2} \Gamma \frac{D_4}{(1\Gamma k)^3} \Gamma \dots X_{txl} \frac{D_1}{(1\Gamma k)^l} \dots (2.19)$$

This results to the equation (2.5). Thus, valuing a share of common stock by discounting its dividends up to some point in the future and its expected selling price at the time is equivalent to valuing stock by discounting all future dividends."

2.4.4 Models Based on Price Earning Ratio

In order to show the interaction of earnings, dividends, retained earnings, and the growth rate of the firm, the model can be reformulated to treat these variables explicitly. Dividends are related to earnings by defining dividends to be equal to the payout ratios of (1-f) times earnings as in the equations (2.20) and 2.20a)

Dt X(1Zf)Et XCorporaion's total cash dividends.....(2.20) dt X(1Zf)et XCash dividend per share.....(2.20a)

Total corporate retained earnings of dollars are assumed to be reinvested within all equity firms to earn a rate of return of r. Since the firm we are discussing here has borrowed money, it can only grow from retained earnings period, as shown in equation (2.21), assuming no external capital is invested in the firm.

- $E_1 X e_0 (1 \Gamma g)^1 X E_0 (1 \Gamma f r)^1$(2.21)
- $e_1 X e_0 (1 \Gamma g)^1 X e_0 (1 \Gamma fr)^1$(2.21a)
- $d_1 X(1\Gamma f)(1\Gamma fr)^1(e_0)$(2.22)
- $d_1 \Gamma(1 Z f)(1 \Gamma g)^1 e_0)$(2.22*a*)
- d₁ X(1Zf)(e1).....(2.22b)

As long as the retention ratio is positive number, f > 0, dividend per share will change each period as indicated in equation (2.22) if no new shares are issued. When some fraction of earnings is retained and earns a return of r within the form, the present value of a share of stock is determined by substituting equation (2.22) into (2.19a) to obtain (2.23). In equation (2.23) the beginning cash dividend per share is stated in terms of the beginning earnings per share by substituting e_0 (1-f) in place of d_0 .

$$V_{0} X \Big|_{tXI} \frac{e_{0}(1 Z f)(1 \Gamma f r)^{1}}{(1 \Gamma k)^{1}} \dots (2.23)$$

or,
$$X \Big|_{tXI} \frac{d_{0}(1 \Gamma f r)^{1}}{(1 \Gamma k)^{1}} X \Big|_{tXI} \frac{d_{0}(1 \Gamma g)^{1}}{(1 \Gamma k)1} X \frac{d_{1}}{k Z g} \dots (2.24)$$

Equation (2.23) may be written equivalently as (2.25 since g = f r. By substituting e1 (1-f) for equation (2.24) below, we get (2.26).

$$V_{0} X \int_{tXI} \frac{e0(1 Z f)(1 \Gamma g)^{1}}{(1 \Gamma f)^{1}} \dots (2.25)$$

or, $V_{0} X \frac{e1(1 Z f)}{k Z g} \dots (2.26)$

One advantage of the dividend valuation model is that it may be written equivalently in different forms. Equations (2.19a), (2.23), (2.24), (2.26) all are useful representation of the same model. Equation (2.23) explicitly shows the relationship of earnings e, dividend policy f, internal profitability r, the firms cost of capital k and the firm's growth rate g in the determination of value of stock. The model may be used to determine the value per share by defining all the variables on a per share basis as shown or the model may be used to value the entire form by using the total quantities represented by the variables in capital letters in equations (2.20) and (2.21).

2.4.4.5 Signaling

"A relative simple view of dividend changes is that an announced increase in dividends is a signal that management has increased its assessment of the form's future earnings. The announced increase in dividends is therefore good news and will, in turn, cause investors to raise their expectations regarding the firm's future earnings. Conversely an announced decrease in dividends is signal that management has decreased its assessment of the firm's future earnings. The announced decrease in dividends is therefore bad news and will, in turn, cause investors to lower their expectations regarding the firm's future earnings. An implication is that an announced increase in dividends will cause the firm's stock price to rise, and an announced decrease will cause it to fall" (Sharpe, Alexander & Bailey, 2000:567).

There is nothing inconsistent with dividends being used as a signal and with the dividend irrelevancy argument of Miller and Modigliani. In particular, stockholders will neither better off nor worse off if the level of dividends, relative to earnings, is high or low. Changes in dividends may, however, be

important because they convey information to the public about the future earnings prospects for the firm.

2.4.4.6 January Effect

"There is no obvious reason to expect stock returns to be higher in certain months than in others. However, in a study that looked at average monthly returns on NYSE listed common stocks, significant seasonality was found. In particular, the average return in January were higher than the average return in any other months...... It appears that the average return in January has been approximately 3% higher than the average monthly returns in February through December."

2.4.4.7 Day-of-the-week-effect

"Studies looked at the average daily return on NYSE listed securities found that the return on Monday was quite different than returns on other days. In particular, the average return on Monday was found to be much lower that the average returns on any other day of the weak. Furthermore, the average return on Monday was negative, whereas, the other days of the weak had positive average returns."

2.4.4.8 Size Effect

The past evidence suggests that the size effect also exists in Japan. The securities of Tokyo stock exchange classified into two sections, the second is less than 10% of the size of the first, measured by the market value of the examined over the period on it. Two indices were prepared and examined over the period from 1952 to 1980; they include the same stocks but are compiled differently. The equally weighted (EW) index weights the stocks by market

value waited (VW) index weights the stock by market value. Hence, the EW index is influenced much more by the performance of small stocks than the VW index is. Te EW index returned 5.1% more, suggesting the preference of a size effect.

2.4.4.9 Earnings Announcement & Price Changes

"A number of studies have shown large price changes for stocks of companies that reports earnings that differ substantially form consumers expectations. One study looked at three groups of 50 stocks. The first group consisted of the 50 stocks listed on the NYSE that expected the greatest price rise during 1970. The second group consisted of 50 stocks chosen randomly from all those on the NYSE during 1970. The third group consisted of the 50 stocks listed on the NYSE that experiences the greatest price decline during 1970...... It is found that the median changes in actual earnings per share for the top , random, and bottom, groups were 21.4%, -10.5%, and -83% respectively."

2.5 Reviews of the Previous Studies

This section includes the previous studies regarding stock markets price and organized stock exchanges both in the national as well as international contexts:

2.5.1 Foreign Context

According to www.stocksabout.com "Socks trade in an open market, where buyers and sellers agree on a price. There is no fixed price like you'll find at convenience store, instead, prices follow the simple laws of supply and demand. Therefore, when a stock's price rises, it means that buyers are continually willing to pay more for the stock (and sellers are demanding more before they'll part with their shares.)

) What Causes Buyer Demand?

As more and more buyers flock to a stock, the supply at a lower price diminishes (partly because al the chap shares are sold out and partly because sellers realize they can raise the price.) Three main factors drive buyers demand.

They are:

- Company profitability
- Dividend income
- > Speculation
- Most investors value company profitability.

A business that makes money is worth purchasing for a variety of reasons. It won't go bankrupt, it will grow, and it might be purchased by any other company. Therefore, the company becomes more valuable.

You might notice that the stock market pays attention to earnings release. These releases are the company's proof that it is a valuable enterprise. When a company can demonstrate consistent earnings growth, it attracts more and more investors.

Dividend income is also valuable to investors. By paying a dividend, the company is sharing profits with the shareholders. Many investors like the idea of getting paid and not doing any work.

Dividend stocks can attract more and more investors just like growth stocks. If a stock has a history of always paying a heavy dividend, one can expect that history to continue. It's even better if the dividend has a history of increasing. Stock that offer constituent dividend growth will continually attract investors. Also, stocks that offer a relatively high dividend yield (dividend payment divided by share price) attract buyers.

Finally, Speculation can cause a stock's price to change dramatically. While earnings growth and attractive dividends are reasonable approaches to investigating; speculating is harder to understand.

The basic idea is that you buy a stock because you think somebody else will pay more for it in future. The reason for the price increase doesn't really matter (after all, any profit in the stock market is a good profit.) All the matters are the belief that there will be an increase.

Speculators typically don't base their buying behavior on historical performance (such as earnings growth or constituent dividend growth.) Rather, they are hoping to predict the future of a stock. The markets saw plenty of speculation in the intent boom. Buyers hoped that internet stocks would make a bundle of money, but they weren't quite sure how, some gained, some lost.

) What Causes Prices to fall?

Now that you know what causes buyer demand, you can start to understand what drives prices down. When a stock becomes unattractive (due to poor earnings outlook, missed dividends payment, or speculation), shareholders want to get rid of their shares. Sellers will settle for less (because they just want to make a sale) and buyer demands are limited. Next time somebody asks why the markets is up, you can respond with the old Wall Street joke: "More buyers than sellers"but you will have a better idea why they are buying."(www.Stockabout.com)

In an journal published on www.utk.edu by Deborah L. Murphy, Ronald E. Shrives and Samuel L. Tibbs entitled "Determinants of Stock Price Reaction to Allegation of Corporate Misconduct: Earning Risk and Size Effects" studied using the most extensive sample to date. They examined the source and magnitude of market imposed penalties experienced by firms alleged to have committed illegal acts. Stratification of the sample by crime category reveals significant verification in the announcement - related wealth effects. Also examined were the linkages between the observed wealth effects and changes in reported and expected earnings, risks, firm sizes and reputation. They found the allegations of misconduct were accompanied by statically significant control firm adjusted decline in reported earnings, increased in return variability and a decline in concordance among analysts' earning estimates. The magnitude of the market-imposed penalties accompanying allegations is systematically related to the type of misconduct, firm size, and increase in uncertainty. However, the statistical relationship between earnings changes around the allegations and the wealth effects of criminal allegations was ambiguous. Their results offer the strongest evidence regarding a link between market-imposed penalties associated with allegations of misconduct and subsequent changes in the level of uncertainty of earnings.

In the journal of Financial Economics, summer 1996, entitled "Commonality in the Determinants of Expected Stock Returns " by Robert A. Haugen and Vardin L. Baker, they presented with evidence that the determinants of the cross section of expected stock return were stable in their identify and influence from period to period and from country. The determinants were related to risk, liquidity, price level, growth potential and stock price history. Out of sample predications of expected returns, using moving average values for the pay-offs to these firm characteristics were strongly and consistently accurate. Two findings, however, distinguished their paper form others in the contemporary literature. First, the stock with higher expected and realized rate of return was unambiguously of lower risk than the stocks with lower returns. Second, they found that the important determinants of expected stock returns were strikingly common to the major equity markets of the world. Given the nature of the texts, it was highly unlikely that those results may be attributed to bias or data snooping. Consequently, the result seems to reveal a major failure in the efficient market hypothesis.

In 1997 International Monetary Fund [IMF], Policy Development and Review Development Division published a working paper entitled "Determinants of Stock Prices: The case of Zimbabwe". The working paper examined the general relationship between stock price and macroeconomic variables in Zimbabwe, using the revised DDM, error-correction model, and multi factor return generating model. Despite the large fluctuation in stock prices since 1991, the analysts indicated that the Zimbabwe Stock Exchange functioned quite constituently during the period. Whereas, sharp increases in the share prices in stock prices during 1993-94 were mainly due to the shift of the risk premium that was caused by partial capital account liberalization, the monetary.

) Ceo Charisma Affects Stock Prices

The head honcho's clever workings influence all aspects of a company, and according to a recent University of Florida study, their powers of persuasion don't end with the firm.

The study found securities analysts predict a firm's future performance based not only on its track record but also on how favorably they view the company, which is influenced largely by how charismatic they consider its chief executive officer.

That influence indirectly affects the price of a company's stock because investors use the tainted predictions to decide whether to buy or sell stock, said Angelo Fanelli, who conducted the study for his doctoral dissertation at the UF Warrington College of Business.

"The essence (of this study) is in this particular relationship between the CEO and securities analysts, a charismatic leader will make a security analyst excited, and then he will rate a company more favorably in his recommendation to stockholders," said Fanelli.

However, the effects of CEO charisma do not mean an analyst is more accurate in predicting the future performance of a company.

The results showed CEO charisma significantly affected the perceptions of analysts, leading them to recommend to investors the stock of a firm with a charismatic CEO in a more favorable way. The study also found, as a group, securities analysts are more likely to have more similar high recommendations for a firm that received a high score for CEO charisma.

J Equity Funds What affects price?

What factors influence the price of stocks, and therefore the value of equity mutual funds? There are several fundamental factors: expectations, external events, fiscal and tax policies, government spending, monetary policy, inflation, and business cycles. Technical factors include: the condition of securities

markets, price movements, trading volume and supply and demand.

Fundamental factors include everything outside the security markets themselves which might influence price. Because market security prices are negotiated between buyer and seller, future expectations help determine price.

) What is the Impact of Research on Stock Prices?

Although the total return on the investment in research is hard to quantify, the information provided via third-party research has tangible value. Objective research provides information to the market to reduce uncertainty. Even though the nature of the stock market prevents us from isolating any one of the many variables that affects a stock price, no one can disagree that in the long run, greater available information means greater market efficiency.

) Stock Price Behavior in Small Emerging Markets: Tests for Predictability and Seasonality on the Bahamas International Securities Exchange

This paper presents evidence on the behavior of stock prices on the Bahamas International Stock Exchange (Bisx) over the first eighteen months of its existence (January 2 2001 to June 29 2002). The paper is unable to reject the hypothesis of randomness in the rates of return series for the majority of the seventeen stocks listed on the Bisx. One is therefore unable to reject the notion that the Bisx is weak form efficient. The paper finds no evidence of a day of the week effect or January effect. This provides further evidence that many of the seasonal patterns in stock returns identified on developed stock markets, do not generally carry over to emerging markets. The paper also provides further evidence that stock prices are not generally drawn from a normal distribution, and that non-parametric statistics are potentially important in the statistical analysis of stock prices.

) Why the Market Rises and fall? /What moves the Stock Market?

That complex question has many answers. Some market movers are obvious, while others creep up on us unseen. In this and subsequent articles, I'll look at some of the economic, political, and societal issues that may cause the market to change direction or speed up or slow down its momentum.

A quick list of the obvious includes:

- \succ Inflation
- Interest rates
- ➤ Earnings
- Oil/Energy Prices
- ➤ War/terrorism
- Crime/fraud
- Serious domestic political unrest

As you can see, many of these have serious long-term implications, while others may only cause temporary disruptions.

However, the one factor not listed above that drives the market absolutely crazy is uncertainty. The market cannot stand surprises and when there is the chance that something may change, it rattles the market.

) What factors influence a Share Price?

When you look at the performance of the stock market at the end of a trading day it can be hard to work out why shares have either risen or fallen in value.

Broadly speaking, share prices are influenced by news or information: new data on employment, manufacturing, directors' dealings, political events or even the weather, all kinds of news can influence the way shares move.

You will sometimes, however, see little move in share prices when, for example, interest rates shift. This is because investors try to anticipate what is going to happen in the next few months and try to move their portfolios in or out of these stocks before the rest of the market catches on. Sometimes, of course, these expectations can be wrong and if this happen, markets can move very sharply.

If you want to trade successfully in the stock market you will need to know what news other investors look at and how they will look at it. This will help you pick the best moment to buy and sell your shares. Read more about monitoring news on a company.

- The economy
-) Company news
-) Analysts reports
-) Press recommendations
- Sentiment
- Technical influences

The Economy

The health of the global economy has a fundamental influence on share prices because it is ultimately responsible for driving company profits. Broadly speaking, if the economy is growing, company profits improve and shares will become more highly valued. If the economy is weakening, company profits will fall and share prices will go down.

Investors look at a vast amount of data to try and work out what is going to happen to the economy and shift their portfolios before the events occur. This is why you will often see markets move well ahead of an actual event occurring. You may, for example, get little reaction from the stock market when interest rates rise. This is because investors have already anticipated the shift months in advance and adjusted their portfolios beforehand.

You can usually assume that the stock market will anticipate moves in the economy by around six to nine months. So if you want to stay ahead of the game you will need to follow economic data as closely as the professionals.

The kind of information you need to play close attention to is: employment data, the reports put out by the Monetary Policy Committee (to get an idea where interest rates are headed), trade with other countries, retail sales and manufacturing. Sentiment surveys produced by trade bodies such as the Confederation of British Industry are also important indicators of where the economy is heading.

It is not only news about the UK economy that will impact on share prices. The signals coming out of other major economies, particularly the UK's major trading partners, such as the US and Europe will affect UK shares as what happens in these economies will have an impact on our own.

When looking at economic data, you need to think not only how the wider economy will be affected but whether certain areas will be more affected than others. A rise in interest rates is, for example, often bad news for house builders as people feel less confident about taking on debt. Retailers are often badly affected too as people spend less. Pharmaceutical companies are, however, usually unaffected as people's demand for drugs is not influenced by the state of the economy. Companies whose profits are closely tied to the health of the economy are known as 'cyclical' stocks. Those businesses that aren't too affected by the economy are called 'defensive' stocks. If economic conditions deteriorate you will often see investors shift from cyclical stocks to defensives.

Company News

The way investors interpret news coming out of companies is also a major influence on share prices. If, for example, a company puts out a warning that business conditions are tough, shares will often drop in value. If, however, a director buys shares in the firm, it may be a signal that the company's prospects are improving.

Companies put out a great deal of news and most of the major announcements are covered by the financial press. But some announcements not regarded as so important and sometimes, particularly among smaller firms that are monitored less by investors and financial journalists, indicators of the company's health can be missed.

You can stay one step ahead of the game by looking carefully at all the information sent out by companies you own, their competitors and other companies you are interested in. This information is usually available on companies' websites.

Try to think laterally about the information you are getting. If, for example, a competitor to a company you have shares in produces a revolutionary new product, it will probably hit profits at the company you own. Also think about the impact it will have on suppliers to that business. An increase in sales of mobile phones with cameras in them will not only be good for the phone company but the firms that supply the technology in the phones.

Takeovers or even rumors of takeovers also have a big influence on prices. This is because investors expect the bidder to pay a premium to shareholders.

Analysts' Reports

Reports produced by independent analysts also influence share prices. If an analyst changes their recommendation from 'sell' to 'buy', for example, the shares will often rise in value. Analysts' reports are produced primarily by investment banks for professional investors, although some stockbrokers will make their research available to private investors. You may find summaries of some reports published on financial news websites or in newspapers and magazines. Some investment banks also publish their reports on their websites for free. You should remember that the recommendation an analyst puts on a company will affect its share price very quickly and can become irrelevant within hours. This is because the analyst will usually say a stock is a 'buy' within a particular price range. If the price moves above their targets the improvements the analyst expects may be 'priced in' and so the shares not worth buying.

But analysts' reports are always worth reading, even if the recommendation is out of date. The reports usually contain a great deal of useful information on the company and how its business is developing. They also often look at how the company rates against its competitors.

Press Recommendations

The financial pages of most national newspapers and investment magazines usually contain share tips. Like analysts' reports these tips can have a major influence on share prices. If a journalist recommends a share, the price will usually rise and if they write a negative story the price will fall. These moves usually happen very quickly so if you are going to follow the recommendation it often makes sense to do so as soon as possible.

Sentiment

Investor sentiment is almost impossible to predict and can be infuriating if, for example, you have bought shares in a company that you think is a good 'buy' but the price remains flat. Investor sentiment is influenced by a wide variety of factors. Share prices can, for example, be flat during the summer simply because so many major investors are on holiday or attending major sporting events such as Royal Ascot and Wimbledon, hence the adages 'sell in May and go away'.

Investor sentiment can lead to irrational buying or selling of shares and result in bull and bear markets. A bull market is when share prices rise while a bear market is when they fall. In the technology boom of the late 1990s, for example, investors paid extremely high prices for shares and ignored traditional valuation measures, such as P/E ratios. This carried on until 2000 when investors belatedly realized these shares has risen too far and resulted in a three year bear market in shares.

Technical Influences

Share prices can rise and fall for a variety of technical reasons that may have nothing to do with the actual outlook for an individual company or the outlook for the market.

It is, for example, a common occurrence for share prices to drop back after a strong rally. This happens because investors take profits on some of the shares that have risen in value, protecting their gains just in case the shares start to slip back. Investors often refer to this as market consolidation.

Another technical reason for share prices to rise or fall is the quarterly adjustment in the FTSE 100TM index. Shares that are expected to enter the FTSE 100TM may experience a sharper rise than one would expect in the weeks beforehand while shares that leave the index can fall more sharply. This happens because funds that simply track the index have to match the composition of the index. Some professional fund managers who hold the affected stocks also adjust their portfolios as they do not want their holding to be too far above or below the company's weighting in the index.

Share prices can also be affected by investors who use technical analysis to drive their investment techniques. Technical analysis, also known as Chartism, is simply the study of past share price movements and stock market index trends, which are then used to forecast how shares and stock markets will behave in future. Read more about strategies for investment.

Market makers can also influence prices. If they, for example, do not own enough shares to balance their books they will have to buy more. Market makers also influence prices if the market is looking flat, reducing prices to attract buyers.

2.5.2 Nepalese Context

There are very few independent studies in Finance in Nepalese perspective. On the core concept of capital market and determinants of the stock price in stock market, very negligible studies have been made. Such research studies are made on shareholder's democracy and dividend policy etc. Even though, these studies have been made many years ago, these can provide intellectual ground, since there are no researches made on the specific topic. Prof. Dr. Radhe Shyam Pradhan (1993), studied the market behavior in Nepal and concluded that:

Large stocks have large PE ratios; large ratios of the market value to book of equity and smaller dividends. PE ratios and dividend ratio are more variable for smaller stocks where as market value to book value of equity is more variable for the large stocks.

Large stocks also have lower liquidity, higher leverage, lower profitability, and lower assets turnover interest coverage stocks.

Smaller dividends, lower profitability, lower assets turnover, and lower interest coverage for large stock may be attributed to the fact that most of the large stocks are at their initial stage of operation.

Stocks with large market value to book value of equity, large PE ratios and lower dividends. PE ratios are more variable for stocks with large market value to book value ratios and dividends ratios are more variable for stocks with smaller market value to book value.

Stocks with large market value to book ratios have lower liquidity, higher leverage, lower earnings, lower turnover and lower interest coverage. However, liquidity and leverage are more variable for stocks with large market value to book value ratios while earnings, assets turnover and interests coverage are more variable for stocks with smaller market value to book value ratios.

Stock with large ratios large PE has large market value to book value of equity and smaller dividends ratios. However, their ratios of market value to book value of equity, and dividends are more variable for smaller stocks than for large stocks. Stocks with large PE ratios have lower liquidity, higher leverage, lower profitability, lower assets turnover, and lower interest coverage. However, liquidity, leverage, earning turnover, and interest coverage are all more variable for stocks with smaller PE ratios as compared to large ones.

Stocks paying higher dividends have higher liquidity, lower leverage, higher earnings and higher turnover and higher interest coverage. However, liquidity and leverage ratios are more variable for the stocks paying lower dividends while earnings, assets turnover and interest coverage is more variable for the stocks higher dividends.

The other study by Prof. Dr. Rahde Shyam Pradhan and Nabaraj Adhikari entitled "Impact of Dividends on Share price in Nepal" leads to three important conclusions. First, dividends have positive impact on share price, i.e. paying dividends can increase share price. Second, dividends have comparatively more favorable impact on the share price of the non-finance sector than to the share price of finance sector. Third, past earnings have more impact than retained earnings and dividends on share private of finance sector.

Khagedra Prasad Ojha (2002), entitled "Financial Performances and Common Stock pricing" was also reviewed for this study. The major findings of the research were: Nepalese stock market is in infancy stage. Dominant of banking sector is prevalent in the market due to other industries including finance and insurance companies. Manufacturing companies are not encouraging. He also conducted that people have a misconception that the issuance of the bonus shares and right shares , which actually decreases price and this makes them to invest even at a too high price with expectation of getting the same to increase their overall wealth. Further, he concluded that stock price in Nepal is determined more by other factors rather than the financial performance of the concerned company.

2.5.6 Review of Unpublished Thesis

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

Bhattarai (1996), a study on "Dividend Decision and Its Impact on Stock Valuation" revealed that:

Objectives of this Study Are:

- i. To know the future market price and return in shares.
- ii. To know whether rational stakeholders and stable dividend affects the valuation of shares.
- iii. To know the positive relation between cash dividend and valuation of shares.
- iv. Gaining knowledge about the actual net worth of shares and its market price.

Finding of this study are as follows:

- i. The stockholders have not well enough return, though market price of shares is increasing due to the high expectation in future.
- ii. If there are rational investors and stable dividend influences considerable impact on valuation of shares.

- iii. There is positive relationship between cash dividend and valuation of shares. There are five companies out of ten, having positive coefficient of correlation between cash dividend and valuation of shares.
- iv. The market price is considerably higher than the actual net worth. In some cases, market price of share is two or three times higher than the net worth. This certainly includes that investors do not have adequate knowledge on how to evaluate the value of shares before investing in them.

Surya Chandra Shrestha (1999), entitled "A Study on Stock Price Behavior in Nepal." The major findings were:

Objectives of this Study Are:

- i. To forecast the market price changes.
- ii. To predict the future price in long run.
- iii. To know the influence factors of the stock market.
- iv. To know the buy-and-hold strategy regarding price changes in market.

Finding of this study are as follows:

- i. The price changes of the past and present can be very helpful to forecast future price and present can be very helpful of future price changes.
- ii. When log days increase, the mean value of serial correlation of coefficient is lower, that indicates the past price changes may have low power to predict the future price in the long run.
- iii. The price changes in the present and the future stock market may not be independent of the price changes in the past and present respectively.
- iv. There elitists no profitable trading rules to make greater profit than they would make the buy-and-hold strategy on past price changes.
- v. Nepal Stock Exchanges is not efficient in pricing shares.

Sangita Gautam (2000) entitled "A Study of Stock Market Behavior in Nepal" concluded that political instability and other laws related issues are the prominent factors for the underdevelopment of security market in Nepal. She further concluded that the stockbrokers and stock market are not being much active to create investment environment in stock market. Most of the investors are influenced through media only. Information deficiency in the capital market may be one of the reasons for determination of share price by excessive speculation. The available information is of low quality and people have very little knowledge of the trading procedure and price formation mechanism in NEPSE. Lack of effective laws and effective implication of the existing laws are the contributing factors for the less development of the capitol market. She also argued that some of the major problems experienced by stock market are the poor regulatory controls and supervision by SEBO/N and NEPSE.

Poudyal (2001) study on "A study on Share Price Behavior of Joint Venture Banks in Nepal" is undertaken by using financial and statistical tools and revealed that:

-) The growth rate analysis as a stand alone may not be adequate for the analysis of share prices behavior and may not represent the bank's performance in the secondary market.
-) The ordinary least square equation of the book value per share on market value per share reveals that the independent variable does not fully explain the dependant variables on the basis of above mentioned two points; Nepal Stock Exchange operated in a weak form of efficient market hypothesis, including that the market prices move randomly. The market value per share does not accommodate all the available historical information.

-) Having good track record of the financial position, the market potential investors buy the shares of joint venture commercial banks. Therefore, the shares of joint venture bans emerge as a blue-chip in the Nepalese Stock Market.
-) The beta coefficient, which measures the risky ness of individual security in relative term, suggests that none of the shares of eight sampled banks are risky. Therefore, even a risk averter can go for making an investment in shares of these banks. The shares of publicly quoted joint venture commercial banks are less risky as compared to the other average stocks traded in the stock exchange.

Apar Neupane (2004), entitled "*Determinants of Stock Price in NEPSE*" and tried to explore the factors that have significant influence on the stock price in NEPSE.

He concluded his study by quoting:

- Nepalese investors have not adequate education about the capital market. They do not have good knowledge and information to analyze the scenario and to forecast share price. Perhaps due to this reason stock price in NEPSE rather shows irrational behavior.
-) In NEPSE, DPS, BPS & EPS individually do not have constituent relationship [with the market price of the share among the listed companies. The pricing behavior varies from one company to another. But EPS, BPS & DPS, jointly have significant effect in market price of the share. So, there may be other major factors affecting the share price significantly. NEPSE is in its primary stage, adopting open out cry system for stock trading and stockbrokers lack professionalism to create investing opportunities in NEPSE.

-) Commercial banking sector has dominated the overall performance of NEPSE. Manufacturing & processing, trading and hotel sectors have weak performance. So, financial intermediaries are strong but their ultimate investment is suffering.
-) Companies' performances (earning, dividend, book value, risk etc) information disclosed , timely AGM , political stability, national economy, demand & supply situation, strikes, demonstrations, ceasefire and peace talks (and their outbreak) are the major factors affecting the share price in NEPSE, according to the respondent of survey. Interest rate, retention ratio, cost of equity, tax rate, gold price , value of US \$, global economy, market liquidity, season, day of the weak, size of the firm, change in the management do not significantly affect the price of the share in NEPSE.
-) There is deficiency of proper laws and policies regarding the capital market. Shareholders are feeling unsecured to invest in security markets due to poor regulatory mechanism to protect shareholders interests. The implementation of existing laws is weak.
-) Listed companies do not provide sufficient information (financial as well as non financial) to their shareholders and they are not able to act according to the shareholders' interests. The performance of most of the listed companies is not transparent.
-) Since NEPSE is in increasing trend, in spite of unfavorable environment for investment, Nepalese citizens have a huge amount of scattered fund remained unproductive, which can be used in the industrial development through capital market to accelerate the economic growth of the nation.
-) With the existing Maoist problem, industrial development and capital market development is impossible. So, the peaceful solution of the

Maoist problem is preliminary condition for capital market and economic development in Nepal.

CHAPTER - III RESEARCH METHODILOGY

3.1 Introduction

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

3.2 Research Design

In order to make any type of research a well-set research design is necessary to fulfill the objectives of the study. Generally, research design means definite procedure and techniques which guides to study and provide ways for research viability. It is arrangements for collection and analysis of data. To achieve the objective of this study, descriptive and analytical research design has been used. Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to determine factors determining stock prices of commercial banks in the NEPSE.

3.3 Variables

A variable is a symbol to which numerals or values are assigned. So, the variables can take on values. This research intends to identify the factors that affect share price in NEPSE. So, the market price of the share is the dependant variable, which is affected by many variables, such variables are regarded as the independent variables in the study. The entire factors that affects the market price of shares , such as, earnings, dividends, interest rate, liquidity, book value of share, economy of the nation, peace & prosperity, rumors and whims etc. are the independent variables.

3.4 Population & Sample

This study intends to identify the factors affecting the stock price of Private Commercial Banks in NEPSE. So, the population of the study is all the listed companies in NEPSE up to July16, 2008 i.e. 142 listed companies. In this study, five sample organizations representing the private commercial banks are taken into account amongst listed companies. The following Table 3.1 reflects the detail of the samples:

Name of Sample Danks						
S.N	Name of the Listed Joint Venture Banks					
1	Standard Chartered Bank (Nepal) Limited					
2	Nabil Bank Limited.					
3	Bank Of Kathmandu Limited.					
4	Himalayan Bank Limited.					
5	Everest Bank Limited					

 Table 3.1

 Name of Sample Banks

The secondary data of sample organizations are analyzed to determine the relationship of earning, dividend and book value with market price of shares in NEPSE. But, to identify the qualitative factors affecting the stock price in NEPSE, primary information are collected through questionnaire from the senior officers of the listed banks, SEBO/N, NEPSE, and Security Brokers.

3.5 Sources & Nature of Data

The study is based on primary data as well as secondary data. To show the relationship between variables (share price – earnings, share price – book value, share price – dividend), secondary data are used but to determine the factors, which affect the stock price, primary data are collected form respondent through research questionnaire. The respondents of the primary data are listed commercial banks and stock brokers etc.

The sources of secondary data are AGM reports of listed companies, SEBO/N, NEPSE, and other concerned organizations, bulletins, publications, researches, journals, unpublished thesis reports, newspapers, journals, and internet.

3.6 Data Collection Techniques

The research consists of both primary and secondary data. Since the nature of these two types of data is different, the data collection procedure also varies. To collect the secondary data, published materials are viewed in various spots. Books by different authors, unpublished thesis reports, journals, magazines, internet, AGM reports of the listed companies, SEBO/N, NEPSE etc. Trading reports of NEPSE are the major source of secondary data. To collect these secondary data, the researches visited SDC library, NCC library, Central library, NRB library and library of SEBO/N. On the other hand, the primary data collected through questionnaire with private commercial banks and security brokers.

3.7 Data Analysis Tools

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

3.7.1 Statistical Tools

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

3.7.1.1Average/Mean

An average is a single value related from a group of values to represent them in someway, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group. There are various types of averages. Arithmetic mean (AM, Simple & Weighted), median, mode, geometric mean, harmonic mean are the major types of averages. The most popular and widely used measure representing the entire data by one value is the AM. The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically:

Arithmetic Mean (AM) is given by,

$$\overline{X} X - \frac{X}{n}$$
.....(3.1)

Where,

 \overline{X} = Arithmetic mean

x = Sum of all the values of the variable X

n = Number of observations

3.7.1.2 Standard Deviation

The standard deviation (†) measures the absolute dispersion. The greater the standard deviation, the greater will be the magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of

uniformity of the observations as well as homogeneity of a series and vice versa.

Mathematically:
$$\sigma = \sqrt{\frac{1}{n} \sum (X - \overline{X})^2}$$
(3.2)

3.7.1.3 Coefficient of Variance

The standard deviation is absolute measures of dispersion; where as the coefficient of variation (CV) is a relative measure. To compare the variability between two or more series, CV is more appropriate statistical tool.

Mathematically,

$$CV = \frac{O}{X} \times 100 \dots (3.3)$$

3.7.1.4 Correlation Coefficient

When the relationship is of quantitative nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it in a brief formula is known as correlation. If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation said to be negative, but the correlation is said to be negative, but the correlation coefficient (between tow variables, say X and Y) is given by:

r ^{xy} X
$$\frac{\text{Cov}(x, y)}{x - y}$$
.....(3.4)

Where,

 r_{xy} = is the correlation coefficient between two variables x & y 'r' lies between +1 to -1

When r = +1, there is perfect positive correlation

When r=-1, there is perfect negative correlation

When r = 0, there is no correlation

When r lies between 0.7 to 0.999 9 (or -0.7 to -0.999), there is high degree of

positive or negative correlation

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

3.7.1.5 Simple Regression

Regression and correlation analysis are the techniques of studying how the variations in one series are related to the variations in another series. Measurement of the degree of relationship between two or more variables is called correlation analysis and using the relationship between a known variable and an unknown variable to estimate the known one is termed as regression analysis. Thus, correlation measures the degree of relationship between the variables while regression analysis shows how the variables are related. Thus, regression and correlation analysis determines the nature and the strength of relationship between variables.

The equation of regression line where the dependant variables Y is determined by the independent variable X is given by:

Y = a + b xa = y - intercept

Where:

b = slope of the regression line (i.e. it measures the change in Y per unit X) or regression coefficient of Y on X.

3.7.1.6 Coefficient of Determination

The coefficient of determination gives the percentage variation in the dependant variable that is accounted for by the dependant variable/s. In other words, the coefficient of determination gives the ratio of expected variance to the total

variance. The coefficient of determination is given by the square of the correlation coefficient, i.e. r^2

So the coefficient pf determination = $r^2 = \frac{\text{Expected Varience}}{\text{Total Varience}}$(3.7)

3.7.1.7 Test of Hypothesis

A quantitative statement about population parameter is called a hypothesis. In other words, it is an assumption that is made about the population parameter and then its validity is tested. It may or may not be found valid in verification. The act of verification involves testing the validity of such assumptions which, when undertaken on the basis of sample evidence, is called statistical hypothesis or testing of hypothesis. The main goal of testing hypothesis is to test the characteristics of hypothesized population parameter based on sample information whether the difference between the population parameter and sample statistics is significant or not. The act of verification involves testing the validity of such assumption which, when undertaken on the basis of sample evidence, is called statistical hypothesis or the testing of hypothesis.

For the test of hypothesis t-test is made in this study.

3.7.1.8 t – Statistics

t –statistics is applied for the test of small sample. If the sample size is less than 30 i.e. called small sample and t-test is used.

The following formula is used to test an observed sample correlation coefficient:

$$r X \frac{r}{\sqrt{1 Z r^2}} | \sqrt{(n Z 2)}$$

Where, r= simple correlation coefficient

n= number of observations

3.7.1.9 z- statistics

To test the significance of effects of the qualitative factors, collected from primary sources, z-test is carried out. Z test is made, since the sample size is more than 30. The test of significance of single mean for large samples (N>30) under Ho is:

$$z X \frac{\sum_{x \neq \mu}^{z} Z \mu}{S.E.(x)} X \frac{\sum_{x \neq \mu}^{z} Z \mu}{\sqrt{n}}$$

Where, S. E. $\binom{z}{x}$ = Standard Error of Mean = $\frac{\dagger}{\sqrt{n}}$

Or,

S.E. =
$$\sqrt{\frac{{\sigma_1}^2}{2n_1} + \frac{{\sigma_2}^2}{2n_2}}$$

In this study, the population mean (~) will be assumed zero, assuming that such qualitative factors doesn't affect market price of shares.

3.7.2 Financial Tools

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

3.7.2.1 Earning Per Share

The earning per share [EPS] is the share of a stock on the earning of the company.

Mathematically,

 $EPS = \frac{\text{Total Earnings of Company}}{\text{No. of Shares Outstanding}}$(3.8)

3.7.2.2Dividend Per Share

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

Mathematically:

 $DPS = \frac{\text{Total Dividend paid}}{\text{No. of Outstanding Shares}}....(3.9)$

3.7.2.3 Market Price per Share

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

Mathematically,

 $MPS = \frac{\text{Total Market Capitalization}}{\text{No. of Shares Outstanding}}.....(3.10)$

3.7.2.4 Book Value per Share

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

Mathematically:

 $BPS = \frac{Net Worth}{No. of Outstandin g Shares}.....(3.11)$

3.7.2.5 Methods of Data Presentation

The collected data (from both primary and secondary sources) are presented in simple and easily understandable tables. To make those data clearer and more

informative such data have been presented in figures like bar diagram, trend line, and pie chart whichever is relevant to explain the data more effectively, based on the nature of data. After presenting such data in the tables and figures, are analyzed using various statistical, mathematical and financial tools and techniques.

CHAPTER - IV DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter focuses on data presentation and analysis of sample banks. In this chapter, both the primary and secondary data are presented in systematic manner. The sources of data were company brochure, annual reports, NEPSE website, SEBO/N website and library, and banks and stock brokers (questionnaire). Those collected data are presented in systematic formats and analyzed using different appropriate tools and techniques. In this chapter, in addition to that the relationship of the variables is presented in graphs and figures. The analysis of data consists of organizing, tabulating and performing statistical analysis. In this chapter, the secondary as well as primary data, collected from different sources are presented in understandable form and analyzed separately using both qualitative and quantitative measures whichever is appropriate.

Table 4.1

S.N.	Sectors	Number of Listed companies	Company Percent
1	Commercial Bank	17	11.97
2	Development Bank	23	16.20
3	Finance Company	55	38.73
4	Insurance Company	17	11.97
5	Hotel	4	2.82
6	Mfg. & Process. Co.	18	12.67
7	Trading Company	4	2.82
8	Other Company	4	2.82
Total		142	100.00

Listed Companies by the end of the Fiscal Year 2007/08

Source: SEBO/N, Annual Report 2007/08

List of Sample Banks				
S.N	Name of the Banks			
1	Standard chartered Bank ltd.			
2.	Nabil Bank Ltd.			
3.	Bank Of Kathmandu ltd.			
4.	Himalayan Bank ltd.			
5.	Everest Bank ltd.			

List of Sample Banks

4.1.1 Analysis of Individual Company

From among the listed companies, the researcher has chosen five listed private commercial banks that falls in group 'A'. The summary of the financial data of the sample listed companies of the study are presented with ten years data (from fiscal year 1998/99 to 2007/08) including Market Price of Share [MPs], Earning Per Share [EPS], Dividend Per Share [DPS] and Book Value Per Share [BPS] and Market Capitalization in the table 4.1

Standard Chatered Bank					
year	MPS	DPS	BPS	EPS	Market Capitalization
1998/99	1162	1073	282.26	105.86	3945.56
1999/00	1985	100	298.88	115.62	6740.04
2000/01	2144	100	327.5	126.88	7279.93
2001/02	1550	100	363.86	141.13	5263.01
2002/03	1640	267	403.15	149.3	5568.6
2003/04	1745	110	399.25	143.55	6537.47
2004/05	23435	120	422.38	143.14	8785.32
2005/06	3775	140	468.22	175.84	14142.68
2006/07	5900	130	512.12	167.37	24382.03
2007/08	6830	130	401.52	131.92	42399.55
Nabil Bank					
1998/99	700	50	223.45	67.84	2749.57
1999/00	1400	55	251	83.79	5499.14
2000/01	1500	60.11	216	59.26	5891.94
2001/02	700	30	233	55.25	3608.81
2002/03	740	50	267	84.66	3608.81
2003/04	1000	65	301	92.61	4909.95
2004/05	1505	70	337	105.49	7389.47

2005/06	2240	85	381	129.21	10998.29
2006/07	5050	140	418	137.08	24828.55
2007/08	5275	100	354	108.31	36356.14
2007/00	5215	100	554	100.51	50550.14
Bank of Kathma	andu				
1998/99	285	15	96.33	24.7	513
1999/00	998	31.58	195.38	39.29	1796.4
2000/01	850	0	207.72	27.97	1989
2001/02	254	10	171.83	2	594.36
2002/03	198	0	192.45	17.72	917.89
2003/04	295	10	218.38	27.5	1367.56
2004/05	430	0	213.6	30.1	1993.40
2005/06	850	30	230.67	43.67	3940.44
2006/07	1375	0	164.68	38.75	8293.19
2007/08	2350	40	222.51	41.89	14173.82
Himalayan Ban	k				
1998/99	1000	75	362.03	86.07	1200
1999/00	1700	75	362.7	83.08	4080
2000/01	1500	57.5	399.42	93.57	4500
2001/02	1000	35	393.34	60.26	3000
2002/03	836	25	444.26	49.45	3586.44
2003/04	840	20	427.4	49.05	4410
2004/05	920	31.58	239.59	47.91	4830
2005/06	1100	35	228.72	59.24	8494.2
2006/07	1740	40	264.74	60.66	14108.09
2007/08	1980	45	247.95	62.74	5920.2
Everest Bank					
1998/99	407	15	122.61	21.3	488.4
1999/00	995	20	215.49	34.84	1176
2000/01	650	0	173	31.56	1080
2001/02	405	20	241.63	32.91	619.2
2002/03	445	0	194.89	29.9	1171.29
2003/04	680	0	241.9	45.58	2142
2004/05	870	20	219.87	54.22	2740.5
2005/06	1379	0	217.7	62.78	5212.62
2006/07	2430	30	292.75	78.47	9185.4
2007/08	3132	30	321.77	91.82	15390.65

[[]Source: AGM reports of the Listed Companies, NEPSE & SEBON]

Note:

MPS = Market price per shareDPS = Dividend per share (i.e. including bonus)Bps = Book value per shareEPS = Earning per share

4.2 Relationship between EPS, DPS & BPS to MPS

To analyze the relationship of EPS, DPS and BPS to MPS, it is assumed that the market price of share is influenced with the changes in EPS, DPS and BPS. So, MPS is the dependant variable; whereas BPS, EPS & DPS are independent variables. Here in this section, relationship of EPS, DPS & BPS with MPS is determined separately to each of the sampled listed companies. The correlation analysis is performed to determine the relationship of EPS, DPS, & BPS with MPS. To determine the effect of DPS, EPS & BPS on MPS, simple correlation as well as their coefficient of determination are calculated. For the test of hypothesis of simple and multiple coefficient; calculated t-value are compared with the tabulated t-value at 95% level of significance. To determine the magnitude of the effects of the independent variables to the dependant variable, simple regression analysis are made and the magnitude is identified after determining the regression equations. In addition to that, multiple correlation coefficient, multiple coefficient of determination (MPS being dependant variable and DPS, BPS and EPS being independent variables), Standard errors of estimate are analyzed during the correlation and regression analysis.

4.3 Correlation & Regression Analysis of SCB

Table 4.2(a & b) summarizes the financial performances of SCB over last ten years and table 4.2 shows the relationship (correlation) of EPS, DPS & BPS to MPS along with the significance of such relationship.

Table 4.2

Year	MPS(a)	DPS(b)	BPS(C)	EPS(d)	Total
1998/1999	1162	1073	282.26	105.86	2623.12
1999/2000	1985	100	298.88	115.62	2499.5
2000/2001	2144	100	327.5	126.88	2698.38
2001/2002	1550	100	363.86	141.13	2154.99
2002/2003	1640	267	403.15	149.3	2459.45
2003/2004	1745	110	399.25	143.55	2397.8
2004/2005	2345	120	422.38	143.14	3030.52
2005/2006	3775	140	468.22	175.84	4559.06
2006/2007	5900	130	512.12	167.37	6709.49
2007/2008	6830	130	401.52	131.92	7493.44
Total	29076	2270	3879.14	1400.61	36625.75
Mean	29076	227	387.91	140.06	29830.97
S.D	1862.57	258.87	68.5	20.35	2210.29
C.V	64.06	114.04	17.66	14.53	210.29

Summary of Financial Performance of SCB

Source: Table 4.1and Annex - I

Table 4.3

Relationship of BPS, EPS and DPS with MPS

Variables	r	r ²	t-cal	t-table	Remarks

rab	-0.3176	0.1009	-0.9472	2.306	Not Significance
rac	0.6177	0.3816	2.2213	2.306	Not Significance
rad	0.4068	0.1655	1.2595	2.306	Not Significance
<u>с</u> т	11 4 1 1 4	77	•		

Source: Table 4.1 and Annex - II

Where,

T-table value is at 95% level of significance (n-2=10-2=8 degree of freedom)

 r_{ab} = correlation coefficient of 'a' & 'b'

 r^2 = coefficient of (simple) determination

SD = Standard Deviation

CV = Coefficient of Variation

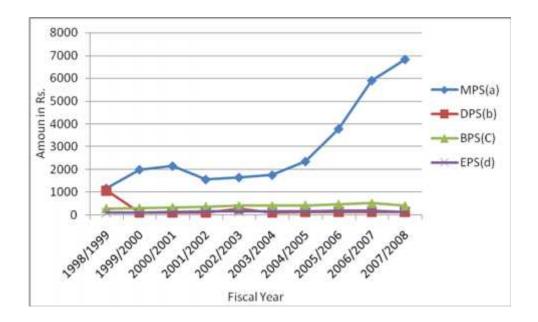
Mean = Arithmetic Mean

For SCB, it is found from the table and figure 4.2 that the BPS and EPS are in the increasing trend till the year 2002/03 and have slightly decreased in 2003/04. BPS and EPS are very less volatile with 17.66% coefficient of variation (CV) of BPS and 14.53% CV of EPS. In comparison to these, MPS is little bit more volatile with 64.06% of CV where as DPS is highly volatile with 114.04% CV in the last ten years period. Looking at the simple correlation analysis, MPS of SCB is negatively correlated with DPS meaning that increasing the DPS, MPS decreases and vice versa. On the other hand, MPS is positively correlated with BPS and EPS. However, there is low degree of correlation. The coefficient of simple determination shows that 10.09% of changes in the MPS is explained by DPS, where as 38.16% and 16.55% of the changes in the MPS is explained by BPS and EPS respectively. Even though, the MPS is affected by DPS, BPS and EPS, the degree of correlation are not significant at 95% level of confidence for all these three independent variables even the MPS is relatively more negatively correlated with DPS than others.

Similarly, while comparing SCB with Industrial benchmark (i.e. the average performance of selected five banks) it is revealed that for MPS, mean MPS of SCB is greater (2907.6) than industrial mean of MPS (1621.6), Standard deviation of MPS is greater (1862.57) than industrial standard deviation (808.75) and Coefficient of Variation is greater (64.06) than industrial CV (51.34). This result shows that MPS has very good performance. For DPS, its mean is higher (258.87) than industrial average (73.52), coefficient of variation is lesser (14.04) than industrial average (95.87) but standard deviation is greater (258.87) than industrial SD (84.44), thus, is good however it is more risky than industrial average DPS. For BPS SCB mean is greater (387.91) than industrial average mean (280.02), standard deviation is lesser (68.5) than industrial average SD (85.76) and less Coefficient of variation (17.66) is lesser than industrial CV (30.6). It proves that SCB's BPS is satisfactory. Finally, for EPS, SCB mean EPS is greater (140.06) than industrial average (75.06), standard deviation is lesser (14.53) than industrial average (40.92) and CV is also lesser (14.53) than industrial average (55.77). Thus, EPS has very good performance. Thus, in overall, SCB has very good performance in the last ten years [See Annex: VII].

The linear relationship of DPS, EPS, BPS and MPS of SCB is presented in the figure 4.1

Figure 4.1 Relationship of MPS with DPS, BPS & EPS of SCB



From the simple regression analysis, the regression equations are found (MPS being dependant variable) as: [Annex -III]

MPS on DPS

MPS = 3377.29 - 2.0691DPS

The regression constant 3377.29 implies that when DPS is zero, MPS is3377.29. The constant for DPS -2.0691 implies that when DPS increases by RS.100, MPS decreases by RS. 2.0691 and vice versa. The simple correlation coefficient is 0.3176 with 420.4867 standard error of estimate.

MPS on BPS

MPS = 7091.76 - 10.7863 BPS

The regression constant 7091.76 implies that when BPS is zero, MPS is 7091.76. The constant for BPS -10.7863 implies that when DPS increases by RS.100, MPS decreases by RS. 1078.63 and vice versa. The simple correlation coefficient is 0.6177 with 416.7649 standard error of estimate.

MPS on EPS

MPS = -2307.24 + 37.2326 EPS

The regression constant -2307.24 implies that when DPS is zero, MPS is-2307.24. The constant for EPS 37.2326 implies that when EPS increases by RS.1, MPS increases by Rs. 37.2326and vice versa. The simple correlation coefficient is 0.1778 with 416.5081 standard error of estimate.

Correlation and Regression Analysis of NBL

Table 4.4 and 4.5 summarizes the financial performances of NBL over last ten six years and table 4.3 shows the relationship (correlation) of EPS, DPS & BPS to MPS along with the significance of such relationship.

Summary of Financial Performance of Nabil Bank							
Year	MPS(a)	DPS(b)	BPS(c)	EPS(d)	TOTAL		
1998/1999	700	50	223.45	67.84	1041.29		
1999/2000	1400	55	251	83.79	1789.79		
2000/2001	1500	60.11	216	59.26	1835.37		
2001/2002	700	30	233	55.25	1018.25		
2002/2003	740	50	267	84.66	1141.66		
2003/2004	1000	65	301	92.61	1458.61		
2004/2005	1505	70	337	105.49	2017.49		
2005/2006	2240	85	381	129.21	2835.21		
2006/2007	5050	140	418	137.08	5745.08		
2007/2008	5275	100	354	108.31	5837.31		
TOTAL	20110	705.11	2981.45	923.5	24720.06		
MEAN	2011	70.51	298.15	92.35	2472.01		
S.D	1640.34	29.61	67.55	26.44	1763.94		
C.V	81.57	42	22.66	28.63	174.86		

Table 4.4Summary of Financial Performance of Nabil Bank

Source: Table 4.1 and Annex - I

Table 4.5

Relationship of BPS, EPS and DPS with MPS

Variables	r	r ²	t-cal	t-table	Remarks
rab	0.9005	0.8109	5.8571	2.306	Significance
rac	0.7551	0.5702	3.2577	2.306	Significance
rad	0.6969	0.4857	2.7486	2.306	Significance

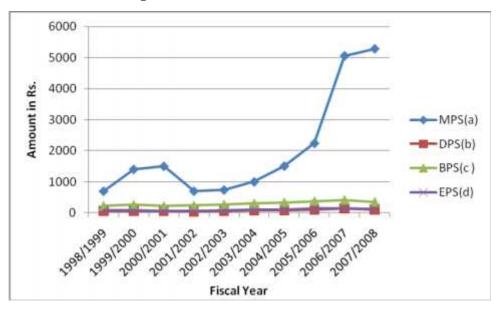
Source: Table 4.1 and Annex - II

It is revealed from above tables and figure 4.3 that the NBL has not consistent performance over the ten years period. MPS is more volatile with 81.57% of CV. In comparison to MPS, DPS and EPS are less volatile with 42% CV of DPS and 28.63% CV of EPS. On the other hand, BPS has relatively consistence performance with lower CV of 22.66%. The simple correlation analysis reveled that the MPS is positively correlated with the independent variables DPS and EPS which indicates that on increasing DPS, and EPS, MPS also increases and vice versa. DPS is more correlated to MPS than the EPS whereas BPS is positive correlated with MPS. The coefficient of determination shows that the 48.57% of changes in the MPS is explained by EPS, 57.02% of changes in the MPS is explained by EPS and EPS with MPS are significant at 95% level of significance. That implies the changes in DPS, BPS and EPS affects the value of MPS.

Similarly, the comparison of NBL with industrial benchmark yields the following results:

For MPS of NBL, mean MPS is higher, SD is higher, and CV is also higher than that of industrial average indicates clearly that MPS of NBL is satisfactory. For DPS, mean DPS is nearly same, SD and CV are higher than industrial; average meaning that it is also satisfactory. For BPS, NBL has higher mean of BPS, and lesser SD and CV, so BPS can be taken as a good performer. And finally for EPS of NBL, mean EPS is greater, and SD and CV are higher than that of industrial average, meaning that is also good. Thus, it is revealed from above analysis that NBL has good performance in last ten years (See Annex: VII).

Figure 4.2



Relationship of MPS with DPS, BPS & EPS of NBL

The linear relationship of DPS, BPS and EPS to MPS of NBL are presented in figure 4.2

From the simple regression analysis, the regression equations are found (MPS being dependant variable) as: (Annex - III).

MPS on DPS

MPS = -1505.941 + 49.8779 DPS

The regression constant -1505.941 implies that when DPS is zero, MPS is-1505.941. The constant for DPS 49.8779 implies that when DPS increases by RS.1, MPS increases by RS. 49.8779 and vice versa. The simple correlation coefficient is 0.9005 with 366.8509 standard error of estimate.

MPS on BPS

MPS = -1355.683 + 11.2921 BPS

The regression constant -1355.683 implies that when BPS is zero, MPS is-1355.683. The constant for BPS 11.2921 implies that when BPS increases by RS.1, MPS increases by RS. 11.2921 and vice versa. The simple correlation coefficient is 0.7551with 367.1021 standard error of estimate.

MPS on EPS

MPS = -1981.9 + 43.2366 EPS

The regression constant -1981.9 implies that when DPS is zero, MPS is-1981.9. The constant for EPS 43.2366 implies that when EPS increases by RS.1, MPS increases by RS. 43.2366 and vice versa. The simple correlation coefficient is 0.6969 with 366.8388 standard error of estimate.

4.4 Correlation and Regression Analysis of BOK

Table 4.6 and 4.7 summarizes the financial performances of BOK over last ten years and table 4.6 shows the relationship (correlation) of EPS, DPS & BPS to MPS along with the significance of such relationship.

Year	MPS(a)	DPS(b)	BPS(C)	EPS(d)	TOTAL
1998/1999	285	15	96.33	24.7	421.03
1999/2000	998	31.58	195.38	39.29	1264.25
2000/2001	850	0	207.72	27.97	1085.69
2001/2002	254	10	171.83	2	437.83
2002/2003	198	0	192.45	17.72	408.17
2003/2004	295	0	218.38	27.5	540.88
2004/2005	430	0	213.6	30.1	673.7
2005/2006	850	30	230.67	43.67	1154.34
2006/2007	1375	0	164.68	38.75	1578.43
2007/2008	2350	40	222.51	41.89	2654.4
TOTAL	7885	126.58	1913.55	293.59	10218.72
MEAN	788.5	12.66	191.36	29.36	1021.88
S.D	639.82	14.9	37.08	12.08	703.88
C.V	81.14	117.69	19.38	41.14	259.35

Table 4.6

Summary of Financial Performance of BOK

Source: Table 4.1and Annex - I

Variables	r	r ²	t-cal	t-table	Remarks
rab	0.6086	0.3704	2.1694	2.306	Not Significance
rac	0.3058	0.0935	0.9084	2.306	Not Significance
rad	0.6783	0.4601	2.6110	2.306	Not Significance

Relationship of BPS, EPS and DPS with MPS

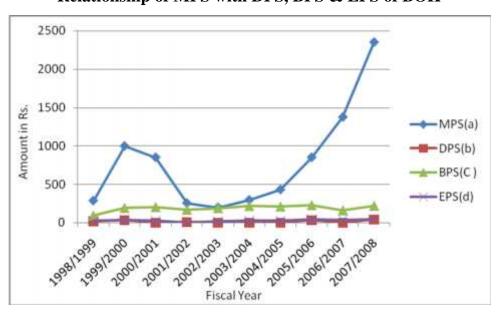
Source: Table 4.1 and Annex - II

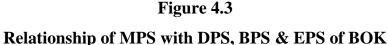
It is revealed from above tables and figure 4.4 that the BOK has not consistent performance over the ten years period. DPS is highly volatile with 117.69% of CV. In comparison to DPS, EPS and MPS are less volatile with 41.14% CV of EPS and 81.14% CV of MPS. On the other hand, BPS had relatively consistence performance with lower CV of 19.38%. The simple correlation analysis reveled that the MPS is positively correlated with all the independent variables (i.e. DPS, BPS & EPS) which indicates that on increasing DPS, BPS and EPS, MPS also increases and vice versa. MPS is more correlated to EPS than the DPS and BPS. The coefficient of determination shows that the 46.01% of changes in the MPS is explained by EPS, 9.35% of changes in the MPS is explained by BPS and this ratio to DPS is 37.04%. The simple correlation of coefficients of DPS, BPS and EPS with MPS are not significant at 95% level of significance even EPS is more positively correlated with MPS than others.

Similarly, the comparative analysis of BOK with industrial benchmark reveals the following results:

For MPS of BOK, it is less risky but mean is less than industrial average and more volatile. For DPS of BOK, mean is less than industrial average, risk level as well as CV is also less. Similarly, looking at BPS, all the factors mean, SD and CV are less than that of industrial average. Finally, the EPS shows the same result as BPS. Thus, in overall, BOK does not have good performance in the last ten years (See Annex - VII).

The linear relationship of DPS, BPS and EPS to MPS of BOK are presented in figure 4.3.





From the simple regression analysis, the regression equations are found (MPS being dependant variable) as: [Annex III]

MPS on DPS

MPS = 457.669 + 26.1361 DPS

The regression constant 457.669implies that when DPS is zero, MPS is 457.669. The constant for DPS 26.1361implies that when DPS increases by RS.1, MPS increases by Rs.26.1361 and vice versa. The simple correlation coefficient is 0.6086 with 143.1069 standard error of estimate.

MPS on BPS

MPS = -206.79 + 5.2013 BPS

The regression constant -206.79 implies that when BPS is zero, MPS is-206.79. The constant for BPS 5.2013 implies that when BPS increases by RS.1, MPS increases by RS. 5.2013 and vice versa. The simple correlation coefficient is 0.3058 with 143.3082 standard error of estimate.

MPS on EPS

MPS = -265.91 + 35.9144 EPS

The regression constant -265.91 implies that when DPS is zero, MPS is-265.91. The constant for EPS 35.9144 implies that when EPS increases by RS.1, MPS increases by RS. 35.9144 and vice versa. The simple correlation coefficient is 0.6783 with 143.0936 standard error of estimate.

4.5 Correlation and Regression Analysis of HBL

Table 4.8 and 4.9 summarizes the financial performances of BOK over last 6 six years and table 4.8 shows the relationship (correlation) of EPS, DPS & BPS to MPS along with the significance of such relationship.

Summary of Financial Performance of Himalayan								
Year	MPS(a)	DPS(b)	BPS(C)	EPS(d)	TOTAL			
1998/1999	1000	75	362.03	86.07	1523.1			
1999/2000	1700	75	262.7	83.08	2120.78			
2000/2001	1500	57.5	399.42	93.57	2050.49			
2001/2002	1000	35	393.34	60.26	1488.6			
2002/2003	836	25	444.26	49.45	1354.71			
2003/2004	840	20	246.93	49.05	1155.98			
2004/2005	920	31.58	239.59	47.91	1239.08			
2005/2006	1100	35	228.72	59.24	1422.96			
2006/2007	1740	40	264.74	60.66	2105.4			
2007/2008	1980	45	247.95	62.74	2335.69			
TOTAL	12616	439.08	3089.68	652.03	16796.79			
MEAN	1261.6	43.91	308.97	65.2	1679.68			
S.D	404.05	18.37	77.03	16.16	515.61			

 Table 4.8

 Summary of Financial Performance of Himalayan

C.V	32.03	41.84	24.93	24.79	123.59
~ - 11		-			

Source: Table 4.1 and Annex - I

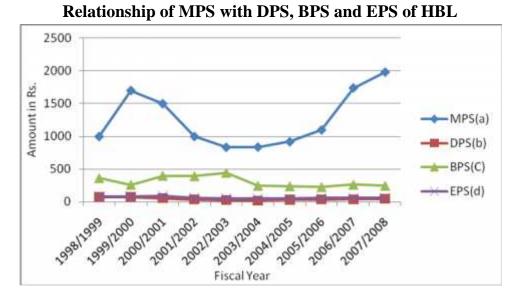
Relationship of BPS, EPS and DPS with MPS										
Variablesrr ² t-calt-tableRemarks										
rab	0.4548	0.2068	1.4444	2.306	Not Significance					
rac	-0.3034	0.0921	-0.9006	2.306	Not Significance					
rad	0.4345	0.1888	1.3642	2.306	Not Significance					

Source: Table 4.1 and Annex - II

It is revealed from above tables and figure 4.4 that the HBL has not consistent performance over the ten years period. DPS is highly volatile with 41.84% of CV. In comparison to DPS, EPS and MPS are less volatile with 24.79% CV of EPS and 32.03% CV of MPS. On the other hand, BPS had relatively consistence performance with lowest CV of 24.93%. The simple correlation analysis reveled that the MPS is positively correlated with the independent variables DPS & EPS which indicates that on increasing DPS, and EPS, MPS also increases and vice versa. MPS is a little more correlated to EPS than the DPS whereas BPS has negative correlation with MPS. The coefficient of determination shows that the 18.88% of changes in the MPS is explained by BPS and this ratio to DPS is 20.68%. The simple correlation of coefficients of DPS, BPS and EPS with MPS are not significant at 95% level of significance.

Similarly, comparative analysis of HBL with industrial benchmark reveals the following information. For HBL, MPS has good performance, DPS is good but mean DPS is a bit less than industrial average. Likewise, BPS is satisfactory and its level of consistence is very low and last but not least, EPS is satisfactory as well. Therefore, HBL in overall have satisfactory performance. [See Annex: VII. The linear relationship of DPS, BPS and EPS to MPS of HBL are presented in figure 4.4

Figure 4.4



From the simple regression analysis, the regression equations are found (MPS being dependant variable) as: [Annex - III]

MPS on DPS

MPS = 822.31 + 10.0047 DPS

The regression constant 822.31 implies that when DPS is zero, MPS is822.31. The constant for DPS 10.0047 implies that when DPS increases by RS.1, MPS increases by RS. 10.0047 and vice versa. The simple correlation coefficient is 0.4548 with 90.4417 standard error of estimate.

MPS on BPS

MPS = 1753.23 - 1.5912 BPS

The regression constant 1753.23 implies that when BPS is zero, MPS is1753.23. The constant for BPS -1.5912 implies that when BPS increases by RS.1, MPS decreases by RS. 1.5912 and vice versa. The simple correlation coefficient is - 3.3034 with 91.9755 standard error of estimate.

MPS on EPS

MPS = -252.76 + 23.2253 EPS

The regression constant -252.76 implies that when DPS is zero, MPS is-252.76. The constant for EPS 23.2253 implies that when EPS increases by RS.1, MPS increases by RS. 23.2253 and vice versa. The simple correlation coefficient is 0.4345 with 90.4206 standard error of estimate.

4.6 Correlation and Regression Analysis of EBL

Table 4.10 and 4.11 summarizes the financial performances of EBL over last ten years and table shows the relationship (correlation) of EPS, DPS & BPS to MPS along with the significance of such relationship.

Table 4.10

	•				
Year	MPS(a)	DPS(b)	BPS©	EPS(d)	TOTAL
1998/1999	407	15	122.61	21.3	565.91
1999/2000	995	20	215.49	34.84	1265.33
2000/2001	650	0	173	31.56	854.56
2001/2002	405	20	241.63	32.91	699.54
2002/2003	445	0	194.89	29.9	669.79
2003/2004	680	0	171.52	45.58	897.1
2004/2005	870	20	219.87	54.22	1164.09
2005/2006	1379	0	217.67	62.78	1659.45
2006/2007	2430	30	292.75	78.42	2831.17
2007/2008	3132	30	321.77	91.82	3575.59
TOTAL	11393	135	2171.2	483.33	14182.53
MEAN	1139.3	13.5	217.12	48.33	1418.25
S.D	882.92	11.84	49.57	21.12	965.45
C.V	77.5	87.7	22.83	43.7	231.73

Summary of Financial Performance of Everest

Source: Table 4.1 and Annex- I

Table 4.11

Relationship of BPS, EPS and DPS with MPS

Variables	r	r ²	t-cal	t-table	Remarks
rab	0.1743	0.0304	0.5007	2.306	Not Significance
rac	0.8477	0.7186	4.5199	2.306	Not Significance
rad	1.3452	0.8096	8.7187	2.306	Not Significance

Source: Table 4.1 and Annex - II

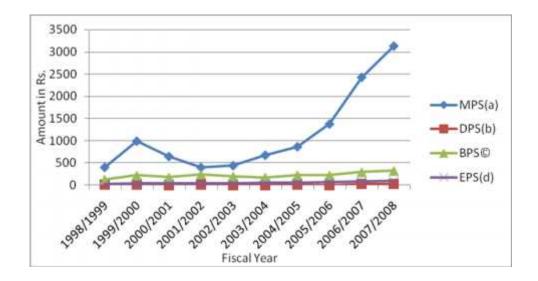
It is revealed from above tables and figure 4.6 that the EBL has not consistent performance over the ten years period. DPS is highly volatile with 87.7% of

CV. In comparison to DPS, MPS, EPS & BPS are less volatile with 77.5% CV of MPS, 22.83% CV of BPS as well as 43.7% CV of EPS. The simple correlation analysis reveled that the MPS is positively correlated with all independent variables DPS, BPS & EPS which indicates that on increasing DPS, BPS and EPS, MPS also increases and vice versa. MPS is a little more correlated to EPS than the DPS and BPS. On the other hand DPS is least correlated with MPS. The coefficient of determination shows that the 80.96% of changes in the MPS is explained by EPS, 71.86% of changes in the MPS is explained by EPS and EPS with MPS are not significant at 95% level of significance.

The comparative analysis of EBL performance with industrial benchmark yields the following results:

For MPS of EBL, it's mean is lesser than that of average otherwise good, for DPS, it is more similar to MPS however DPS's risk level is very low than industrial average, for BPS, it has the same case as of MPS and finally, for EPS, it is more similar to DPS. Thus, in overall, the good performance of EBL is lacked by lower mean of independent variables in the last ten years period. (See Annex: VII). The linear relationship of DPS, BPS and EPS to MPS of EBL are presented in figure.

Figure 4.5 Relationship of DPS, BPS and EPS to MPS of EBL



From the simple regression analysis, the regression equations are found (MPS being dependant variable) as: [Annex - III]

MPS on DPS

MPS = 504.60 + 47.0150 DPS

The regression constant 504.60 implies that when DPS is zero, MPS is 504.60. The constant for DPS 47.0150 implies that when DPS increases by RS.1, MPS increases by RS. 47.0150 and vice versa. The simple correlation coefficient is 0.1743 with 197.4447 standard error of estimate.

MPS on BPS

MPS = -1792.06 + 13.5011 BPS

The regression constant -1792.06 implies that when BPS is zero, MPS is-1792.06. The constant for BPS 13.5011 implies that when BPS increases by RS.1, MPS increases by RS. 13.5011 and vice versa. The simple correlation coefficient is 0.8477 with 179.7378 standard error of estimate.

MPS on EPS

MPS = -693.13 + 37.9125 EPS

The regression constant -693.13 implies that when DPS is zero, MPS is-693.13. The constant for EPS 37.9125 implies that when EPS increases by RS.1, MPS increases by RS. 37.9125 and vice versa. The simple correlation coefficient is 1.3452 with 197.4834 standard error of estimate.

4.7 Analysis of Primary Data

This thesis involves primary data also which were collected through questionnaire. During the course of collecting primary data, the researcher visited the private commercial banks as well as security brokers. Among the various factors affecting the share price, twenty factors were considered and primary information was collected from thirty one [nine private commercial banks and twenty two security brokers] institutions. The answers of the respondents were marked with + 2 to - 2 on the basis of the degree of agreement to disagreement of the respondents. (-2 for strongly disagree, -1 for disagree, 0 for undecided, 1 for agree and 2 for strongly agree; using five degree Likert -Type Scale. The summaries of the respondent's response for each of the identified factors are presented in this section separately. All the necessary calculations for this section are presented in Appendices III and IV with the help of MS. Excel Software.

4.7.1 Higher the Earnings (EPS), Higher the Share Price

The responses of the respondents for the affect of EPS to the market price of share were found as shown in table 4.12.

Table 4.12

Higher the Earnings (EPS), Higher the Share Price

S. no.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	21	67.74
3	Undecided (U)	4	12.90

	Total	31	100.00
5	Strongly Disagree (SD)	0	0.00
4	Disagree (D)	2	6.45

Source: Annex- IV

Form the primary responses it is found that 80.64 % of the respondents were agree that the increased earnings increases the share price in the market. Only, 6.45% were disagreed and 12.90 % were undecided with the statement. So, the increase in EPS significantly increases the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.2 Higher the Cash Dividend, Higher the Share Price

The responses of the respondents for the affect of cash dividend to the market price of share were found as shown in table 4.13.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	5	16.13
2	Agree (A)	19	61.29
3	Undecided (U)	3	9.68
4	Disagree (D)	3	9.68
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Higher the Cash Dividend, Higher the Share Price

Source: Annex - IV

Form the primary responses it is found that 77.42 % of the respondents were agree that the increased cash dividend increases the share price in the market. Only, 12.91% were disagreed and 9.68 % were undecided with the statement. So, the increase in cash dividend significantly increases the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.3 Lower the Growth Rate (g), Higher the Share Price

The responses of the respondents for the affect of growth rate to the market price of share were found as shown in table 4.14.

Table 4.14

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	0	0.00
2	Agree (A)	2	6.45
3	Undecided (U)	6	19.35
4	Disagree (D)	20	64.52
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Lower the Growth Rate (g), Higher the Share Price

Source: Annex - IV

Form the primary responses it is found that 6.45 % of the respondents were agree that the decreased growth rate increases the share price in the market. Only, 74.2% were disagreed and 19.35 % were undecided with the statement. So, the decrease in growth rate significantly increases the market price of the share and vice versa at 95 % level of significance. (See Annex- VI)

4.7.4 Higher the Interest Rate (r), Higher the Share Price

The responses of the respondents for the affect of interest rate to the market price of share were found as shown in table 4.15.

п	nigher the interest Rate (r), nigher the Share Price			
S.no.	Responses	No.	Percentage	
1	Strongly Agree (SA)	2	6.45	
2	Agree (A)	17	54.84	
3	Undecided (U)	7	22.58	
4	Disagree (D)	4	12.90	
5	Strongly Disagree (SD)	1	3.23	
	Total	31	100.00	

Table 4.15Higher the Interest Rate (r). Higher the Share Price

Source: Annex - IV

Form the primary responses it is found that 61.29 % of the respondents were agree that the increase in interest rate increases the share price in the market. Only, 16.13% were disagreed and 22.58 % were undecided with the statement. So, the increase in interest rate does not significantly increase the market price of the share and vice versa at 95 % level of significance. (See Annex: VI).

4.7.5 Higher the Retention Ratio, Better the Share Price

The responses of the respondents for the affect of retention ratio to the market price of share were found as shown in table 4.16.

Table 4.16Higher the Retention Ratio, Better the Share PriceS.no.ResponsesNo.Percentage

1	Strongly Agree (SA)	2	6.45
2	Agree (A)	14	45.16
3	Undecided (U)	5	16.13
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	2	6.45
	Total	31	100.00

Source: Annex - IV

Form the primary responses it is found that 51.61 % of the respondents were agree that the increase in retention ratio increases the share price in the market. Only, 32.62% were disagreed and 16.13 % were undecided with the statement. So, the increase in retention ratio does not significantly affect the market price of the share and vice versa at 95 % level of significance. (See Annex: VI)

4.7.6 Stock Dividend Increases the Share Price

The responses of the respondents for the affect of stock dividend to the market price of share were found as shown in table 4.17.

S. no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	15	48.39
3	Undecided (U)	5	16.13
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Table 4.17

Stock Dividend Increases the Share Price

Source: Annex- IV

Form the primary responses it is found that 54.84 % of the respondents were agree that the stock dividend increases the share price in the market. Only, 29.04% were disagreed and 16.13 % were undecided with the statement. So, the

stock dividend significantly affects the market price of the share and vice versa at 95 % level of significance (See Annex- VI).

4.7.7 Higher Cost of Equity Reduces the Share Price

The responses of the respondents for the affect of cost of equity to the market price of share were found as shown in table 4.18.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	14	45.16
3	Undecided (U)	6	19.35
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Higher Cost of Equity (Ke) Reduces the Share Price

Source: Annex- IV

Form the primary responses it is found that 51.61 % of the respondents were agree that the higher cost of equity decreases the share price in the market. Only, 29.04% were disagreed and 19.35 % were undecided with the statement. So, the higher cost of equity does not significantly affect the market price of the share and vice versa at 95 % level of significance (See Annex- VI).

4.7.8 Lower Personal Tax Rate Reduces the Share Price

The responses of the respondents for the affect of personal tax rate to the market price of share were found as shown in table 4.19.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	1	3.23
2	Agree (A)	7	22.58
3	Undecided (U)	7	22.58
4	Disagree (D)	14	45.16
5	Strongly Disagree (SD)	2	6.45
	Total	31	100.00

Lower Tax Rate Reduces the Share Price

Table 4.19

Source: Annex - IV

Form the primary responses it is found that 25.81 % of the respondents were agree that the lower tax rate decreases the share price in market. Whereas, 51.61% were disagreed and 22.58 % were undecided with the statement. So, the personal tax rate significantly affects the market price of the share at 95 % level of significance (See Annex- VI).

4.7.9 Fall in Gold Prices Causes Fall in the Share Price

The responses of the respondents for the affect of gold price to the market price of share were found as shown in table 4.20.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	0	0.00
2	Agree (A)	7	22.58
3	Undecided (U)	15	48.39
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Table 4.20 Fall in Gold Price Causes Fall in Share Price

Source: Annex - IV

Form the primary responses it is found that 22.58 % of the respondents were agree that the fall in gold price causes fall in the share price in market. Whereas, 29.04% were disagreed and 48.39 % were undecided with the statement. So, change in gold price does not significantly decreases the market price of the share and vice versa at 95 % level of significance (See Annex- VI).

4.7.10 Fall in value of US \$ Exchange Rate Causes Fall in the Share Price

The responses of the respondents for the affect of fall in the value of US\$ exchange rate to the market price of share were found as shown in table 4.21.

Table 4.21Fall in value of US\$ Reduces the Share PriceS.no.ResponsesNo.Percentage

1	Strongly Agree (SA)	0	0.00
2	Agree (A)	6	19.35
3	Undecided (U)	17	54.84
4	Disagree (D)	8	25.81
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Annex- IV

Form the primary responses it is found that 19.35 % of the respondents were agree that the fall in the value of US\$ causes fall in the share price in market. Whereas, 25.81% were disagreed and 54.84 % were undecided with the statement. So, fall in the value of US\$ does not significantly decreases the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.11 Instability of the Government Causes Fall in the Share Price

The responses of the respondents for the affect of the instability of the government to the market price of share were found as shown in table 4.22.

Table 4.22

Instability of Government Reduces the Share Price

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	3	9.68
2	Agree (A)	22	70.97
3	Undecided (U)	4	12.90
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Annex- IV

Form the primary responses it is found that 80.65 % of the respondents were agreed that instability of government causes fall in the share price in market.

Whereas, 6.45% were disagreed and 12.90 % were undecided with the statement. So, instability of the government significantly decreases the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.12 Strikes, Demonstration etc. Causes Fall in the Share Price

The responses of the respondents for the affect of strike, demonstration to the market price of share were found as shown in table 4.23.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	3	9.68
2	Agree (A)	23	74.19
3	Undecided (U)	2	6.45
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Strikes, Demonstrations Reduces the Share Price

Source: Annex - IV

Form the primary responses it is found that 83.87 % of the respondents were agreed that strike, demonstration etc. causes fall in the share price in market. Whereas, 9.68% were disagreed and 6.45 % were undecided with the statement. So, strike, demonstration etc. significantly decreases the market price of the share and vice versa at 95 % level of significance. (See Annex: VI)

4.7.13 Cease-Fire/Peace Talks Affect Positively the Share Price

The responses of the respondents for the affect of cease-fire/peace talks to the market price of share were found as shown in table 4.24.

Table 4.24

Cease-Fire/Peace Talk Affect Positively to the Share Price

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	22	70.97
3	Undecided (U)	2	6.45
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Annex- IV

Form the primary responses it is found that 83.87 % of the respondents were agreed that cease-fire/piece talks affect positively the share price in market. Whereas, 9.68% were disagreed and 6.45 % were undecided with the statement. So, Cease-fire/peace talk significantly affects the market price of the share positively at 95 % level of significance (See Annex- VI).

4.7.14 Outbreak of Cease-Fire Increases the Share Price

The responses of the respondents for the affect of cease-fire/peace talks to the market price of share were found as shown in table 4.25.

Outbreak of Cease-Fire Increases Share Price				
S.no.	Responses	No.	Percentage	
1	Strongly Agree (SA)	0	0.00	
2	Agree (A)	2	6.45	
3	Undecided (U)	4	12.90	
4	Disagree (D)	19	61.29	
5	Strongly Disagree (SD)	6	19.35	
	Total	31	100.00	

Table 4.25Outbreak of Cease-Fire Increases Share Price

Form the primary responses it is found that 6.45 % of the respondents were agreed that outbreak of cease-fire affect positively the share price in market. Whereas, 80.64% were disagreed and 12.90 % were undecided with the statement. So, outbreak of cease-fire significantly affects the market price of the share negatively at 95 % level of significance. (See Annex: VI)

4.7.15 Better the National Economy, Better the Share Price

The responses of the respondents for the affect of national economy to the market price of share were found as shown in table 4.26.

Table 4.26Better the National Economy, Better the Share PriceS.no.ResponsesNo.Percentage

1	Strongly Agree (SA)	4	12.90
2	Agree (A)	21	67.74
3	Undecided (U)	4	12.90
4	Disagree (D)	2	6.45
5	Strongly Disagree (SD)	0	0.00
	Total	31	100.00

Source: Annex - IV

Form the primary responses it is found that 80.64 % of the respondents were agreed that better national economy affect positively the share price in market. Whereas, 6.45% were disagreed and 12.90% were undecided with the statement. So, better economy significantly affects the market price of the share positively at 95 % level of significance (See Annex: VI).

4.7.16 Better the Global Economy, Better the Share Price

The responses of the respondents for the affect of global economy to the market price of share were found as shown in table 4.27.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	12	38.71
3	Undecided (U)	10	32.26
4	Disagree (D)	6	19.35
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Table 4.27

Better the Global Economy, Better the Share Price

Source: Annex- IV

Form the primary responses it is found that 45.16% of the respondents were agreed that better global economy affect positively the share price in market. Whereas, 23.18% were disagreed and 32.26% were undecided with the

statement. So, better global economy does not significantly affect the market price of the share and vice versa at 95 % level of significance. (See Annex: VI)

4.7.17 Higher the Market Liquidity, Lower the Share Price

The responses of the respondents for the affect of market liquidity to the market price of share were found as shown in table 4.28.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	9	29.03
3	Undecided (U)	7	22.58
4	Disagree (D)	10	32.26
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Higher the Market Liquidity, Lower the Share Price

Source: Annex- IV

Form the primary responses it is found that 35.48% of the respondents were agreed that higher market liquidity affect negatively the share price in market. Whereas, 41.94% were disagreed and 22.58% were undecided with the statement. So, higher market liquidity does not significantly affect the market price of the share and vice versa at 95 % level of significance. (See Annex: VI)

4.7.18 Share Price is Influenced by Season

The responses of the respondents for the affect of season to the market price of share were found as shown in table 4.29.

Table 4.29

Share Price is Lower in Winter than in Summer

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	1	3.23
2	Agree (A)	6	19.35
3	Undecided (U)	14	45.16
4	Disagree (D)	9	29.03
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Annex- IV

Form the primary responses it is found that 22.58% of the respondents were agreed that share price is influenced by season. Whereas, 32.26% were disagreed and 29.03% were undecided with the statement. So, the season i.e. summer or winter does not significantly affect the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.19 Share Price is Lower in Sunday than on Thursday

The responses of the respondents for the affect of week of the day to the market price of share were found as shown in table 4.30.

Table 4.30

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	7	22.58
3	Undecided (U)	17	54.84
4	Disagree (D)	4	12.90
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Share Price is Lower in Monday than in Friday

Source: Annex- IV

Form the primary responses it is found that 29.03% of the respondents were agreed that share price is lower on Sunday than on Thursday. Whereas, 16.13% were disagreed and 54.84% were undecided with the statement. So, the week of the day effect does not significantly affect the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.20 Higher the Risk, Higher the Share Price

The responses of the respondents for the affect of risk to the market price of share were found as shown in table 4.31.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	1	3.23
2	Agree (A)	2	6.45
3	Undecided (U)	5	16.13
4	Disagree (D)	20	64.52
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Higher the Risk, Higher the Share Price

Source: Annex- IV

Form the primary responses it is found that 9.68% of the respondents were agreed with higher the risk, higher the share price. Whereas, 74.2% were disagreed and 16.13% were undecided with the statement. So, the risk factor significantly affects the market price of the share negatively at 95 % level of significance (See Annex: VI).

4.7.21 Larger Companies have Higher Share Price

The responses of the respondents for larger companies have higher share price were found as shown in table 4.32.

Table	4.32
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Larger Companies have Higher Share Price

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	3	9.68
2	Agree (A)	15	48.39
3	Undecided (U)	5	16.13
4	Disagree (D)	7	22.58
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Annex - IV

Form the primary responses it is found that 9.68% of the respondents were agreed with higher the risk, higher the share price. Whereas, 74.2% were disagreed and 16.13% were undecided with the statement. So, the larger company size significantly affects the market price of the share at 95 % level of significance (See Annex: VI).

4.7.22 Share price increases with change in management

The responses of the respondents for share price increases with change in management were found as shown in table 4.33.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	0	0.00
2	Agree (A)	5	16.13
3	Undecided (U)	18	58.06
4	Disagree (D)	7	22.58
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Table 4.33

Share Price Increases with Change in Management

Source: Annex- IV

Form the primary responses it is found that 16.13% of the respondents were agreed with share price increases with change in management. Whereas, 25.81% were disagreed and 58.06% were undecided with the statement. So, change in management does not significantly affect the market price of the share and vice versa at 95 % level of significance. (See Annex: VI)

4.7.23 Lower the BPS, Higher the Share Price

The responses of the respondents for lower the BPS, higher the share price were found as shown in table 4.34.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	0	0.00
2	Agree (A)	2	6.45
3	Undecided (U)	5	16.13
4	Disagree (D)	21	67.74
5	Strongly Disagree (SD)	3	9.68
	Total	31	100.00

Table 4.34Lower the BPS, higher the share price

Source: Annex- IV

Form the primary responses it is found that 6.45% of the respondents were agreed with lower BPS causes higher the share price. Whereas, 77.42% were disagreed and 16.13% were undecided with the statement. So, BPS significantly affects the market price of the share and vice versa at 95% level of significance (See Annex: VI).

4.7.24 Share price is influenced by demand & supply

The responses of the respondents for share price is affected by demand and supply were found as shown in table 4.35.

Table 4	1.35
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Share Price is Affected by Demand and Supply

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	20	64.52
3	Undecided (U)	2	6.45
4	Disagree (D)	4	12.90

5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00
a	A TT 7		

Source: Annex- IV

Form the primary responses it is found that 77.42% of the respondents were agreed with lower share price is affected by demand and supply. Whereas, 16.13% were disagreed and 6.45% were undecided with the statement. So, the fact that demand and supply of the stock significantly affects the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.25 Rumors and Whims Affect the Share Price

The responses of the respondents for share price are affected by rumors and whims were found as shown in table 4.36.

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	17	54.84
3	Undecided (U)	5	16.13
4	Disagree (D)	3	9.68
5	Strongly Disagree (SD)	2	6.45
	Total	31	100.00

Table 4.36Rumors and Whims affects the share price

Source: Annex -IV

Form the primary responses it is found that 67.74% of the respondents were agreed with share price is affected by rumors and whims. Whereas, 16.13% were disagreed and 16.13% were undecided with the statement. So, the fact that rumors and whims significantly affects the market price of the share and vice versa at 95 % level of significance (See Annex: VI).

4.7.26 Capital Market is Not Developed due to Poor Regulatory Mechanism

The responses of the respondents for capital market is not well developed due to poor regulatory mechanism were found as shown in table 4.37.

Table 4.37

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	4	12.90
2	Agree (A)	17	54.84
3	Undecided (U)	5	16.13
4	Disagree (D)	4	12.90
5	Strongly Disagree (SD)	1	3.23
	Total	31	100.00

Source: Annex- IV

Form the primary responses it is found that 67.74% of the respondents were agreed with capital market is not well developed due to poor regulatory mechanism. Whereas, 16.13% were disagreed and 16.13% were undecided with the statement. So, the fact that capital market is not well developed due to poor regulatory mechanism is significant at 95 % level of significance (See Annex: VI).

4.7.27 Listed Companies are Not Serious Towards Shareholder's Interests

The responses of the respondents for listed companies are not serious about shareholders interests were found as shown in table 4.38.

Table 4.38

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	5	16.13
2	Agree (A)	16	51.61
3	Undecided (U)	3	9.68
4	Disagree (D)	5	16.13
5	Strongly Disagree (SD)	2	6.45

Total	31 100.00
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Source: Annex- IV

Form the primary responses it is found that 67.74% of the respondents were agreed with the fact that listed companies are not serious about shareholders interests. Whereas, 22.58% were disagreed and 9.68% were undecided with the statement. So, the fact that listed companies are not serious about shareholders interests is significant at 95 % level of significance (See Annex: VI).

4.7.28 NEPSE and SEBO are not able to protect shareholders interests

The responses of the respondents for NEPSE and SEBO are not able to protect shareholders interests were found as shown in table 4.39.

Table 4.39

S.no.	Responses	No.	Percentage
1	Strongly Agree (SA)	2	6.45
2	Agree (A)	5	16.13
3	Undecided (U)	3	9.68
4	Disagree (D)	17	54.84
5	Strongly Disagree (SD)	4	12.90
	Total	31	100.00

NEPSE and SEBO are able to Protect Shareholder's Interest

Source: Annex- IV

Form the primary responses it is found that 22.58% of the respondents were agreed with the fact that NEPSE and SEBO are able to protect the shareholders interests. Whereas, 67.74% were disagreed and 9.68% were undecided with the statement. So, the fact that NEPSE and SEBO are not able to protect shareholders interests is significant at 95 % level of significance (See Annex: VI).

4.8 Empirical Findings of the Study

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

4.8.1 Findings from Secondary Data Analysis

The analysis of secondary data of five private commercial banks gives the following results:

-) For standard Chartered Bank, MPS is negatively correlated with DPS where as it is positively correlated with BPS and EPS. None of these relationships are significant at 95% level of significance. BPS, EPS and MPS are less volatile except DPS. In overall, SCB has very good performance in the last ten years.
-) For NBL, MPS is positively correlated with DPS and EPS where as negatively with BPS. However, the relationship is not significant at 95% level of significance. DPS, BPS and EPS as well as MPS are less volatile. It is revealed from analysis that NBL has good performance in last ten years.
-) For BOK, MPS is positively correlated with all of the independent variables (i.e. DPS, BPS & EPS); however, the degree of correlation shows insignificant at 95% level of significance. The volatility of DPS, MPS and EPS are a little bit higher than that of BPS which has a good performance. In overall, BOK does not have good performance in the last ten years.
-) While analyzing the HBL, MPS is positively correlated with DPS and EPS and negatively correlated with BPS. The degree of correlation is high however these relationships are not significant at 95% level of significance. BPS is very much consistent where as MPS and EPS are not bad and DPS is a bit more volatile. HBL in overall have satisfactory performance.
-) For EBL, there exists lower degree of positive correlation of MPS with all independent variables. The t-test explains that these results do not show significance at 95% level of significance. The performance of BPS and EPS are good. MPS is a bit more volatile where as DPS is more volatile which is not good. In overall, the good performance of EBL is

lacked by lower mean of independent variables in the last ten years period.

4.8.1.1 Empirical Findings from Primary Data Analysis

On the other hand, the analysis of primary data reveals the following results:

-) MPS is significantly affected by company's performance such as earnings, cash dividends payment, book value, risk associated with the company and growth rate at 95 % level of significance.
-) When looking at, the other relevant factors to share piece such as interest rate, retention ratio, and cost of equity etc., these factors do not affect significantly whereas stock dividend significantly affects the share price at 95% level of significance.
-) Similarly, the political, economic and environmental factors such as instability of government, strike and demonstrations, cease-fire, national economy, tax rate, etc. significantly affect the share price where as global economy insignificantly affect the share price at 95% level of significance.
-) From other factors, gold prices, value of US\$ exchange rate, seasonal factors like summer and winter, day of the week, change in management have insignificant impact on the share price.
-) Similarly, size of the company, demand and supply, rumors and whims etc significantly affect the share price.
-) While analyzing the response of capital market is not well developed in Nepal, Listed companies are not serious about shareholder's interests and NEPSE and SEBO are not able to protect share holders interest has shown significant implication at 95% level of significance.

CHAPTER - V

SUMMARY CONCLUSION & RECOMMENDATIONS

Introduction

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

5.1 Summary

The history of securities market began with the floatation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Introduction of the Company Act in 1964, the first issuance of Government Bond in 1964 and the establishment of Securities Exchange Centre Ltd. in 1976 were other significant development relating to capital markets.

Securities Exchange Centre was established with an objective of facilitating and promoting the growth of capital markets. Before conversion into stock exchange it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services.

His Majesty's Government, under a program initiated to reform capital markets converted Securities Exchange Centre into Nepal Stock Exchange in 1993. Nepal Stock Exchange, in short NEPSE, is a non-profit organization, operating under Securities Exchange Act, 1983. The basic objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transactions in its trading floor through member, market intermediaries, such as broker, market makers etc. NEPSE opened its trading floor on 13th January 1994. His Majesty's Government, Nepal Rastra Bank, Nepal Industrial Development Corporation and members are the shareholders of the NEPSE.

After the restoration of democracy in 1990, HMG/N initiated privatization and economic liberalization, the industrial development as well as the capital market development process took a pace. However, with the initiation of Moist armed revolution, the industrial and capital market development process got a break. The nation has been paralyzed in terms of economic development due to the lack of peace and security. Most of the government investment has been concentrated to maintain security only. Similarly, lack of political stability and Royal take over of February 1; has added fuel in this issue.

Nepalese capital market is still in primary stage. Most of the citizens are not aware of the basic knowledge regarding security market. As a result they have not been able to make investment and if even invested; are being exploited in the absence of proper knowledge. In spite of poor condition of the security market in Nepal, government of Nepal has not given priority in its current tenth five year plan. Government has not been able to create basic infrastructures, sound policies and laws and their effective implementation, for the capital market development. As a result, there is not transparency in the performance of the listed companies and the capital market due to which capital market is struggling to mature.

The researcher has tried to explore the factors affecting share price in NEPSE, with special focus to private commercial banks. The major objectives of the dissertation work are listed as:

-) To identify qualitative as well as quantitative factors affecting the stock price in NEPSE with focus to commercial banks
-) To determine the effect of earnings and book value to the stock price
-) To determine the effect of dividend to the stock price
-) To make appropriate recommendations/suggestions for the betterment of the stock market and so on.

To meet the desired objectives, the researcher identified the effect of quantitative factors, DPS, BPS & EPS with MPS by correlation and regression analysis of secondary data, whereas, to identify the qualitative factors affecting the share price, the researcher used the questionnaire approach.

On the one hand, from the secondary data analysis it is found that, for some companies, the correlation coefficient of MPS with independent variables (i.e. DPS, BPS & EPS) is significantly positive whereas in some other cases significantly negative at 95% level of significance. MPS is significantly positively correlated with DPS, BPS and EPS of NBB where as MPS is significantly negatively correlated to none of the factors.

Even though DPS, BPS & EPS affect the MPS positively, there are several other factors in the internal as well as external environment that affect the share price significantly. Theoretically, when earnings, dividends and book value per share increases, the market price per share also increases and vice versa. But in case of NEPSE, this theory does not seem to be true hundred percent meaning that there are various other factors too that affects the share price.

On the other hand, the qualitative factors affecting the share price are identified through the primary data analysis. Dividends, earnings, book value per share, growth rate and risk associated with the company are some internal factors affecting the market price per share. Among other environmental factors affecting the share price are political stability, cease fire and peace talks, strikes/bandha, rumors and whims, national economy, demonstrations, demand and supply situations. While analyzing the effects of interest rate, retention ratio, stock dividend, cost of equity, tax rate, value of US \$ exchange rate, gold price, global economy, market liquidity, season, day of the week, size of the organization, change in the management etc , it is found that these factors have nominal effects o share price.

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

Talking about the listed companies in the NEPSE, most of the companies are unable to meet organizational objectives. Service industries and manufacturing industries are suffering loss in the present context. The only the satisfactory sector is banking and financial institutions.

5.2 Conclusion

Based on the above summary and findings of the research, the researcher came into the following conclusions:

Adequate knowledge and information regarding the capital market is lacking in Nepalese investors. This is precisely the reason why they are cheated by the concerned companies and the NEPSE shows rather irrational behavior. Most of the listed companies do not provide sufficient and timely information to NEPSE as well as their shareholders. And even the supplied information does not have similarity among NEPSE, Annual Report and their particular websites. Meaning that they try to attract potential investors by providing exaggerated information regarding their performances.

From the secondary data analysis it is revealed that, pricing behavior differs company to company. Even though, DPS, BPS and EPS jointly have significant effect on the share price, individually they do not have consistent relationship with MPS. It means that there may be other major factors influencing and determining the share price significantly.

Whereas analysis of primary data (from view point of respondents) summarizes, company performance (EPS, book value, DPS, risk), information disclosed, timely AGM, other political and economic factors such as political stability, national economy, peace, strikes/bandhas, demand and supply situation of the share, cease-fire etc. are the some important factors having significance influence on the share price. Similarly, other relevant factors, interest rate, tax rate, seasonal factors, day of the week effect, gold price, global economy, value of US\$, cost of equity, market liquidity, size of the firm and change in management do not have significant effect.

Due to poor rules and regulations as well as effective regularity mechanism, one the one hand, shareholders are not confident enough to invest in the share whereas on the other hand, capital market has not been growing as per expectation. Similarly, lack of political stability, peace and Moist revolution has constrained the smooth development of security market. The study concludes that the Nepalese stock market is in infancy stage. There is a gap between the theory and practice of investment in Nepalese stock market due to lack of proper study/analysis of stock market. Professionalism is lacking.

In spite of the several constraints, the NEPSE has been growing gradually. The commercial banking sector is the best performer among the listed companies. We can't undermine the truth that with the presence of peace and political stability, the capital market gets far better soon.

5.3 Recommendations

Based on the research work, the researcher has reached the following recommendations:

To Investors

Lack of education and sufficient information is the main weakness of the investors. They should seek their right towards accurate and timely information, as well as for protection. Similarly, investors should be alert to exploit the opportunities through short term speculation. So, they are suggested to raise their voice and complain about the misconduct of relevant company or NEPSE, SEBON as well as of Government. They are encouraged to enrich their level of knowledge and make the investment opportunities fruitful.

To Brokers

Brokers are suggested not only to look at their interests but also be sincere and cooperate with investors. Since they have greater level of practical knowledge they should provide rational and accurate advices to their clients/investors and foster professionalism.

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To SEBO/N NEPSE

Perfect markets require that all information concerning future risks and returns of securities be readily available to all investors. As there exists various market imperfections, relevant information are not easily available to the investors. They are often published in national dailies, but most of the information is highly aggregated and not reliable. Because of the lack of technical knowledge, majority of the investors is unable to analyze the available information. As such, a single buyer and a single seller can affect the price of securities. NEPSE has to insure listed companies relevant information. Similarly, NEPSE can expand its service to regional and local level so that it gives the equal opportunity to all the potential investors. The existing manual method of security trading should be replaced with computerized method to ensure the accuracy and systematic. Investors should be provided with investment guidelines and relevant information through media. It should monitor the activities of brokers as well as listed companies.

To Listed Companies

Listed companies are requested to avail the accurate and timely information to concerned authorities as well as to investors. They should conduct timely AGM, and fulfill the requirement of concerned authorities. They should not provide gimmicks to attract the potential investors.

To Government

Government should formulate as well as implement effective rules and regulations, code of conduct, for the gradual development of capital market. For this purpose national as well as international stock experts should be consulted. Similarly, it should encourage independent rating agencies so that the investors will have a confident picture of financial health and future prospects of organizations/instruments. NEPSE should be given authority to take immediate action for wrongdoer companies. Government should encourage the concerned body to organize programs, seminars time to time to create awareness among the investors.

To Further Researcher

Research is an ongoing process. Study of security is a vast field of study. Through this research, the researcher has tried to explore the factors affecting share price of commercial banks, which is I believe more specific, the further researcher can focus their study towards more specific factors. Similarly, they can even carry out research based on primary source. The other relevant factors for example can be impact of CEO charisma, Research, inflation, oil/energy prices etc that affect the share price.

BIBLIOGRAPHY

Books

- Bhandari, D.R. (2003). *Principle and Practice of Banking and Insurance*. Kathmandu: Asia Publications.
- Bodie, Z., Kane, A. & Marcus, A. J. (2001). Investments. Boston: Irwin.
- Brigham, E.F., Gapenski, L.C. & Michel, C. (1999). *Financial Management*. Singapore: Harcourt Asia.
- Cheney, J. M. & Moses, E. A. (1995). *Fundamental of Investments*. St. Paul: West Publishing Company.
- Fransis, J. K. (1989). *Investment: Analysis and Management*. New York: McGraw Hill.
- Fransis, J. K. (1991). Investments. New York: McGraw Hill International.
- Gitman, L. J. (1991). *Principles of Managerial Finance*. Singapore: Harper Collins Publishers.
- Gupta, S. C. (1992). *Fundamentals of Statistics*. Bombay: Himalaya Publishing House.
- Gupta, S. P. (2000). *Statistical Methods*. New Delhi: Sultan Chand & Sons Publishers.
- Hornby, A. S. (2000). *Oxford Advance Learner's Dictionary*. New Delhi: Oxford University Press.
- Kerlinger, F. N. (2002). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
- Khan, M. Y. & Jain, P. K. (1999). "Financial Management". New Delhi: Tata McGraw Hill.
- Kothari, C. R. (1999). *Research Methodology: Method and Techniques*. New Delhi: Vishwa Prakashan.
- Pandey, I. M. (1999). *Financial Management*. New Delhi: Vikash Publishing House.

- Pant, P. R. (2003). *Business Environment in Nepal*. Kathamndu: Buddha Academic Enterprises.
- Pradhan, R. S. (1994). Financial Management Practices in Nepal. New Delhi: Vikash Publishing House.
- Pradhan, R. S. (2004). *Financial Management*. Kathmandu: Buddha Academic Enterprises.
- Pradhan, S. (1992). *Basic of Financial Management*. Kathamndu: Education Enterprises.
- Sharma, P.K. & Choudhary, A.K. (2002). *Statistical Methods*. Kathamndu: Khanal Books Prakashan.
- Sharpe, W. F., Alexander, G. J. & Jeffery, V. B. (1998). *Fundamentals of Investements*. New Delhi: Prentice Hall of India.
- Shrestha, M. K. (1980). *Financial Management*. Kathmandu: Curriculum Development Center.
- Shrestha, M. K. (1992). *Shareholder's Democracy and Annual General Meeting Feedback*. Kathmandu: Portfolio Nepal Analysis Publication.
- Shrestha, M. K. Securities Exchange Center: Problems and Prospects. Kathmandu: Critical Dynamic Research and Consultancy.
- Srivastava, S. C. (1990). Fundamentals of Social Research and Econometric Techniques. Bombay: Himalaya Publishing House.
- VanHorne, J.C. & Wachowicz, J.M. Jr. (2000). *Fundamentals of Finance Management*. New Delhi: Prentice Hall of India.
- VanHorne, J.C. (2000). *Financial Management and Policy*. New Delhi: Prentice Hall of India.
- Webster Dictionary. New Delhi: CBS Publishers and Distributors.
- Weston, J.F. & Brigham, E.F. (1987). *Essentials of Managerial Finance*. Orlando: The Dryden Press.
- Weston, J.F. & Copeland, T.E. (1992). *Managerial Finance*. Chicago: The Dryden Press.

Wolf, H.K. & Pant, P.R. (2000). Social Science Research and Thesis Writing.Kathmandu: Buddha Academic Enterprises.

Journals and Articles

- Agrawal, J. (July 2000). Nepal's Capital Market: What it takes to Improve. Kathmandu: *Business Age*.
- Commonality in the Determinants of Expected Stock Returns. (1996). Journal of Financial Economics.
- IMF Working Paper (1997). Determinants of Stock Prices: The Case of Zimbabwe.
- Pradhan, R.S. (1993). *Stock Market Behavior in a Small Capital Market: A Case Study of Nepal.* Kathmandu: The Nepalese Management Review.
- Regmee, R. K. (August 2003). *Jack-up Time in NEPSE Mall*. Kathmandu: *Business Age*.
- Sharma, B. (June 2001). Nepal's Only Capital Market in Shambles. Kathmandu: Business Age.
- Shrestha, M.K. (2000). *Why Share Market is Inactive?: Problems and Measures*. Kathmandu: Nepal Rastra Bank.

Official Publications

Annual General Meeting Reports (1997/98 to 2002/03). Kathmandu.

Government of Nepal (2003). *Economic Survey*, 2002/03. Kathmandu.

Nepal Rastra Bank. (May 2004). Mirmire. Kathmandu. (Vol. 33 No. 244).

NEPSE Trading Reports, Vol. 1-8.

- Security Board of Nepal (2000/01 to 2002/03). Annual Reports. Kathandu: SEBO/N.
- TU Central Department of Management. (May 2002). *Banijya Sansar*. (Issue 10).

Thesis

- Bhatta, B. P. (1997). Dynamics of Stock Market in Nepal. An Unpublished Masters Degree Thesis, Central Department of Economics, Tribhuvan University.
- Gautam, S. (2004). A Study on Stock Market Behavior in Nepal. An Unpublished Masters Degree Thesis, Central Department of Management, Tribhuvan University.
- Ojha, K. P. (2002). *Financial Performance and Common Stock Pricing*. A Mini Research, Central Department of Management, Tribhuvan University.
- Paneru, L. R. (2003). Stock Market and Economic Growth. An Unpublished Masters Degree Thesis, Central Department of Economics, Tribhuvan University.
- Paudyal, P. K. (2002). Share Price Behavior of Joint Venture Banks in Nepal.An Unpublished Masters Degree Thesis, Central Department of Management, TU.
- Shrestha, S.C. (1999). A study on Stock Price Behavior in Nepal. An Unpublished Masters Degree Thesis, Central Department of Management, TU.

Web Sites

http://www.bok.com

http://www.bus.utk.edu/finance

http://www.edunepal.com.np

http://www.efficientfrontire.com

http://www.facd.gov.np

http://www.nepalstock.com

http://www.nrb.org.np

http://www.nyse.com

http://www.sebonp.com

http://www.stocks.about.com