# CHAPTER - I INTRODUCTION

#### **1.1 Background of the Study**

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

The world's economic sector is changing rapidly. Economic sector plays vital role for developing the nation. The world economic growth reached to 3.9 percent in the year 2007/08 as against 4.8 percent growth in the year 2006/07. The decrease in growth rate was attributed to the rise in the commodity prices and recession in the US real estate market were more than offset. As a result, the world economy faced economic crisis and thus invited worldwide unemployment.

However, the economic growth rate of Nepal in the year 2006/07 was only 2.8 percent which is increased to be 3.6 percent in the year 2007/08 in line with some improvement in economic activities. Nepal is one of the least developed countries lying between two large countries India & China. It has richly diversified geography and biology with huge potentiality of hydroelectric power. Similarly, its culture, natural beauty, art and archaeology are quite distinct in the world that can increase the economic growth through promoting tourism. Besides having these rich mechanisms, there is a wide gap between Nepal's economic growth and

the world's economic growth. Such gap may have been provoked by the ineffective utilization of resources and available capital.

The relationship between stock market development and economic growth has received renewed attention of academicians and policy makers in the present decade not in the developed and developing countries. The growing importance of stock markets in the developing countries has opened up many avenues for research in the relationship between financial development and economic growth, with focus on development role of stock market.

# 1.1.1 Security Board, Nepal [SEBO/N]

Securities Board of Nepal (SEBON) was established by the Government of Nepal on June 7, 1993 as an apex regulator of Securities Markets in Nepal. It has been regulating the market under the Securities Exchange Act, 2006.

Nepal Security Board promotes and protects the interest of the investors by regulating the issuance, sale and distribution of securities and purchase, sale and exchange of securities, to supervise, look after and monitor the activities of the stock exchange and the 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.

The Governing Board of SEBON is composed of seven members including one full time chairman appointed by the Government for tenure of four years. Other members of the Board include joint secretary of Ministry of Finance, joint secretary of Ministry of Law, Justice and Parliamentary Affairs, representative from Nepal Rastra Bank, representative from Institute of Chartered Accountants of Nepal, representative from

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Federation of Nepalese Chambers of Commerce and Industries, and one member appointed by the Government from amongst the experts pertaining to management of securities market, development of capital market, financial or economic sector.

#### **1.1.2 Nepal Stock Exchange [NEPSE]**

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. Government of Nepal, Nepal Rastra Bank, Nepal Industrial Development Corporation and members are the shareholders of NEPSE.

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 Center Ltd. in 1976 were othe significant development relating to capital markets.

Securities Exchange Center 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. Nepal Government, under a program initiated to reform capital markets converted Securities Exchange Center into Nepal Stock Exchange in 1993.

Members of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and listed corporate securities. At present, there are 23 member

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brokers and 2 market makers, who operate on the trading floor as per the Securities Exchange Act, 1983, rules and bye-laws.

Besides this, NEPSE has also granted membership to issue and sales manager securities trader (Dealer). Issue and sales manager work as manager to the issue and underwriter for public issue of securities whereas securities trader (dealer) works as individual portfolio manager.

NEPSE, the only Stock Exchange in Nepal, introduced fully automated screen based trading since 24th August, 2007. The NEPSE trading system is called 'NEPSE Automated Trading System '(NATS) is a fully automated screen based trading system, which adopts the principle of an order driven market. NEPSE facilitates trading in Shares (Equity Shares & Preference Shares), Debentures, Government Bonds and Mutual Funds. Trading on equities takes place on all days of week (except Saturdays and holidays declared by exchange in advance). On Friday only odd lot trading is done.

The market timings of the equities are:-Market Open: - 12:00 Hours Market Close: - 15:00 Hours

Odd Lot Trading is done on Fridays. For Odd Lot Trading Market Timings are:-

Market Open: - 12:00 Hours Market Close: - 13:00 Hours

The stock exchange provides floor for trading the shares of listed companies creating the liquidity in shares markets. The liberal financial policy adopted by Nepalese Government after the restoration of democracy tried to reform the financial market of Nepal. That result open practice of buying and selling of securities in the open floor of NEPSE maintaining the suitable market price of the shares. In general, the prices are determined according to the demand and supply of the shares. This study attempts to examine the different determiners of the share price relating the MPS with major financial indicators.

#### **1.2 Statement of the Problem**

Only few investors of Nepalese share market are aware of the factors affecting share price. It means that most of the investors are unknown about the financial performance of the company but tend to invest on the company without proper financial analysis. It causes the unusual relation of the financial indicators – Earning Price per Share (EPS), Book-Value per Share (BPS), Dividend per Share (DPS) etc. with the market price of share. The market rumours relating the financial position of the company is the major analytical tool for most of the Nepalese investors. The Market Value per Share (MPS) of most of the foreign joint venture commercial banks is high in comparison with the other banks and manufacturing companies. Therefore it is essential to know actually what major factors are affecting the Stock Price of Nepalese Commercial Banks listed in NEPSE? Similarly, is there any relation between MPS with the major financial indicators are aware of financial indicators that influence the MPS of the company?

# 1.3 Objectives of the Study

The general objectives of this study are listed below:

- To identify the prime determining factors that provokes Share Price fluctuation of Nepalese Commercial Banks.
- To examine and evaluate the relationship between MPS with the various financial indicators like EPS, BPS, DPS etc.
- To analyze the market trends of MPS with financial indicators.

• To conduct the opinion survey of potential investors regarding various aspects of share behaviours in Nepal.

# **1.4 Significance of the Study**

This study attempts to construct the relation of MPS of the Nepalese Commercial Banks to the major financial indicators like EPS, BPS, DPS etc. The relation is hoped to show the current status of Nepalese Commercial Banks with respect to the determiners of the Share Price. These findings may be helpful to the potential investors to make the better investment decisions.

Likewise, this thesis provides the information about the position of Share Price in Share industry. Moreover, the industrial average regarding different financial indicators are helpful to compare with the individual banks. This information is expected to be helpful to the managers of the respective banks.

This thesis delivers different information about the Share Market of Nepalese Commercial Banks which may be required to the further researcher. Hence this thesis is expected to be important to the further researchers.

# **1.5 Limitations of the Study**

Due to the limitations of the time, cost and other resources, this study is limited to the following areas:

- Though this thesis tends to explore the major determinants of Market Price of Share, it is limited on the analysis of Share Price of few Nepalese Commercial Banks only. It does not cover the whole financial institutions.
- This study covers only the relevant data of six years i.e. from Fiscal Year 2003/04 to 2007/08.
- This study is limited to the analysis of MPS of Nepalese Commercial Banks.

• The study is based Primary and Secondary Data. So the validity and reliability of the data depends upon their source.

# **1.6 Chapter Scheme**

The entire study has been organized into five main chapters as:

Chapter I	:	Introduction
Chapter II	:	Review of Literature
Chapter III	:	Research Methodology
Chapter IV	:	Data Presentation and Analysis
Chapter V	:	Summary, Conclusion and Recommendations

The first chapter deals with background of the study, a brief review of NEPSE and SEBON, statement of problem, objective of the study, significance of the study and limitations of the study.

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

The third chapter deals with the research methodology which has been followed to achieve the purposes of the study. It consists of research design, the period covered, nature and sources of data, tools to be used, research variable etc.

The fourth chapter deals with presentation and analysis of data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed.

And at last, the fifth chapter shows the summary of whole study, conclusion drawn and recommendations given. This ends the study paper.

Besides these chapters, Bibliography and Appendix are included in this research paper.

# CHAPTER – II REVIEW OF LITERATURE

This Chapter includes the conceptual review, review of journals and articles, review of previous studies related to the study.

# **2.1 Conceptual Review**

## 2.1.1 Security Market

"A security market can be defined as a mechanism of bringing together buyers and sellers of financial assets in order to facilitate trading. Alternatively, security market is a place of places where securities are bought and sold, the facilities and people engaged ins such transactions, the demand for and availability of securities to be traded, and the willingness of buyers and sellers to reach agreement on sales." (*Freedman: 1999; 47*)

Although, securities markets are concentrated in few locations, they refer more to mechanism, rather than to place, designed to facilitate the exchange of securities by bringing buyers and sellers of securities together. In other words, people and

organizations wanting to borrow together with those having surplus funds in the securities markets. "Securities, such as equities, short and long term debt instruments, derivatives etc are the products that are traded in the markets, institutions such as investment bankers and security firms, securities issuing institution such as government and corporate bodies and the participants of the securities markets. Securities markets' major function is to provide line between saving and investment there by facilitating the creation of new wealth." (*http://europa.eu.int/comm/security\_market.pdf*)

The development of a sound securities market with its constituent financial institution is one of the mechanisms which enable the efficient transformation of savings from the hands of surplus spending units to hose of deficit spending ones who can use them move productivity and/or have loss/risk evaluation.

"The existence of markets for securities is of advantage to both issuers and investors. As to their benefit to issuers, securities market assists business and government in raising funds." *(Chorafas: 2001; 147)* In a society with private ownership of the means of production and distribution of goods and services, savings must be directed toward investment in industries where capital is must productive. Governments must also be able to borrow for public improvements. Market mechanism market possible the transfer of funds from surplus to deficit sectors, efficiently and at low cost.

In the broadest term securities market can be classified into primary markets and secondary markets.

## 2.1.1.1 Primary Market

"The market for new securities is called primary market. The security market transfers the funds from savers to invest throughout the primary market. Hence, the transactions of the securities issued for the first time take place in this market." (*Rugh: 1996; 88*)

"The main function of primary market is to make the financial capital available to make new investments in building, equipment, and stock of necessary goods. The investment bankers perform the role of an expert in issuing new securities. These bankers make available advice to the business firms regarding the nature of security, maturity, and interest rate and underwrite the issue of securities. The commercial banks are not directly involved in this market. Usually, the business firms make private placement of securities. The direct sales of securities by the issue of securities to the buyers without underwriting is called private placement of securities." (*http://www.equiduct-trading.com*)

Primary markets are distinguished by the flow of funds between the market participants. Instead of treading between investors as in the secondary markets, participants in the primary market buy their assets directly from the source of the asset. Once the assets or securities are sold in the primary market, they begin trading in the secondary market.

# 2.1.1.2 Secondary Market

"Secondary market is the market for the existing securities. Second hand securities are bought and sold in the secondary market. Its main function is to provide liquidity to the purchasers of securities. This market remains as a center to convert stocks, bonds, and other securities into cash immediately. Since the secondary market provides liquidity to the securities, the investors are encouraged to buy securities in the primary market." (*Kolb and Rodriguez: 1996; 141*)

The transactions are more in secondary market than in primary market. But these markets involve in mutually closely related wary. For instance, if the interest

increases or the price of securities increases in secondary market, the interest and price of primary market also increase because of the investment transfer from one market to another according to price and return.

"Secondary securities markets allow out standing securities to be traded from old to new owners. The advantage of secondary market is to provide liquidity or cash and investment opportunities to investor and to make certain assets more attractive to buyers and sellers. Secondary market comprises the stock exchange, the over the counter market." (*Donald and Ronald: 2000; 33*)

#### 2.1.2 Stock Exchange and Its Role

"Stock exchange is the most highly centralized and visible institution where already issued securities are bought and sold for investment and speculative purpose. It provides facilities of trading of listed financial securities.

Securities exchanges do not directly buy or sell securities, rather they provide trading floors on which a continuous auction market is conducted. To transact business on the trading floor of an exchange an individual must be member; that is, a seat on the exchange must be purchased. Individual or institutional investors who place orders to buy or sell the securities listed on an exchange may not be present when their orders are executed. Rather, they must transmit their orders to an exchange member- usually a commission broker- who sees that they are carried out." (*Mishkin: 1998; 12*)

In recent years, the authorities are increasingly recognizing he role of the stock exchange. "Stock exchange is not and has at no time been the private concern of a few individuals. Nor have their activities been limited to the cyclical booms and slumps, which attracted so much popular attention. The stock exchange as the market for securities gives everybody assess to a number of different opportunities for capital investment. The function of stock exchange is to provide equal opportunities for many buyers and sellers of securities as possible. From general economic point of view the stock exchange constitute the core of capital market. It has put its finger on the pulse of the economy and gives the diagnoses to the public in the form of quotation." (*Pinches and Singlton: 1998; 19*)

The institution plays a notable part in the economic life of the country acting as a free market for securities, where prices are determined by demand and supply. The function of a stock exchange is not only to provide a market for securities but also assist in the raising of for government and industries. Thus, free and active markets in stock and shares have become a prerequisite for the mobilization and distribution of a nation's savings as to support modern business.

## **2.1.3 Participants in the Stock Exchange**

#### Brokers:

"Brokers are the agents or middlemen, who facilitate the buying and selling of securities for investors. They take buy or sale orders from the investors in their own office and executes the transactions in the floor of the exchange. Besides the basic service of executing orders, brokers also provide services such as holding securities for safe keeping, providing information and advice relating to investment alternatives, extending margin loans and facilitating short sales." *(Thygerson: 1992; 132)* 

#### Dealers:

"Dealers trade solely for themselves and are prohibited from handling public orders. Since dealers have access on the floor and can own securities on their own name, they benefit from buying at low and selling at high prices. The benefit of the dealers to the market is that their buy and sell actions added up liquidity of the securities." (*Thygerson: 1992; 132*)

#### Market Makers:

"Market makers, also known as specialists, facilitate the trading of securities by maintaining inventory in particular securities. They are similar to dealers in many ways except that they always stand ready to buy and sell securities at their bid and asked price for which they are market maker." (*Thygerson: 1992; 133*)

This Chapter includes the Review of previous studies, articles and conceptual framework for the related studies.

#### 2.1.4 Common Stock

Common Stock is legal representation of equity for ownership position in a corporation. It lies under variable income security between two types of securities: fixed income and variable income and is a negotiable instrument. It can be bought and sold in the secondary market. The holders of common stocks are called shareholders or stockholders. The common stocks are the permanent and vital source of capital since they do not have a maturity date. As a return to the contribution of shareholders investment, they are entitled to dividends. Being the owner of the company, the shareholders bear the risk of ownership. They are entitled to dividends after the claims of outsiders' are satisfied.

# 2.1.4.1 Features of Common Stock

Common Stock is an ownership share in a corporation. Common stock certificates are legal documents that evidence ownership in a company that is organized as a corporation; they are also marketable financial instruments. Sole proprietorship and partnership are other forms of business organizations, but only corporations can issue common stocks. The main features of common stock are:

# i. Claim on Income:

"The Common Stockholders bear a right to claim on income, which is earning available for ordinary shareholders, after paying expenses, interest charges, taxes and preferred dividend, if any. The income may be distributed among shareholders in the form of dividend or retained earnings. Dividends are immediate cash flow to shareholders, whereas retained earnings are the income reinvested in the organization, which ultimately increase the net worth of shareholders. Claim on Assets: The Common Stockholders have a residual claim on the company's assets in case of liquidation. Out of the realized value of assets, first the claims of debt-holders and then preference shareholders are satisfied, and the remaining balance, if any, is paid to the common stockholders." (*Pandey; 1999: 905*)

#### ii. Right to control:

"The ordinary shareholders have the legal power to elect directors to the board. If the board fails to protect their interests, they can replace the directors. They are able to participate in the management of the company through their voting right and right to maintain proportionate ownership." (*Pandey; 1999: 905*)

#### iii. Voting Right:

"For each share of common stock owned, the common stockholder has the right to cast one vote at the annual meeting or Annual General Meeting (AGM) of stockholder. Common stockholders have the right to vote on stockholders matter, such as the selection or the board of directors, sale of fixed assets, merger of the company etc." (*Pandey; 1999: 906*)

#### iv. Pre-emptive Right:

"The law grants shareholders the right to purchase new shares in proportion to their current ownership. Thus the pre-emptive right entitles a stockholder to maintain his proportionate share ownership in the company. The stockholder's option to purchase, a stated number of new shares at a specified price during a given period, is called rights which can be exercised at a subscription price which is generally much below the current market price of shares." (*Pandey; 1999: 906*)

#### v. Limited Liability:

"The Common Stockholders are the true owners of the company, but their liability is limited to the amount of their investment in shares. If a stockholder has already fully paid the issue price of shares purchased, s/he has nothing more to contribute in the event of financial distress or liquidation. The limited liability feature of share encourages unwilling investors to invest their funds in the company which helps company to raise funds." (*Pandey; 1999: 908*)

# 2.1.4.2 Rights of Common Stockholders

## i) Right to income

"Common Stockholders are entitled to share in the earnings of the company only if cash dividends are paid. Shareholders also prosper from the market value appreciation of their shares but they are entirely dependent on the board of directors for the declaration of dividends that give them income from the company. Thus the priorities of common stockholders differ markedly from that of the creditors." (*Van Horne and Wachonicz; 2000: 561*)

#### ii) Voting Right

"Because the common stockholders of a company are its owners, they are entitled to elect a board of directors. In a large corporation, shareholders usually exercise only indirect control through the board of directors they elect. The board, in turn, selects the management and management actually controls the operations of the company. Voting can be done either in person at the shareholders annual meeting or by proxy." (*Van Horne and Wachonicz; 2000: 563*)

# iii) Right to Purchase new Share

"A firm's corporate charter or state statute may require that a new issue of common stock or an issue of securities convertible into common stock be offered first to existing common stockholders because of their preemptive right. If the preemptive right applies to a particular firm existing common shareholders would have the right to preserve their proportionate ownership in the corporation. Thus, if the corporation issues common stock, the common shareholders must be given the right to subscribe to the new stock so that they can maintain their pro rata interest in the company." (*Van Horne and Wachonicz; 2000: 564*)

# 2.1.5 Earning per Share (EPS)

Earning per Share (EPS) is calculated by dividing a company's net revenues by the outstanding shares. This gives a number that can be used to compare the earnings of companies since it is unlikely any two companies will have the same number of shares outstanding. "Accounting earnings that represent the different revenues and expenses, including the expenses associated with non-equity source of funds (such as interest to debt, dividend of preference shares) is known as total earning available for common stock. If this portion of income is divided by number of outstanding shares, we get earning per share." (*Francis; 1991: 622*)

#### 2.1.6 Retained Earning

"The total amount of earning of the firm that has not paid out as dividend throughout its history and indicated in the Balance Sheet as earning is known as Retained Earnings. These earnings are reinvested in the firm." (*Reilly; 1996: 212*)

#### **2.1.7 Dividend per Share**

"Dividends per share are calculated by dividing the total dividend amount paid for the financial period by the number of ordinary shares in issue. The directors may pay an interim dividend during the accounting period and then recommend a final rate of dividend per share for approval by shareholders at the Annual General Meeting (AGM).

# Forms of Dividend

- **a.** Cash Dividend: Payments made in cash to shareholders are termed as cash dividends. Distribution of cash dividend causes the reduction in total assets and net worth of the company.
- b. Stock Dividend: Distribution of bonus shares as dividend to the stockholder is known as Stock Dividend. This increases the number of shares of the company." (*Reilly*; 1996: 212)

## 2.1.8 Book Value per Share [BPS]

"The book value of the equity reflects the historical costs of - brick and meters the physical assets of the company. A well run company with strong management and an organization that functions effectively should have a market value greater than the historical book value of its physical assets." (*Weston and Brigham; 1987: 674*)

## 2.1.9 Market Value per Share

"Market value per share is the current price at which the stock is traded. For activity traded stocks that have thin markets, prices are difficult to obtain. Even when obtainable, the information may reflect only the sale of a few shares of stock and not typing the market value of the form as a whole. For companies of this sort, care must be taken in interpreting market price information." (*Van Horne and Wachonicz; 1996: 561-64*)

"The market price of share gives the value of shares, and the value of the organization. The market price 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. Since the common stock holders are owner of organization and have least priority to claim in liquidation, the share price is highly volatile and very sensible to environmental factors.

Due to the market imperfection and uncertainty, shareholders may give a higher value to the near dividends and capital gains. Thus, payment of dividend may significantly affect the market price of shares. Higher dividends increase the value of shares and low dividends reduce the value." (*Pandey; 1999: 681*)

#### **2.1.10 Share Price Determinants**

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

"The process used to find the value of a security varies with the types of security. The firms are characterized as having high free cash flow, low growth opportunities and low insider ownership when compared to control firms. The fund targets are significantly undervalued compared to their industry peers and targeting likelihood is increasing significantly in the magnitude of the undervaluation. Markets recognize that the funds are able to spot undervalued firms. Simlarly, the positive effects of fund on target firm in the short-run can persist in the long-run as well. Moreover, there is a correlation between long-run post-targeting performance and the post-target changes." (Francis, et al.; 1991: 271)

Also, "dividend policy affects the value of shares even in a situation in which return on investment is equal to the capitalization rate i.e. r = Ke. It is assumed that investors have a preference for present dividends to future capital gains under the condition of uncertainty. An increase in dividend payout ratio leads to an increase in the stock prices for the reason that investors consider that the dividend yield (d<sub>1</sub>/p<sub>0</sub>) is less risky than expected capital gain. The basic assumptions are as follows:

- The firm is an all equity form.
- No external financing is available so retained earnings will be used to finance any expansion.
- The internal rate of return (r) and cost of capital (k) are constant.
- The firm and its stream of earnings are perpetual.
- The corporate taxes do not exit.
- The retention ratio (b) once decided upon is constant. Thus, growth rate, g
  = b x r is constant.
- 'K<sub>e</sub>' must be greater than 'g' to get meaningful value.

The investors value the present dividend more than the future capital gains. An increase in dividend payout ratio leads to an increase in stock prices for reason of investor's capital gain." (Gordon; 1962 : 111)

Similarly, "the actual market price can only pursue a consensus estimate of any given security's intrinsic value since securities analysts' value estimates differ. Similarly, a perfectly efficient security price is in a continuous equilibrium such that the intrinsic value of the security vibrates randomly and the market price

equals the fluctuating intrinsic value in every instant in time. It is the speed of security's market price adjustment process which gauges the efficiency of a price.

A security with perfectly efficient prices would be in 'Continuous equilibrium". Every time a new piece of news is released, the security's intrinsic value will change and the security's market price will adjust toward the new value. If any disequilibrium (of even a temporary nature) exists, then the security's price is less than perfectly efficient. Of course, actual market prices are not perfectly efficient because different securities analysts typically assign different value estimates to any given security." (Samuelson; 1986: 281)

# 2.2 Review of Policy and Regulation

#### 2.2.1 GON Policies and Programmes

GON after adopting liberalized economic policy has been initiating different programmes for the organized development of securities market. In this context, during the period of Eighth Five Year Plan (1992-1997), some infrastructures regarding the securities market regulation were prepared. In the ninth Five Year Plan period (1997-2002), efforts were made to develop an organized and credible market. While implementing the programmes of Ninth Five Year Plan, GON through the budget speech of 2000/01, announced the programmes to amend Securities Exchange Act, initiate necessary steps to bring wider participation in the stock exchange and make its operation more transparent. Similarly, the budget speech has also included the programme to take legal action against those listed companies, not publishing and submitting their audited financial statements of last two years. Accordingly, 25 companies were de-listed for not publishing their financial statements and not paying annual listing fees to the stock exchange. However, other programmes like amendment of Securities Exchange Act, Standardizing Stock exchange etc., which were perceived to be more important for the securities market development, could not move ahead concretely.

In the fiscal year 2001/02, GON came with the 10<sup>th</sup> Five Year Plan (2002-2007), which among others also includes various programmes for securities market development. The objective of the securities market development programme is to increase public ownership in the development projects operated by private sector and promote industries by supplying financial resources through securities as well as increase employment opportunities and fulfill the capital requirements to the development projects operated by GON, government enterprises and municipalities issuing debentures in the securities market thereby reducing foreign loan. To meet these objectives, it has taken the policy of modernizing stock exchange, strengthening the regulatory system of the securities market, widening the participation of the stock exchange and making it dynamic, transparent, credible and investor friendly and developing the securities market as an important sources of long-term financial growth by increasing its depth and breadth. It has incorporated the programmes of making public issue effective, enhancing regulatory capability of SEBO, making the securities trading process standard and credible, creating a state of transferring ownership immediately after transaction, diversifying securities market instruments, attracting institutional investors, protecting investors interest, expanding the securities market services nationwide and improving the compliance and integrity of the market (www.sebonp.com; Feb, 2009)

Securities Market Programmes in 10th Plan (2059-2064)

a) Objectives

- To increase public ownership through shares in the development projects to be operated by private sector and to provide returns of such projects.
- To promote industry and trade by supplying the required financial in competitive cost and to increase employment opportunities.
- To issue bonds through securities market to meet the mid-term and long-ter, financing required by development projects to be operated by GON, government enterprises and municipalities, therby gradually reducing the foreign loan.
- b) Quantitative Goals
- To increase number of investors investing in share capital of corporate bodies to at least 3 percent of total population.
- To raise at least Rs.5000 million for the corporate bodies through primary market of securities.
- To increase the amount of securities trading to at least Rs. 10000 million.
- To increase the value of total market capitalization to at least 15 percent of total GDP.
- To list additional 40 corporate bodies in the stock exchange.
- c) Strategies
- Modernizing the stock exchange.
- Making the securities market regulatory system more effective.
- d) Policies and Working Policies
- Modernization of stock exchange (Related to strategy 1).

- To make corporate sector dynamic and broad based and to develop effective and investor friendly role of securities market regulators.
- To increase allocation and operational efficiency of securities markets.
- To make securities market mechanism fully transparent and credible.
- Effective securities market regulatory system (Related to Strategy2).
- To develop and expand securities market as an important source of long-term funds.
- To increase depth and breadth of securities market.
- e) Programmes and implementation structure
- Establish one window policy for public issue through SEBO and enhance capability of SEBO.
- Arrange for the immediate ownership transfer of securities
- Develop simplified issue and trading system for the securities of privatized government enterprises.
- Constitute a permanent committee with representation of Ministry of Finance, Nepal Rastra Bank, SEBO and Insurance Board for the coordinated development of healthy and competitive financial market as well as for the development of unified financial regulator in the future.
- Expand securities exchange facilities in the other places of the country considering its feasibility for the savers residing there.
- Develop clear regulatory benchmark of SEBO and NEPSE.
- Make the securities trading process and financial statement of the issuer companies more credible and transparent.
- Implement codes of conduct for securities regulators, employees of stock exchange, directors, managers, auditors and advisors of the corporate bodies and for the securities businesspersons.

- Provide training and education on different aspects of securities market and make institutional arrangement for regular research and study.
- Make provision to take insider trading as a criminal offence so as to control such trading.
- Make necessary legal provision for securities trading through nominee system.
- Make necessary arrangement for SEBO to take membership of International Organization of Securities Commission (IOSCO).
- Privatize NEPSE and develop it as a self-regulatory organization following good governance practices.
- Establish central depository system for immediate ownership transfer of securities and to protect investors from frauds that may occur on securities trading.
- Provide incentives for the promotion of companies having wider ownership and good governance practices.
- Make legal provision to encourage mutual funds, debentures and securitization.
- Make arrangement for the trading government bonds in the stock exchange and provide benchmark and liquidity.
- Develop appropriate legal provision to encourage entry of contractual savings in to capital market as well as develop regulatory system of such instruments under securities jurisdiction.
- Simplify entry and exit process of securities businesspersons by following prudential norms.
- Assist ICAN for the establishment of international accounting system and establish and operate disclosure review system of issuing companies.
- Gradually automate securities trading of NEPSE as per feasibility.

- Expand present centralized floor trading system, establish OTC market and develop trading system that can accommodate trading for local areas.
- Make clearing and settlement system of securities transparent and establish and/or utilize central depository system of securities for clearing and settlement. (www.sebonp.com; Feb, 2009)

# 2.2.2 Regulation of Nepalese Securities Market

Securities market in Nepal, till the recent past, has all the characteristic of an underdeveloped economy. It was characterized by the absence of professional promoters, underwriting agencies, market intermediaries, organized market, regulatory bodies, and rules and regulations. However, after the restoration of democracy in 1990, a trend towards an organized stock market can be marked with numerous developments in the Nepalese securities market, removing its earlier deficiencies.

A detail legislative code has been adopted by the Government to protect the investors' interests. The Securities Exchange Regulation, 1993, provides for those reforms in stock exchange trading methods and practices. The Regulation ahs added further functions, powers and duties of the Securities Board, Nepal (SEBO). The Regulation has authorized the SEBO for internal housekeeping matter, made provision regarding licensing stock exchange and their subsequent operation, specified requirements for the registration and listing of securities along with authority for the registration of market intermediaries such as brokers, market makers, dealers and issue managers. The regulation, different provisions regarding allowances and benefits as well as duties, powers and functions of chairman of SEBO, funding, accounting and auditing are also specified by the regulation. The Companies Act, 1997, marks an important stage in the development of corporate enterprises in Nepal. The provisions made under this act especially relevant to the securities market are provisions regarding the issuance and publication of the prospectus, which is necessary for public issue of securities. As per this provision, the details of the content of prospectus are prescribed and the prospectus is to be approved by the Companies Registrar's Office (CRO). Under this act, different provisions have been make for the establishment of a company (either public or private) and its liquidation, conduction of Annual General Meeting (AGM), incorporation of Memorandum and Articles of Association, issue of shares and debentures, preparation of annual accounts and their audit and the annual report.

Securities Exchange Act, 1983 (Second Amendment) provides reforms in securities market regulating practices. It can be taken as the very important legislation of the securities market. The act has been formulated to systematize and regularize the stock exchange in order to maintain the economic interest of the people. It also contributes to the economic development of the country, to protect the interest of the investors and to increase the participation in the industrial sectors. For this purpose, this act provides legal framework for the securities regulatory system by establishing SEBO as an apex regulatory body. As per this act, SEBO provides license for the operation of stock exchange, registers securities and grants issue approval, supervises and monitors stock exchange and market intermediaries. This act also enables SEBO to issue directives and make bylaws and guidelines and also allow the stock exchange to frame by-laws, Similarly, some provisions have been made regarding inside information and other forbidden activities, however, they are not covered broadly.

In order to manage sales and promotion of securities and make the sales and issue manager accountable for their services, SEBO has issued the Securities Management Guidelines, 1998. This Guideline has been made as per the provision of Section 35 of the Securities Exchange Act, 1983 (Second Amendment). The guideline further specified various provisions regarding disclosure, application for registration of securities, agreement between issue managers and issuing companies, execution procedures of the sales management and code of conduct to be specified etc. Similarly, Share Allotment Guidelines, 1994 issued by SEBO make the share allotment procedures fair the transparent. The directives were intended to crate broader ownership according to the mass participation policy.

Thus, from the foregoing brief discussion, it is clear that the Securities Exchange Act, 1983 (second amendment) and Securities Exchange Regulation, 1993 set up a general framework for regulating securities market, which has facilitated and encouraged the development of securities market of Nepal.

#### **2.3 Review of Theories**

Broadly, there are three schools of thought concerning the valuation of securities and their price behavior: (1) Technical Analysis (2) Fundamental Analysis and (3) Random Walk or Efficient Market Analysis.

# 2.3.1 Technical Analysis

The Technical Analysis theory of share price behavior is based on past market information. On the assumption that history tends to repeat itself, it is believed that knowledge of past patterns of share prices will help to predict future prices under similar circumstances. It involves the study of past market behavior with reference to various financial and economic variables to forecast the future. Financial and economic variables do change, but these variables are to be adjusted in the light of the present situation. Charles Dow is the greatest protagonist of this theory. Since the followers of this theory anticipate future share prices on the basis of charts and graphs of past movements in prices, this approach is popularly known as Chartist Approach. Thus, under this approach technicians are interested to interpret the past trend to predict the future prices of equity shares.

#### **2.3.2 Fundamental Analysis**

The fundamentalists are of the opinion that the value of a share depends upon the anticipated future stream of returns and corresponding capitalization rates. The capitalization rate is an appropriated risk related cost of equity. Therefore, value of share, under this model, is equal to the present value of future incomes from an equity discounted at risk adjusted capitalization factor. It requires full disclosure of financial and economic information. If the dissemination of information is not regular, reliable and complete, the market value of shares cannot be properly ascertained. Two models are popularly used under this theory e.g., Earnings Capitalization Model and Dividend Capitalization Model. The market price of share is based on its intrinsic value. The shareholder would like to maximize the return by buying shares of the under-valued company and selling shares of the over-valued company. Buying pressure would increase the price of under-valued company until the equilibrium price is restored.

# 2.3.3 Random Walk Analysis

The Random Walk Theory assumes that all future streams of incomes from the equity investment are independent of preceding incomes. In other works, future prices cannot be predicted on the basis of past price behavior. The share prices fluctuate randomly, however, this does not mean that the market is irrational in the determination of prices. It operates through market mechanism. In a free and competitive market, the relative forces of demand and supply determine share

prices. The so-called efficient market automatically adjusts the prices of shares since the market is very sensitive. Any discrepancies in the market are automatically corrected and actual prices fluctuate randomly about its intrinsic value. This is a free and most competitive market and the prices of shares in the market are assumed to reflect all relevant information.

Nepalese stock market is not efficient enough to evaluate the prices of stocks. Most of the investors are not very responsive to many financial and economic changes. But it has been felt that they invariably respond to the dividend incomes, earnings per share, capitalization of profits to issue bonus shares and issue of right shares. In such a situation, share prices of the company starts going up steadily. The leakage of secret information in the share market from inside the company called insider trading also sometimes raises share prices upwards. But this is a temporary phenomenon; when the company discloses the information, the price is automatically corrected in the market. There is no doubt that their demand and supply affect the price of shares in the stock market. When there is a tendency of rising prices in the market, the supply of shares will be increased; and in contrast, when the prices are falling, investors would demand more of the shares to buy, other things remaining the same. But because of the lack of reliable and regular disclosure of market information and lack of awareness and technical knowledge amongst the vast majority of investors to read and analyze the financial information, the market is non-competitive and inefficient. Therefore, the Technical and Fundamental Analysis models are most appropriate to evaluate the prices of shares in our context. The best-practiced tools of analysis, under Fundamental School of thought, are based on earnings and dividends of the company. Hence, the stock valuation models discussed below are based on earnings and dividends.

# 2.4 Review of Journals and Articles

Professor **James E. Walter** in his journal entitled, "*Dividend Policy: It's Influence on the Value of Enterprise*", argues that "dividend policies almost always affect the value of the enterprise .The investment policy of a firm cannot be separated from its dividend policy, which is just the opposite of what MM said. The key argument in a support of the relevant proposition of the model is the relation between the return of firm's investment or its internal rate of return (r) and its cost of capital (k). As long as the internal rate is greater than the cost of capital (k), the stock price will be enhanced by retention and will vary inversely with dividend payout.

The basic assumptions of the model are:

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

**International Monetary Fund [IMF]**, examined the general relationship between stock price and macro economic 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 analysis indicated that the Zimbabwe Stock Exchange functioned quite constituently during the period. Whereas sharp increases in the Share Price during 1993/94 were mainly due to the shift of the risk premium that was caused by partial capital account liberalization". (*IMF; 1997: 17*)

**Pettit** in his journal entitled, "Dividend Announcements, Security Performance and Capital Efficiency" has the objective of providing further support or evidence about the validity of the efficient market hypothesis by estimating the speed and accuracy, with which market price reacts to announcements of changes in the level of dividend payment. He analyzed 625 announcement dates of all dividend changes collected from New York Stock Exchange for the period of January 1964 through January 1968, within which 1000 dividend changes were announced and daily price information was also studied for 135 announcements in 1967-1969. For analysis, the market model was used.

The study draws the conclusion that "the market makes use of announcements of changes in dividend payments in assessing the value of a security and most of the information implicit in the announcement is rejected in the securities' price as of the end of the announcement period" (*Pettit; 1972: 63*), and the study strongly supports the proposition that the market is reasonably efficient both on a monthly and daily basis.

A study conducted by **Michele, Thaler and Wamack** on "Price Reactions to Dividend Initiations and Omissions: Overreaction or Drift", finds out that "the short run price impact of dividend omissions is negative and that of initiation is positive, that there are long term drifts in prices following announcements of initiations and especially omissions, and that there is no evidence of important change in volume or clientele, which mitigates price pressure as a potential explanation for the anomalous drift." (*Michele, et al.; 1995: 217*)

"There are many loopholes in our stock- exchange Act. Investors feel insecure here. A few years back there was a company called Nimrod Pharmaceutical Company that floated in shares but where are they now? Similarly, it has been more than a year that Bansbari leather age has allotted its shares but why didn't the company lists its shares in the stock market? It has been three years that Gorkhkali Rubber Udyog hasn't called for its AGM Government has remained silent in all these cases. This is why the general public as well as the institutional buyers are not feeling secure in investing in stock market" (Business Age, Jan 2000:25).

"Return from investment in stock is not short run phenomenon". Investors have to learn few things before they make investment on stock. First of all they should know the financial health of that company. For example: if some body want to invest in investment of bank's shares, he/she must see its balance sheet or at least paid- up capital, last year net profit, current years anticipated profit and calculate earning per share and price earning ratio. These two numbers would give a fair idea about company's health and then market price would judged through the discount factors based upon one of the sound company's data. Market price is equal to earning per share divided by discount factor. EPS can derive by dividing total net profit after tax by total number of share and price earning ratio by dividing market price with capital gain and other (Business Age, July 2001:20).

"Investment in share has traditionally been done by rating the institutions on the basis of price earning ratio or dividend. Hardly do investors compare current assets with current liabilities or take a look at the debt equity ratio. Unless investors are analyzing the intricate financial details of corporate institutions before making investment decision the market cannot develop smoothly.

Share investment has traditionally been guided by the investor's returns. Most earnings of investors here have been in the form of dividends rather than capital gains, through high dividend are often seen in corporate finance theory as a wasteful use of scares capital. With the commercial bank becoming the only potential investment destination, with other stock market participants hardly

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making profit and even if they did failing to meet investor's expectations, demand for shares of commercial banks outpaced supply and their prices boomed.

Now the latest sums in secondary market, despite a pretty good performance by commercial banks, make it more apparent that investment in the past was done on whim. Even officials at the stock exchange and the securities board, refuting investors, allegations of the market manipulation and insiders trading of last February discreetly claimed that the Nepalese stock market is in a has cent stage and that investment are made more in an impulse rather that through market study and credit rating" (Business Age, June 2001; 25).

"ADB experts have been many obstacles to the growth of the capital market. This includes low lend of investors confidence, disclosure of poor and manipulated financial information. Weak enforcement of regulation, absence of instructional investors. Lack of diversity in range of financial instruments and the scope of active participation for the various intermediaries limited by vertical barriers" (The Rising Nepal, Jan , 2001).

One should analyze and develop various alternatives to anticipate the best returns before making a decision. That however is not enough. Investors have to use their own common sense to make a right decision. Considering the risks, investors also need to be gutsy while investing in stock. Starting the journey somehow and learning the tricks alone the way. It is commonly known that profit and loss is part of the game. There may be some monetary loss in the beginning, but investors should not worry as they learn lesson in this way, which can prove to be an asset in the long seem. Start by playing safe and along the journey, be patient and try to develop a proper understanding of market language, investor's psychology and market behavior (Business Age, February 2007: 32).

Investment in the capital market now has become very uncertain sending the investors in search of avenues of more certain retains. The equality in investment is considered riskier than investment in bond and preferred stock etc. the secondary market is not performing well. The NEPSE index is moving around 208 and 215 since long. After great sump in Nepal stock market in fiscal year 2000/01, dissatisfaction has increased in the mind of investors. The NEPSE index on 3<sup>rd</sup> November 2000 had reached the peak of 545.82 and after that is continuously on the decline. (Business age, March 2004: 42).

Nepal stock exchange's securities price (NEPSE index) during the monthly of June remained fluctuating. It remained bullish till June 10 reaching 216.75 and than it turned bearish continuously searching the level of 211.31 on June 15. The rise was started with the appointment of new government and the main leader was commercial Bank group market dominating sector in the exchange understandably enough, the increase in the price was fueled by the expectation for early end of conflict between government and political parties after the appointment of Deuba as a prime minister. But the publication of the third quarter financial result (where showed the operating profit increasing more than 50 percent over the competition amount the banks) was no way less important factor for such positive impact on commercial Bank sector as been in June 2004.

NEPSE index fell after reaching 216.75 on June 10 and plummeted to 211.31 over a short span of three days. This fall was however caused by noticed published by some companies inviting applications for their new issue (Paschimanchal Development Bank and Kist Merchant Banking and finance LTD both on June 10 call of NBL for application to purchase its holding on SCBNL, Issuance of right share by the NB Finance ltd.). As well as the possible strike of the NEPSE employees and wrangle among the political parties that delayed the formation of coalition of government. Since June 16, the index turned bullish again till the end of the month. Despite the strike of employees of NEPSE, the market increased on June 16, one day before the strike and continued to increase, during and after the strike till the end of the month. There were no any major event to cause the price of share goes up. However, the expectation of fewer disturbances after the four parties suspended the outgoing demonstration and the Maoist student union called off the education strike, the country budget and positive development reported for the formation of coalition government etc. increased the expectation of investors.

The NEPSE index since sensitive to political, economical and financial sectors development it has raised after the discloser of financial situation by the companies and when there were positive sign of political stability and it decreased for some company's shares. It shows that the investors becoming aware about when to buy and sell the securities" (Business Age 2004 July: 53).

The NEPSE index rose to 492.46 on November 29th. Gaining 84.08 points within a month. It was only 408.38 at the end of October. A similar bullish trend was observed in the stock exchange after the reinstatement of the parliament on April 24th and the revision of monetary policy in July.

However, the latest bullish trend was not sustained for long. The market turned bearish from early December, losing over 15 points in few days. This is attributed to the news that the price actions on the market were not based on strong fundamentals.

The arrangement signed between the seven party alliance and Maoist on November 18th sent the NEPSE index jumping by over 11 points on the following day. A similar phenomenon was observed after the peace accord was signed on November 21, which caused the NEPSE index to increase, by 45.98 points within the following week.

This phenomenon is attributed to the new confidence of receive in better returns in the future from investments in the market. The regular market speculators were trying to cash in on the political agreement by spreading rumors of better economy in the future.

Similarly, speculators spread propaganda about NB Bank's future prospects after its management was taken over by Nepal Rastra Bank (NRB). NB Bank's share gained over Rs.100 reaching Rs.335 after NRB took over NBB's management. This was quite unjustified on the basis of bank's fundamentals. The book value of the Bank at the end of fiscal year 2004/05 was only Rs.65 P.S. Just before NRB's takeover; depositors had withdrawn over Rs.3.5 billion from the bank drastically reducing its business capacity (Business Age, December 2006:60).

A book about capital market by Dr. R.S. Mahat entitled "Capital market financial flow and industrial finance in Nepal" was written in early period of the development of capital market and before the establishment of stock exchange. So, Dr. R.S. Mahat made the first priority to establish stock exchange for development of stock market. He also writes that Nepalese stock market is still in infancy stage and some drawbacks to the development of stock markets are strong historical and social reasons as well as mass poverty and illiteracy in Nepalese society. He further points out that some conscious and educated people of urban areas are also not investing in the industrial sector instead they are investing on the real estate especially building construction. Although the book is written in the early stage of the development of stock market, the limitations of Nepalese society regarding the investment in stock market is still reality of Nepalese capital market.
One should analyze and develop various alternatives to anticipate the best returns before making a decision. That however is not enough. Investors have to use their own common sense to make a right decision. Considering the risks, investors also need to be gutsy while investing in stock. Starting the journey somehow and learning the tricks alone the way. It is commonly known that profit and loss is part of the game. There may be some monetary loss in beginning, but investors should not worry as they learn lesson in this way, which can prove to be an asset in the long seem. Start by playing safe and along the journey, be patient and try to develop a proper understanding of market language, investor's psychology and market behavior (Business Age, February 2007; 32)

The NEPSE index was bullish this month experiencing a revival after an abysmal performance in the past months. The index ended up gaining a swashbuckling 62.66 points when compared to the last month's opening at 512.38 and closing 575.04. The Sensex though increased less proportionately by 17.4 points opening at 128.18 and closing at 145.58. Shares trading also increased in comparison to the previous month (The Boss, Jul-Aug, 2007).

Nepali shares closed at 813.77 points on the last day of the trading from the opening of 796.34 points on Sunday. On the first day of the trading, the sole secondary market index set a record by crossing 800 points mark for the first time in its 14 year long history and posted 811.98 points.

On the second day of the trading, NEPSE index registered 828.77 points and it witnessed an investment of 12.12 points on the third day as the index posted 833.56 points. However, the NEPSE index could not continue its growth throughout the week as it posted 821.44 points on the fourth day. Finally the NEPSE index closed only 1.79 points higher on the last day of the trading from

Sunday's closing, as one of the current market driver hydropower group registered a loss of 43.62 points.

Buyers were continuous on the unnatural growth of share prices of the institutions that have negative net worth and PE ratio. Unnatural growth also forced NEPSE to issue precautionary notice to the investors (The Himalayan Times, 16 Sept, 2007).

After continued rises, the stock market fell by 12.13 points over the week, as investors were skeptical over the sustainability of overheated market. NEPSE opened at 718.09 points and closed at 705.96 points. The commercial banks group, which drives the market, saw a sharp fall. Its index fell to 782.55 points, down from 801.53 points. Market analysts termed the fall as the market correction. The shares prices were rising unjustifiably in the past, and they were bounded to retreat. They said that the market had rising significantly over the months and the market correction would simply return the price to the previous level (The Kathmandu Post, 19 August 2008).

India shares claimed Thursday tracking regional markets and helped by gains in banking and automobile shares. The Bombay Stock Exchange's 30-share sensex index moved up 170 points, or 1.1 percent to close at 15616 points on the broader National Stock Exchange, the 50-company S&P Nifty index moved up 42 points, or 1 percent, to end at 4518 points (The Kathmandu Post, 7 September 2008).

The trend that market analysts have termed as a "mad growth" continued as the share price kept soaring this week with the NEEPSE reporting a growth of 40.29 point over the week. The NEPSE opened at 756.05 points and closed at 796.34. Market analysts said investors are locking in money, envying profits made by others, instead of analyzing any fundamentals. There is no change in the corporate and economy scenario to push the price up like this, but the price are moving up.

This trend shows that the market will see a downturn sooner or later, they added (The Kathmandu Post, 19 January 2009).

The overheated stock market showed signs of cooling down growing by just 1.79 point this week with the market secondary a steep fall towards the end of the week. The market had grown 40.29 points in the previous week.

Market analysis said as the market has raising too much, it was now starting to correct. The share prices had been raising even though there wasn't any favorable development. The commercial banks group, the leading sector, posted a rise of 3.82 points. In the previous week it had soared by 38.53 points. Its index finished off at 910.37 points this week, from 906.55 (The Kathmandu Post, 16 March 2009).

### 2.5 Review of Thesis

Number of thesis relevant to this study has been reviewed for the purpose of finding previous studies and their findings. Some of the important findings are presented here below:

**Pradhan** (1993) has conducted a research, "Stock Market Behaviour in Small Capital Market: A Case of Nepal". For the study, he collected the data of 17 enterprises from the year 1986 to 1990. His research study was carried out to meet the following objectives.

- a. To assess the stock market behaviour in Nepal.
- b. To examine the relationship of market equity, market value to book value, price earnings and dividends with liquidity, profitability, leverage, assets turnover and interest coverage.

After using statistical tools like regression model, he presented the following findings:

- a. The stock with larger ratio of dividend per share to market price per share have lower leverage ratio.
- b. The leverage ratio of dividends per share to market price per share has higher liquidity.
- c. The liquidity position of stock paying lower dividends is also more variable as compared to the stock paying higher dividends.
- d. The stock with larger ratio of dividend per share to market price per share has higher earnings.
- e. There is positive relationship between the ratios of dividends per share and interest coverage.
- f. The dividend per share and market price per share are positively correlated.
- g. The dividend payout and profitability has positive relationships.
- h. There is a positive relationship between dividend payout and turnover ratios.
- i. Assets turnover, earning and interest coverage are more variable for the stocks paying higher dividends.

**Aryal** (1999) has conducted research on "The General Behaviour of Stock Market ". The specific objectives of this study were:

- a. To discuss theoretically the movements of stock market prices as predicated by the random walk model.
- b. To develop the empirical probability distribution of successive price changes of an individual common stock and a stock market as a whole.
- c. To examine whether the successive price changes of stocks market are independent to each other or not.

The main findings of his study were:

- a. On the basis of run tests and serial correlation, it seems that the independent assumption of random walk model in stock prices is rejected by the collected sample data of 21 companies at least as a description of price behaviour in Nepal Stock Exchange.
- b. The stock price changes are dependent on each other.
- c. The random walk of security speculative price behaviour has been refuted at least in the Nepalese context, which clarifies that the knowledge of the past becomes useful in predicting the future movements of stock market price.
- d. The securities in the past were incorrectly priced either over or under valued, as actual market prices of securities do not reflect their intrinsic value. In other words, in case of sample securities, they are incorrectly adjusted those past information to the present market prices.
- e. There exists frequent persistence than reaction in the general stock market climate because of the investors' irrational behaviour that causes the irrational movement of prices of stock.
- f. The general stock market of Nepal for the initial period appeared to the inefficient in incorporating the possible appearance of information into the successive price changes. Therefore, the investing publics are not aware of the information available publicly, appropriate in adjusting with the actual market price.

**Panta** (2000) has analyzed in her thesis "Current Problems and Prospects of Securities Market in Nepal", the trend of the Nepalese stock market and present state of primary and secondary market as well as problems and prospects of Nepalese stock market.

The major objectives of the study was to detect out the existing problems in Securities market in Nepal and also the prospects of Securities Market in future. The main findings of her study were:

- a. The development of stock market primarily depends on program and their implementation.
- b. In Nepal, the overall policy environment has not been conductive to the development of stock market. Therefore, it is difficult to develop more efficient secondary market, trading system for both equity and debt security.
- c. Lack of investor's confidence in stock market since many listed companies resulted not trading on regular basis or hold AGM.
- d. Restriction on foreign portfolio investment hindered market development.
- e. NEPSE does not have appropriate policies, memberships and fee structure to attract member outside the Kathmandu.
- f. In Nepal, banks dominate primary market in government debt instruments, OTC trading is not permitted; therefore, secondary market is totally inactive.
- g. Lack of necessary provisions in the laws and regulation for the privatization and automatics of stock exchange as well as for the establishment of central depository of securities (CDS).

**Baral** (2003) has conducted research on *"Stock Price Movement in Nepalese Securities Market"*, submitted to Shanker Dev Campus. The main objectives of his research are:

- a. To study and analyze the stock price and volume.
- b. To study and analyze the rate of newly listed companies and maintenance of already listed companies in NEPSE.
- c. To study and analyze the investors views regarding the decision on stock investment.
- d. To suggest the findings of the study to the interested parties related to stock investment.

e. To study & examine the signalling factors impact on stock price with the help of NEPSE index.

The major findings of Baral are as follows:

- a. Studying the annual trend analysis of Nepalese stock price market, it was found that stock price trend is decreasing from many years as smoothly but from one year price of stock is decreasing as rapidly.
- b. On analyzing the price trend of three years NEPSE index in different months (36 months) with the help of monthly trend showed that the price trend of different months of the year 2000 was in increasing trend 2001 in decreasing trend while that of 2002 was sometimes in increasing and sometimes in decreasing trend. So from this trend analysis we can say there is no relationship of price trend between three successive years.
- c. Studying the sector wise monthly trend analysis for one year (Poush 2058 to Mangsir 2059), it was found that unsystematic activities of the Nepalese stock price market. No exports can certainly forecast about the stock price.
- d. Volume of stock traded in stock exchange during the study period was found in increasing trend but in last year it was in decreasing trend.

**Dhamala** (2004) has conducted research on "*Determinants of Share Price in Nepalese Financial Market*", submitted to Shanker Dev Campus. The main objectives of his studies are as follows:

- a. To examine and evaluate the relationship of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- b. To analyze the market trends of MPS with various financial indicators like EPS, NWPS, DPS, ROE, etc.
- c. To identify whether stocks of the sampled companies equilibrium priced or not.
- d. To present some recommendations bases on the findings of the study.

The major findings of the research pointed out by Dhamala are as follows:

- a. HBL's MPS is negatively correlated with major financial indicators. But it has positive relationship with DPS and DPR respectively.
- b. NBL's MPS has positive relationship with EPS and ROE, whereas it has negative relation with other financial variables.
- c. NBBL's MPS is positively correlated with EPS, NWPS and DPS which are statistically significant at 1% and 5% levels of significance. Further, MPS is positively correlated with DPR and ROE.
- d. NIBL's MPS is reversely correlated with major financial variables. However, MPS and DPS is statistically significant at 1% level of significance.
- e. SCNBL's MPS is negatively correlated with major financial indicators. But it has higher positive relationship with ROE.
- f. AFCL's MPS has positive correlation with main financial variables except ROE, with which it has negative relationship. But no such relationship is statistically significant.
- g. KFL's MPS has positive relationship with major financial variables except DPR and ROE, with which it has opposite relationship. The relationship of MPS with EPS and NWPS is statistically significant at 5% level.
- h. NHDL's MPS has positive relationship with main financial indicators, but such relationship is not statistically significant.

**Bhattarai** (2006) submitted dissertation on *"Stock Price Behavior of Financial Institutions and Commercial Banks"* to Shanker Dev Campus. The main objectives of his research are:

a. To study the present position of the financial institution and joint venture banks.

- b. To examine and evaluate the relationship of MPS with various financial indicators like EPS, NWPS, DPS and DPR.
- c. To analyze the degree of risk involved in the common stocks investment of the sampled companies.
- d. To identify whether stocks of the sampled companies equilibrium priced or not.
- e. To analyze and have the comparative study about the performance of financial institution and commercial banks with regard to their profitability and liquidity position.
- f. To present some recommendations based on the findings of the study.

The major findings of Bhattarai are as follows:

- a. The DPS of SCBL has higher than NBL, NIBL and EBL. In finance companies, DPS of NFCL is higher than AFCL, NMBCL. It is seen that DPS of NFCL is in satisfactory level.
- b. The MPS of SCBL is higher than NBL, NIBL and EBL. SCBL is the most appreciable bank among the selected ones. The risk of NBL is higher than SCBL, NIBL and EBL. It indicates that there is high risk in NBL. The CV of EBL is more fluctuating i.e. there is higher CV in EBL.
- c. The correlation coefficient of EPS and DPS seems to be significant except the case of EBL and AFCL, i.e. correlation coefficient recorded as EBL & AFCL is in negative.
- d. In case of NIBL & NFCL there exists negative correlation coefficient of EPS & NWPS which is insignificant which shows that there is higher degree of managerial problem in issuing and managing shares of NIBL & NFCL.
- e. The coefficient of determination (r<sup>2</sup>) of SCBL, NIBL, NFCL & NMBFCL are strong of 0.64, 0.254, 0.7174, 0.393 which indicates that 64%, 25.4%, 71.74% & 39.3% of the total variation in market price has been explained

by the influence of EPS and remaining 36%, 74.6%, 28.26%, 60.7% is due to the effect of other factors.

Similarly, **Regmi** (2006) submitted dissertation on "*Role of Financial Indicators in Determining Share Price in Nepalese Financial Market*" to Shanker Dev Campus. The main objectives of his research are:

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

The major findings of Regmi are as follows:

- a. NABIL's MPS is positively correlated with all financial indicators but these values are not statistically significant at either 5% or 10% level of significance.
- b. NIBL's MPS has negative correlation with all financial indicators.
- c. For all other banks, the correlation coefficients of MPS with other financial indicators are both positive and negative. These values are statistically significant at either 5% or 10% level of significance.
- d. Relationship with all financial indicators of MPS for NFCL is positively correlated and the relationship is statistically significant at 5% level of confidence with EPS and at 10% level of confidence with NWPS and DPS.
- e. For other Finance Companies, the correlation coefficient of MPS with other financial indicators, are both positively and negatively correlated and the relationship is statistically significant for KFL and UFCML and for others it is insignificant.

**Shrestha** (2006) has conducted research on *"Share Price Behaviour of Commercial Banks listed in NEPSE"*, submitted to Shanker Dev Campus. The main objectives of his research are as follows:

- a. To analyze the stock price movement of the NEPSE market.
- b. To test the random walk or weak efficient market hypothesis.
- c. To test whether the successive price changes are independent or dependent with the price of historical change.

The major findings of Shrestha are as follows:

- a. The total numbers of actual and expected runs are statistically significant for most of the equity shares, which implies that their price changes are significantly different from random series. Result of run test also supports the result of autocorrelation. Therefore, today's price change is dependent on the information of yesterday's price.
- b. The mean absolute values of the autocorrelation coefficients are lower when the lag days are increases. This means the information of past price changes have little role to predict the future price changes for longer days.
- c. Half of the sample companies' share have greater than average value of K (18.87%) difference between actual and expected number of runs, which indicates significant difference between the actual and expected number of runs.
- d. Because the persistence hypothesis has been supported by the result of autocorrelation and run test, professional investors either individual or institutional can beat the market. Therefore, to make greater profit than "naïve buy and hold strategy", acute fundamental or other analysis are required which accurately predict the appearance of the new information in the market that affects the price of shares.

e. There exists a low order serial dependence, which helps in certain extent to increase investor's expected profit.

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

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

The major findings of Devkota are as follows:

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

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

# CHAPTER – III RESEARCH METHODOLOGY

Research Methodology refers to the various sequential steps to be adopted by researcher in studying a problem for the sake of attaining certain research objective. In other words, it is a systematic way to solve the research problem. This chapter refers to the overall research methods from the theoretical aspects to the collection and analysis of data. Its focus is made on the application of the technique and procedure to analyses the relevant variables to see the basic relationship between relevant topics. To achieve the basis objectives both financial and statistical tools has been adopted.

#### **3.1 Research Design**

Generally, research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance. It is arrangement 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 affecting share price of commercial banks in the NEPSE. To determine the affect of EPS, BVPS and DPS on stock price, historical research design is adopted along with correlation and regression analysis and secondly this study includes exploratory and analysis approach to identify the qualitative factors affecting share price of the exact scenario of the Nepalese stock market.

### **3.2 Population and Sample**

This study intends to identify the issues moving the stock price of Nepalese

commercial bank listed in NEPSE. So the population of the study is all the listed commercial bank in NEPSE to July 16, 2008 i.e. 17 listed banks. However, taking all banks in the study is almost impossible due to time constraint, so only two banks namely Himalayan Bank Limited and Nepal Investment Bank Limited, are taken as sample of the study. The following table 3.1 reflects the detail of the samples.

#### Table 3.1

#### **Sample Banks**

S. No.	Name of Sample Banks					
1	Himalayan Bank Ltd.					
2	Nepal Investment Bank Ltd.					

The secondary data of sample organizations are analyzed to determine the relationship of earning, dividend and book value with market price of shares in Nepalese commercial banks. But, to identify the qualitative factors affecting the share price in Nepalese commercial bank, primary information are collected through questionnaire and interview from the senior officers of the listed bank, SEBE-N, NEPSE and security brokers.

# 3.3 Nature and Sources of Data

The study is based on primary data as well as secondary data. To show the relationship between market price per share with earnings, book value and dividend, secondary data are used but to determine the factors which affect the stock price. Primary data are collected from respondent through research questionnaire and the observation of researcher. A variety of questions were asked to the respondent in order to identify which factors affect the share price. The respondent of the primary data are listed commercial banks, stock brokers, SEBO-N, NEPSE etc.

The sources of secondary dada are AGM reports of listed companies, SEBO-N,

NEPSE and other concerned organizations, bulletins, publication, researches, journals, articles, unpublished thesis reports, newspapers, books, authorized websites and internet.

#### **3.4 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, the researcher has visited the different libraries, concerned companies, NEPSE, SEBO-N and other useful book stores, and collection related publications and periodicals. Official websites were searched in order to collect required information. Furthermore, secondary data related to common stocks of concerned companies have been downloaded from the official website of NEPSE. (*www.nepalstock.com*)

On the other hand, the primary data collect through questionnaire with private commercial bank, security brokers, SEBO-N and NEPSE. Questionnaire are distribution in random sampling basis.

# **3.5 Data Analysis Tools**

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

# **3.5.1 Financial Tools**

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

# a. Earning Per Share

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

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

# b. Dividend per Share

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

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

# c. Market Price Per Share

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

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

# d. Book Value Per Share

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

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

#### e. Holding Period Return

Generally, single period return or holding period return is represented by HPR and expressed in terms of percentage basis. It is calculated as;

 $HPR = \frac{Ending \ price - Begining + Cash \ Dividend}{Begining \ Price}$ 

Symbolically,

$$HPR = \frac{P_1 - P_{t+1} + D_1}{P_{t+1}}$$

Where,  $P_1$  = Price of a stock at time t

 $P_{t-1} = Price \text{ of stock at time } t-1$ 

 $D_t = Dividend per share at time$ 

# f. Risk and Return Analysis of Market

### **Return on Market**

Annual return on market is the average return of market based on the index of market. It is denoted by  $R_m$ . Under this study, NEPSE index will be used. It is a value weighted index and comprises of all the stocks listed in NEPSE. The NEPSE index is used for the study.

Annual Market Return (Rm) =  $\frac{\text{Ending NEPSE index} - \text{Begining NEPSE index}}{\text{Begining NEPSE index}}$ 

Average Market Return  $(\overline{R}_{m}) = \frac{\sum Rm}{N}$ 

Where,  $\sum Rm =$  Summation of annual market return

N = Number of observations.

#### **Risk of Market Return**

Risk of market return is also measured by the standard deviation of the return of market. The standard deviation of market return is computed as;

Standard deviation 
$$(\delta_m) = \sqrt{\frac{\sum (R_m - \overline{R}_m)^2}{N - 1}}$$

# **3.5.2 Statistical Tools**

Statistical tools are the measures or the instruments to analyze the collected data

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

# a. Correlation Coefficient

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

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

Where,  $r_{xy}$  = the correlation coefficient between two variables X & Y

r lies between +1 to -1

when r = +1, there is perfect positive correlation

when r = -1, there is perfect negative correlation

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

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

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

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

The probable error denoted by P.E. is used to measure the reliability and test of significance of correlation coefficient. Significance of relationship has been tested

by using the probable error (P.E.) and it is denoted by the following model:

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

Where, r = the value of correlation coefficient

n = number of pairs of observations

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

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

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

# c. Simple Regression

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

X and Y are the independent and dependent variable respectively.

Regression equation of Y on X

The regression equation is expressed as;

y = a + bx

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

$$\begin{split} \sum X &= Na + b \sum Y \\ \sum XY &= a \sum Y + b \sum Y^2 \end{split}$$

Where,

X = the value of independent variable

Y = the value of dependent variable

a = Y-intercept

b = slope of the trend line/coefficient of regression

N = number of pairs of observations. a = Y-bX

### d. Coefficient of Regression

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

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

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

# e. Multiple Regressions

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

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

Where

 $X_1$  is dependent variable.

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

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

(i.e. intercept made by regression plane)

b<sub>1</sub>=Partial regression coefficient of X<sub>1</sub> on X<sub>2</sub>when X<sub>3</sub> is constant

b<sub>2</sub>= Partial regression coefficient of X<sub>1</sub> on X<sub>3</sub>when X<sub>2</sub> is constant

Note that a, b<sub>1</sub>and b<sub>2</sub> are the parameter of the equation whose values are to be

determine.

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



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

# f. Coefficient of multiple Determination $(\mathbf{R})^2$

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

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

# g. Test of Regression Coefficient by t-Test

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

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

I: the sample size is less than 30.

II: the population standard deviation must be unknown.

In using t-test we assume the following:

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

## t-Test for significance of an observed sample Correlation Coefficient

Let r be the observed sample correlation coefficient a sample of n pairs of observations from bi-veriate normal population. In order to test whether the sample correlation coefficient is significant of any correlation between the variables in the population, t-test for significance of an observed sample correlation coefficient is applied. The steps for testing of significance of an observed sample correlation coefficient are as follows.

**Step-1** Null Hypothesis ( $H_0$ ): p=0: that is population correlation coefficient is zero. In other words, the variables are insignificantly correlated in the population i.e. r is not significant of correlation in the population.

Alternative Hypothesis ( $H_1$ ): p=0: that is population correlation coefficient is not zero. In other words, the variables are significantly correlated in the population i.e. r not significant of correlation in the population.

**Step-2** Test statistic, under H<sub>0</sub>, the test statistics is;

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

t  $_{n-2}$  i.e. follows, t-distribution with (n-2) d.f., n being the sample. r = simple correlation coefficient

**Step-3** Obtained the tabulated value of t for (n-2) d.f. at  $\alpha$  level of significance according as whether the alternative hypothesis is one tailed or two tailed test.

**Step-4** Decision: Make a decision by comparing the calculated value of t with tabulated value of t, it is not significant and it is accepted otherwise, it is rejected.

# CHAPTER-IV DATA PRESENTATION AND ANALYSIS

This chapter is the main part of this study. In this chapter the secondary as well as primary data, collected from different sources, are presented in an understandable presentation, analyzed and interpreted separated using both qualitative and quantitative measures whichever are appropriate. This chapter presents the analysis and result of issues relating to the market price volatility in Nepalese commercial banks.

#### 4.1 Secondary Data Analysis

The secondary data analysis revolves within the relationship of MPS with DPS, EPS and BPS of the bank. To find out the relationship, statistical tools like correlation coefficient, regression analysis, probable error and hypothesis test have been extensively used. Besides these, the industrial return has been used to evaluate the risk of MPS.

#### **4.1.1 Financial Indicators Analysis**

To financial indicators, viz, MPS, DPS, EPS and BPS have been analyzed to examine the financial strength of the banks. To achieve the objectives of research only five years data starting from 2003/04 and ending to 2007/08 have been taken.

#### **4.1.1.1 Himalayan Bank Limited**

To examine the financial strength of HBL, the major financial indicators, viz, MPS, DPS, EPS and BPS are analyzed. The analysis also shows the average, trend followed and volatility of the financial indicators. The data for the five year periods are presented in the Table 4.1

### Table 4.1

FY	MPS	DPS	EPS	BPS
2003/04	840	20	49.05	246.93
2004/05	920	31.58	47.91	239.59
2005/06	1100	35	59.24	228.72
2006/07	1740	40	60.66	264.74
2007/08	1980	45	62.74	247.95
Mean	1316	34.32	55.92	245.59
S.D.	458.41	8.48	6.19	11.79
C.V.%	34.83	24.70	11.06	4.80

**Financial Indicators of HBL** 

(Source: Annual Reports, HBL)

The Table 4.1 showed the major financial indicators of Himalayan Bank Limited. The table showed that the MPS of HBL followed increasing trend in the five year periods taken for research. The MPS ranged from Rs. 840 in the fiscal year 2003/04 to Rs. 1980 in the fiscal year 2007/08, which indicated almost more than two-fold increase within the five year periods. This jumping in MPS implied that investors are more interested to overflow their money in HBL. In average, HBL maintained Rs. 1316 MPS in the market. However, the coefficient of variation is 34.83%, which depicted higher inconsistency.

Similarly, the pattern of dividend distribution in HBL followed increasing trend. HBL distributed Rs. 20, Rs. 31.58, Rs. 35, Rs. 40 and Rs. 45 per share as dividend to its shareholder in the fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08. In average, Rs. 34.32 per share was distributed as dividend and the coefficient of variation in dividend distribution was 24.70%. The increasing trend of DPS indicated more responsibility of HBL to its shareholder and good dividend

policy to retain and allure existing shareholder and potential shareholder respectively.

Likewise, the earning per share of HBL followed increasing trend throughout the period. The EPS was Rs. 49.05, Rs. 47.91, Rs. 59.24, Rs. 60.66 and Rs. 62.74 per share in the fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. In average, HBL earned Rs. 55.92 per share in the five year period. The coefficient of variation in EPS was 11.06%, which indicated more consistency and gradual increase in EPS. The increase in EPS in each fiscal year compared to the previous year implied better financial improvement of HBL.

However, the BPS of HBL fluctuated during the period. Initially for the first three year periods, the BPS followed decreasing trend, i.e. Rs. 246.93 in the fiscal year 2003/04, Rs. 239.59 in the fiscal year 2004/05 and Rs. 228.72 in the fiscal year 2005/06, and then increased to Rs. 264.74 in the fiscal year 2006/07 and again decreased to Rs. 247.95 in the fiscal year 2007/08. In average, HBL maintained Rs. 245.59 BPS in the five consequent fiscal year periods and the coefficient of variation on BPS was 4.80% only, indicating higher uniformity.

Comparing four major financial indicators, it can be concluded that MPS is more inconsistent than other ratios. Next to MPS, DPS is more inconsistent than remaining ratios, while BPS is most uniform. Also, MPS has highest increase, 2.36 times, compared to the base year 2003/04 with the final year 2007/08. Similarly, DPS increased by 2.25 times, EPS increased by 1.28 times and BPS increased by 1.01 times only.

# Figure 4.1

# **Financial Indicators of HBL**



# 4.1.2 Nepal Investment Bank Limited

To analyze the financial indicators, MPS, DPS, EPS and BPS, the date for the five year periods, from the fiscal year 203/04 to 2007/08 has been taken. The data taken have been processed in the Table 4.2 using mean, standard deviation and coefficient of variation.

# Table 4.2

# **Financial Indicators of NIBL**

FY	MPS	DPS	EPS	BPS
2003/04	940	15.00	51.70	246.89
2004/05	800	12.50	39.50	200.80
2005/06	1260	55.46	59.35	239.67
2006/07	1729	30.00	62.57	234.37

2007/08	2450	40.83	57.87	223.17
Mean	1435.80	30.76	54.20	228.98
S.D.	599.26	16.09	8.15	16.07
C.V.%	41.74	52.30	15.04	7.02

(Source: Annual Reports, HBL)

The table 4.2 showed the major financial indicators of NIBL. The table showed that MPS began to increase since 2004/05. The MPS of NIBL in the fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 were Rs. 940, Rs. 800, Rs. 1260, Rs. 1729 and Rs. 2450 per share respectively. The MPS of NIBL increased approximately by two and half times in the five year periods. In average, the MPS of NIBL was Rs. 1435.80 in the market and the coefficient of variation in MPS was 41.74%, indicating higher volatility.

Similarly, the DPS of NIBL was Rs. 15.00, Rs. 12.50, Rs. 55.46, Rs. 30.00 and Rs. 40.83 in the fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. This showed that the DPS of NIBL fluctuated during the periods taken for research. In average, NIBL distributed Rs. 30.76 per share as dividend to its shareholders. However, the coefficient of variation of 52.30% indicated higher inconsistency in the dividend policy and suggests requirement of effective policy.

However, the EPS of NIBL fluctuated during the entire period. The EPS was Rs. 51.70 in the fiscal year 2003/04, which decreased to Rs. 39.70 in the fiscal year 2004/05, and then decreased to Rs. 59.35 in the fiscal year 2005/06 and Rs. 62.57 in the fiscal year 2006/07 and finally decreased to Rs. 57.87 in the fiscal year 2007/08. In average, EPS earned Rs. 54.20 in five year periods and the fluctuation in such EPS was 15.04%.

Likewise, the BPS of NIBL for the fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 was Rs. 246.89, Rs. 200.80, Rs. 239.67, Rs. 234.37 and Rs. 223.17

per share respectively. The BPS of NIBL fluctuated during the entire period. In average, EBL maintained Rs. 228.98 per share as BPS in the five year periods. However, the coefficient of variation of 7.02% indicated higher uniformity.



Figure 4.2 Financial Indicators of HBL

# 4.1.3 Comparison of HBL and NIBL on the basis of Financial Indicators

To investigate which of the sampled banks, HBL and NIBL, is better than other on the basis of the major financial indictors, MPS, DPS, EPS and BPS, the mean value and coefficient of variation obtained in Table 4.1 and Table 4.2 have been utilized.

**Comparison of Financial Indicators** 

Indicators	HBL		NIBL	
	Mean C.V.%		Mean	C.V.%
MPS	1316	34.83	1435.80	41.74

DPS	34.32	24.70	30.76	52.30
EPS	55.92	11.06	54.20	15.04
BPS	245.59	4.80	228.98	7.02

(Source: Table 4.1 & Table 4.2)

While comparing two sampled banks, HBL and NIBL, it can be concluded that on the basis of MPS, the demand for equity shares of NIBL is higher than that of HBL as the average MPS of NIBL (Rs. 1435.80) is greater than the average MPS of HBL (Rs. 1316). This clearly indicates that NIBL has good market capture than HBL. Similarly, on the basis of DPS it can be concluded that the shareholders of HBL are more satisfied than those of NIBL as HBL distributed more dividend (Rs. 34.32) than NIBL (Rs. 30.76). Also, on the basis of EPS it can be considered that HBL utilized funds more effectively than NIBL, since HBL earned more profit Rs. 55.92 per share than NIBL, Rs. 54.20. Also, HBL has stronger internal funding than NIBL as the BPS of HBL (Rs. 245.59) is greater than the BPS of NIBL (Rs. 228.98). Hence, it can be concluded that HBL has good earning capacity, dividend distribution policy and internal funding than NIBL, while NIBL has better market holding than HBL.

# Figure 4.3

# **Comparison of Financial Indicators**



# 4.1.2 Relationship between MPS and DPS

To measure whether changes in DPS moves the market price of share (MPS), the Karl Pearson's correlation coefficient, regression lines, and t-statistics have been used.

# 4.1.2.1 Correlation Coefficient between MPS and DPS

The correlation coefficient measures the relationship between two variables, viz, MPS and DPS. To know role of DPS in moving the market price of share, the Karl Pearson's correlation coefficient 'r' has been calculated and the significance of the value of 'r' is tested through probable error.

Table 4	4.4
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**Correlation Coefficient between MPS and DPS** 

Bank	r	$\mathbf{r}^2$	P.E.	6 P.E.	Remarks
HBL	0.8880	0.7885	0.0638	0.3829	Significant
NIBL	0.5202	0.2706	0.2200	1.3202	Insignificant

(Source: Appendix- IV)

The table 4.4 shows that the relationship between MPS and DPS of HBL is highly positive, which indicates that the dependent variable, MPS increases with the

increase in independent variable, DPS. The correlation coefficient between MPS and DPS is + 0.8880, indicating Rs. 100 increase in DPS leads to Rs. 88.80 increase in MPS. Similarly, the coefficient of determination is 0.7885, which explicates that 78.85% variation in MPS is explained by change in DPS. Also, the calculated probable error and the 6 P.E. are 0.0638 and 0.3829 respectively. The lower value of 6 P.E. than the correlation coefficient (r < 6 P.E.) implies that the relationship between MPS and DPS of HBL is statistically significant and hence it can be concluded that DPS has significant impact to change the value of MPS.

Likewise, the relationship between MPS and DPS of NIBL is moderately positive, indicating that the dependent variable, MPS increases along with the increase in independent variable, DPS. The correlation coefficient between these two variables is 0.5202, which depicts that Rs. 100 increase in DPS causes Rs. 52.02 increase in MPS. Also, the coefficient of determination, 0.2706, explicates that only 27.06% variation in MPS is explained by change in DPS. The calculated probable error and 6 P.E. on these variables are 0.2200 and 1.3202 respectively. The higher the value of 6 P.E. than the correlation coefficient (6 P.E. = 1.3202 > r = 0.5202) implies that the relationship between MPS and DPS of NIBL is statistically insignificant and hence it is not necessary that MPS should increase with the increase in DPS and vice versa.

#### **4.1.2.2 Regression Line of MPS on DPS**

Let MPS be the dependent variable, Y and DPS be the independent variable, X then the regression lines of MPS on DPS calculated in the *Appendix-IV* are;

Yc	=	a + bX
MPShbl	=	$-331.66 + 48.01 \text{ DPS}_{HBL}$
MPS <sub>NIBL</sub>	=	$839.80 + 19.38 \text{ DPS}_{\text{NIBL}}$

#### Table 4.5

#### **Regression Analysis of MPS on DPS**

Bank	a-value	b-value	t-cal	t-tab	Remarks
HBL	-331.66	48.01	3.34	2.776	Significant
NIBL	839.80	19.38	1.05	2.776	Insignificant

(Source: Appendix- IV)

The table 4.5 shows the regression line of MPS on DPS. The regression line of MPS on DPS of HBL shows that MPS has positive relationship with DPS. Similarly, the constant of -331.66 indicates that if DPS remains zero, MPS will be Rs. -331.66. Also, the beta coefficient of DPS, 48.01, indicates that per rupee increase in DPS leads to Rs. 48.01 increase in MPS. The calculated t-value at 5% level of significance and 4 degree of freedom is 3.34, which is comparatively higher than the tabulated t-value (2.776), implies that the relationship between MPS and DPS is statistically significant and hence MPS increases by Rs. 48.01 with per rupee increase in DPS.

Likewise, the regression line of MPS on DPS of NIBL also depicts that MPS has positive relationship with DPS and hence MPS increases by Rs. 19.38 with per rupee increase in DPS, if the other variable, 839.80, remains constant. However, the calculated t-value (1.05) is lower than the tabulated t-value (2.776), which directly implies that the relationship between MPS and DPS is statistically insignificant and hence it is not mandatory that MPS should increase by Rs. 19.38 with per rupee increase in DPS.

#### 4.1.3 Relationship between MPS and EPS

This analysis examines the impact of EPS on the movement of market price per share (MPS). For this correlation coefficient, regression lines and the significance between the relations have been tested.

# 4.1.3.1 Correlation Coefficient between MPS and EPS

To measure whether the variation in MPS is caused by the EPS, the correlation

coefficient has been calculated. The calculated value of 'r' in *Appendix-IV* has been presented in the Table 4.6.

#### Table 4.6

**Correlation Coefficient between MPS and EPS** 

Bank	r	$\mathbf{r}^2$	P.E.	6 P.E.	Remarks
HBL	0.8648	0.7479	0.7060	0.4562	Significant
NIBL	0.6491	0.4213	0.1746	1.0474	Insignificant

(Source: Appendix- IV)

The table 4.6 shows the relationship of MPS with EPS of sampled banks, HBL and NIBL. The table shows that MPS has high degree of positive correlation, 0.8648, between MPS and EPS, indicating that MPS follows the same direction of changes that EPS follows. Similarly, the coefficient of variation of 0.7479 implies that 74.79% variation in MPS is explained by change in EPS. The probable error and 6 P.E. on the relationship between these two variables, MPS and EPS, are 0.7060 and 0.4562 respectively. As the correlation coefficient 'r' is greater than the 6 P.E. (r = 0.8648 > 6 P.E. =0.4562), it can be concluded that the relationship between MPS and EPS is statistically significant and hence MPS increases with the increase in EPS and vice-versa.

Similarly, the table shows that the relationship between MPS and EPS of NIBL is moderately positive. The correlation coefficient 'r' between these two variables, MPS and EPS, is 0.6491, indicating increase in EPS leads to increase in MPS. Also, the coefficient of determination 'r<sup>2</sup>'is 0.4213, demonstrating that 42.13% variation in MPS is caused by change in EPS, and the probable error is 0.1746. However, the lower the value of 'r' than the 6 P.E. (r = 0.6491 < 6 P.E. = 1.0474) implies that the relationship between MPS and EPS is statistically insignificant and it is not mandatory that MPS should follow the same direction as EPS follows.

### 4.1.3.2 Regression Line of MPS on EPS

Let the dependent variable, MPS, be denoted by Y and the independent variable, EPS, be denoted by X, then the regression equation of MPS on EPS is given by;

Yc	=	a + bX
MPS <sub>HBL</sub>	=	$-2267.61 + 64.08 \text{ EPS}_{HBL}$
MPS <sub>NIBL</sub>	=	-1149.72 + 47.71 EPS <sub>NIBL</sub>

#### **Table 4.7**

#### **Regression Analysis of MPS on EPS**

Bank	a-value	b-value	t-cal	t-tab	Remarks
HBL	-2267.61	64.08	2.98	2.776	Significant
NIBL	-1149.72	47.71	1.48	2.776	Insignificant

(Source: Appendix- IV)

The table 4.7 delineates the regression line of MPS on EPS. The regression line of MPS on DPS of HBL demonstrates that MPS has positive relationship with EPS and hence MPS increases by Rs. 64.08 along with per rupee increase in EPS, if the other variable, -2267.61, remains uniform. Similarly, the calculated t-value,  $t_{cal}$ , at 5% level of significance and 4 degree for freedom is 2.98, which is higher than the tabulated t-value,  $t_{tab}$  (2.776), implies that the relationship between MPS and EPS is statistically significant and hence MPS increases by Rs. 2.98 with per rupee increase in EPS and vice-versa.

Likewise, the regression line of MPS on EPS of NIBL depicts that MPS has positive relationship with EPS. The calculated beta coefficient of 47.71 indicates that MPS increases by Rs. 47.71 with per rupee increase in EPS, if the other variable, -1149.72, remains stable. However, the lower the value of  $t_{cal}$ , 1.48, than the  $t_{tab}$ , 2.776, at 5% level of significance and 4 degree of freedom implies that the relationship is statistically insignificant and hence it is not necessary that MPS should increase along with the increase in EPS.

#### 4.1.4 Relationship between MPS and BPS
The relationship between MPS and BPS has been analyzed through the correlation coefficient and regression lines. This analysis mainly focuses on whether the movement in MPS of the sampled banks has been caused by the BPS of the concerned banks.

#### 4.1.4.1 Correlation Coefficient between MPS and BPS

The correlation coefficient between MPS and BPS calculated in the Appendix-IV and the test of significance through 6 P.E. has been presented in the Table 4.8.

Bank	r	$\mathbf{r}^2$	P.E.	6 P.E.	Remarks
HBL	0.5577	0.3111	0.2078	1.2469	Insignificant
NIBL	0.0591	0.0035	0.3006	1.8036	Insignificant

#### Table 4.8

## **Correlation Coefficient between MPS and BPS**

(Source: Appendix- IV)

The table 4.8 depicts the relationship of MPS and BPS on the basis of correlation coefficient. The table shows that the relationship between MPS and BPS of HBL is moderately positive, 0.5577, indicating that MPS increases along with the increase in BPS. Also, the coefficient of determination,  $r^2$ , implies that 31.11% variation in MPS is explained by change in BPS. The calculated P.E. and 6 P.E. between the relationship of these two variables, MPS and BPS, are 0.2078 and 1.2469 respectively. As the 'r' value is lower than the 6 P.E. (r= 0.2277 < 6 P.E. = 1.2469), it can be considered that the relationship between MPS and BPS is statistically insignificant, and hence it is not mandatory that MPS should increase with the increase in BPS.

Likewise, the relationship between MPS and BPS of NIBL is very low, i.e. r = 0.0591. Also, the coefficient of determination,  $r^2$ , is 0.0035 implies that MPS changes only by 0.35% with the change in value of BPS and hence BPS has less role to upgrade the value of MPS. The P.E. and 6 P.E. on the relationship between

these two variables, MPS and BPS, are 0.3006 and 1.8036 respectively. Further, the lower the value of 'r' than the value of 6 P.E. (r = 0.0561 < 6 P.E. = 1.8036) verifies that the relationship between MPS and BPS is statistically insignificant and hence BPS has no role to play to vary the value of MPS in case of NIBL.

#### 4.1.4.2 Regression line of MPS on BPS

Let MPS be the dependent factor, Y and BPS be the independent factor, X. Then the regression line of dependent variable, MPS on the independent variable, BPS is given by;

Yc	=	a + bX
MPS <sub>HBL</sub>	=	$-4011.12 + 21.69 \ BPS_{HBL}$
MPS <sub>NIBL</sub>	=	$931.46 + 2.20 \ BPS_{NIBL}$

#### Table 4.9

**Regression Analysis of MPS on BPS** 

Bank	a-value	b-value	t-cal	t-tab	Remarks
HBL	-4011.12	21.69	1.16	2.776	Insignificant
NIBL	931.46	2.20	0.10	2.776	Insignificant

(Source: Appendix- IV)

The table 4.9 demonstrates the regression line of dependent variable, MPS on independent variable, BPS. The table delineates that the beta coefficient of BPS on regression line of HBL is 21.69, which indicates that if BPS increases by Re. 1, MPS increases by Rs. 21.69, assuming that the other variable, -4011.12, remains stable. However, the lower the value of  $t_{cal}$ , 1.16, than the value of  $t_{tab}$ , 2.776, at 5% level of significance and 4 d.f. denies this fact and implies that there exist no significant relationship between MPS and BPS.

Similarly, the regression line of MPS on BPS of NIBL indicates that MPS has positive relationship with BPS and hence MPS increases along with the increase in BPS and vice-versa. The beta coefficient of BPS, 2.20, signals that MPS increases by Rs. 2.20 along with per rupee increase in BPS, if the other variable, 931.46 remains constant. However, the t-statistics shows that  $t_{cal}$ , 0.10, is lower than  $t_{tab}$ , 2.776, at 5% level of significance and 4 d.f. and hence denies to agree that MPS should increase by Rs. 2.20 when BPS increase by Re. 1.

#### 4.1.5 Relationship of MPS with DPS and EPS

# To measure the joint effect of DPS and EPS on MPS, the multiple correlation and multiple regression analysis have been analyzed.

4.1.5.1 Multiple Correlations between MPS, EPS and DPS.

Let correlation coefficient between MPS and DPS be denoted by  $r_{12}$ , DPS and EPS be denoted by  $r_{23}$  and MPS and EPS be denoted by  $r_{13}$ . Then the multiple correlation coefficient of MPS on DPS and EPS is given by; (*Appendix-V*)

**R**<sub>1.23</sub> = 
$$-\sqrt{\frac{\mathbf{r}^2_{12} + \mathbf{r}^2_{13} - 2 \mathbf{r}_{12} \mathbf{r}_{23} \mathbf{r}_{13}}{1 - \mathbf{r}^2_{23}}}$$

 $R_{MPS,DPS,EPS}$  (HBL) = 0.9127  $R_{MPS,DPS,EPS}$  (NIBL) = 0.6545

#### Table 4.10

Banks	R	Relationship	$\mathbb{R}^2$	P.E.	6 P.E.	Remarks
HBL	0.9127	+ ve	0.8330	0.0504	0.3022	Significant
NIBL	0.6545	+ ve	0.4284	0.1724	1.0346	Insignificant

#### Multiple Correlations between MPS, EPS and DPS

(Source: Appendix-V)

The above table 4.10 shows the multiple correlation between market price per share (MPS) and dividend per share (DPS) and earning per share (DPS) of two concerned banks during the year covered for research. The multiple correlation coefficients (R) between MPS, DPS and EPS of HBL and NIBL are 0.9127 and

0.6545 respectively, which show the positive relationship between these variables of both the banks.

The coefficient of multiple determination (R<sup>2</sup>) of HBL is 0.8330, which is higher than that of NABIL (i.e. 0.4284). It shows that, in case of HBL, only 83.30% of variation in dependent variable (MPS) is explained by the variation in independent variables (EPS and DPS). Similarly, only 42.84% variation in dependent variable (MPS) of NIBL is explained by the variation in independent variables (DPS and EPS).

To measure the significance of the relationship between MPS, EPS and DPS of the two concerned banks, it would be more preferable to calculate the probable error of correlation coefficient. The same table depicts that R of HBL is greater than 6 P.E (R = 0.9127 > 6 P.E. = 0.3022) and R of NIBL is lower than 6 P.E. (R = 0.6545 < 6 P.E. = 1.0346). So, it can be concluded that the relationship between MPS, EPS and DPS is significant in HBL and insignificant in NIBL.

4.1.5.2 Multiple Regression Equation of MPS on DPS and EPS

Let MPS, DPS and EPS be denoted by X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> respectively. Then the multiple regression equation of MPS on DPS and EPS is given by;

$X_1$	$= a + b_1 X_2 + b_2 X_3$
$MPS_{\rm HBL}$	$= -1355.40 + 29.75 \text{ DPS}_{\text{HBL}} + 29.51 \text{ EPS}_{\text{HBL}}$
MPS <sub>NIBL</sub>	$= -948.47 + 4.46 \text{ DPS}_{\text{NIBL}} + 41.46 \text{ EPS}_{\text{HIBL}}$

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Multiple Regression Line of MPS on DPS and EPS

Banks	No. of year	Constant (a)	<b>Regression Coefficient</b>	
			(b)	
			<b>b</b> 1	$b_2$
HBL	5	-1355.40	29.75	29.51

NIBL	5	-948.47	4.46	41.46
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(Source: Appendix V)

The above table 4.11 represents the linear relationship between MPS, with DPS and EPS of two concerned banks. The constant (a) is negative in both HBL (-1355.40) and NABIL (-948.47). In case of HBL, the beta coefficient of DPS and EPS are 29.75 and 29.51 respectively. It indicates that a one-rupee increase in DPS leads to Rs. 298.75 increase in MPS if EPS remains constant and one rupee increase in EPS leads to an average about Rs.29.51 increase in MPS if DPS remains constant.

On the other hand, in case of NIBL, the regression coefficients of DPS and EPS are 4.46 and 41.46 respectively, which indicates that a one-rupee increase in DPS causes Rs. 4.46 increase in MPS if EPS remains stable and one-rupee increase in EPS leads to an average about Rs. 41.46 increase in MPS if DPS remains uniform. Hence, it can be concluded that both DPS and EPS have direct influence on MPS.

#### 4.1.6 Holding Period Rate of Return

The duration/period during which an investor owns an investment is called holding period. Return from investment during that period is called the holding period return, i.e. simply a return obtained by holding investable securities fro certain periods. There are two types of return (i) cash return in a form of dividend or interest or coupon, (ii) capital gain or loss.

#### 4.1.6.1 Himalayan Bank Limited

To measure the return from just holding the investment of share of HBL for certain period of time, the HPR has been calculated. The holding period rate of return for the five fiscal years, 2003/04 to 2007/08, is presented in the Table 4.12.

#### **Table 4.12**

#### Holding Period Rate of Return of HBL

FY	Pt	Pt-1	Dt	HPR
2003/04	840	836	20	2.87
2004/05	920	840	31.58	13.28
2005/06	1100	920	35	23.37
2006/07	1740	1100	40	61.82
2007/08	1980	1740	45	16.38
Mean				23.54
S.D.				20.24
C.V%				85.99

(Source: Annual Reports, HBL)

The table 4.12 depicts the holding period rate of return of NIBL. The table shows that the shareholders of HBL enjoyed increase of 2.87% of the MPS of fiscal year 2002/03 in fiscal year 2003/04 for holding share for one year period. Similarly, the shareholders enjoyed increase of 13.28%, 23.37%, 61.82% and 16.38% in the fiscal year 2004/05, 2005/06, 2006/07 and 2007/08 respectively. In average, the shareholders earned 23.54% increase per year in MPS for holding the share of HBL for five years period. The coefficient of variation of 85.99% indicates that HPR of HBL remained high volatile during the period.

## Figure 4.4

#### Holding Period Rate of Return of HBL



# 4.1.6.2 Nepal Investment Bank Limited

The holding period rate of return of NIBL for the five fiscal year period, i.e. from the fiscal year 2003/04 to the fiscal year 2007/08, is presented in the Table 4.13.

FY	Pt	P <sub>t-1</sub>	Dt	HPR
2003/04	940	795	15.00	20.13
2004/05	800	940	12.50	-13.56
2005/06	1260	800	55.46	64.43
2006/07	1729	1260	30.00	39.60
2007/08	2450	1729	40.83	44.06
Mean				30.93
S.D.				26.33
C.V.%				85.12

Table 4.13Holding Period Rate of Return of NIBL

(Source: Annual Reports, NIBL)

The table 4.13 delineates that the shareholders of NIBL earned 20.13%, -13.56%, 64.43%, 39.60% and 44.06% of the previous year market price as holding period rate of return. The fiscal year 2004/05 remained loss for shareholder as the HPR is negative compared to the previous year 2003/04. In average, the shareholders enjoyed 30.93% HPR per year for the five fiscal years period taken for research.

However, the coefficient of variation of 85.12% implied high fluctuation and thus sensitiveness in HPR.

Figure 4.5 Holding Period Rate of Return of NIBL



# 4.1.6.3 Comparison of HPR

To enlighten from which shareholding between the banks HBL & NIBL, the investors gets more HPR, the comparison has been made on the basis of mean HPR and the consistency of such HPR.

# **Table 4.14**

# **Comparison of HPR**

Indicators	HBL	NIBL

	Mean	C.V.%	Mean	C.V.%
HPR	20.24	85.99	30.93	85.12

(Source: Table 4.11 & Table 4.12)

The table 4.14 shows that the mean HPR of HBL (20.24%) is lower than the mean HPR of NIBL (30.93%). Also the coefficient of variation of HBL (85.99%) is slightly greater than the coefficient of variation of NIBL (85.12%). Considering these facts, it can be concluded that holding the share of NIBL for longer period of time would be beneficial to shareholders rather than retaining the shares of HBL.

## 4.8 Estimated Industry (Market) Parameter

Market return and market standard deviation are the most important factors to analyze the risk & return. For that purpose the sampled banks, HBL & NIBL, from all over the market are taken into consideration.

Fiscal						
Year	Closing	Capital Gain %	$D_t/P_t$		R <sub>m</sub> -	
	Price (P <sub>t</sub> )	$P_{t}-(P_{t}-1)/(P_{t}-1)$	%	<b>R</b> <sub>m</sub> %	<b>R</b> <sub>m</sub>	$(\mathbf{K}_{m}-\mathbf{K}_{m})^{2}$
2003/04	592.50	7.24	5.63	12.87	-40.36	1628.61
2004/05	840.00	41.77	4.72	46.49	-6.74	45.37
2005/06	1187.50	41.37	2.33	43.70	-9.53	90.74
2006/07	1809.50	52.38	2.80	55.18	1.95	3.82
2007/08	3740.00	106.69	1.20	107.89	54.66	2988.15
Mean				53.23		951.34

#### **Table 4.15**

#### **Calculation of Industry Return and Standard Deviation**

(Source: Annual Report of NRB)

Here,

Variance, 
$$\sigma_m^2 = \frac{\Sigma (R_m - \check{R}_m)^2}{N - 1}$$

$$= 4756.70 = 1189.74$$
  
5-1

Standard Deviation,  $\sigma_m = 34.48$ 

Market (Industry) return is the combination of capital gain yield and dividend yield which is calculated as above. The market return of stocks is 53.23% & the the required market standard deviation of the stock is 34.48%.

(NOTE: Risk free rate ( $R_f$ ) is assumed to be 2.42% which is taken from Treasury bill yield rate (91 days) of Poush, 065 as published by Nepal Rastra Bank.)

Calculation of Beta Coefficient (B<sub>j</sub>) & Expected Rate of Return E (R<sub>j</sub>) of HBL

FY	R <sub>n</sub>	$\mathbf{R}_{n}$ - $\check{\mathbf{R}}_{n}$	$(\mathbf{R}_{\mathrm{m}} extsf{-}\check{\mathbf{R}}_{\mathrm{m}})$ $(\mathbf{R}_{\mathrm{n}} extsf{-}\check{\mathbf{R}}_{\mathrm{n}})$
2003/04	2.87	-20.7	834
2004/05	13.3	-10.3	69.2
2005/06	23.4	-0.17	1.62
2006/07	61.8	38.3	74.6
2007/08	16.4	-7.16	-391
Total	$\Sigma R_n = 117.72$	$\Sigma(R_m-\check{R}_m)$ $(R_n$	$(\check{R}_n) = 588.29$
Mean	$\check{R}_{n} = 23.54$		

(Source: Table 4.12)

Here, Cov (R<sub>n</sub>, R<sub>m</sub>) = 
$$\frac{\Sigma(\underline{R_m} - \underline{\check{R}_m})(\underline{R_n} - \underline{\check{R}_n})}{N}$$
 = 117.66

Beta Coefficient (B<sub>j</sub>) = Cov (R<sub>n</sub>, R<sub>m</sub>)/ $\sigma_m^2$ = 117.66/1189.74 = 0.0989 And,

Required Rate of Return  $(R_j) = R_f + (R_m-R_f) B_j$ 

So, Beta Coefficient of HBL  $(B_i) = 0.0989$ 

Expected rate of Return  $E(R_j) = 7.45\%$ 

The above calculation showed that the expected rate of return of HBL is 7.45% and the beta coefficient is 0.0989.

#### **Table 4.17**

Calculation of Beta Coefficient (B<sub>j</sub>) & Expected Rate of Return E (R<sub>j</sub>) of NIBL

FY	R <sub>n</sub>	$\mathbf{R}_{n}$ - $\check{\mathbf{R}}_{n}$	$(\mathbf{R}_{\mathrm{m}}\textbf{-}\check{\mathbf{R}}_{\mathrm{m}})$ $(\mathbf{R}_{\mathrm{n}}\textbf{-}\check{\mathbf{R}}_{\mathrm{n}})$
2003/04	20.13	-10.80	435.89
2004/05	-13.56	-44.49	299.86
2005/06	64.43	33.50	-319.26
2006/07	39.60	8.67	16.91
2007/08	44.06	13.13	717.69
Total	$\Sigma R_n = 154.46$	$\Sigma(R_m-\check{R}_m)$ (R <sub>n</sub> -	$\check{R}_n$ ) = 1151.09
Mean	$\check{R}_{n} = 30.93$		

(Source: Table 4.13)

Here,

Cov  $(R_n, R_m) = \Sigma (R_m - \check{R}_m) (R_e - \check{R}_e) / N$ = 1151.09/5 = 230.22

Beta Coefficient (B<sub>j</sub>) = Cov (R<sub>n</sub>, R<sub>m</sub>)/
$$\sigma_m^2$$
  
= 230.22/1189.74  
= 0.1935

And,

Required Rate of Return  $(R_j) = R_f + (R_m - R_f) B_j$ = 2.42 + (53.23-2.42) x 0.1935 = 12.25

So, Beta Coefficient of NIBL $(B_j)$	= 0.1935
Expected rate of Return $E(R_j)$	= 12.25%

From the above calculation, the expected rate of return and Beta Coefficient of return of NIBL are 12.25% and 0.1935 respectively. The calculation made in Table 4.16 and Table 4.17 is summarized in the following table 4.18.

#### **Table 4.18**

Summary Table of Beta Coefficient and Expected Rate of Return

	Beta Coefficient	Mean	Exp. Rate of Return
Bank	<b>(B</b> <sub>j</sub> )	Return	$\mathbf{E}(\mathbf{r_j})$
HBL	0.0989	23.54%	7.45%
NIBL	0.1935	30.93%	12.25%

(Source: Table 4.15 & Table 4.16)

The above table 4.18 showed that the beta coefficient of HBL is 0.0989. Since, the beta coefficient of HBL is less than 1, the HBL consists defensive assets. Also, the mean return and expected rate of return of HBL are 23.54% and 7.45% respectively. Similarly, the beta coefficient of NIBL is 0.1935 (less than 1) and thus is less risky. The mean return and expected rate of return are 30.93% and 12.25% respectively. Comparing the beta coefficient, NIBL return ( $B_j = 0.1935$ ) is

considered more risky than that of HBL ( $B_j = 0.0989$ ) and thus yield higher mean return (30.93%) and expected rate of return (12.25%) than those of HBL.

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

For the purpose of collecting primary data, a questionnaire having a set of 12 questions were prepared and presented to 50 respondents. The respondents were selected randomly from the group of Share-Known personalities – especially from the Professional Investor, Market Analyzer and Potential Investor. The questions 1 to 12 contained objective question. Out of 50 questions distributed, respondents from only 45 personnel obtained which represented 90% of the total populated questions.

#### **4.2.1 Classification of Respondents**

A total of 45 respondents opined their responses to the questionnaire. Among these, 27 respondents were professional investors of Share investment, 15 were potential investors who are willing to invest in Share but have not invested yet and rest 3 were market analyzer. To delineate the facts about the determinants that practically affect the share price, number of professional investors has been taken comparatively higher than the number of market analyzer and potential investors. Likewise, the respondents are classified in terms of their age and sex as given in Table 4.18.

Table 4	.19
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**Classification of Respondents** 

S.N.	Basis of Classification	Male	Female	Number	Percentage
	Occupation				
1	Professional Investors	21	6	27	60
	Potential Investors	10	5	15	33

	Market Analyzer	3	0	3	7
	Total	34	11	45	100
	Age				
	Below 25	5	2	7	16
2	25 to 40	12	7	19	42
	40 above	17	2	19	42
	Total	34	11	45	100
	Sex		I		
3	Male			34	75
	Female			11	25
	Total			45	100

(Source: Field Survey, 2009)

As given in table, 75% of the respondents were male where as 25% were female. Similarly, 16% of the respondents were from the age group below 25 years, 42% were between 25 to 40 years and 42% were 40 above.

## 4.2.1 Impact of Political change in the Stock

To examine whether the political change has impact on stock of the commercial banks of Nepal, the respondents were asked to express their opinions. The responses obtained from them are presented in the Table 4.20.

## **Table 4.20**

# **Impact of Political Change on Stock Price**

S.N.	Impact	No. of	% of
		respondent	Respondent
1.	Increase in share trading volume	15	33.33
2.	Decrease in share trading volume	0	0.00
3.	Decrease in share price	6	13.33
4.	Increase in share price	18	40.00

5.	No impact	6	13.33
	Total	45	100

(Source: Field Survey, 2009)

The table shows that the majority of the respondents, 40%, opined that the political changes increase the share price of commercial banks. And hence the stock market of Nepal is highly interference by the political changes. However, 33.33% of the respondents, 15 out of 45, stated that political changes increases the share trading volume, 13.33% of the respondents, 6 out of 15 respondents, said that political changes decrease the share price, and 13.33% of the respondents, 6 out of 45, said that political changes have no impact on share. Gazing the majority, 18 out of 45, it can be concluded that the political changes increase the MPS of commercial banks of Nepal.



Figure 4.6 Impact of Political Change on Stock Price

#### **4.2.2 Influencing Factor of Stock Price**

The investors are attracted in the stock of companies by analyzing various factors. Such factor creates rise or fall in the stock price. To examine which factor most influence the investor on buying shares of certain company and influences the stock price of the listed company, the respondents were asked on this regard. The opinions obtained from them are presented in the following table.

S.N.	Factor	No. of respondent	% of Respondent		
1.	Dividend	28	62.22		
2.	Rumor	2	4.44		
3.	Financial Condition	9	20.00		
4.	Management	6	13.33		
	Total	45	100		

**Influencing Factor of Stock Price** 

**Table 4.21** 

(Source: Field Survey, 2009)

The above table showed that the majority of the respondents, 28 out of 45 (62.22%), stated that dividend is the most influencing factor of stock price. Similarly, 4.44%, 20.22% and 13.33% of the respondents affirmed that rumor, financial situation of the company and management of the company respectively are the influencing factors of the stock price. Hence, it can be concluded that dividend distribution pattern of the company is the major factor that raises or falls the stock price.

## Figure 4.7

#### **Influencing Factor of Stock Price**



### 4.2.3 Motives on Investment

Each investor has different motive in investing on the stock of the company. To trace out the main motive on the basis of which the investors makes investment on stock, the respondents were asked about the motive of investment. The responses obtained from the respondents are depicted in the following table.

## **Table 4.22**

**Motives on Investment** 

S.N.	Motives	No. of respondent	% of Respondent
1.	Social Status	1	2.22
2.	Dividend	30	66.67
3.	Friend and Family	2	4.44
4.	Stock Broker	3	6.67
5.	Marketability	9	20.00
	Total	45	100

(Source: Field Survey, 2009)

The above table showed that the majority of the respondents opined that investor makes decision on the basis of dividend distribution pattern of the company. About 66.67% of the respondents opined that investors are motivated to invest on stock by the dividend. Similarly, 1 out of 45 (2.22%) stated that investor makes investment to gain social status, 2 out of 45 (4.44%) affirmed that investor makes

investment on the suggestions of friend and family, 3 out of 45 (6.67%) said that investor makes investment on the advise of stock broker and 9 out of 45 (20%) opined that investor makes investment by analyzing the ease marketability of the stock. Thus, on the basis of the majority, it can be concluded that the investors are highly motivated to invest by dividend structure of the company and eventually to generate income.



Motives on Investment

Figure 4.8

# 4.2.4 Awareness of Investors

Full Awareness of investors about the stock market is most crucial for the growth of stock. Hence, to examine whether investors are fully aware about the Nepalese Stock Market, the respondents were asked to express their view on this regard. The different opinions obtained from the respondents are presented in the following table.

**Table 4.23** 

## **Awareness of Investors**

S.N.	Awareness	No. of respondent	% of Respondent
------	-----------	-------------------	-----------------

1.	Yes	16	35.56
2.	No	24	53.33
3.	Don't Know	5	11.11
	Total	45	100

(Source: Field Survey, 2009)

The above table showed that the majority of the respondents, 24 out of 45, opined that the investors are not fully aware about the Nepalese stock market. Similarly, 35.56% of the respondents, 16 out of 45, affirmed that investors are fully aware about the Nepalese stock market, whereas 5 out of 45 respondents, 11.11% of the respondents remained neutral on this topic. Hence, on the basis of majority, 43.33%, it can be concluded that the investors are not fully aware about the Nepalese stock market and thus SEBON should conduct different programs and seminars to fully aware investors and eventually increase turnover.

# Figure 4.9





## 4.2.5 Effects of Investor awareness on Share Price

To know the degree of effects of awareness of investors on share price, the respondents were asked to express their feelings. The responses obtained from them are presented in the below table.

## **Table 4.24**

S.N.	Effects	No. of respondent	% of respondent
1.	Very High	6	13.33
2.	High	18	40.00
3.	Moderate	15	33.33
4.	Low	3	6.67
5.	Very low	3	6.67
	Total	45	100

Effects of Investor Awareness on Share Price

(Source: Field Survey, 2009)

The Table 4.24 reveals that majority of the respondents (40%), 18 out of 45, said that the awareness of investors on stock market has high impact on the share price. Similarly, 33.33% of the respondents, 15 out of 45, affirmed that the investors awareness has moderate effects on share price, 13.33% of the respondents, 6 out of 45, opined that investors awareness has very high effect on the share price, and 6.67% of the respondents, 3 out of 45, each said that investor awareness has low effect and very low effect on share price respectively. From the above research it can be concluded that the awareness of investor high effect on the share price.

## Figure 4.10





# 4.2.6 Significance of Inside Information

Various malpractices exist in the stock market of Nepal. Among them insider training, knowing inside information of the company, is one. Hence, to know the significance of inside information on the price fall/rise of share, the respondents were asked on this regard. The responses obtained from them are presented in the table below.

#### **Table 4.25**

S.N.	Significance	No. of respondent	% of respondent
1.	Yes	33	73.33
2.	No	9	20.00
3.	Don't know	3	6.67
	Total	45	100

## **Significance of Inside Information**

(Source: Field Survey, 2009)

The table 4.25 reveals that majority of the respondents (73.33%), 33 out of 45, are in the view that the inside information has greater role to play to beat the market. However, 20% of the respondents, 9 out of 45, affirmed that the inside information has no role to play in the stock price. Similarly, 6.67% of the respondents, 3 out of 45, opined that they have no idea on this market. Hence, on the basis of the majority of the respondents, it can be concluded that the inside information has significant role to raise/fall the stock price.

#### Figure 4.11

## **Significance of Inside Information**



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

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

#### **Table 4.26**

S.N.	Responses	No. of Respondents	% of respondent
1.	Strongly Agree (SA)	17	37.78
2.	Agree (A)	23	51.11
3.	Undecided (U)	4	8.89
4.	Disagree (D)	1	2.22
5.	Strongly Disagree (SD)	0	0.00
	Total	45	100

# **Higher EPS indicates Higher Share Price**

(Source: Field Survey, 2009)

Table 4.26 shows that most of the respondents agreed that EPS is the main determiner of Share Price. 37.78% of the total respondents who agreed the statement strongly were highly convinced that EPS is the main determiner whereas 51.11% stated they agree the statement. In this way, 88.89% of the total respondent agreed the statement. Only remaining 11.11% stated they were either undecided (8.89%) or disagree (2.22%). From this it can be concluded that the investors think that EPS is the major tool for the Nepalese investors to analyze whether the organisation is best enough to invest or not.

# Figure 4.12

# **Higher EPS indicates Higher Share Price**





The responses of the respondents regarding the role of dividend pattern in the determination of share price are summarized and presented in Table 4.26.

Table 4	4.27
---------	------

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

S.N.	Responses	No. of Respondents	% of respondent
1.	Strongly Agree (SA)	11	24.44
2.	Agree (A)	24	53.33
3.	Undecided (U)	7	15.56
4.	Disagree (D)	3	6.67
5.	Strongly Disagree (SD)	0	0.00
	Total	50	100

(Source: Field Survey, 2009)

Table 4.27 clears that Dividend pattern plays a great role on the determination of Share Price, 53.33% of the respondents agreed that higher rate of Dividend results the higher Market Price per Share, 24.44% of the respondents strongly agreed the statement that dividend pattern has great role to play in Share Price determination. The remaining 22.22% percent stated that either they were undecided (15.56%) regarding the matter or disagree (6.67%).

## **Table 4.13**



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

## **4.2.9** Role of Company Assets Structure

To investigate whether the company assets structure affects the market price per share of commercial banks, the respondents were asked to express their opinions. The following table 4.28 shows the responses achieved from the respondents.

## **Table 4.28**

S.N.	Responses	No. of Respondents	% of respondent
1.	Strongly Agree (SA)	2	4.44
2.	Agree (A)	10	22.22
3.	Undecided (U)	23	51.11
4.	Disagree (D)	8	17.78
5.	Strongly Disagree (SD)	2	4.44
	Total	45	100

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

(Source: Field Survey, 2009)

The above table 4.28 shows that the Company Assets Structure plays almost no important role in the determination of Share Price in the view of respondents. That is why, almost half (51.11%) of the respondents neither agrees nor disagree the statement and choose to say undecided. Only 4.44% were strongly agreed whereas

22.22% choose to agree the statement. The percentage of the respondents who choose disagree and strongly disagree were 17.78% and 4.44% respectively.



Figure 4.14 Role of Company Assets Structure in Share Price Determination

## 4.2.10 Role of Capital Structure

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

## **Table 4.29**

S.N.	Responses	No. of Respondents	% of respondent
1.	Strongly Agree (SA)	5	11.11
2.	Agree (A)	19	42.22
3.	Undecided (U)	10	24.44
4.	Disagree (D)	8	17.78
5.	Strongly Disagree (SD)	3	6.67
	Total	45	100

**Good Capital Structure indicates higher Share Price** 

(Source: Field Survey, 2009)

The above table 4.29 shows that the Capital Structure of organisation is responsible to determine their share price. More than half (11.11% strongly agreed and 42.22% agreed) of the respondents agreed that better Capital Structure is

responsible for the higher Market Price per Share. Similarly, 4.44% undecided whereas 17.78% and 6.67% disagreed and strongly disagreed to the statement.





## 4.2.11 Company Risk vs. Share Price

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

## **Table 4.30**

S.N.	Responses	No. of Respondents	% of respondent
1.	Strongly Agree (SA)	0	0.00
2.	Agree (A)	6	13.33
3.	Undecided (U)	10	22.22
4.	Disagree (D)	22	48.89
5.	Strongly Disagree (SD)	7	15.56
	Total	45	100

## Higher the risk, More the Share Price

(Source: Field Survey, 2009)

The above table 4.30 shows that the higher risk of the company does not increases the market price per share of that company. About 48.89% of the respondents disagreed that higher risk increases share price, 15.56% strongly disagreed on this statement. However, 22.22% of the respondents remained undecided and only 13.33% of the respondents agreed that higher risk increases share price. On the basis of overall majority, it can be concluded that higher risk does not increase the share price.





## 4.2.12 Reasons for Selling the Share

To examine the major reason that drives the shareholders to sell their possession on share, the respondents were asked on this matter. The responses obtained from them are presented in the Table 4.31.

Table	4.31
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Reasons	for	Selling	the	Share
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1 For		·	•
1 101	the personal need	9	20.00
2 To b	buy the other stock	12	26.67
3 Exp	ectation of price fall	21	46.67
4 Non	payment of dividend	3	6.67
	Total	45	100

(Source: Field Survey, 2009)

The table 4.31 shows that the main reason behind selling the share is the expectation of price fall of the share that has been held. About 46.67% of the respondents, 21 out of 45, supported for this statement. Besides this, 26.67% of the

respondents said that investors sell stocks to collect money for buying the other stock. Similarly, 20% of the respondents, 9 out of 45, said that the personnel need drives shareholders to sell stock and only 6.67% of the respondents, 3 out of 45, stated that investors sell stock if company does not pay dividend. Hence, on the basis of majority it can be concluded that the fear of price fall provokes investors to sell the stock they are possessing on.



**Reasons for Selling the Share** 

Figure 4.17

## 4.3 Major Findings

From the analysis of both primary and secondary data, the following major findings have been drawn out.

#### Findings from Secondary Data Analysis

- The MPS of HBL has increased by 2.36 times, DPS increased by 2.25 times, EPS increased by 1.28 times and BPS increased by 1.01 times in the five year periods. Also, BPS is most uniform and MPS is most inconsistent compared with other indicators. The average MPS, DPS, EPS and BPS maintained by HBL are Rs. 1316, Rs. 34.32, Rs. 55.92 and Rs. 245.59 respectively.
- Similarly, the MPS, DPS, EPS and BPS of NIBL increased by 2.61 times, 2.72 times, 1.12 times and 0.90 times in the five year periods. Among the

four financial indicators, DPS is most volatile and BPS is most consistent compared with other indicators. And the average MPS, DPS, EPS and BPS maintained by NIBL are Rs. 1435.80, Rs. 30.76, Rs. 54.20 and Rs. 228.98 respectively.

- Comparing the financial indicators, HBL has better earning capacity, dividend distribution policy and internal funding than NIBL, while NIBL has better market holding than HBL.
- The correlation coefficient between MPS and DPS of HBL is 0.8880, which is highly positive, and the relationship is statistically significant on the basis of 6 P.E. However, the correlation coefficient between MPS and DPS of NIBL is 0.5202, which is moderately positive, and the relationship is statistically insignificant.
- The regression line between MPS and DPS shows that with per rupee increase in DPS the MPS of HBL increases by Rs. 48.01 and that of NIBL increases by Rs. 19.38. However, the t-statistics verified that the relationship between MPS and DPS of HBL is significant and that of NIBL is insignificant.
- Similarly, the correlation coefficient between MPS and EPS of HBL is 0.8648, which is highly positive, and the relationship is statistically significant as the value of 'r' is greater than the 6 P.E. However, the correlation coefficient between MPS and EPS of NIBL is only 0.6491, and the relationship is statistically insignificant.
- Likewise, the regression line between MPS and EPS shows that with per rupee increase in EPS, the MPS of HBL increases by Rs. 68.08 and the MPS of NIBL increases by Rs. 47.71. However, the relationship between MPS and EPS of HBL is significant and that of NIBL is insignificant as verified by the t-statistics.
- Also, the correlation between MPS and BPS of HBL and NIBL are 0.5577 and 0.0591 respectively, which are less than the calculated 6 P.E. of the

corresponding banks. This verified that MPS has nothing to do with the change in BPS.

- The regression line of MPS on BPS shows that with per rupee increase in BPS, the MPS of HBL increases by Rs. 21.69 and the MPS of NIBL increases by Rs. 2.20. However, the relationship between MPS and BPS of both the sampled banks are statistically insignificant.
- The multiple correlation coefficient of MPS on DPS and EPS of HBL is 0.9127 and that of NIBL is 0.6545. And the multiple regression equation of MPS on DPS and EPS indicates that with per rupee increase in DPS, the MPS of HBL increases by Rs. 29.75 and the MPS of NIBL increases by Rs. 4.46, if the EPS of both the banks remain constant. Similarly, with per rupee increase in EPS, the MPS of HBL increases by Rs. 29.51 and that of NIBL increases by Rs. 41.46, if DPS of both the banks remain constant.
- In average, the investors of HBL got 23.54% return per year for holding the share of HBL and the investors of NIBL got 30.93% return per year just for holding the investment in share of NIBL.
- The expected rate of return of HBL and NIBL are 7.45% and 12.25% respectively. While the beta coefficient on required rate of return are 0.0989 and 0.1935 for HBL and NIBL respectively.

## **Findings from Primary Data Analysis**

- 40% of the respondents opined that the political changes increase the share price of the commercial banks. Similarly, the majority of the respondents, 62.22%, opined that dividend is the most influencing factor that moves the share price.
- Also, the main motive behind investing in the share is the expectation of earning dividend. About, 66.67% of the respondents supported this fact. However, 53.33% of the respondents opined that the investors are not fully aware about the Nepalese stock market and 40% of the respondents disclosed the fact that awareness of investors has high impact on the share

price movement.

- Similarly, 73.33% of the respondents stated that the inside information of the company has greater role to play in moving the share price of such company. And 51.11% of the respondents agreed that EPS has greater role to play in increasing/decreasing the share price. Similarly, 53.33% of the respondents agreed that DPS has significant role to move the share price.
- However, 51.11% of the respondents remained undecided to express the role of company assets structure on the share price movement, while 42.22% of the respondents agreed with the fact that capital structure have impact on share price. And, 48.89% of the respondents disagreed with the statement that higher risk increases the share price.
- Finally, 46.67% of the respondents affirmed that investors sell the share when they realize that the share price of their stock is going to fall.

# CHAPTER – V

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

The smooth continuity of the economic development widely depends upon the adequate and steady of medium as well long term capital fund for productive investment. Capital plays highly significant role for future growth and prosperity of the organization.

Industrialization and economy prosperity of a nation heavily depend upon effective mobilization of saving. Stock markets are the corner stone for the mobilization of people's saving, equity or common stock in Nepalese commercial banks the largest category of security listed with the Nepal stock exchange. It has predominance both quantity and value. Meanwhile the Nepal Stock Exchange (NEPSE) and commercial banks have to play enormous role with respect to the capital formation and it's effective development the development of the country.

Securities market price refers to the buying and selling price of the stock, bond, share and debt. The development of the modern day economy. The history of securities market began with floatation of share by Biratnager 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 in 1993, Nepal Stock Exchange, short NEPSE is a non-profit organization operating under security Exchange Act. 1983. The basis objective of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor through member, market intermediaries, such as broker, market makers etc. NEPSE opened its trading floor on 13<sup>th</sup> January 1994. Automated trading system started with the completion of trading floor automation of NEPSE in present.

The regulatory and controlling Body of Security Market. The Security Board of Nepal was established on May 26, 1993 with the basic objective of the promoting

and protecting the interest of investors by regulating securities market. Currently SEBO-N is operating under securities act, 2006.

Nepalese Capital Market is still in primary stage. Average citizens and investors have not proper ideas about the capital market, share, book value, par value, market price, pricing mechanism and the factors affecting the market price of share. They are willing to invest but are not able to do so due to the lack of knowledge in this subject. In spite of poor condition of the security market in Nepal, government of Nepal has not given priority in its current three years interim 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 it is struggling to mature.

Market price of the stock moves daily in the NEPSE. The securities market is essential; cause of price change may be signaling effect, low return and high risk, lack of knowledge, low income of the investors and high price of the stock. Price of the stock is determined by the interaction between demand and supply, this situation is in security market or not. These are burning issues regarding stock price determining of secondary market in Nepal.

The researcher has tried to explore the issues moving the share price in Nepalese commercial banks. The main objectives of this research is to identify the prime determining factors that provokes Share Price fluctuation of Nepalese Commercial Banks and to examine and evaluate the relationship between MPS with the various financial indicators like EPS, BPS, DPS etc.

Due to many limitation or restriction researcher has taken only two commercial banks, viz, Himalayan Bank Limited and Nepal Investment Bank Limited, as sample. As per the nature of the study, secondary as well as questionnaire of survey type of study is followed with analytical and descriptive way. The study is based on secondary data from the fiscal year 2003/04 to 2007/08. Secondary data were collected from annual report of NEPSE, SEBO-N, annual reports of concerned banks, daily newspaper and Journal. Which ever is necessary Questionnaires were distributed to gather information? Information is tabulated as per requirement of study for the fulfillment of the objectives of the study many analysts have been done. Both financial as well as statistical tools have been used to analyze and interpret the facts and information. Mainly, the researcher identified the effect of quantitative factors, EPS, DPS and BPS with MPS by correlation and regression analysis whereas to identify the issues moving the share price the researcher used the questionnaire approach for primary survey.

#### **5.2 Conclusion**

On the basis of data analyzed and the major findings drawn it can be concluded that MPS and DPS increases more rapidly than EPS and BPS of the commercial banks. Similarly, MPS and DPS remain more inconsistent than EPS and BPS of the banks. The comparison of financial indicators aids to conclude that HBL has better earning capacity, dividend distribution policy and internal funding than NIBL, whereas NIBL has better market holding than HBL.

Similarly, on the basis of correlation coefficient it can be concluded that HBL has positive correlation between MPS and DPS, EPS, and BPS. However, only the relationships between MPS and DPS, and MPS and EPS are statistically significant as the correlation coefficients are greater than the six times probable error. Thus, it can be considered that DPS and EPS have major role to move the share price of HBL. Likewise, the correlation coefficients between MPS and DPS, EPS, and BPS of NIBL are positive. However, none of the relationships is statistically significant, as the correlation coefficient of each variable is less than the six times probable error. Alike, on the basis of multiple correlation coefficient between MPS on DPS and EPS, it can be concluded that there exists highly positive correlation between MPS on DPS and EPS in HBL and moderate positive correlation between MPS on DPS and EPS in NIBL.

Likewise, the holding period rate of return aids to conclude that the shareholders of NIBL remained more beneficial than the shareholders of HBL, as they got more return for holding the stock for certain period of time. Also, it can be considered that the expected return and beta coefficient on such return of NIBL are higher than the expected return and beta coefficient of HBL.

Finally, the primary data helps to conclude that the political changes of the nation increases the share price of the commercial banks. In addition, dividend is the most influencing factor of stock price, is the motive for investing in stock market. However, investors are not fully aware about the stock market practices and the awareness has high impact in moving the share price. Besides these, inside information, EPS, DPS and Capital structure have major role to move the share price. In contrast, share price movement is indifferent with company's assets structure and company' risk. Eventually, it can be concluded that investors sell share when they realize that the share price of the stock, they are holding on, is going to decrease.

#### **5.3 Recommendations**

Based on the research work, the researcher has reached the following recommendations. Perfect markets require that all information concerning future risks and returns of securities be readily available to all investors. As there exists various market imperfection relevant information are not easily available to the investors. They are offer 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 ensure listed companies relevant information. Similarly, it can expand its service to regional and local level so that it gives the equal opportunity to all the potential investors after adopting automatic trading system, it should provide regarding information to investors. Investors should be provided with investment guidelines and relevant information through. The following major recommendations have been enlisted after reviewing the major findings and conclusion of the study.

- Every investor should read the monthly journal as well as daily newspapers. It provides extensive statistical data, financial news and even a bit of rumor.
- They should always be aware of the daily stock price and volume traded figures of stock price record published by NEPSE.
- Investors are suggested to raise their voice and complain about the misconduct of relevant company or NEPSE, SEBO-N as well as of government. They are encouraged to enrich their level of knowledge and make the investment opportunities fruitful.
- Investor should be alert to exploit the opportunities through short term speculation.
- Commercial banks should diversify their investment in difference productive sectors.
- The commercial Banks group should communicate timely real financial statement and non financial information to the concern group.
- SEBON should control the leak out of the inside information from companies.
- Nepal stock exchange should analyze the controversial factors which determine the share price
- NEPSE index plays a major role for creating investment opportunities. So for removing stock markets difficulties such as transaction facilities
investor's interest and investment facilities should be managed in effective way by formulating investor's protection policies.

- It is recommended that SEBON operate investors awareness program regarding stock market and share investment decision
- As per the study, it has been found out that EPS, DPS, BPS and price appreciation are the foundation, upon which equity price built. So investors are recommended for the details study of the financial indicators before investing and trading stock of any Banks and they should not rush over the rumors.

# BIBLIOGRAPHY

## <u>Books</u>

- Ackerman, I.L. (1980). *How to Investment in Philippine Stock Market*. New Delhi: Mc-Graw Hill Publishing Co. Ltd.
- Baral, Keshar, J. and Shretha, Surya Kumar (Dec 2006). Daily Stock Price Behavior of Commercial Bank in Nepal. *The Journal of Nepalese Business Studies*. Vol. III.
- Bhalla, V.K.(1986). Investment Management Securities Analysis and Portfolio Management. New Delhi: S. Chand & Company Ltd.
- Bhandari, D.R. (2003). *Principle and Practice of Banking and Insurance*. Kathmandu: Asia Publication.
- Bhattarai, Rabindra (2007). *Investment Analysis*. Kathmandu: Buddha Academic Enterprises.
- Brealey, R.A. and Mayers, S.C. (1998). *Principles of Corporate Finance*. Prentice Hall India Pvt. Ltd.
- Brigham, E.F.(1999). *Fundamentals of Financial Management*. New York: The Dryden Press.
- Chand, P. (1995). The Investment Game. New Delhi: Tata McGraw Hill India
- Charles, Jones P. (1943). *Investment Analysis and Management*. St. Paul: West Publishing Company.
- Checey, J.M & Moses, E.A. (1997). *Fundamental of Investment*. St. Paul: West Publishing Company.
- Chorafas, D.N. (2001). Managing Operational Risk: Risk Reduction Strategies for Investment and Commercial Banks. London: Euromoney Books.
- Christy, G.A. & Clendenin, J.C. (1985). *Introduction of Investment*. New Delhi: McGraw Hill.

- Copeland, T.E.& Weston, J.F. (1992). *Managerial Finance*. New York: The Dryden Press.
- Dobbins, R. (1986). Investment Decisions & Financial Strategy. New Delhi: Heritage Publishers.
- Donald, E.F., Ronald, J.J. (2000) Security Analysis and Portfolio Management, New Delhi: Prentice Hall of India P. Ltd.
- Fisher, D.E. & Jordan, R.J. (1992). Security Analysis & Portfolio Management. New Delhi: Prentice Hall of India.
- Francis, J.C. (1991). *Investments: Analysis and Management*. New York: McGraw Hill.
- Gordon, Mayron J. (1962). *The Investment, Financing and Valuation of Corporation*. Homewood III: Richard D. Irwin.
- Kolb, Robert and Rodriguez, Ricardo J. (1996). *Financial Institutions and Markets*. USA: Blackwell Publishers
- Pandey, I.M. (1999). *Financial Management*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Pradhan, R.S. (2000). *Financial Management*. Kathmandu: Buddha Academic Enterprises.
- Raghunathan V. (1996). Stock Exchange and Investment Straight Answers to 125 Nagging Questions. New Delhi: Tata McGraw Hill.
- Reilly Frank(1986). Investment. Japan: The Dryden Press, CBS Publishing Ltd.
- Rugh, Patric D. (1996). Financial Development and Economic Growth, Economic Development and Cultural Change. Bombayu: Vikash Publishing House
- Sharpe, W.F. Alexander, J.V. & Bailey, J.V. (2000). *Investment Analysis*. Prentice-Hall of India Private Limited.
- Van Horne, J.C. & Wachowicz, J. M. Jr. (2000). *Fundamentals of Finance Management*. New Delhi: Prentice Hall of India.
- Weston & Brigham (1987). *Essentials of Managerial Finance*. USA: The Dryden Press.

#### **<u>Reports, Periodicals and Journals</u>**

Annual Report of HBL and NIBL from the fiscal year 2003/04 to 2007/08.

- Bhattarai, Rabindra (2007). Big Bull Bank & Banks. Kathmandu: New Business Age.
- Freedman, C. (1999). The Regulation of Central Securities Depositories and the Linkages between CSDs and Large-Value Payment Systems. Technical Report No. 87. Ottawa: Bank of Canada.
- IMF Working Paper (1997). Determinant of Stock Prices: The Case Zimbabwe. Zimbabwe.
- Michele, Roni, Richard H. Thaler and Wamack, L. Kent (1995). *Price Reactions* to Dividend Initiations and Omissions: Overreaction of Drift. Journal of Finance XXVII.
- Pettit, R. R. (1972). "Dividend Announcements, Security Performance and Capital Market Efficiency. Journal of Finance XXVII.
- Robertson, Andrew (1997). "Determinants of Stock Prices: the case of Zimbabwe. An IMF Report.
- Walter, James E. (1963). *Dividend Policy: It's Influence on the Value of Enterprise*. Journal of Finance XXXI.

### **Thesis**

- Aryal, Ajay Raj (1999). The General Behaviour of Stock Market. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Baral, Dilip Ram (2003). Stock Price Movement in Nepalese Securities Market. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Bhattarai, Prakriti (2006). Stock Price Behaviour of Financial Institutions and Commercial Banks. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.

- Devkota, Shanker (2008). Stock Price Determinants in Nepal Stock Exchange. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Dhamala, Kiran. (2004). Determinants of Share Price in Nepalese Financial Market. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Panta, Ramesh (2000). Current Problems and Prospects of Securities Market in Nepal. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Pradhan, Sumit (1993). Stock Market Behaviour in Small Capital Market: A Case of Nepal. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Regmi, Nischal (2006). *Role of Financial Indicators in Determining Share Price in Nepalese Financial Market*. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.
- Shrestha, Prabin (2006). Share Price Behaviour of Listed Commercial Banks Listed in NEPSE. An Unpublished Master's Degree Thesis submitted to Faculty of Management, T.U.

# Web Sites

www.europa.eu.int/comm/internal\_market/financialmarkets/docs/clearing/2004consultation/nordea\_en.pdf) www.equiduct-trading.com/white-papers/clearing-and-settlement-key-issues-inthe-light-of-mifid.asp www.nepse.com.np www.sebonp.com www.stocksabout.com www.hbl.com.np www.nibl.com.np