## CHAPTER- I

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

The history of security market in Nepal began with the flotation of shares by Biratnagar Jute Mills Ltd. and Ne1pal Bank Ltd. in 1937. Introduction of the Company Act in 1964, the first issue of Government Bond was in 1964 and the establishment of Securities Board (SEBON).

Capital market is a market that enables suppliers and demanders of long-term funds make transactions or the place where long-term securities having maturity period greater than one year are traded. The instruments used in capital market are debt, stock, preferred stocks, bonds and convertible issue. The long-term debts are installment debts, commercial debts represented by acceptance bills, commercial debts and accommodation papers etc. Saving and deposits schemes, which are not securities bearings, fall under the non-securities segment of market. Capital markets are also classified as primary market and secondary markets. Primary markets are the markets in which corporations raised new capital and in which newly issued securities are involved. If we were to sell new issue of common stock to raise common stock to raise capital, there would be a primary market transaction. The corporation selling the stock receives proceeds from the sale in the primary market transaction. Secondary markets are those in which previously issued securities are traded by far the most active secondary market and the most important one to the financial managers is the stock market. It is here that price of firms stocks are established and since the primary goal of financial management is to maximize the firm's stock price, knowledge of the market, in which the price is established, is essential for any one involved in managing the business.

Stock exchanges are intricately inter-woven in the fabric of nation's economic life. Without a stock exchange the saving of the community, the sinews of economic progress and productive efficiency would remain underutilized. The task of
mobilization and allocation of savings could be attempted in the old days by a much less specialized institution than the stock exchange. But as business and industry expanded and the economy assumed more complex nature, the need for 'permanent finance' arose. Entrepreneurs needed money for long term whereas investors demanded liquidity - the facility to convert their investments into cash at any given time. The answer was ready market for investments and this was how the stock exchange came into being. Stock exchange means any body of individuals, whether incorporated or not, constituted for the purpose of regulating or controlling the business of buying, selling or dealing in securities. The securities include shares, scrips, stocks, bonds, debentures, government securities and rights or interest in securities (Bhalla, 2004, page no 96 ).

Nepal is one of the least developed countries of the world and has very little development in the part of capital market. The Nepalese capital market in open-market securities is in its infancy stage. The government established 'Security Exchange Center' in 1976 and enacted 'Securities Exchange Act' in 1983 to promote and regulate the market of open-market securities. Thereafter, the center started secondary market operation by listing corporate securities. In order to activate the capital market; the government has massively amended the Act, constituted 'Security Exchange Board of Nepal', and converted Securities Exchange Center into Nepal Stock Exchange. Exchange now provides full-fledge secondary market. Financial institutions like commercial banks, insurance companies, and development banks dominate the trading of securities in 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.

An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk; it requires a present certain sacrifice for a future uncertain benefit (Francis, 1997: 1, page no 73). Investment, in its broadest sense, means the sacrifice of current dollars for future dollars. Two different attributes are generally involved: time and risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain (Sharpe, 2004:1, page no 121). Investment is the sacrifice of certain present value for the uncertain future reward. It entails arriving at numerous decisions such as type, mix, amount, timing, grade etc. of investment and disinvestments. Further, such decision-making has not only to be continuous but rational too. Broadly speaking, an investment decision is a trade off between risk and return. All investment choices are made at points of time in accordance with the personal investment ends and in contemplation of an uncertain future. Since investments in securities are revocable, investment ends are transient and investment environment is fluid, the reliable bases for reasoned expectations become more and vaguer as one conceives of the distant future. Investors in securities will, therefore, from time to time, reappraise and reevaluate their various investment commitments in the light of new information, changed expectations and end (Bhalla, 2001, page no 131).

### 1.2 STATEMENT OF THE PROBLEM

The problem toward which this study is directed is to identify the performance of common stocks listed in NEPSE. Now-a-days, investment in common stocks in Nepal is getting momentum due to flow of information through print media although not so adequate. The individual investors are investing in common stocks despite very little information because of less opportunity available elsewhere. Most of them are based on the price movement of stocks in the market. Not much information is available in the market regarding various risk factors. There are no specific agencies to provide information on the performance various common stocks. Therefore, this study is directed towards the measurement of performance of common stocks. Are the common stocks listed performing well as per their risks? Which common stocks are outperforming the market? To what extent the performance of common stocks is
related to the market? How can investors form profitable portfolios out of the available common stocks?

The investors could not identify the good and bad stock in lack of proper information and lack of not creating confidence. Several university researchers that because of the lack of sufficient support, information, and whim had played significant role in share price movements identified it and that investment on common stock is based on institution, imagination, guesswork and conscious judgment based on little understood, statistical probabilities in Nepalese stock market.

Brokers are also supposed to assist in the maintenance of a fair and orderly market but they may not be able to do this job in their full capacity successfully because of the various obstacles presented in the economic environment. So the necessity to analyze the practical situation of the price formation and brokering services in Nepalese stock market is a most in present situation. There were various complaints from the investors about the performance of the brokers, such as:

- Absence from the stock market for a long period without pre-notice to the Nepal Stock Exchange, and
- The maintenance of verbal contracts with some investors by disobeying the rules and regulations.

Stock market provides investors good investment opportunity with fair return and instant liquidity with minimal risk of loss. It helps to mobilize financial resources for the investment in development projects and thereby helps for economic development, in turn, further develop the stock marker. The investment strategy based on the technical analysis is more profitable than buy and hold policy of timing of selling and buying. Fundamental analysis theory holds the view that there exists intrinsic value of the stocks, which helps to select the right stock at a time. Market is efficient in pricing the shares. In that condition, investment decision becomes simple. But investors are loosing interest in the performance of share market mainly due to the
behavior of fraudulent and scandalous activities. The investors are confused which stock is bad and which stock is good.

The study period is not longer enough and other comprehensive test in short data series seems that the study was focused on the methodological study only. The study mainly has sought the answer to the following research questions.

- What is the trend of annual turnover of Nepal Stock Exchange?
- How many companies listed in Nepal Stock Exchange?
- What is the trend in market capitalization?
- What is the behavior of NEPSE Index?
- What are the roles of NEPSE \& SEBO in the development of capital market?


### 1.3 OBJECTIVES OF THE STUDY

This study was conducted to meet the following objectives:

- To evaluate current position of Nepal Stock Exchange in Nepalese capital market
- To examine and evaluate the roles of NEPSE \& SEBO in the development of capital market.
- To analyze the role of the brokers in price formation in Nepalese Stock Market.
- To analyze the trend of market price of the stock through NEPSE index.
- To provide recommendations and suggestions on the basis of major findings.


### 1.4 SIGNIFICANCE OF THE STUDY

This research study has much significance to many. Stockbrokers to evaluate the investment alternatives for the interested investors can use it. There are various factors that cause marker fluctuation of stock price in the market; mainly two factors economic and non-economic factors. The most fundamental factor in stock price fluctuation lies change in corporate earning, interest rates and business cycle trends contribute to makeup the economic factors. Political changes, administrative changes, changes in weather and other natural conditions. The volumes of transaction, institutional investors, transactions etc directly affect the stock price. Although margin
transactions increase purchase whose stock price is going up, once the price begins to fall, they become a selling factor and accelerate price decline.

The listing of shares in stock exchange center and their trading in the stock market is not too long. The stock market has been providing capital for investment in industrial productive sector, financial sector, service sector and other.

### 1.5 LIMITATIONS OF THE STUDY

No research works are free of some shortcomings or limitations. So this research study also has some limitations. The main limitations are mentioned below:

- This study is based on secondary sources of data.
- Various trading costs (e.g. brokerage commission), taxes etc are excluded from the study.
- Market return is based only on NEPSE index.


### 1.6 ORGANIZATION OF THE STUDY

The study has been organized into five chapters. They are as follows:

## Chapter I: Introduction

This is the introductory chapter, which has covered background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study etc.

## Chapter II: Review of Literature

This chapter has included conceptual framework i.e. theoretical analysis and review of related different studies. In this chapter has been also considered that how this present studies are different from previous studies.

## Chapter III: Research Methodology

This chapter has dealt with the research design, population and sample, sources of data, data collection techniques and data analysis tools (financial tools and statistical tools) and methods of analysis and presentations.

## Chapter IV: Presentation and Analysis of Data

This chapter describes the research methodology employed in the study. It will include secondary data and primary data presentation, data analysis, interpretation, testing of hypothesis and major finding.

## Chapter V: Summary, Conclusion and Recommendations

The last chapter states the summaries, conclusions of the whole study and recommendations. It also offers several avenues for future research. The exhibits and bibliography are incorporated at the end of the study.

## CHAPTER- II

## REVIEW OF LITERATURE

### 2.1 CONCEPTUAL FRAMEWORK

Virtually all individuals and organizations earn or raise money and spend or invest money. Most successful firms have ongoing needs for funds. They can obtain funds through various external sources. The sources can be financial institutions like commercial banks, finance companies, insurance companies etc. The second way is by private placements. Third way is through financial markets. The financial markets are forums in which suppliers of funds and demanders of funds can transact business directly. The suppliers of funds in the financial markets know where their funds are being lent or invested. The two common financial markets are the money market and the capital market. A transaction in short-term debt instruments or marketable securities takes place in the money market. Long-term securities, stocks and bonds, are traded in the capital market.

Apart from the some information gathered from the internet sites such websites of stock market and security board, searching for various sources of relevant studies, including libraries, in Nepal was not fruitful as no previous research was found to done on the field of stock market, which means that this study is exploratory in nature in the field of research of Nepal. Therefore, only foreign materials were available to study to build a theoretical framework for the research process. For this, various websites were browsed to gain knowledge and access to foreign Internet sites and previous researches sites.

Common stocks represent equity, or an ownership position in a corporation. It is a residual claim, in the sense that creditors and preferred stockholders must be paid as scheduled before common stockholders can receive any payments. So investment in common stocks bears much risk than in any other alternatives (Sharpe, 2004:457).

This chapter deals with the review relating to the topic roles of Nepal stock exchange and security board in more detail and descriptive manner. For this study various books, journals and articles, some previous thesis reports related with this topic had been reviewed. Since the research topic was absolutely new and the thesis paper and the topic was not easily found, many indirectly topic-related subjects had been studied. These studies were presented in below.

### 2.1.1 FINANCIAL MARKETS:

Financial markets provide a forum where suppliers of loans and investments can transact business directly. The two keys of financial markets are money market and capital market. Transactions in shot-term debt instruments or marketable securities are done in money market whereas long-term securities (Bond and Stocks) are traded in the capital market.

### 2.1.2 CAPITAL MARKET

The capital is a financial relationship created by a number of institutions and arrangements that allows the suppliers and demands of long-term funds to make transaction. Capital market may be divided into securities market. The term securities include long-term financial tools, which are used by the companies to gather the needed long-term fund. Capital market includes:
$>$ Activity relating to the organization, distribution, and trading of securities.
$>$ Organization, which facilities this activities.
$>\quad$ Individuals and institutions, which buy and sell securities.
$>\quad$ Rules and regulations, customs and practices that control the organization and conduct of business in the market.

Securities are marketable financial instruments that bestow on their owners the right to make specific claims on particular assets. An individual security provides evidence of either creditor ship or ownership depending of whether it is a bond or a
stock respectively. A bond is a loan that is paid off with interest; the investor lends money to the borrowing company that issued the bond. In contrast, stockownership represents a cash investment in the future of a corporation; the investor owns a part of the corporation and shares in its profit.

A Firm either may have debt and equity in its capital structure or only equity but no any firm can separate without equity. So, equity is the compulsion of every corporation. The main characteristic of equity investment is that investor is liable only up to the amount they have invested.

Common stock has one important investment characteristic and one important speculative market price tend to increase irregularly but persistently over the decades as their net worth builds up through the reinvestment of undistributed earnings.... . However, most of the time common stocks are subject to irrational and excessive price fluctuations in both decisions as the consequence of the ingrained tendency of most people to speculate of gamble, i.e. to give way to hope, fear and greed.

Securities markets can be divided into two parts. a) Primary market and b) secondary market. Primary market is the one where companies first issued shares are traded while the once issued shares are traded in secondary market. The secondary market can be views as a 'used' securities market. The development of the securities market enables the efficient transformation of savings from the hands of surplus spending units to those of direct spending ones who can use them more productively with lesser risk.

The stock exchange is the secondary market. It is intricately interwoven in the fabric of the nation's economic life. It is generally thought that a stock exchange services only to those who have money to invest and securities to sell. This is an understatement for a stock exchange benefits the whole community in a variety of ways. By enabling procedures to raise capacity it indirectly gives employment to millions of people and help consumers to get goods needed by them.

Actually market mechanism establishes the existence of random walk theory that the successive price changes to be independent. The stock market poses steady inflow of information that influences the set of anticipation's of the individuals. Independence is an important property of random walk hypothesis. Proponents of random walk recognize that, in general, strictly an independence assumption doesn't exist in real world.

### 2.2 REVIEW OF RELATED STUDIES:

This sub-section is concern with the previous research work done by the different scholars more specially; the chapter includes the conceptual framework, review of foreign research and review of Nepalese research.

### 2.2.1 REVIEW OF FOREIGN RESEARCH:

Research on the stock market and security price did not begin with the development of a theory of price formation, which was ten subjected to empirical test. It impetus for the development of the theory came from the accumulation of evidence in the middle 1950 that the behavior of common stock and other speculation of prices could be well approximated by a random walk. Much of the theory on the random walk can be traced to French mathematician Louis Bachelor whose PhD dissertation titled "The Theory of Speculation". He tested the model in commodity speculation I France was a "Fair game". He also concluded that the current price of a commodity was an unbiased estimate of its future price. After the first discovery of the random walk model by Louis Bachelor, empirical testing of the model in the stock market prices almost remained stagnate until 1960s. There are large number of studies most of which are briefly reviewed below.

Kendall (1953), Roberts (1959) and Osbern (1959) also tested the model that gave rises to the theory. Then after in 1960s and onwards numerous studies were carried out in this area validated the hypothesis while some other studies refuted this theory as a true description of the market. These researches apply various analyzing
tools and mechanical rules, details of that have been presented in the following paragraphs.

Kendall (1953, page no 61) made significant contribution to advance in the study of the random walk model. He tested the model on the weekly price changes of the 19 indices of British industrial shares and in the spot price series of cotton (New Youk) and wheat (Chicago). He analyzed the data by serial correlation coefficient and concluded that the subsequent stock price movement follows random walk. He showed that the successive price changes are statistically independent to its past price changes.

Roberts (1959) he conducted simulation tests by comparing the cumulating of random numbers and the Dow-Jones Industrial Average Index (DJIAI) for about one year. He observed the first difference of two series produce the same pattern. He gave a number of methodological suggestions for testing what he calls the chance model. He suggested run analysis for testing independence of price changes. Similarly Osbern (1959) analyzed stock price from New York stock exchange (NYSE) using daily log price changes, which called Borwain Motion. He found the consistency between the Borwain Motion and share prices movements rise to support on random walk hypothesis.

Cootner (1962 page no 19) analyzed weekly and 14 week interval data on 45 stocks from New York stock exchange (NYSE). He found that one-week interval stock price move as a random walk. However, he also found some dependencies in the data at 14 -week interval. The average serial correlation coefficient for one week was -0.047 and for 14 was 0.131 . He focused the importance of "differencing interval" while testing for randomness in stock price behavior.

Fama study (1965) on the Random Walk Model. He observed the daily proportionate prices of 30 individual stocks the Dow Jones Industrial Average. He employed the statistical tools such as serial correlation and run test to draw inference about dependence of the price series. He calculated auto-correlation coefficient for
daily changes in $\log$ prices for $\log$ from to 30 and found that the coefficient were almost close to zero in overall.

Dryden (1970, page no 21) studied daily London all-market indices for four year, and found the serial correlation coefficient 3.30 to 0.16 that is significantly differs from zero. He suggests "sufficient divergence from the random walk hypothesis to justify a more extensive analysis of the behavior of individual share quote on the London stock exchange".

Solnik (1973) investigated the daily price of 234 common stocks of eight European countries namely, France, Italy, Uk, Germany, Netherlands, Belgium, Switzerland, Sweden for the time period from March 1966 to April 1971. He calculated the returns for various interval of the each stock and studied the distribution of serial correlation coefficient. He pointed out random walk is more apparent in the European stock price behavior than in the American price behavior.

Sharma and Kennedy (1977) tested the random walk model, by run test and spectral analysis against representative stock market indices of Bombay, Network and London stock exchange during 1963-73. They found that the stocks on Bombay stock exchange obey random walk and are equivalent in sense to the behavior of share price in the market of developed countries.

Gupta (1985) found out comprehensive test of the random walk hypothesis by employing serial correlation and run analysis in two sets of time series data. The two sets of time series data are the first was the economic time index, number of daily share prices and financial express index number of equity prices on a daily and other weekly series and another was a weekend closing price. He concluded on the basis of these test the random walk model share price behavior suggesting in the Indian stock exchange were efficient in the weak sense in pricing share.

Mahapatra (1995, page no 23) tested the weakly efficient market hypothesis using rank correlation analysis bases on relative strength. The sample was end of
month closing price of 26 stocks from Bombay stock exchange during the period January 1989 to December 1992. He argued that the Indian stock market is less efficient in the short run but more efficient in the long run.

Mobarek and Keasey (2000, page no 23) The study seek evidence supporting the weak form efficient of the market using daily market return series of the listed securities on the Dhaka Stock Exchange for the period of 1988 to 1997. Empirical analyses suggest that the Dhaka Stock Market Of Bangladesh is not weak form efficient. The result of individual share returns also evidence that they are not following random walk model.

Majnoni and Massa (2001, page no 23) measurement of market efficiency of the Italian Stock Market. The data used two deferent's data set on prices and returns, first on daily data then on intraday data. The analysis based on daily data that shows the strong positive correlation between price changes and trading volume is due to significant causal relationship between trading volumes and price formation. The increasing concentration of trading should not be interpreted as an indication of poor market efficiency since the component of price volatility due to the market imperfections has declined as a proportion of total volatility even for infrequently traded stocks.

Abraham, Seyyed and Alsakran (2002, page no 23) The data consist of weekly index value for the three major Gulf Sock Markets of Kuwait, Saudi Arabia and Bharain for the period (October 1992 to December 1998). Random walk hypothesis and market efficiency hypothesis are assessed using the variance ratio and the nonparametric (run test) consistent with results in the literature for similar emerging markets both RWH and weak form efficiency are rejected for the Gulf Markets when the observed index levels are used. The corrected indices show that successive price changes are independent for all three markets implying weak form efficiency. Random Walk Hypothesis for the Saudi Arabia and Bahrain markets cannot reject. Kuwaiti market falls to follow a random walk even after the correlation.

Pena and Alana (2003, page no 24) test it stock index price follow random walk in the Spanish Stock Market by means of variance ratios. By using daily, weekly and monthly prices return auto correlation in the Spanish Stock Market for the two indexes (IGBM and IBEX35) and for individual securities but means of variance ratio tests. They found that positive string auto correlation for both IGMB ad IBEX35 index daily returns cannot reject the random walk hypothesis for the period March 31, 1997 to 2000, significant position of auto correlation especially in daily and weekly period. The positive index auto correlation monthly returns are not significance at $5 \%$ level in any period. On the other hand, Spanish Stock Market security daily returns show weekly positive auto correlation. Even though index monthly return cross-correlation at one lag (a month) between portfolios based on size. In particular, large stock portfolios lead to the small stock ones.

Islam and Khaled (2005, page no 24) carried out a test of weak-form efficiency of the Dhaka Stock Exchange use of monthly versus daily data or weak. The study uses daily, weekly, and monthly market prices and returns of the stock exchange during the year 1990 to 2001. Starting from the January 1990, the daily market price data cover the period up to 23 November 2001, while the weekly and monthly price data cover the period up to 21 November 2001 and October 2001 respectively. Data for the period 1990 to 1991 were taken from the daily price quotations. Test of weak from efficiency of the Dhaka Stock Exchange by using the autocorrelation test. Test separately for the period before July 1996 and for the period after March 1997. They concluded on the basis of these test weak-efficiency is rejected by using autocorrelation test but on the basis of hypothesis at $5 \%$ significance level in the case of monthly data. But for Weekly data and daily data the market efficiency was rejected for the pre boom period (1996) but not for the post crash.

### 2.2.2 REVIEW OF NEPALESE RESEARCH:

Shrestha (1982, page no 31) conducted a study on the role of securities marketing center in the economic development of Nepal. The study was conducted
with the objectives to examine the role played by securities marketing center in promoting Nepalese security. This study covered the period of 4 years (2034/35 to 2037/38). He has concluded that the securities marketing center is very poor in term of the primary market and facing the problem in the demand and supply. Investors are influenced by the value to share and dividend policy of the company while buying or selling the securities.

Bhattarai (1985, page no 26) carried out a study of impact of securities exchange center on capital mobilization with special reference to the government securities and share market in Nepal. The objective of this study was to evaluate the significant features of government securities market to find out the contribution of Securities Exchange Center. He concluded that Securities Exchange Center has mobilized long-term capital required to the new companies launch the development activities in the country to provided the investment opportunities to investor through the primary market.

Bhattarai (1990) carried out a study on share market in Nepal. The sample for he study comprised of 12 companies. This study was based on secondary data. Differential statistical tools and financial tools were applied. She concluded that the investors in capital market through brokers' network raised the transaction volume. Market starts to walk randomly reflecting providing alternatives to make diversified portfolio facilitates true value of share and investors.

Bhatta (1995, page no 26) carried out a study on assessment of the performance of listed companies in Nepal. The basic objective of this study was performance of listed companies. He has taken 10 listed companies as sample based on secondary data. By using different statistical tools like ratio analysis, beta coefficient and portfolio to analyze the dividend yield, liquidity, leverage, risk and return etc. He concluded that capital market to run efficiently requires continues flow of information and there is serious deficiency of such information in market. Investors are depressed in the market by rules and regulations and bureaucratic set up mind of the companies.

Bhatta (1997) carried out a study on dynamic of stock market in Nepal. The primary objective of the study was to anal use trend research study and to analyze the market share price of secondary market. By using differential statistical tools like mean, standard deviation and other essential tools for the study purpose of 14 companies listed in stock market could be regarded as the heart of the capital market. There is a high volatility of share price.

Gurung (1999) conducted a study on the basis of share price behavior of listed companies in Nepal. The study was conducted with the objectives to test the monthly movement of share price behavior of listed companies in Nepal. The sample for the study comprised of 15 companies representing form commercial bank, insurance and finance, manufacturing and processing and trading. Using different statistical tools like mean, coefficient correlation and financial parameters. He mentioned that the number of listed companies has been increased during the study period. The study was to analyze the relation between traded and listed companies, to evaluate the trading turnover, to analyze the share price behavior of listed companies whose stocks are listed in stock exchange center and trade in the stock market. The performance of commercial banks is better than that of trading concerns and the investment in this group is more attractive so, banking group is higher than compare to the other group. Market was bluish during the initial period of the study. The higher fluctuations in prices in decreasing trend and higher variations in prices showed the performances of listed companies have been deteriorating. More over this implies the uncertainty and instability in stock market.

Timilsina (2001, page no 26) conducted a study on capital market development and stock price behavior in Nepal. The main objectives of the study was to find out the fair market prices of equalities and observe the variation of actual prices from the computed fair prices to test whether the present behavior of prices will remain stable. The study covered a period of 8 months (2002/2003). By using different statistical, mathematical and financial tools including the formulation of hypothesis was done in the study. He concluded that the market price of share depends on earning per share
(EPS) as well as dividend per share (DPS), direct and immediate response in the market.

Pradhan (2003, page no 31) conducted a study on stock market behavior in a small capital market. Different financial tools were used in the study period of 1986 to 1990. The sample for study was taken from 7 listed companies. The main objective of the study was the stock market behavior in a small capital market in the context of Nepal. He concluded that the larger stocks have larger price earning ratios, larger ratio of market value to book value of equity, lower liquidity, lower profitability and smaller dividend. Larger stocks also have higher leverage, lower assets turnover and lower interest coverage but these are more variable for smaller stocks than for larger stocks. Stocks with higher price earning ratios have lower liquidity, higher leverage, lower turnover, lower profitability and lower interest coverage's.

Pradhan and Upadhya (2004, page no 45 ) conducted a study on the efficient market hypothesis and the behavior of share prices in Nepal. The objective of the study was to make a comprehensive investigation of weak and other form of efficient market hypothesis. Different statistical tools were used in the study serial correlation, the run test, weighted mean, median, chi-square test and spearman's rank correlation. Twentythree equity shares listed and actively traded in the Nepal Stock Exchange LTD. He concluded that Nepalese Stock Market might not be termed as "weakly efficient" in Pricing shares where market efficiency is defined as all historical information is reflected in security price. The main factors affecting share prices perceived by the respondents are dividends, retained earnings, bonds share and right issue. The study also found that the shareholders in high tax brackets did not prefer relined earning instead of dividends.

Poudel (2005, page no 83) conducted study on share price behavior of listed companies in Nepal. The study was conducted with the objectives to test the daily share price behavior of listed companies in Nepal. The sample for the study comprised of 21 companies representing from each sector listed in Nepal Stock Exchange. This, study is based on the secondary data. Different statistical tools like serial correlation
and run test were used. He concluded that NEPSE index showed a steady increase in the later month of the study period, which also shows the better performance of NEPSE. Stock market performance is less in a stable position in the capital market overall in the study period. The stock market performance is steady increasing with the increase in the number of listed companies. The badly affected sectors were hotels, trading, manufacturing and processing sectors due to different reasons. The NEPSE index showed a better performance during the study period.

## CHAPTER- III

## RESEARCH METHODOLOGY

Research methodology is the sequential steps followed by a researcher in studying a problem that helps to obtained reliable and actual result from the study. The research methodology enables to describe the method and techniques applied the study including research design. The research methodology concentrates on the various subtopics, which are mentioned below:

### 3.1 RESEARCH DESIGN

This research study is based on certain research designs. Selection of appropriate research design is necessary to meet the objective of the study. This study emphasizes on descriptive and analytical study of collective data over a period of time and it gives suggestion on the improvement of capital structure. So this study is based on descriptive and analytical research designs.

A quantitative research design has been adopted to plan the activities required to be followed for carrying out the various tasks of research work such as choosing the methodology to be adopted, gathering data, analyzing data and finally writing the report. Using a quantitative approach provides richer detail for exploring viewpoints in early stages of research, allowing the researcher to gain a better initial understanding of the problem and to identify phenomena, attitudes and influences. (Reilly, Frank K. (1990, page no 192).

### 3.2 DESCRIPTION OF DATA \& SAMPLE

Nepal stock exchange has classified the companies into eight sectors i) Commercial bank ii) Financial companies iii) Insurance companies iv) Hotel companies v) Manufacturing and processing companies vi) Trading companies vii) Development companies and viii) Others. The overall sector has been taken for the study period of 2003 to 2008 as population and among them.

### 3.3 SOURCES AND PROCEDURES OF DATA COLLECTION

This study is based completely on historical data. The data required for this research study are particularly collected from secondary sources. It will content mostly the annual reports, profit and loss account and balance sheet of concerned companies.

The data are collected from various annual reports, trading reports, and financial statements, various articles and journals available in central library, library of Nepal Commerce Campus and library of the SEBON. Besides, website of NEPSE was used to collect relevant data.

### 3.4 TOOLS OF ANALYSIS

The tools used for the analysis of the data include both financial and statistical tools. Financial tools used are the formulas of returns and risks for the individual securities and the portfolios. The statistical tools used are: measures of dispersion (variance, standard deviation and co-variance), correlation and regression techniques, and hypothesis testing.

### 3.5 RETURN MEASUREMENT

In analyzing a common stock's performance, the holding period return on the common stock needs to be correctly calculated over the period of the evaluation. The single period rate of return is the basic random variable in investments analysis. This rate of return concept is important because it measures the speed at which the investor's wealth increases or decreases. The rate of return formula can be stated in a form appropriate for almost any investment.

$$
\begin{equation*}
R_{t}=\frac{P_{t}-P_{t-1}+C_{t}}{P_{t-1}} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.1}
\end{equation*}
$$

Where,

$$
\begin{aligned}
& \mathrm{R}_{\mathrm{t}}=\text { an investment's single period rate of return } \\
& \mathrm{P}_{\mathrm{t}}=\text { market price at the end of period } \mathrm{t} \\
& \mathrm{P}_{\mathrm{t}-1}=\text { price at the end of period } \mathrm{t}-1 \\
& \mathrm{C}_{\mathrm{t}}=\text { cash flow income received during the } \mathrm{t}^{\text {th }} \text { period }
\end{aligned}
$$

For common stocks, it can be simply stated as:

$$
\begin{equation*}
R_{t}=\frac{E P-B P+D_{t}}{B P} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.2}
\end{equation*}
$$

Where,

$$
\begin{aligned}
& \mathrm{EP}=\text { end price of stock; } \\
& \mathrm{BP}=\text { beginning market price of stock; and } \\
& \mathrm{D}_{\mathrm{t}}=\text { dividend received during the period of the evaluation. }
\end{aligned}
$$

Average return or arithmetic average is the simple time-weighted average. So


$$
\begin{equation*}
=\frac{R_{1}+R_{2}+\ldots \ldots+R_{T}}{T} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.3}
\end{equation*}
$$

Where,
$\mathrm{R}_{1} \ldots \mathrm{R}_{\mathrm{T}}=$ Returns for assets from 1 to T time periods and T= Numbers of time periods.

### 3.6 COMPUTATION OF DIVIDEND

Dividend is an important cash inflow for the common stock holder. So in order to calculate holding period rate of return calculation of dividend is an important task. In this research paper stock dividend is converted into cash dividend. The model used to convert stock dividend into cash dividend is as follows:

## Stock dividend $=[\%$ of stock dividend $] \times[$ MPS after stock dividend $]$

Here if the stock dividend is declared before 35 days of ending holding period, the ending price (EP) of the same year is taken as MPS after stock dividend otherwise next year's EP is taken as the MPS after stock dividend. For example if a company declares stock dividend on $20^{\text {th }}$ March 2004 then EP for 2003/2004 is used to convert stock dividend into cash dividend. But if a company declares stock dividend after $10^{\text {th }}$ June 2004 then EP for 2004/2005 is used as MPS to convert stock dividend into cash dividend. Therefore total cash dividend is calculated as follows:

Total cash dividend $=\left[\begin{array}{l}\text { \% of cash dividend } \times \\ \text { Paidup value }\end{array}\right] \times\left[\begin{array}{l}\% \text { of stock dividend } \times \\ \text { MPS after stock dividend }\end{array}\right] \ldots 3.4$

### 3.7 MEASUREMENT OF RISK

When analyzing investments, analysts define risk as variability of return. Financial analysts and statisticians prefer to use a quantitative risk surrogate called the variance of returns, denoted $\operatorname{Var}(\mathrm{r})$. The variance of an asset's rates of return for historical data is given by:

$$
\begin{equation*}
\operatorname{Var}\left(r_{i}\right)=\frac{\sum_{i=1}^{T}\left(r_{i, t}-\bar{r}_{i}\right)^{2}}{T-1} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.5}
\end{equation*}
$$

Where,

$$
\begin{aligned}
& \operatorname{Var}\left(r_{i}\right)=\text { variance or returns of asset } i \text {; } \\
& r_{i, t}=\text { rate of return of asset } i \text { in period } t \text {; and } \\
& \bar{r}_{i}=\text { average rate of return of asset } i
\end{aligned}
$$

Variance as well as standard deviation measure total risk of an asset. So standard deviation $\delta$, of the rates of return is given by:

$$
\begin{equation*}
\delta=\sqrt{\operatorname{Var}\left(r_{i}\right)}=\left[\frac{\sum_{t=1}^{T}\left(r_{i, t}-\bar{r}_{i}\right)}{T-1}\right]^{1 / 2} \quad \ldots \quad \ldots \quad \ldots \tag{3.6}
\end{equation*}
$$

The total risk of an asset can be divided into two parts: diversifiable risk and undiversifiable risk. Therefore,

$$
\text { Total risk }=\text { Undiversifiable risk+ Diversifiable risk }
$$

Undiversifiable risk is that portion of total variability in return caused by market factors that simultaneously affect the prices of all securities. It is also called systematic risk. Changes in the economic, political, and sociological environment that affect securities markets are sources of systematic risk. The beta $(\beta)$ is an index of systematic (or undiversifiable) risk that gauges how much the $\mathrm{i}^{\text {th }}$ asset's return typically reacts to a change in the market portfolio's return. Beta coefficients may be used for ranking the systematic risk of different assets. The beta coefficient also measures the slope of the characteristic line. The beta coefficient is defined as:

$$
\begin{equation*}
\beta_{i}=\frac{\operatorname{Cov}\left(r_{i}, r_{m}\right)}{\operatorname{Var}\left(r_{m}\right)} \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.7}
\end{equation*}
$$

Where,

$$
\beta_{\mathrm{i}}=\text { beta coefficient of asset I }
$$

$\operatorname{Var}\left(\mathrm{r}_{\mathrm{m}}\right)=$ the variance of returns for the market portfolio.
$\operatorname{Cov}\left(\mathrm{r}_{\mathrm{i}}, \mathrm{r}_{\mathrm{m}}\right)=$ the covariance of returns of $\mathrm{i}^{\text {th }}$ asset with the market.
$\operatorname{Cov}\left(r_{i}, r_{m}\right)=\left[\frac{\sum_{t=1}^{T}\left(r_{i}-\bar{r}_{i}\right)\left(r_{m, t}-\bar{r}_{m}\right)}{T-1}\right] \ldots \quad \ldots \quad \ldots \quad \ldots$
Systematic risk is given by,

Systematic risk $=\beta_{i}{ }^{2} \operatorname{Var}\left(r_{m}\right)$

The percentage of total risk that is systematic risk can be measured by the coefficient of determination $\rho^{2}$.

$$
\begin{equation*}
\rho^{2}=\frac{\text { systematicrisk }}{\text { unsystematicrisk }}=\frac{\beta_{i}^{2} \operatorname{Var}\left(r_{m}\right)}{\operatorname{Var}\left(r_{i}\right)} \ldots \ldots \quad \ldots \tag{3.9}
\end{equation*}
$$

Diversifiable risk is that portion of total risk, which is unique to the firm that issued the securities. It is also called unsystematic risk. It is given by:

Diversifiable risk $=\operatorname{Var}(e)$
$\operatorname{Var}(\mathrm{e})$ is called residual variance or standard error squared. The percentage of unsystematic risk equals $\left(1-\rho^{2}\right)$.

The characteristic line and CAPM provide a foundation for risk-adjusted performance analysis. The equilibrium rate of return for individual assets is given by the CAPM. The relationship between covariance and expected return is known as security market line [Sharpe, 2004:235, page no 109].

For our purpose, the ex post SML is simply the equation of the line going through the points $\left(0, \bar{r}_{f}\right)$ and $\left(1, \bar{r}_{m}\right)$. The return given by the ex post SML for an asset with a beta of $\beta_{\mathrm{i}}$ can be used as a benchmark return, $\bar{r}_{\mathrm{bi}}$, for that asset. That is:

$$
\begin{equation*}
\bar{r}_{b i}=\bar{r}_{f}+\left(\bar{r}_{m}-\bar{r}_{f}\right) \beta_{i} \cdots \quad \cdots \quad \ldots \quad \ldots \tag{3.10}
\end{equation*}
$$

One measure of an asset's risk-adjusted performance is the difference between its average return ( $\bar{r}_{\mathrm{i}}$ ) and the return on its corresponding benchmark return, denoted $\left(\bar{r}_{\mathrm{bi}}\right)$. This difference is generally referred to as the asset's ex post alpha (or differential return), and is denoted $\alpha_{I}$ :

$$
\begin{array}{cccccc}
\alpha_{i}=\bar{r}_{i}-\bar{r}_{b i} \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \tag{3.11}
\end{array} \ldots
$$

$$
\begin{equation*}
\therefore \alpha_{i}=\bar{r}_{i}-\left[\bar{r}_{f}+\left(\bar{r}_{m}-\bar{r}_{f}\right) \beta_{\mathrm{i}}\right] \ldots \quad \ldots \quad \ldots \tag{3.12}
\end{equation*}
$$

Characteristic line is a simple linear regression model expressing the relationship between the excess return on the market portfolio. [Sharpe 2004:909] The simple equation of characteristic line is given by:

$$
\begin{equation*}
r_{i, t}=\alpha_{i}+\beta_{i} \times r_{m, t}+\varepsilon_{i, t} \cdots \cdots \quad \ldots \quad \ldots \quad \ldots \tag{3.13}
\end{equation*}
$$

Where, $\mathrm{r}_{\mathrm{i}, \mathrm{t}}=$ total rate of return in period t .
$\mathrm{r}_{\mathrm{m}, \mathrm{t}}=$ rate of return for market in period t.
$\alpha_{I}=$ regression intercept
$\beta_{\mathrm{I}}=$ slope of characteristic line
$\varepsilon_{\mathrm{I}, \mathrm{t}}=$ unexplained residual return that occurs in period t .

The characteristic line is used to measure statistically the undiversifiable risk and diversifiable risk of individual assets and portfolios. [Francis, 1997: 267 page no 153]. The ex-post characteristic line for performance evaluation is given by:

$$
\begin{equation*}
r_{i}-r_{f}=\alpha_{i}+\beta_{i}\left(r_{m}-r_{f}\right) \ldots \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.14}
\end{equation*}
$$

### 3.8 VARIOUS INDEXES USED IN PERFORMANCE EVALUATION

1) Rate of Return
2) Standard Deviation (SD)
3) Coefficient of Variation (CV)
4) Coefficient of Correlation
5) Co-efficient of determination
6) F-test

### 3.8.1 RATE OF RETURN

In analyzing a common stock's performance, the holding period return on the common stock needs to be correctly calculated over the period of the evaluation. The
single period rate of return is the basic random variable in investments analysis. This rate of return concept is important because it measures the speed at which the investor's wealth increases or decreases. The rate of return formula can be stated in a form appropriate for almost any investment.

$$
\begin{equation*}
R_{t}=\frac{P_{t}-P_{t-1}+C_{t}}{P_{t-1}} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3.8.1.1}
\end{equation*}
$$

Where,
$\mathrm{R}_{\mathrm{t}}=$ an investment's single period rate of return
$\mathrm{P}_{\mathrm{t}}=$ market price at the end of period t
$\mathrm{P}_{\mathrm{t}-1}=$ price at the end of period $\mathrm{t}-1$
$\mathrm{C}_{\mathrm{t}}=$ cash flow income received during the $\mathrm{t}^{\text {th }}$ period

For common stocks, it can be simply stated as:

$$
\begin{equation*}
R_{t}=\frac{E P-B P+D_{t}}{B P} \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3..8.1.2}
\end{equation*}
$$

Where,
$\mathrm{EP}=$ end price of stock;
$\mathrm{BP}=$ beginning market price of stock; and
$D_{t}=$ dividend received during the period of the evaluation.

Average return or arithmetic average is the simple time-weighted average. So

$$
\bar{R}_{t}=\frac{\sum_{t=1}^{T} R_{t}}{T}
$$

$$
\begin{equation*}
=\frac{R_{1}+R_{2}+\ldots \ldots+R_{T}}{T} \ldots \ldots \quad \ldots \tag{3..8.1.3}
\end{equation*}
$$

Where,
$\mathrm{R}_{1} \ldots \mathrm{R}_{\mathrm{T}}=$ Returns for assets from 1 to T time periods and $\mathrm{T}=$ Numbers of time periods.

### 3.8.2 STANDARD DEVIATION

Standard deviation is measure of dispersion, which takes into account each value of the data and also how all observation are distributed (Chandan, 200: 76, page no 221). In general, if different values of data are reasonably close to mean then there is very little variability of dispersion of data. On the other hand if values are at a considerable distance from the center of mean, the variability is said to be small. Standard deviation measures such variability and it can be computed by using following formula:

$$
\begin{equation*}
\sigma=\left[\frac{\sum_{t=1}^{T}\left(r_{i, t}-\bar{r}_{i}\right)}{T-1}\right]^{1 / 2} \ldots \ldots \quad \ldots \quad \ldots \tag{3..8.2.1}
\end{equation*}
$$

where,

$$
\begin{aligned}
& r_{i, t}=\text { rate of return of asset } i \text { in period } t ; \text { and } \\
& \bar{r}_{\mathrm{i}}=\text { average rate of return of asset } i . \\
& \sigma=\text { Standard deviation }
\end{aligned}
$$

### 3.8.3 COEFFICIENT OF VARIATION (CV)

The CV is relative measure of dispersion. It is expressed as a percentage and is useful in comparing the variability of two or more set of data. Since it is a ratio, the units of measurement have no significance. The co-efficient of variation is given by:

$$
\begin{equation*}
\mathrm{CV}_{\mathrm{i}}=\frac{\sigma_{\mathrm{i}}}{\bar{R}_{\mathrm{i}}} \times 100 \quad \ldots \quad \ldots \quad \ldots \quad \ldots \tag{3..8.3.1}
\end{equation*}
$$

### 3.8.4 COEFFICIENT OF CORRELATION (R)

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another. (Richard I. Levin and David S. Rubin). The coefficient of correlation measures the direction of relationship between two sets of figures. It is the square root of coefficient of determination. Correlation can either be positive of it can be negative. If variables are changing in the same direction, then correlation is said to be positively correlated but when the variation of two variables take place in opposite direction, the correlation is termed as positive. Thus, correlation coefficient lies in between +1 or -1 . While interpreting correlation coefficient, due care should be provided as it misleads the results and decision.

### 3.8.5 COEFFICIENT OF (MULTIPLE) DETERMINATION ( $\mathbf{R}^{\mathbf{2}}$ )

The coefficient of determination is a measure of the determination is measure of the degree (extent or strength) of linear association or correlation between two variables, one of which happens to be independent variable ( S ). In other words $\mathrm{R}^{\mathbf{2}}$ measures the percentage total variation variables. The coefficient of determination can have value ranging from zero to one. If $\mathrm{R}^{2}$ is equal to 0.85 , which indicates that the independent variables used in regression model explain $85 \%$ of total variation in the dependent variable. A value of one can occur only if the unexplained variation is zero, which simply means that all the data points in the scatter diagram fall exactly on the regression line.

### 3.8.6 F-TEST

To test the validity of our assumption, we can use F-test also. The difference between two samples means can be studied through t-test where as to examine the significance of the difference between more then two sample means at one and the same time, F-test is used. F-test, i.e the difference between more than two samples means. Using this technique, one will be able to make inferences about whether his regression equation provides statistically significant result or not (Kothari, C.R, 2003, page no 110 .

## CHAPTER- IV

## PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the main body of the study the presentation and analysis of the collected data. The first chapter deals with the historical development of capital market. The second and third part deals with the sector wise listed companies, annual turnover, market capitalization, traded share quantity, number of transaction. The rest of part deals with bahaviour of NEPSE index of there sectors listed in NEPSE and the findings of the study.

### 4.1 HISTORICAL DEVELOPMENT OF CAPITAL MARKET

The history of security market began with the flotation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Introduction of the Company Act in 1964, the first issue of Government Bond in 1964 but there was no secondary market to provide liquidity for these bonds until the establishment of securities marketing center in 1976 were other significant development resulting to capital markets.

In 1983, His Majesty's Government Nepal under a programmer initiated to reform capital market, converted Securities Exchange Centre (SEC) in 1984. Securities Exchange Centre was established with an objective of facilitating and promoting the growth of capital markets. SEC carried primary and secondary market services for the corporate securities. Thus, the actual development of the stock market began since 1984. The remarkable changes came only after the initiation to reform the market in 1993, when the SEC was converted into Nepal Stock Exchange. Nepal Stock Exchange Centre (NEPSE) is a non-profit organization and new market mechanism was introduced. NEPSE is the only stock exchange in the country. It is owned by the Government, Nepal Rastra Bank (the central Bank) and Nepal Industrial Development Corporation. It has an ownership holding of its member also. Securities businesspersons such as stockbrokers, market makers and securities sealers, registered
by Securities Exchange Board (SEBON) have to get membership from the stock for conducting securities business. The Securities Exchange Board (SEBON) is operating since 1993.

Securities market is a place where buying and selling of securities takes place in an organized way. The parties involved in securities market are investors, intermediaries and specialists. Securities markets provide options to all categories of investors and make the financial market most competitive in the developing countries. Securities Exchange Act has empowered NEPSE with the capacity of promulgating various Byelaws in order to ensure orderly and fair transactions of securities. Accordingly, the NEPSE has made and adopted the securities listing Byelaws 1996 and membership of stock exchange and transactions Byelaws 1998.

Securities markets bring together buyers and sellers of securities, they are mechanisms created to facilitate the exchange of financial assets. A market mechanism is the trading procedures of an organized market through which the listed securities are traded. So, under this mechanism the trading procedures will be determined by the stock exchange. Some countries have adopted automation and some are still managing and running open-out-cry system. NEPSE had also adopted the open-out-cry system licensing two types of members. They were market makers and member brokers. Market makers were the institutional members. They, being well-organized institutions, are considered an expert in the analyzing financial statements and controlling and regulating the market through market mechanism. So these organizations are allowed making buy and sale in and form their own account. NEPSE has licensed six organizational market makers. The number goes on decreasing. Market makers quite the job of market making of corporate securities when NRB puts investment ceilings by publishing directives. Now a day there is no market maker operating in the market.

Member brokers are the license holders who are empowered to accept the buy and sale orders from their individual and institutional clients and make transactions in trading floor organized, managed and operated by stock exchange. The rate or
brokerage commission ranges from 1 to 1.5 percent. These intermediaries are not allowed to buy and sale in and from their own account.

NEPSE has also licensed to dealer primary market and dealer secondary market. Dealer (primary market) operates as a manager to the issue and underwriter. Where as dealer (secondary market) operates as a portfolio manager. Presently, NEPSE licensed to 11 dealer (primary market) and 2 dealer (seconday market).

### 4.2 SECTOR-WISE LISTED COMPANIES

Trading on the floor of the NEPSE is restricted to listed corporate securities and government bonds. Companies established under company act 1964, must be listed in Stock Exchange Ltd. Number of listed companies was 62 in the initial month of floor trading o NEPSE. Then this number increased by listing of additional companies. The number of listed companies is in increasing trend. The trend of group wise a listed company is increasing. The number of listed companies in finance group has increased at higher rate, than that of other sectors. The higher number of listed companies in finance group implies the well management, facilities provided to investors, effective securities to the investors.

Table 4.2
Distribution of Listed Companies

| Sector | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Commercial Bank | 11 | 14 | 16 | 16 | 17 |
| Finance | 41 | 44 | 48 | 51 | 57 |
| Insurance | 13 | 14 | 14 | 15 | 17 |
| Hotel | 4 | 4 | 5 | 4 | 4 |
| Mfg \& Processing | 29 | 29 | 11 | 17 | 18 |
| Trading | 8 | 8 | 3 | 3 | 4 |
| Development Bank | 4 | 7 | 9 | 18 | 24 |
| Others | 4 | 5 | 6 | 5 | 5 |
| Total | 114 | 125 | 112 | 129 | 146 |

Source: Nepal Stock Exchange Ltd.

The total number of listed companies was 114 in the initial year of floor trading. In 2005/06 the number of listed companies falls down to 112 , and then started to increase in each year. The trend of group wise listing companies is increasing. At the end of observed period, 146 companies are listed in NEPSE. The number of listed companies in Finance, Commercial and Development Bank group has increased at higher rate than that of Hotel, Manufacturing and processing, and Other groups.

Finance group dominates over other listed companies in the terms of total number of listed companies. At the end of the observed period, the total number of companies is 57 in Finance companies where as it is a few in Hotel group. The year wise the total number of companies explicitly shows the increasing trend i.e 114 companies in 2003/04, 125 companies in 2004/05, 112 companies in 2005/06, 129 companies in 2006/07 and 146 companies in 2007/08. However, the number of companies is in increasing process. So, it indicates the expansion of capital market in Nepal.

Fig. 4.2
Distribution of Listed Companies


Fig. 4.2 the number of listed companies of listing figure indicators shows that the stock market in Nepal is burning issue with rapidly growing companies i.e 114 companies in 2003/04, 125 companies in 2004/05, 112 companies in 2005/06, 129 companies in 2006/07,146 companies in 2007/08.

### 4.3 ANNUAL TURNOVER

The most successful year so far for Nepal Stock Exchange was 2004/05 year. Whose annual turnover of the market was Rs 4507.7 million compare to other years but again recorded a sharp decline in 2005/06 with the turnover reaching Rs 3451.4 million. The drastically fall from Rs. Rs 4507.7 million in 2004/05. In 2006/07 went up to Rs 8360.1 million. Commercial Bank has dominated over other groups in the terms of amounts. Annual turnover for observed year is Rs 13822.14 million that is $136.04 \%$ of the annual turnover of commercial Bank.

Table 4.3
Annual Turnover (Rs. in Million)

| Year | $2003 / 04$ |  | $2004 / 05$ |  | $2005 / 06$ |  | $2006 / 07$ |  | $2007 / 08$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sector | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ |
| Commercial Bank | 863.41 | 40.3 | 4021.9 | 89.2 | 2696.3 | 78.1 | 5563.5 | 106.3 | 13822.1 | 136.04 |
| Finance | 165.09 | 7.07 | 216.37 | 4.8 | 305.85 | 8.86 | 713.57 | 133.3 | 2307.53 | 259.07 |
| Insurance | 36.86 | 1.72 | 67.62 | 1.5 | 129.9 | 3.76 | 204.97 | 57.79 | 264.86 | 29.22 |
| Hotel | 2.84 | 0.13 | 4.48 | 0.1 | 19.77 | 0.57 | 7.04 | -64.39 | 27.67 | 291.37 |
| Mfg. \& Processing | 1031.6 | 48.1 | 114.9 | 2.55 | 17.19 | 0.5 | 24.27 | 41.19 | 343.44 | 1323.9 |
| Trading | 11.83 | 0.55 | 7.99 | 0.18 | 15.8 | 0.46 | 10.42 | -34.05 | 33.65 | 222.94 |
| Devt. Bank | 32.33 | 1.51 | 22.01 | 0.49 | 82.76 | 2.4 | 577.56 | 597.9 | 1981.05 | 456.9 |
| Others | 0.29 | 0.01 | 52.48 | 1.16 | 183.88 | 5.33 | 1258.8 | 584.6 | 0.29 | -46.3 |
| Total | 2144.3 |  | 4507.7 |  | 3451.4 |  | 8360.1 |  | 18780.6 |  |
| Sourcer |  |  |  |  |  |  |  |  |  |  |

Source: Nepal Stock Exchange Ltd
Table 4.3 shows that the annual volume is fluctuating. The annual turnover is Rs 2144.3 million in 2003/04. In 2005/06 recorded sharp decline with the turnover reaching Rs 3451.4 million in a total volume of thousand scripts turnover. In 2003/04 the share of banks is Rs. 863.41 million (40.03\%) and in 2004/05 the bank share went up to Rs. 4021.85 million ( $89.22 \%$ ) but in $2005 / 06$ Rs. 2696.3 million ( $78.1 \%$ ) came down then after it starts to increase to Rs. 13822.1 million (136.04\%). Finance companies was Rs. 165.09 million ( $7.07 \%$ ) in 2003/04 in increasing process went up to Rs. 216.37 million ( $4.8 \%$ ) in $2004 / 05$ and in $2005 / 06$ was Rs. 305.85 million ( $8.86 \%$ ) in 2006/07 was Rs. 713.57 million (133.3\%) and in 2007/08 was Rs. 2307.53 million ( $136.04 \%$ ). The financial market still over whelming dominates the market. Insurance companies in 2003/04 Rs. 36.86 million (1.72\%) and went up regularly in 2004/05 Rs.
67.62 million ( $1.5 \%$ ) 2005/06 Rs. 129.9 million ( $3.76 \%$ ), in 2006/07 Rs. 204.97 million ( $57.79 \%$ ) and $2007 / 08$ Rs. 264.86 million ( $29.22 \%$ ). The annual turnover for Hotel group was Rs. 2.84 million ( $0.13 \%$ ), increased at Rs. 4.48 million occupied 0.1 percent and Rs. 19.77 million ( $0.57 \%$ ) but in $2006 / 07$ slump down to Rs. 7.04 million ($64.39 \%$ ). The other sectors hardly made any presence, which is shown in figure 4.3

Fig. 4.3
Annual Turnover


Fig 4.3 of annual turnover shows the highest turnover in the terms of volume in 2007/08 share traded was Rs. 18780.6 and the lowest turnover is in 2003/04, whose turnover is Rs. 2144.3 million. Figure 4.3 is shown that in 2005/06 manufacturing and processing, commercial banks dominated the other sectors in the term of annual turnover.

### 4.4 MARKET CAPITALIZATION

Market capitalization measures of a company's total value. It is estimated by determining the cost of buying an entire business in its current state. Market capitalization derived by multiplying the number of shares outstanding by the current market price of shares. Market capitalization the lists of companies at the secondary market are on the continuous rise. The increased market value suggests the good performance of the companies that the investors are highly interested to such companies. The market capitalization value of the listed securities the higher value of market capitalization is Rs. 308770.3 and the lowest is Rs. 41424.2.

Table 4.4
Market Capitalization (Rs. in Million)

| Year | $2003 / 04$ |  | $2004 / 05$ |  | $2005 / 06$ |  | $2006 / 07$ |  | $2007 / 08$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Sector | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ |
| Commercial Bank | 27147.4 | 65.5 | 38547.1 | 67.3 | 68841.2 | 72.0 | 138086.4 | 74.0 | 218264.2 | 70.7 |
| Finance | 2911.15 | 7.03 | 3471.5 | 6.05 | 4930.63 | 5.16 | 11491.4 | 6.16 | 27113.59 | 8.78 |
| Insurance | 2549.3 | 6.16 | 3659.86 | 6.39 | 4852.19 | 5.07 | 7959.78 | 4.27 | 10897.16 | 3.53 |
| Hotel | 2391.39 | 5.77 | 1016.45 | 1.77 | 2393.61 | 2.50 | 1935.59 | 1.04 | 3484.13 | 1.13 |
| Mfg \& Processing | 4644.59 | 11.2 | 4585.66 | 8.0 | 4619.2 | 4.83 | 3760.28 | 2.02 | 6576.18 | 2.13 |
| Trading | 490.37 | 1.18 | 802.04 | 1.4 | 737.39 | 0.77 | 787.4 | 0.42 | 686.73 | 0.22 |
| Development Bank | 796.85 | 1.92 | 1049.07 | 1.83 | 1227.49 | 1.28 | 5980.8 | 3.21 | 15619.36 | 5.06 |
| Others | 493.09 | 1.19 | 4187.73 | 7.31 | 8012.2 | 8.38 | 16503.02 | 8.85 | 26128.93 | 8.46 |
| Total | 41424.2 |  | 57319.4 |  | 95614 |  | 186504.7 |  | 308770.3 |  |

Source: Nepal Stock Exchange Ltd

The percentage of market capitalization of commercial bank has highest shares as $65.54 \%, 67.25 \%, 72.0 \%, 74.0 \%$ and $70.7 \%$ among other eight sectors of the listed companies. The commercial banks are dominating the other sectors in terms of market capitalization. Commercial banks alone has a market capitalization of Rupees 27147.4 million ( $65.5 \%$ ) in 2003/04 followed by the finance company Rupees 2911.15 million (7.03\%), Manufacturing and processing occupies second position in the term of market capitalization as $11.21 \%, 8.0 \%, 4.83 \%, 2.02 \%$ and $2.13 \%$ over all the listed companies. The proportion of market capitalization of Hotel and Trading as well as Development Bank is lower but the proportion of market capitalization of insurance, Finance,

Manufacturing and Processing and Other Sectors are attractive to encourage the investors to invest in these sectors. This is shown in figure 4.4.

Fig. 4.4
Market Capitalization


Fig 4.4 of market capitalization shows that the commercial bank dominated the trading floor. The manufacturing and processing sector occupied the second position all over the eight listed companies like wise others finance and insurance and other groups also shows the better performance than that of trading and hotel groups. Market capitalization since the commercial bank group commands a lion's share in the total NEPSE trading.

### 4.5 TRADED SHARE QUANTITY

Table 4.5 presents the sector wise traded shares quantity and percentage of share traded quantity. The traded share quantity of the sector wise listed companies is increasing during the study period even the number of traded companies. In 2003/04 the share-traded quantity was 6468.5 increases to 18433.00 in 2004/05 but in 2005/06 is
decrease to 12223.00 then after it starts to increase again 18147.00 in 2006/07 and 26710.00 in 2007/08.

Table 4.5
Traded Share Quantity

| Year | $2003 / 04$ |  | $2004 / 05$ |  | $2005 / 06$ |  | $2006 / 07$ |  | $2007 / 08$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sector | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ |
| Commercial Bank | 2737.6 | 42.3 | 6416.4 | 34.8 | 5534.9 | 45.3 | 8700 | 47.9 | 11241.4 | 42.1 |
| Finance | 1202.2 | 18.6 | 1443.4 | 7.83 | 1957.7 | 16.0 | 2534.2 | 14.0 | 3094.3 | 11.6 |
| Insurance | 256.33 | 3.96 | 328.13 | 1.78 | 575 | 4.70 | 627.64 | 3.46 | 433.27 | 1.62 |
| Hotel | 61.04 | 0.94 | 98.17 | 0.53 | 392.18 | 3.21 | 81.7 | 0.45 | 158.07 | 0.59 |
| Mfg \& Processing | 1978.2 | 30.6 | 7603.1 | 41.3 | 59.8 | 0.49 | 82.92 | 0.46 | 1655.09 | 6.20 |
| Trading | 8.64 | 0.13 | 10.41 | 0.06 | 15.22 | 0.12 | 11.47 | 0.06 | 14.97 | 0.06 |
| Development Bank | 212.76 | 3.29 | 135.62 | 0.74 | 386.39 | 3.16 | 1360.5 | 7.49 | 2534.9 | 9.49 |
| Others | 11.72 | 0.18 | 2398.1 | 13 | 3301.5 | 27.0 | 4748.7 | 26.2 | 7578.02 | 28.4 |
| Total | 6468.5 |  | 18433 |  | 12223 |  | 18147 |  | 26710 |  |

Source: Nepal Stock Exchange Ltd

Commercial bank dominated the trading floor, as it captured the largest chunk of the total share trading. It accounted $42.3 \%$ in 2003/04 $34.81 \%$ in 2004/05, $45.3 \%$ in 2005/06 $47.9 \%$ in 2006/07 and $42.1 \%$ in 2007/08. Commercial bank the maximum share traded of 26710 shares of total shares traded in 2007/08 and lowest share traded of 6468.5 shares in 2003/04. Second position occupied the manufacturing and processing sectors whose percentage of share traded are $30.6 \%$ in 2003/04, $41.3 \%$ in $2004 / 05,0.49 \%$ in $2005 / 06,0.46 \%$ in $2006 / 07$ and $6.20 \%$ in $2007 / 08$. The highest share traded quantity was 7603.1 in 2004/05 and lowest share traded quantity of manufacturing and processing was 59.8 in 2005/06. The entire sector the highest share quantity share traded was in 2007/08 as 26710 and the lowest share traded was in $2003 / 04$ as 6468.5 .

Fig 4.5
Traded Share Quantity


The figure 4.5 of traded share quantity shows that in 2007/08 manufacturing and processing and commercial bank dominates the other sectors too as well as other sectors too. In 2003/04 the manufacturing and processing, commercial bank and hotel group dominates the other five sectors. But in 2006/07 finance groups dominates the other sector. The highest traded share quantity was in 2007/08 and the lowest traded quantity share was in 2003/04, which is shown in figure 4.5 .

### 4.6 NUMBER OF TRANSACTIONS

NEPSE has fixed the trading days and hours during which the members are allowed to enter the floor to make the transactions. NEPSE has fixed the board lot of 10 shares if the face value is Rs. 100 or the face value is Rs. 10. The transactions on regular trading should be done one board lot. The transactions of less than 10 shares are permitted only on odd lot trading hours. Thus, the number of transactions occurred during a certain period.

Table 4.6
Number of Transactions

| Year | $2003 / 04$ |  | $2004 / 05$ |  | $2005 / 06$ |  | $2006 / 07$ |  | $2007 / 08$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Sector | Value | Value | $\%$ | Value | $\%$ | Value | $\%$ | Value | $\%$ |  |
| Commercial Bank | 26000 | 30.4 | 64966 | 61.2 | 45886 | 50.8 | 42848 | 35.2 | 54314 | 36.4 |
| Finance | 47920 | 56.0 | 27576 | 26.0 | 28875 | 31.9 | 18879 | 15.5 | 30462 | 20.4 |
| Insurance | 8689 | 10.2 | 7340 | 6.91 | 6187 | 6.84 | 16203 | 13.3 | 3332 | 2.24 |
| Hotel | 549 | 0.64 | 671 | 0.63 | 510 | 0.56 | 393 | 0.32 | 911 | 0.61 |
| Mfg \& Processing | 163 | 0.19 | 252 | 0.24 | 233 | 0.26 | 135 | 0.11 | 96 | 0.06 |
| Trading | 51 | 0.06 | 49 | 0.05 | 66 | 0.07 | 42 | 0.03 | 108 | 0.07 |
| Development Bank | 2073 | 2.42 | 4836 | 4.55 | 4740 | 5.24 | 39413 | 32.4 | 53317 | 35.8 |
| Others | 88 | 0.10 | 556 | 0.52 | 3898 | 4.31 | 3898 | 3.20 | 6519 | 4.37 |
| Total | 85533 |  | 106246 |  | 90395 |  | 121811 |  | 149059 |  |

Source: Nepal Stock Exchange LTd.

Table 4.6 of number of transactions is shows that the over all banking sector has a highest transaction in the term of number. The number of transaction of commercial bank is 26000 ( $30.40 \%$ ), 64966 ( $61.15 \%$ ), 45886 ( $50.8 \%$ ), 42848 ( $35.2 \%$ ) and 54314 $(36.4 \%)$. Finance and Insurance as well as development bank encourage investing in these sectors. The number of transactions of trading group is the lowest than compare to other sectors. The lowest transaction is trading companies comparing to among all eight sectors.

Fig 4.6
Number of Transaction


Figure 4.6 shows that the transaction value was 26000 in the initial year 2003/04. In 2004/05 the commercial bank has highest transaction 64966 million but in 2005/06 decreases to 45886 as decreasing in 2006/07 it reached to 42848 as slightly increased in the term of number of transaction it reached to 54314 as increasing process in the period of 2007/08. Finance sector has 47920 in 2003/04, 27576 in 2004/05, 28875 in 2005/06 and 18879 in 2006/07 as highest transaction in the terms of number was 30462. In the term of no of transaction the insurance group has highest in 2006/07 and the lowest transaction was in 2007/08. Trading sector has a lowest no of transaction took place in NEPSE. Figure shows that banking sector, manufacturing and processing, finance sectors are highly attractive which encourage invest in these sectors.

### 4.7 BEHAVIOR OF NEPSE INDEX

Index is a device designed to measure the change in a group of related variable over a period of time. Indexes are used to determine the relationship between historical price and movements and economic variables and to determine the systematic risk for individual securities and portfolios.

Table 4.7
NEPSE Index during the Latest 5 Years (2003/04-2007/08)

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 205.35 | 237.43 | 290.56 | 382.24 | 739.53 |
| September | 206.83 | 234.11 | 296.98 | 394.25 | 885.50 |
| October | 207.65 | 232.44 | 307.22 | 408.38 | 878.86 |
| November | 205.66 | 238.92 | 300.54 | 486.19 | 897.29 |
| December | 201.57 | 238.29 | 302.78 | 514.42 | 984.53 |
| January | 211.39 | 247.41 | 309.04 | 513.34 | 803.69 |
| February | 208.87 | 265.97 | 341.05 | 511.81 | 756.76 |
| March | 196.34 | 284.34 | 337.52 | 480.99 | 709.40 |
| April | 205.22 | 294.29 | 361.58 | 513.69 | 736.46 |
| May | 207.41 | 279.90 | 371.74 | 541.38 | 833.18 |
| June | 218.65 | 281.15 | 375.14 | 591.65 | 937.46 |
| July | 222.04 | 286.67 | 296.78 | 378.76 | 678.97 |

*Share trading stopped due to strike of NEPSE employee on 26 July 2004.
*Share trading stopped on 1st, 2nd, 3rd due to 12 Nepalese hostage killed in Iraq on September 2004.

The NEPSE index hit the peak of prices in December at 984.53 points in the year 2007/08. In the beginning fiscal year 2003/04 July at 222.04 points then in 2004/05 it was improve 286.67 and continue to goes up in other fiscal year 2005/06, 2006/07 and 2007/08 regularly. Must remarkable year for NEPSE index was 2007/08 as 984.53 in December. In 2005/06 the NEPSE index was 1290.56 but it slump down in July 296.78. In 2006/07 the highest NEPSE index was 591.65 in June and decreased to 378.76 in July then after it starts to improve much better in 2007/08 comparing to other four years. The NEPSE index reflects the aggregate volatility of the share prices of the companies listed the peak prices. High volatility high will be risky. Standard deviation for NEPSE index 6.048 in 2003/04, 24.098 in 2004/05, 59.23 in 2005/06, 63.88 in $2006 / 07$ and 97.67 in 2007/08. The less risky year is 2003.04.

Fig. 4.7
Monthly Movement of NEPSE Index


Figure 4.7 of bahaviour of NEPSE index shows that from the first fiscal year in 2003/04 it started to increase regularly up to 2007/08. In 2007/08 figure shows that as increasing process slightly in NEPSE index till the end of observation period NEPSE index shows that as increasing trend but trend line shows that as decreasing process and no any sign of improvement in NEPSE index.

### 4.7.1 NEPSE INDEX OF COMMERCIAL BANK

Trading of commercial bank group the largest group at the NEPSE floor registered and increases of index up to 979.70 in December 2007/08 but it went up to 759.67 in July. Commercial bank in 2003/04 slightly decrease and went down to 196.01 in December but in March the commercial bank index slump down to 188.56 point. Which shown in Table 4.8.

Table 4.8
NEPSE Index of commercial Bank

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 200 | 237.43 | 426.39 | 311.05 | 824.91 |
| September | 204.03 | 234.11 | 443.78 | 316.67 | 995.52 |
| October | 205.54 | 232.44 | 463.22 | 333.16 | 951.46 |
| November | 203.75 | 238.92 | 562 | 325.48 | 952.23 |
| December | 196.01 | 238.29 | 582.02 | 328.31 | 979.7 |
| January | 211.46 | 247.41 | 566.88 | 334.9 | 785.9 |
| February | 208.12 | 265.97 | 544.01 | 380.62 | 730.56 |
| March | 188.56 | 284.34 | 501 | 374.9 | 690.48 |
| April | 203.43 | 294.29 | 555.2 | 410.17 | 732.07 |
| May | 210.03 | 279.90 | 591.03 | 423.04 | 834.76 |
| June | 227.68 | 281.15 | 553.41 | 422.81 | 960.78 |
| July | 231.97 | 286.67 | 524.28 | 322.47 | 759.67 |

Source: Nepal Stock Exchange Ltd.

Table 4.8 on NEPSE index of commercial bank shows that the decreasing year was 2003.04 then after it starts to increase regularly. In 2003/04 not much improvement in NEPSE index of commercial bank at the point of 197.53. 2004/05 the index of commercial bank slightly increasing process and went up to 304.64 in July. The NEPSE index of commercial bank risk is fluctuating. 13.83 in 2003/04, 26.86 in $2004 / 05,42.27$ in 2005/06, 37.61 in $2006 / 07$ and 51.25 in 2007/08. The more risky year is 2003/04 and less risky year is 2004/05 but investor can invest in the risky year it depends on the investor's attitude towards the risk.

Figure 4.8
Monthly Movement of Commercial Bank


NEPSE index of commercial bank shows as increasing trend but the trend shows that the index of commercial bank has slightly decreasing trend up to July 2007/08.

### 4.7.2 NEPSE INDEX OF FINANCE COMPANIES

According to the Nepal Stock Exchange Ltd Finance sector was in increasing process from its fiscal year July 2003/04 to July 2007/08 are 195.99 to 483.01 respectively. After commercial banks it is the highest group. Which shown in the table 4.9

Table 4.9
NEPSE Index of Finance Companies

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 204.57 | 208.86 | 229.52 | 263.75 | 503.88 |
| September | 204.95 | 207.8 | 229.3 | 271.62 | 550.06 |
| October | 199.65 | 208.53 | 232.76 | 274.45 | 714.01 |
| November | 199.48 | 205.12 | 238.94 | 283.82 | 791.44 |
| December | 193.64 | 208.47 | 246.54 | 329.65 | 1064.87 |
| January | 196.12 | 207.96 | 247.47 | 404.18 | 921.39 |
| February | 195.53 | 208.58 | 249.13 | 450.44 | 966.44 |
| March | 195.02 | 210.13 | 246.71 | 430.68 | 960.67 |
| April | 194.59 | 211.32 | 245.03 | 440.44 | 954.93 |
| May | 193.12 | 227.33 | 254.7 | 448.91 | 1103.4 |
| June | 194.49 | 227.62 | 259.27 | 464.05 | 1136.76 |
| July | 195.99 | 228.39 | 228.7 | 263.8 | 483.01 |

Source: Nepal Stock Exchange Ltd.

NEPSE index for finance 2003/04 as decreasing process went down to 193.32 to 208.86 in August as increasing process went up to 211.32 to 228.39 in July. Well the finance transaction was also in increasing and decreasing process. By comparing from its initial year it was increasing but in comparisons with monthly basis it was increasing as decreasing process. The standard deviation is 4.03 in 2003/04, 8.83 in 2004/05, 13.24 in 2005/06, 27.22 in 2006/07 and 61.16 in 2007/08. So the less risky year for the finance is the finance is the 2003/04 as well as year 2004/05.

Figure 4.9
Monthly Movement of Finance


Figure 4.9 the NEPSE index of finance shows that as decreasing trend and remains constant in 2003/04 to 20005 and slightly increases in 2005/06 and 2006/07 but the trend shows that the NEPSE index of finance sector is highly increase in 2007.08.

### 4.7.3 NEPSE INDEX OF INSURANCE COMPANIES

The NEPSE index for insurance had a highest in the year of 2003/04 as 245.38 in March and the lowest recorded as 337.62 in July. As increasing process it went up to 320.44 in the month of July in 2004/05 and increased regularly in other year. But the better improvement year is $2007 / 08$ then it slightly down to 657.65 in the month of July, Which shown in table 4.10.

Table 4.10
NEPSE Index of Insurance Companies

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 240.60 | 235.11 | 214.19 | 394.8 | 648.31 |
| September | 237.80 | 321.80 | 332.72 | 396.10 | 690.65 |
| October | 236.62 | 232.32 | 323.05 | 394.66 | 715.68 |
| November | 239.52 | 237.33 | 334.72 | 408.73 | 813.85 |
| December | 237.21 | 239.44 | 329.97 | 469.93 | 1035.06 |
| January | 236.19 | 238.64 | 331.69 | 529.14 | 820.26 |
| February | 235.15 | 239.76 | 343.59 | 638.83 | 769.80 |
| March | 237.32 | 258.09 | 344.19 | 607.45 | 725.83 |
| April | 245.38 | 311.97 | 346.41 | 576.08 | 733.54 |
| May | 244.29 | 301.97 | 356.37 | 530.59 | 769.21 |
| June | 236.83 | 311.23 | 370.33 | 573.55 | 827.23 |
| July | 237.62 | 320.24 | 332.92 | 387.84 | 657.65 |

Source: Nepal Stock Exchange Ltd.

Table shows that the highest month of NEPSE index of insurance was December recorded as 1035.06 in the year 2007/08 and the lowest month was August in the year of 2004/05 as 235.11. NEPSE index of insurance standard deviation is 3.20 in 2003/04, 5.42 in 2004/05, 8.62 in 2005/06, 18.89 in 2006/07 and 26.31 in 2007/08. Highest risky year for the NEPSE index of insurance sector is 2003/04 and less risky year is the 2004/05.

Figure 4.10
Monthly Movement of Insurance


Figure 4.10 show in initial year 2003/04 the highest index was 245.38 in April and the lowest index was 235.15 in the month of February. In the year 2004/05 increasing process starts regularly. But in 2007/08 it is highly increased which is shown in figure 4.10.

### 4.7.4 NEPSE INDEX OF HOTEL SECTORS

NEPSE index of hotel sector in initial year the month of July the 184.41 as increasing till at the end of October it reached to 187.76 and it slump down to 182.20 in November as decreasing and increasing process. Drastically fell down from 172.25 to 189.30 in the year of 2004/05. In the year of 2005/06 to 2006/07 as decreasing and increasing trend up to 242.55 in June but the hotel sector went down to 257.64 at the end of July 2007/08 is shows in table 4.11.

Table 4.11
NEPSE Index of Hotel Sectors

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| August | 189.67 | 189.30 | 179.34 | 179.62 | 276.45 |
| September | 188.23 | 188.53 | 177.62 | 179.42 | 281.72 |
| October | 187.18 | 188.15 | 177.62 | 179.03 | 281.14 |
| November | 182.20 | 187.39 | 177.90 | 185.07 | 279.60 |
| December | 187.76 | 188.53 | 177.90 | 187.47 | 420.59 |
| January | 184.40 | 172.25 | 181.26 | 193.42 | 412.79 |
| February | 181.81 | 172.63 | 183.55 | 215.49 | 412.02 |
| March | 181.43 | 176.08 | 182.88 | 235.00 | 412.01 |
| April | 181.81 | 177.04 | 179.23 | 229.60 | 402.87 |
| May | 187.85 | 176.28 | 181.14 | 238.71 | 401.93 |
| June | 182.11 | 177.23 | 180.77 | 242.55 | 373.95 |
| July | 184.41 | 178.00 | 179.54 | 180.77 | 257.64 |

Source: Nepal Stock Exchange Ltd.

Table 4.11 shows that the NEPSE index of hotels sector in the highest month of the year of hotel sector is 2007/08 December 420.59 and the lowest month of the year 2004/05 January as 172.25 . NEPSE index of hotel hit the volatility of the NEPSE index. In the initial year the standard deviation is 3.36 in 2003/04, 6.79 in 2004/05, 2.62 in 2005/06, 9.37 in 2006/07 and 19.85 in 2007/08.

Figure 4.11
Monthly Movement of Hotel


The figure 4.11 shows that 2003/04 and 2004/05 remains constant according to the figure. In 2005/06 it was decreased and highly increases in the year 2007/08.

### 4.7.5 NEPSE INDEX OF MANUFACTURING AND PROCESSING

NEPSE index for manufacturing and processing sector was the best as compared to other sector for the study period. It is recorded the highest in the month of January and lowest month of May in 2003/04. In 2004/05 increased in NEPSE index of manufacturing and processing went up to 276.96 in March. The highest in the month of index was June and the lowest month of index was at the end of July 276.38 during the year 2005/06. Index of manufacturing and processing index goes up and down as increasing and decreasing process in the year 2006/07 and 2007/08, which is shown in table 4.12.

Table 4.12
NEPSE Index of Mfg and Processing

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 261.97 | 265.27 | 291.74 | 316.82 | 347.74 |
| September | 256.15 | 263.79 | 177.62 | 314.69 | 350.19 |
| October | 259.27 | 268.13 | 177.62 | 313.68 | 350.19 |
| November | 251.63 | 267.42 | 272.31 | 314.69 | 350.19 |
| December | 265.45 | 272.07 | 274.42 | 319.82 | 350.19 |
| January | 267.96 | 274.39 | 274.42 | 322.36 | 360.96 |
| February | 266.78 | 276.08 | 283.77 | 335.09 | 392.75 |
| March | 265.98 | 276.96 | 291.08 | 334.95 | 413.23 |
| April | 265.92 | 276.80 | 289.81 | 329.42 | 411.15 |
| May | 250.43 | 276.29 | 292.34 | 331.06 | 418.82 |
| June | 252.28 | 276.45 | 297.41 | 342.29 | 418.82 |
| July | 255.58 | 276.50 | 276.38 | 303.65 | 348.63 |

Source: Nepal Stock Exchange Ltd.

Table 4.12 shows that over all the 2007/08 was the best year for the manufacturing and processing sector. In 2003/04 the highest index point was 265.98 and the lowest index point was 250.43 in May. At the end of July in 2004/05 as decreasing and increasing process it went down to 263.79 in September. In 2005/06 slightly Increase up to 297.41 in June and went up to 276.38 in the month of July. In 2006/07 and 2007/08 it highly increase up to 335.09 in February and 418.82 respectively. Among the eight sectors the manufacturing and processing sector is the best for the investor to invest. The standard deviations of manufacturing and processing sectors are 13.97 in 2003/04, 11.46 in 2004/05, 9.89 in 2005/06 and 27.32 in 2006/07 and 31.12 in 2007/08. Risk for the manufacturing sector is decreasing trend, which indicates the good sign for the investor. The risky year is 2005/06.

Figure 4.12
Monthly Movement of Manufacturing and processing


Figure 4.12 show that decreasing process in the year 2003/04 and slightly increase in 2004/05 and remain constant till year of 2005/06 but then starts to increase in the year of 2006/07 and 2007/08 the trend line shows that increasing trend.

### 4.7.6 NEPSE INDEX OF TRADING COMPANIES

NEPSE index of trading sector in 2003/04 recorded highest 103.58 in November and the lowest month was 94.29 in March as increasing trend went up to 123.20 in 2004/05 of July and remains constant till July 2005/06. In the year of 2006/07 and 2007/08 the NEPSE index for trading sector increase up to 155.37 in June and 212.55 in June respectively, which is shows in the table 4.13.

Table 4.13
NEPSE Index of Trading Companies

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ |  | $2006 / 07$ |  | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| August | 95.88 | 98.87 | 134.95 | 148.11 | 162.08 |  |  |
| September | 94.29 | 98.87 | 129.55 | 150.72 | 162.08 |  |  |
| October | 99.58 | 98.87 | 129.55 | 149.71 | 162.08 |  |  |
| November | 103.58 | 98.87 | 134.84 | 149.71 | 162.32 |  |  |
| December | 94.40 | 98.87 | 134.84 | 150.09 | 165.20 |  |  |
| January | 94.40 | 98.87 | 142.78 | 148.51 | 162.32 |  |  |
| February | 94.40 | 102.73 | 148.07 | 152.79 | 162.32 |  |  |
| March | 94.29 | 111.04 | 141.29 | 148.71 | 125.83 |  |  |
| April | 94.29 | 116.33 | 147.27 | 148.71 | 196.71 |  |  |
| May | 95.01 | 118.97 | 148.11 | 155.21 | 210.83 |  |  |
| June | 95.01 | 122.94 | 148.11 | 155.37 | 212.55 |  |  |
| July | 95.01 | 123.20 | 123.20 | 148.11 | 162.03 |  |  |

Source: Nepal Stock Exchange Ltd.

The table shown that in 2003/04 the highest month was November and the lowest month was April. In 2004/05 the highest month of NEPSE index of trading sector was 123.20 in July and remains constant till July 2005/06. In 2006/07 the index for trading sector starts to increase and the highest index was 155.37 in June and lowest index was 148.11 in July. In 2007/08 at the point of 162.08 till the month of October and slightly increase from the month of November as increasing process till February but it slightly decrease in March and again goes up to 212.55 in June. The standard deviations are 2.84 in 2003/04, 10.34 in 2004/05, 13.22 in 2005/06, 15.24 in 2006/07 and 18.17 in 2007/08. This shows that the year of 2003/04 is the risky year for the NEPSE index of trading sector.

Figure 4.13
Monthly Movement of Trading


Figure 4.12 show that the NEPSE index for trading sector is in increasing process from the initial year 2003/04 to till the year 2007/08. According to the figure it can easily seen that the increasing trend from the first year till to the last year.

### 4.7.7 NEPSE INDEX OF DEVELOPMENT BANK

Development bank has listed in Nepal Stock Exchange in the year of 2001/02 in the month of January. But here we have applied latest five-year's related NEPSE index data of development bank. The development bank of NEPSE index took place in the trading floor with listed three companies. According to the data, NEPSE index of development bank increases from the initial year till to 2007/08, which shown in table 4.14.

Table 4.14
NEPSE Index of Development Bank

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| August | 244.12 | 199.19 | 225.16 | 313.86 | 631.01 |
| September | 241.55 | 196.90 | 216.30 | 317.27 | 752.23 |
| October | 237.06 | 197.19 | 221.55 | 322.69 | 1046.18 |
| November | 239.55 | 197.95 | 226.25 | 479.08 | 1278.63 |
| December | 241.35 | 203.22 | 228.27 | 484.93 | 1720.76 |
| January | 240.55 | 198.63 | 246.39 | 529.79 | 1497.91 |
| February | 240.01 | 212.66 | 228.50 | 526.62 | 1062.17 |
| March | 240.17 | 215.95 | 272.71 | 477.58 | 1008.19 |
| April | 190.17 | 238.82 | 292.53 | 442.95 | 938.15 |
| May | 188.50 | 233.69 | 269.83 | 483.90 | 996.37 |
| June | 190.37 | 235.21 | 278.16 | 511.42 | 1136.76 |
| July | 190.03 | 237.86 | 250.05 | 287.08 | 513.44 |

Source: Nepal Stock Exchange Ltd.

Development bank of NEPSE index in the initial year of 2003/04 highest month was August 244.12 and the lowest month was May 188.5. In 2004/05 highest month was 238.82 in April and lowest month was 196.90 in September as 2005/06 increasing process went up to 292.53 in the month of April. In 2006/07 the NEPSE index of development went up to 529.79 in the month of January but decrease in the month of July as 287.08 . The standard deviation of the NEPSE index Development bank has 25.16 in 2003/04 and decreases 17.66 in 2004.05 and slightly increase 19.87 in $2005 / 06,28.37$ in 2006/07 and then highly increase 53.22 in 2007/08. The risky year is $2004 / 05$.

Figure 4.14
Monthly Movement of Development Bank


Development Bank in NEPSE index shows that remains constant till the year of 2003/04 and 2005/06 and slightly fell in 2004/05 but it shows that increasing trend in the year of 2006/07 but trend line shows that highly increasing in the year of 2007/08.

### 4.7.8 NEPSE INDEX OF OTHER SECTORS

NEPSE index for other sector in April and May went up to 143.94 in the year of 2003/04 but slightly decrease and went down to 139.79 in December. In 2004/05 it was highly increase up to 354.67 in the month of February. Again in 2005/06 it was increased up to 393.76 in June. In 2006/07 the month of June as highly increase from 411.27 to 807.52 that was highly increasing and decreasing trend. But in 2007/08 is also in increasing trend, which shown in the table 4.15.

Table 4.15

## NEPSE Index of Other Sectors

| Month | $2003 / 04$ | $2004 / 05$ | $2005 / 06$ | $2006 / 07$ | $2007 / 08$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| August | 142.25 | 145.24 | 328.74 | 411.27 | 818.12 |
| September | 141.09 | 145.58 | 336.36 | 416.2 | 818.12 |
| October | 140.31 | 144.98 | 347.78 | 440.1 | 818.12 |
| November | 140.31 | 144.46 | 328.74 | 578.56 | 818.12 |
| December | 139.79 | 142.91 | 319.85 | 690.4 | 818.12 |
| January | 140.31 | 329.28 | 339.4 | 647.4 | 818.12 |
| February | 141.35 | 354.67 | 345.39 | 663.8 | 818.12 |
| March | 141.35 | 308.33 | 338.79 | 651.59 | 817.47 |
| April | 143.94 | 335.68 | 359.76 | 668.59 | 817.47 |
| May | 143.94 | 335.63 | 363.49 | 731.19 | 817.47 |
| June | 142.65 | 329.28 | 393.76 | 807.52 | 817.47 |
| July | 142.65 | 347.65 | 325.56 | 406.47 | 817.47 |

## Source: Nepal Stock Exchange Ltd.

Table 4.15 NEPSE index of other sector is shown that in 2003/04 is the highest month was 142.65 June and July than the lowest month is December 139.79. In 2004/05 February 354.67 is the highest month of NEPSE index of other sector than the lowest is 142.91 in December. In 2005/06 from August to July it was seen decreasing and increasing trend and the highest month was 347.78 October and the lowest month 319.85 in December. In 2006/07 from August keep started to highly increased till the month of June and in the end of July it was went down 406.47 but this year was in increasing year. In 2007/08 the index is increase constantly in same points. This is good sign for the other sector. But calculation of the standard deviation shows that the other sector is more risky than compare to other sectors like commercial bank, Insurance, Manufacturing and Processing, Hotel Sector, Development bank, Trading and Finance sector. Compare to other sectors it is too risky because in 1.42 in 2003/04, 98.32 in 2004/05, 99.25 in 2005/06, 109.12 in 2006/07 and 123.83 in 2007/08. For other sectors less and good year is 2003/04 which minimal risk is only 1.42 . Higher risky year is 2007/08, which value is 123.83 .

Figure 4.15
Monthly Movement of Other


The other sector is better than the other group because the sector are Increasing trend which shown by the trend line compare to other sector is better. From the initial year 2003/04 trend of NEPSE index increase slightly in year 2004/05, 2005/06 and then after highly increase till to 2007/08. In 2003/04 as increasing process went up to till the year of 2007/08, which is shown in figure. Even trend shows that the other sector is increasing trend.

### 4.8 MAJOR FINDINGS OF THE STUDY

The major findings of this study are as follows:

- 4.8.1 There are altogether 146 companies listed in stock exchange. Out of these are 17 Commercial Bank, 57 Finance, 17 Insurance, 4 Hotels, 18 Manufacturing and Processing, 4 Trading, 24 Development Bank and 5 others. The NEPSE licensed to 11 dealers (primary) and 2 dealers (Secondary market) up to 2007/08.
- 4.8.2 The number of listed companies is in increasing trend. The number of the companies in the initial year was 114 in 2003/04 and 125 in 2004/05 went up to 112 in 2005/06, 129 in 2006/07 and 146 in 2007/08.
- 4.8.3 The annual turnover is fluctuating. It is more than doubled in 2007/08. In 2003/04 it was sharp decline and in 2004/05 increased with reaching the turnover Rs 4507.7 million, in 2005/06 slightly decreased Rs 3451.4 million and then increased Rs 8360.1 million in 2006/07 and Rs 18780.6 million in 2007/08.
- 4.8.4 Market capitalization value is in erratic trend in each group in each year. The proportion of market capitalization of commercial bank is the highest among eight sectors. Its proportion is $65.54 \%, 67.28 \%, 72.0 \%, 74.0 \%$ and $70.7 \%$ in $2003 / 04$, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Commercial bank commands a lion's share in the NEPSE trading floor.
- 4.8.5 In the term of traded share quantity commercial bank capture the largest chunk of the total share trading. Trading sector has lowest share traded quantity comparing other sectors.
- 4.8.6 The total number of transactions increasing trend during the study period. In total, the number of transactions on commercial bank is the highest. Second position occupied the finance in the term of number of transactions. Thus, the investors are encouraged to invest in these sectors.
- 4.8.7 NEPSE index reflects the aggregate volatility of the share price of the companies listed.


## CHAPTER- V

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 SUMMARY

Nepal is one of the least development countries in the world; Nepal launched planned economic development more than four decades ago. Recently she has adopted the path of economic development through liberalization. The capital market institutions are engaged in mobilization of savings into the productive investment activities. So to develop the economy of the country an efficient and effective capital market is a vital importance. The basic objectives of this study are concern to the concept of capital market, analyze its performance and price behavior of shares of listed companies and role of NEPSE index.

The second chapter presents the theoretical and research review. In theoretical there are two approaches technical analysis and fundamental of security analysis. Technical analysis and Fundamental of security analysis. Technical analysis involves the study of the past volume price fluctuations where as fundamental analysis approach, the security analyst the factor economic influences, industry factors and pertinent company information such as product and management in order to calculate an intrinsic value of the firms security. In an efficient market, there are three forms (a) weak form (b) semi-strong and (c) strong form. In weak form, stock price behavior can be test by using parametric (Serial Correlation) and non-parametric (run tests).

Research Methodology and Presentations of data deals with the methods of analysis. This chapter presents the research design of the study. This study covers five years time from 16 July 2003 through 16 July 2008. In Nepal Stock Exchange there are eight sectors listed. So, all eight sectors (1) Commercial Bank, (2) Finance Companies, (3) Insurance Companies, (4) Hotel, (5) Manufacturing and Processing (6) Trading, (7) Development Bank and (8) Others have been taken as a sample for the study. Data used for the study purpose are based on the secondary data, primary data
and major sources of data are NEPSE and SEBON. For analysis of data, percentage method, bar diagram has been used. A statistical tool like standard deviation has been used to measure the volatility of behavior of NEPSE index. Calculation of standard deviation is a positive relationship between risks varies from investor to investor. A risk aversion is the approach where the investor doesn't want to bear additional risk and wants secured and safe return. The level of risk is not so easy to measure.

The number of listed companies is in increasing trend. The numbers of listed companies were 114 in 2003/04, 125 in 2004/05, 112 in 2005/06, 129 in 2006/07 and 146 in 2007/08.

The annual turnover is fluctuating and market capitalization value is increasing trend. The proportion of market capitalization of commercial bank is highest among eight sectors.

Total number of transactions increasing trend during the study period and investors are encouraged to invest in commercial bank and finance sectors.

The NEPSE index reflects the aggregate volatility of the share prices of the companies listed. Viewpoint of standard deviation 6.05 in 2003/04, 24.09 in 2004/05, 59.23 in 2005/06, 63.88 in 2006/07 and 97.67 in 2007/08. In 2003/04 is the less risky year for the NEPSE index.

### 5.2 CONCLUSION

The following conclusions have been derived from the major of findings of this study.

- 5.2.1 Capital market is a vital importance to develop the economy the country, an efficient and effective stock market. The growth of institutional, growth of primary and secondary market and increase in listed companies it implies that the capital market in Nepal is in developing process.
- 5.2.2 The number of transactions, traded amount and market capitalization suggest that the Banks and Finance companies as companies as compared to others are in better position. They look less affected than the performance of Hotel and Other companies.
- 5.2.3 Commercial banks total annual turnover stood at 136.04 by the end of fiscal year. 2007/08 with those shares accounting for $70.7 \%$ of the total market capitalization during the fiscal year. These indicators reveal that the share of commercial banks have a dominant role in determining the key indictors of the Nepalese Stock Exchange. It is thus unsurprising that commercial banks have continued to appear as the most attractive investment alternatives since the opening of the floor.
- 5.2.4 Market performance of NEPSE index shows the decreasing trend and no any sigh of improvement of NEPSE index. NEPSE index of commercial bank is fluctuating. Volatility of the NEPSE index hit the peak 13.83 in 2003/04, 26.86 in $2004 / 05,42.27$ in 2005/06, 37.61 in 2006/07 and 51.25 in 2007/08. The manufacturing and processing and finance sector is less risky according to standard deviation. Investors are suggested to invest in other sectors too but it depends on the investors' attitude towards the risk. If investors is ready to assume more risk in to obtain a higher expected monetary value. So investors are encouraged to invest in manufacturing and processing and finance sector too.


### 5.3 RECOMMENDATIONS

- The performance of commercial bank, finance companies and manufacturing and processing companies is better than the other sectors so it is recommended to the investors to invest there investment in these sectors.
- It is also recommended to the concerned regulatory body to carry out or helps to carry out further research on the specifics of market efficiency to develop an efficient capital market.
- Statistical tools like serial correlation and run test, filter rules technique is not carried in this study so the up-coming researchers are suggest carrying out study by applying these tools.


## Appendix 1

Sector-wise Transaction as on 16 th July 2003/04

| Name of Sector | Listed <br> Companies | Annual <br> Turnover | Traded <br> Share <br> Quantity | No of <br> Transaction | Market <br> Capitalization |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Commercial Bank | 11 | 463.41 | 2737.61 | 26000 | 27147.42 |
| Finance | 41 | 165.09 | 1202.2 | 47920 | 2911.75 |
| Insurance | 13 | 36.86 | 256.33 | 8689 | 2549.3 |
| Hotel | 4 | 2.84 | 61.04 | 549 | 2391.39 |
| Manuf \& Processing | 29 | 1031.6 | 1978.22 | 163 | 4644.59 |
| Trading | 8 | 11.83 | 8.64 | 51 | 490.37 |
| Development Bank | 4 | 32.33 | 212.76 | 2073 | 796.85 |
| Others | 4 | 0.29 | 11.72 | 88 | 493.09 |
| Total | 114 | 1744.25 | 6468.52 | 85533 | 41424.76 |

Source: Nepal Stock Exchange.

## Appendix 2

Sector-wise Transaction as on 16 th July 2004/05

| Name of Sector | Listed <br> Companies | Annual <br> Turnover | Traded <br> Share <br> Quantity | No of <br> Transaction | Market <br> Capitalization |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Commercial Bank | 14 | 4021.85 | 6416.4 | 64966 | 38547.1 |
| Finance | 44 | 216.37 | 1443.36 | 27576 | 3471.5 |
| Insurance | 14 | 67.62 | 328.13 | 7340 | 3659.86 |
| Hotel | 4 | 4.48 | 98.17 | 671 | 1016.45 |
| Manuf \& Processing | 29 | 114.9 | 7603.14 | 252 | 4585.66 |
| Trading | 8 | 7.99 | 10.41 | 49 | 802.04 |
| Development Bank | 7 | 22.01 | 135.62 | 4836 | 1049.07 |
| Others | 5 | 52.48 | 2398.11 | 556 | 4187.73 |
| Total | 125 | 4507.7 | 18433.34 | 106246 | 57319.41 |

Source: Nepal Stock Exchange.

## Appendix 3

Sector-wise Transaction as on 16 th July 2005/06

| Name of Sector | Listed <br> Companies | Annual <br> Turnover | Traded <br> Share <br> Quantity | No of <br> Transaction | Market <br> Capitalization |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Commercial Bank | 14 | 2696.3 | 5534.9 | 45886 | 68841.2 |
| Finance | 44 | 305.85 | 1957.7 | 28875 | 4930.63 |
| Insurance | 14 | 129.9 | 57 | 6187 | 4852.19 |
| Hotel | 4 | 19.17 | 392.18 | 510 | 2393.61 |
| Manuf \& Processing | 29 | 17.19 | 59.8 | 233 | 4619.2 |
| Trading | 8 | 15.8 | 15.22 | 66 | 737.39 |
| Development Bank | 7 | 82.76 | 386.39 | 4740 | 1227.49 |
| Others | 5 | 183.88 | 3301.5 | 3898 | 8012.2 |
| Total | 125 | 3450.85 | 11704.69 | 90395 | 95613.91 |

## Appendix 4

Sector-wise Transaction as on 16 th July 2006/07

| Name of Sector | Listed <br> Companies | Annual <br> Turnover | Traded <br> Share <br> Quantity | No of <br> Transaction | Market <br> Capitalization |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Commercial Bank | 14 | 5563.5 | 8700 | 42848 | 138086.4 |
| Finance | 44 | 713.57 | 2534.2 | 18879 | 11491.4 |
| Insurance | 14 | 204.97 | 627.64 | 16203 | 7959.78 |
| Hotel | 4 | 7.04 | 81.7 | 393 | 1935.59 |
| Manuf \& Processing | 29 | 24.27 | 82.92 | 135 | 3760.28 |
| Trading | 8 | 10.42 | 11.47 | 42 | 787.4 |
| Development Bank | 7 | 577.56 | 1360.5 | 39413 | 5980.8 |
| Others | 5 | 1258.8 | 4748.7 | 3898 | 16503.02 |
| Total | 125 | 8360.13 | 18147.13 | 121811 | 186504.67 |

Source: Nepal Stock Exchange.

## Appendix 5

Sector-wise Transaction as on 16 th July 2007/08

| Name of Sector | Listed <br> Companies | Annual <br> Turnover | Traded <br> Share <br> Quantity | No of <br> Transaction | Market <br> Capitalization |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Commercial Bank | 14 | 13822.1 | 11241.4 | 54314 | 218264.2 |
| Finance | 44 | 2307.53 | 3094.3 | 30462 | 27113.59 |
| Insurance | 14 | 264.86 | 433.27 | 3332 | 10897.16 |
| Hotel | 4 | 27.67 | 158.07 | 911 | 3484.13 |
| Manuf \& Processing | 29 | 343.44 | 1655.09 | 96 | 6576.18 |
| Trading | 8 | 33.65 | 14.97 | 108 | 686.73 |
| Development Bank | 7 | 1981.05 | 2534.9 | 53317 | 15619.36 |
| Others | 5 | 0.29 | 7578.02 | 6519 | 26128.93 |
| Total | 125 | 18780.59 | 26710.02 | 149059 | 308770.28 |

Source: Nepal Stock Exchange.

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