

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Nepal is one of the smallest, poorest and least developed countries in the world. It is a land-locked country with 500km length and open border with India. Approximately 38% of Nepalese people are living below poverty line. There is always shortage of capital for the development activities. Per capita income of the Nepalese people is very low, while their propensity to consume is very high. Due to low income their saving is very low and capital formation is very low.

In a simple sense, an investment is a commitment of money that is expected to generate additional money. The word investment brings forth vision of profit, risk, speculation and wealth. It is the purchase of real as well as paper assets of company to earn profit in future with taking risk “Investment may be defined as the purchase by an individual or institutional investor of a financial or, real asset that produces a return proportional to the risk assumed over some future investment period” (Amiling, 2006).

Security is a piece of paper evidencing the investor's right to the assets. It is the legal representation of the right to receive prospective future benefits, understand condition and to acquire or, sell ownership interest. Share, bond, preference stock, T-bill, commercial paper etc are securities.

“Security market is the market where financial instruments are traded. It brings together buyers of the securities and holders of the securities and facilitates transaction between them” (Bhattraai, 2008). There are various types of security markets like money and capital market, primary and secondary market. Money market refers to that financial market in which securities with a short term (one years or less) and high liquid debt securities are traded.

Capital market is a financial market in which long term securities are traded. Securities having life spans of more than one year are traded in capital market. Long-term financial instrument such as stocks issued by corporation are traded in capital market. Capital market can be categorized into primary and secondary market. The transaction of securities issued for the first time takes place in the primary market "The market in which new securities are originally sold to investment" (Carrado and Jordon). The market where the existing and pre developed securities are bought and sold in the secondary market. It provides liquidity to the purchase of the securities. Secondary market can be regarded as the center to convert securities to cash immediately. "The market in which previously issued securities trade among investors" (Carrado and Jordon). There are two types in the secondary market which are organized exchange and over the counter market.

Capital market began with flotation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937. Institutional development of securities market in Nepal started from the year 1976. Security Exchange Centre (SEC) was established under the company Act Exchange Centre (SEC) was established under the company Act with Joint Capital contribution of Nepal Rastra Bank and Nepal Industrial Centre was to mobilize public saving and encourage the people the participate in the ownership to industries and business enterprises. In 1993, with a view to reform the capital market, Government of Nepal converted SEC into Nepal Stock Exchange Ltd. (NEPSE) along with the formation of Securities Exchange Board. It is a non-profit making organization operating under Security Exchange Act, 1983. The 27<sup>th</sup> AGM on 5 June 2009 decided to distribute 20% cash dividend from the profit of fiscal year 2007/08. This is the first time NEPSE has announced cash dividend. The decision of 26th AGM converted NEPSE into a profit making organization from non-profit making organization. Brokers and market makers operate on the trading floor as per securities exchange act, rules and by laws of NEPSE. NEPSE started its trading operation on 13th January 1994 through its licensed members. The objectives of NEPSE is to provide free

marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor through member, market intermediaries such a broker, market maker etc. NEPSE is a trading institution where as SEBO is the regulatory body. NEPSE is a security market in Nepal. There are so many companies operating in Nepal. Among them 26 commercial banks, 63 development banks 77 finance companies, 15 micro credit development banks, 16 saving and co-operatives 21. Insurance companies and 45 non-government organization Janata bank, megha bank and commarge and Trust bank are is going to convert into commercial bank soon. (Kantipur National Daily, 19 November, 2009).

In the fiscal year 2008/09 with the listing of 17 new companies the total number of listed companies remained to being while it was 142 in the fiscal year 2007/08. Out of them, 21 Commercial Banks, 29 Development Banks, 61 Finance Companies, 17 Insurance Companies, 4 Hotel, 18 Mfg and processing companies, 4 Trading Companies and 5 others companies are listed in NEPSE. (Annual Report of SEBON, 2008/09)

## **1.2 Focus of the Study**

Capital market helps to mobilize the financial resources and efficiently channel to productive investment. Capital market consists of securities market and non-securities market. Securities market implies mobilization of the funds through issuance of the securities like share, bonds and debentures. The securities available in the market can be in the form ownership securities that common stock and debt securities issued by corporate body and government as well as hybrid security that is preferred stock and derivative securities (option, warrant, right, future etc.) These securities traded in the market are generally negotiable and hence can be traded in the secondary market. Non-securities market refers to the mobilization of the financial resources by the financial institutions in the form of deposits and loans.

Stock market acts as a part of the capital market and can provide major source for the investments in the economic development. Stock market is an

institution of paramount importance in the economic life of any country. In fact private ownership of business and industry would be inconceivable in the absence of a facility which enables such share ownership right to be bought, transferred and converted into cash. It is the stock exchange that provides liquidity to private investment in corporate enterprises. Stock market is a secondary market a trading market where the securities are traded. The stock price efficiency occupies an important place in financial management. If there are certain imperfections in the stock markets, wise investor attempts to utilize them to achieve a better return. This perfection has no rational significance in a world where shares are efficiently priced. In efficient market share price should adjust randomly upwards with respect to the new information. Stock market efficiency cannot be tested directly. However, by postulating some security price behavior, one can have some idea about market efficiency. History indicates that much time and effort have been devoted in the field of financial research to investigate the movement of share price. Thus, this study is focused on the Behavior of Nepal Stock Exchange Index.

### **1.3 Statement of the Problems**

The Nepalese capital market has been passing through a transactional phase over the past few decades. A break through was achieved in the development of stock market in Nepal, when the security Exchange Centre was converted into NEPSE in 1993. Stock market provides investors good investment opportunity with fair return and instant liquidity with minimum risk. It helps to mobilize financial resources for the investment, in turn further develop the stock market. Most of the investors are unknown about risk and return. They have lack of knowledge about the investing policy and modern business principles that is why they cannot select the right stock at right time. The investors are confused which stock is suitable. Thus this study is focused on the following specified problems.

) What is the trend of Listed Companies?

- ) What is trend of annual turnover?
- ) What is the trend in market capitalization?
- ) What is the behavior of NEPSE Index?

#### **1.4 Objective of the Study**

This study aims to examine the efficiency of the behavior of NEPSE index. The specific objectives of the study are as follows:

- ) To analyze the trend of listed companies during the five fiscal years.
- ) To analyze the trend of sector-wise annual turnover.
- ) To analyze the trend of market capitalization.
- ) To analyze the trend of NEPSE index.

#### **1.5 Significance of the Study**

There are various factors that cause fluctuation of stock price in the market, there are mainly two factors, such economic and non-economic factors. The most fundamental factor in stock price fluctuation lies change in corporate earning interest rate and business cycle trends contribute to make up the in economic factors, political changes, administrative changes, change in weather and other natural conditions. The stock price is directly affected buy the volumes of transaction, institutional investors etc. Although margin transactions increase purchase whose stock price is going up, once the price begins to fall they became selling factors and accelerate price decline.

The listing of shares in stock exchange center and their trading in the stock market is not long. The stock market has been providing capital for investment in industrial productive sector, financial sector, service sector and other. The successive price change of the shares depended on their past values. There exist trends or pattern in the price movement which provides information about nature of securities. So trend analysis will be helpful for investors to make profitable investment.

## 1.6 Limitation of the Study

This study is simply for the partial fulfillment of the requirement of the Degree of master in Business Studies. Nepal Stock Exchange consists of nine sectors. This study is based only on these nine sectors to study the behavior of the Nepal Stock Exchange. There are so many limitation of the study which is as follows:

- ) The whole study is based on secondary data only so the validity of the study depends on the reliability of the data.
- ) The study covers five years from F/Y 2004/05 to 2008/09
- ) The study is focused on the sector wise analysis but not individual company.
- ) Thus study is simply for the partial fulfillment of M.B.S. degree and prepared within limitation of time and resources, which may weaken adequacy of the study.
- ) This study do not cover every aspects of NEPSE.

## 1.7 Organization of the Study

The study has been presented according to research format prescribed by the faculty of management of masters of business studies. The body of the report is broadly classified into five chapters as:

- ) **Introduction:** The first chapter deals with the introductions framework of the study. This includes background of the study, focus of the study, statement of the problem, objective of the study, significance of the study, limitation of the study and organization of the study itself.
- ) **Review of Literature:** The second chapter includes the review of literature available and review of related theoretical background of the relevant field of study. It includes review of literature, where issue, published and unpublished articles, books, thesis, journals, newspapers etc are reviewed.

- ) **Research Methodology:** The third chapter explains the research methodology used or the purpose of the study, which includes research design, source of data, data gathering procedure, population and sample size of the study, data processing procedure and financial as well as statistical tools available and the limitation of the methodology.
- ) **Presentation and Analysis of Data:** The fourth chapter which is the important chapter of the study, will include data classification analysis and interpretation and scoring the empirical findings for this purpose various analytical tools are used.
- ) **Summary, Conclusion and Recommendations:** The fifth chapter contain findings, summary and conclusions derived from the study is present. Depending upon the findings recommendations for further improvement is prescribed.

*Bibliography and appendix are presented at the end.*

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter devotes to review some of the existing literature concerning behavior of Nepal Stock Exchange Index. In this regard, various books, journals and articles concerned to this topic have been reviewed. The first part of the chapter deals with the theoretical review of the study and the second part is concern with the review of articles, journals and dissertation.

#### **2.1 Theoretical Review**

This section mainly focus on investment, security, security market, security market in Nepal, Security Board of Nepal, Nepal Stock Exchange, security analysis and its types and efficient market theory.

##### **2.1.1 Investment**

"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 et al., 2005).

"An investment is a commitment of funds made in the expectation of some positive rate of return. If the investment is properly undertaken, the return will be commensurate with the risk the investor assumes." (Fisher and Jordan, 2000).

"We shall define an investment as the commitment of current funds in anticipation of receiving a larger future flow of funds. The investor hopes to be compensated for forgoing immediate consumption, for the effects of inflation, and for taking a risk" (Hirt and Block, 2003).

"Investment in its simple form means employing money to generate more money in future. It is the sacrifice of current rupees for future rupees. Return is the primary motive of investment, but it always entails some degree of risk. Buying common stock, bonds of a company, depositing money into bank account, buying a piece of land, gold or silver are examples of investment. All these examples involve



sacrifice of current rupees in expectation of future return. Hence, they are investments. The main objective of investment is to maximize the wealth of an investor” (Shrestha et al., 2003).

Investment is the sacrifice of fund today with the hope of achieving additional income in future. It involves the commitment of resources that have been saved or put away from current consumption for the future. Investment involves the sacrifice of current rupees for future rupees. The sacrifice takes place in present that is certain and reward comes in future, which is uncertain. So, every investment involves risk factor because future is uncertain and risk comes with uncertainty. Investor can invest the fund in two types of assets. They are real assets (Land and Building, Plant and Machinery, Equipment and Tools, Inventory etc) and financial assets it means paper assets (Shares, Debentures, Government Bonds, Mutual Funds etc), which represents indirect claims to real assets.

Every investment involves uncertainties that make investment return risky. Some sources of uncertainty that contribute to investment risk are - interest rate risk, inflation risk, default risk, liquidity risk, call ability risk, convertibility risk, political risk and industry risk.

### **2.1.2 Forms of Investment**

There are two categories of assets-financial assets and real assets. Accordingly there are two forms of investment. (Thapa et al., 2006).

1. Financial Investment
2. Real Investment

Investment in financial assets like common stocks, bonds etc are called financial investments. Financial assets represent a financial claim. It is an asset that is usually documented by some forms of legal representation. Although financial assets are typically represented by tangible certificates of ownership, the financial asset itself is intangible. They are also called securities. Financial assets themselves do not directly possess productive capacity. Financial assets can be viewed as claims to the income generated by real assets. So values of financial assets are derived from the value of underlying assets. Financial assets are also called "paper assets".

A real asset represents an actual tangible asset that may be seen, felt, held or collected e.g. real estate, gold etc. Investment in such tangible asset is called real investment. Real assets have productive capacity. The capital formation is the direct

outcome of this productive investment.

### **2.1.3 Security**

Security is a piece of paper evidencing the investors right to the assets. It is the representation of the right to receive prospective future benefits, understand condition and to acquire or, sell ownership interest. Share, bond, debenture, preferred stock, T-bills, commercial papers derivatives etc are securities. Various types of securities are uses in Nepalese listed companies with traded in security market. Securities that may be transferred one investor to another investor and it will go all its rights and conditions.

“A security is a document that evidences specific claims on a stream of income and/or to particular assets” (Francis, 1986).

"Security is a legal document that shows an ownership interest. In other words, security is a piece of paper evidencing the investors' right to the asset. It is a legal representation of the right to receive prospective future benefits under stated condition and to acquire or sell ownership interest. Shares, bonds, preferred stock; T-bill, commercial paper etc are the example of securities” (Thapa et al., 2006).

“Securities means shares, stock, bond, debentures or debenture stocks issued by the body corporate or certificates related to collective investment schemes or loan certificates, saving certificates or bonds issued by the government or that issued by the corporate body under the guarantee of the government and this word shall also mean other securities designated by the Board to be tradable or transferable through Stock Exchange or the rights and entitlements relating to the securities” (Securities Registration and Issue Regulation, 2008).

"Shares, stocks, bonds, debentures, debenture stocks issued by an corporate body or a certificate of unit saving scheme or collective saving scheme (mutual fund) or transferable certificate of deposits issued by a corporate body in accordance with laws, and the word also include the securities or receipt of deposit (pledge) of such securities and interest in securities prescribed by Government of Nepal by publishing notification in the Nepal Gazette" ([www.nrb.org.np](http://www.nrb.org.np)).

Simply, security is a legal document that shows the ownership interest. It has the right to receive prospective future benefits under stated terms and conditions.

There are two types of security Buyers which areas follows (Kuchhal, 1998)

### **1. Institutional Investors**

They may be further be divided into two categories. First, the private institutional investors. Which consists of two types of investor; and they can be differentiated on the basis of investment of their funds: 1. Private institutional investors which invest on their own account. Such as commercial banks, life insurance companies, investment trusts, and commercial and industrial concerns possessing surplus, i.e. corporate saving; and 2. Private institutional investors which invest on behalf of their clients and/ or do not purchase corporate securities on a permanent investment basis, such as underwriting houses; issues house and investment bankers or, trustee companies, secondly, the public institutional investors which includes various government agencies engaged directly or, indirectly in the financing of private enterprises. (Such as the Industrial Finance Corporation of India, State Finance Corporations, National Industrial Development Corporation etc.)

### **2. Individual Investors**

Individual investors of securities are great number legion they may be classified into three broad categories. 1. Individuals who are affiliated with the issuing company they may be its old shareholders, creditors, customers and employees. 2. Individuals who are not affiliated with the issuing corporation. Such as persons are usually those who have a surplus of income over expenditure to use as a basis for income. They may be regarded as real investors. 3. Speculators who buy shares with an idea to gain by probable capital appreciation or, depreciation in the value of shares.

#### **2.1.4 Security market**

A security market is the Mechanism which brings together buyer and seller of financial assets in order to facilitate the trading of securities. Over the counter market, New York Stock Exchange, Cikago Board Trade. American Stock Exchange, Nepal Stock Exchange are examples of security market. Security market help to flow the fund from saver to the demander in the economy. So it has to mobilize fund in the economy. There are so many function of security market which

are price discovering provision of liquidity, minimization of transaction cost, saving mobilization trade promotion, Increase employment opportunities and provide financial assistance.

“Security market is a broad term embracing a number of markets in which securities are brought and sold” (Fisher and Jordan, 2000).

“A security market or financial marker can be defined as a mechanism for bringing together buyers and sellers of financial assets in order to facilitate trading. One of their main functions is “price discovery,”-that is, to cause security prices to reflect currently available information. The more quicker and accurately price discovery is achieved, the most efficiently financial markets will direct capital to its more productive opportunities, Thereby lending to greater improvement in public financial assets that were issued at some previous point in time” (Sharpe et al., 2006).

“A security market (or financial market) can be defined as a mechanism bringing together buyers and sellers of financial assets in order to facilitate trading. Alternatively, security market is a place or places where securities are brought and sold, the facilities and people engaged in such transactions, the demands for and availability of securities to be traded, and the willingness of buyers and sellers to reach agreement on sales” (Thapa et al., 2006).

Hence, security market is the mechanism to bring together buyers and sellers of the securities to facilitate the exchange of financial assets.

### **Classification of security market**

1. On the basis of types of securities brought and sold
  - i) Primary
  - ii) Secondary
2. On the basis of maturity
  - i) Money market
  - ii) Capital market.

### **Primary Market and Secondary Market**

Securities available for the first time are offered through the primary securities market. The issuer may be a brand-new company or one that has been in business for many years. The securities offered may be a new type for the issuer or additional amounts of a security used frequently in the past. The key is that these securities absorb new funds for the offers of the issuer, whereas the secondary

market, existing securities are simply being transferred between parties, and the issuer is not receiving new funds. After their purchase in the primary market, securities are traded subsequently in the secondary market (Fisher and Jordan, 2000).

“Primary markets are distinguished by the flow of funds between the market participants. Instead of trading between investors as in the secondary markets, participants in the primary market buy their assets directly from the source of the assets” (Hirt and Block, 2003).

## **Secondary Markets**

### **1. The Organized Exchanges**

Organized exchanges are physically marketplaces where the agents of buyers and sellers operate through the auction process. New York Stock Exchange (NYSE), American Stock Exchange (AMEX) and Nepal Stock Exchange (NEPSE) are some examples of the Organized Exchange. (Fisher and Jordan, 2000)

### **2. Over the Counter Market (OTC market)**

The over the counter market was started trading in 2008 A.D. Nepalese share market. The OTC market is not a central physical market but a collection of broker-dealers scatted across the country. This market is more a way of doing business than a place. Buying and selling in unlisted stocks are matched not through the auction process on the floor of an exchange but through negotiated bidding, over a massive network of telephone and teletype wires that link thousands of securities firms here and abroad (Fisher and Jordan, 2000).

## **Money Market and Capital Market**

### **Money Market**

Money market refers to that financial market in which securities with a short term, or, one year or, less and high liquid debt securities are traded.

“Money market typically applies to the trading of credit instruments issued for less than one year. Money market instruments are highly liquid and readily marketable” (Miller and Pulsinelh, 1989).

The money market is a sub-sector of the fixed-income market. It consists of very short-term debt securities that usually are highly marketable. Many of these securities traded in large denomination, and so are out of the reach of individual investors. Money market funds however are easily accessible to small investors. These mutual funds pool the resources of many investors and purchase a wide variety of money market securities on their behalf (Bodies et al., 2002).

### **Capital market**

Capital market is a financial market in which long term securities are traded, securities having the life spans of more than one year are traded in capital market. Long term financial instrument such as stocks issued by corporation are traded in capital market. In any market, there are two parties demanders and suppliers. Capital market is the place, which bring both the financial demanders and suppliers directly or, indirectly in touch.

“Capital markets include the purchase and sale of securities with a maturity of one year or more that is, long-term securities. The stock market is arbitrarily included as part of the capital market. In a sense, a share of stock is a long-term security because it has no maturity. As long as the corporation exists, the share of stock can remain in existence” (Miller and Pulsinelh, 1989).

“Capital market 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” (Bhalla, V.K., 1983).

The capital market is concerned with long-term finance. In the widest sense it consists of a series of channels through which the savings of the community are made available for industrial and commercial enterprise, and public authorities. It is concerned with those private savings, individual as well as corporate, that are turned into investment through new capital issues and also new public loans floated by government and semi-government bodies. In the capital market, demand comes from agriculture, industry, trade and government. While supply comes from the individual or corporate savings-individuals and institutions-and bodies through which these savings are mobilized. The savings institutions like savings banks, investment trusts or investment companies, specialized financial corporations and stock exchanges are some of the important constituents of capital market (Kuchhal, 1998).

### **The factors, which affect the activities on the capital market**

According to Kuchhal following are the affecting factors:

1. Government's fiscal and industrial policies
2. General economic conditions with special reference to industrial production and profitability
3. Thrust in the money and capital market with particular reference to price and savings situation
4. Demand for capital from the public and private sector for developmental expenditure
5. Investors' preference for liquidity and return as reflected in the movement of price in the secondary market.

#### **2.1.5 Securities Market in Nepal**

History of security market begins with the flotation of shares by Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. in 1937 A.D. Introduction of the Company Act in 1964 A.D., the first issuance of Government Bond in 1964 A.D. and the establishment of Securities Exchange Center Ltd. in 1976 A.D. was other significant development relating to capital markets.

The process of stock market development in Nepal actually started in when the government established Security Exchange Centre (SEC) with an objective of facilitating and promoting the growth of capital market. Before conversion into stock exchange it was the only capital markets institution undertaking the job of brokering, underwriting, managing public issue, market making for government bonds and other financial services. Nepal Government under a program initiated to reform capital markets converted SEC into Nepal Stock Exchange (NEPSE) in 1993 A.D. NEPSE started its operation with 25 brokers and 5 market maker makers. Later 6 brokers and 1 market maker are added and operated with 31 brokers and 6 market makers. Till 2066 B.S. Nepse is operating with 23 brokers but there is no any market maker.

However, visible impact on the development of financial sector was observed only when the government changed its restrictive policy and opened financial sector to private sector and foreign participation in the establishment of banks.

Securities Board of Nepal (SEBON) is and apex regulator of Securities

Markets in Nepal and Nepal Stock Exchange Ltd. (NEPSE) is only one securities market in Nepal.

## **A) Securities Board of Nepal (SEBON)**

### **I. Functions, Duties and Power**

SEBON was established by the Government of Nepal on June 7, 1993 A.D. as an apex regulator of Securities Market in Nepal. The main objective of SEBON is to regulate and develop the securities market and investor's rights. As per the Securities Related Act, 2006, the major functions, duties, and power of SEBON are as follows.

- ) Register securities of public companies.
- ) Provide license to operate stock exchanges.
- ) Provide license to operate securities business.
- ) Permit the operation of collective investment schemes and investment fund programs.
- ) Draft regulations, issue directives and guidelines.
- ) Supervise and monitor stock exchanges and securities business activities.
- ) Take legal action against the non-compliance companies' business activities.
- ) Review reporting of issuer and listed companies, and securities businesspersons.
- ) Conduct research, study and awareness programs regarding securities markets.
- ) Coordinate and cooperate with other domestic as well as international securities related regulatory agencies.
- ) Formulate policies and programs relating to securities markets and advise the Government of Nepal as and when required.

### **II) The Board**

The Governing Board of SEBON comprises seven members representing various Government and non-Government sectors. The seven-member board includes a full-time Chairman appointed by the Government of Nepal for the tenure of four years. Other members of the Board are joint secretary from Ministry of Finance, joint secretary from Ministry of Law, Justice and Constitutional Assembly Affairs, a representative from the NRB, a representative from Institute of Chartered



Accountants of Nepal, a representative form Federation of Nepalese Chamber of Commerce and Industries, and an expert appointed by the Government of Nepal.

### **III) Financial Resources**

The major financial sources of SEBON are Government grants, transaction fees from the stock exchange, and registration fees of corporate securities. Other financial sources include fees from licensing and renewal of stock exchange, licensing and renewal of market intermediaries and income generated from the mobilization of its revolving fund.

### **IV) Features of Securities Registration and Issuance Regulation 2008**

In order to implement the provisions relating to registration of securities of public companies and approval of prospectus under the new securities related act, 2006. SEBON enacted Securities Registration and Issuance Regulation, 2008 since November 12, 2008.

- ) Provisions for registering securities in SEBON including promoters shares proposed to issue to public by the public limited companies.
- ) Incorporated more advance provisions for the process of public issue, issue by circular and rights issue.
- ) Incorporated clear provisions for issuing securities to other than public.
- ) Incorporated more advance provisions for the process of public issue, issue by circular and rights issue.
- ) Incorporated clear provisions for issuing securities to other than public.
- ) Incorporated the provision requiring SEBON approval of offer for sale (offer documents) before issuing securities to public held by other groups than the securities held by promoters and public by using tender offer or, at any other agreed upon price.
- ) Incorporated the provision for prescribing the format of the prospectus by SEBON required to be published for issuing securities and provision requiring SEBON approval of prospectus before publishing.
- ) Incorporated the provisions of accountability of the directors of issuer companies, issuer manager and the accountability of the directors of issuer companies, issuer manager and the professional preparing prospectus of the authenticity of the contents of the prospectus, and relating to the aspects of

making more credible and transparent prospectus.

- J Provisions for seeking comments of stock exchange on prospectus and other related documents for right issue, and documents of offer for sale submitted in SEBON for approval and registering the prospectus in stock exchange after SEBON approval.
- J Provisions for submitting annual report, trimester report and price sensitive information to SEBON in the prescribed format by the issuer companies not yet listed and listed.

To safeguard rights and interests of the investors by making securities issue fair, credible and transparent, SEBON has enacted securities issue guidelines since March 22, 2009 in pursuant to section 118 of securities Related Act, 2006.

#### **Features of Securities Issue Guidelines 2009**

- J Clear definition of various terminologies related to securities issue.
- J Provisions to be underwritten at least 50% of the issuing shares by the public company.
- J Incorporated clear provisions for the process of preference share, right share and debenture issue.
- J Incorporated the clear process for further public issue and securities issue on premium.
- J Incorporated clear provisions about the allotment of shares within minimum time span of 40 days to maximum 70 days on the basis of applications numbers after the closure date of securities issue.
- J Provisions to refund amount within five days after allotment.
- J Incorporated clear provisions to allotment 2% to 5% shares to its employees depending upon the number of employees of the issuing companies out of total issue of shares.

#### **v) Stock Exchange Regulation, 2007**

SEBON enacted stock exchange regulation, 2007 since November 5, 2007. The regulation has provisions for enhancing the operation of the stock exchange. There are so many features of stock exchange regulation, 2007 which are as follows:

- J Provisions for the requirement of SEBON recommendation for the

registration of corporate body to operate stock exchanges.

- ) Prescribed minimum provisions to be incorporated in the memorandum of association and the article of association of the stock exchange for more effective operation and better governance.
- ) Provisions for broad-based ownership and corporate management structure of the stock exchanges.
- ) Provision for giving certain time limits for the existing stock exchange for its operational reforms as per the provisions of new Act.
- ) Provisions for requiring the stock exchange for the disclosure of information of listed companies, securities business persons and securities trading.
- ) Provisions for prescribing the qualification of chief executive offices and the directors for the stock exchanges.
- ) Provisions for the independent director in the stock exchanges.

## **B) Nepal Stock Exchange (NEPSE)**

In 1993 A.D Security Exchange Centre was converted into Nepal Stock Exchange (NEPSE) with the objectives to provide secondary market for securities transaction. The basic objectives of NEPSE is to impart free marketability and liquidity to the government and corporate securities by facilitating transaction in its trading floor through member, market intermediaries, such as brokers, market makers etc. It opened its trading floor on 12th February 1994 A.D. NEPSE is only one secondary market for securities in Nepal.

NEPSE was a non-profit organization, operating under Securities Exchange Act 1983. The AGM on 5 June 2009 decided to distribute 20% cash dividend from the profit of fiscal year 2007/08. This is the first time NEPSE has announced cash dividend. The decision of 26th AGM converted NPESE into a profit making organization form non-profit making organization.

### **I. Shareholders of NEPSE:**

- 1 Government of Nepal
- 2 Nepal Rastra Bank,
- 3 Nepal Industrial Development Corporation and members

### **II. Members of NEPSE:**

Members of NEPSE are permitted to act as intermediaries in buying and selling of government bonds and listed corporate securities. At present, there are 23 member brokers, 2 market makers, 11 sales and issue manager and 2 dealers (Secondary market)

### **III. Tenure of Membership:**

The tenure of the membership is one year. The license should be renewed within three months after the closure of the fiscal year. If not, it can be done within another three months by paying 25% penalty.

### **IV. Process to obtain membership of NPESE:**

Corporate bodies willing to be member shall have to submit application in prescribed format within specified time along with certificate of incorporation, tax certificate, Memorandum of Association, Article of Association and concerned Act, rules and regulations in the case of corporate body other than company after the incorporation and the projected B/S an PL A/C for the next three years, last three years audited financial statement, if the year of incorporation is less than three years, the B/S and A/C of investment made in its parent company's share capital, details of share investment in any other company other than subsidiary, the name, address, number of shares subscribed and the amount invested by shareholders having more than 5% of the share capital need to be submitted.

### **V. Board of Directors:**

The Board of Directors (BOD), which governs NEPSE, constitutes of members representing different sectors as per security Act 2006. At present the BOD constitutes 2 members including a chairman from Nepal Government, 2 members from NRB, 1 from Nepal Industrial Development Corporation (NIDC). Moreover 1 member will be nominated by BOD as an expert in capita market. General Manager of NEPSE will serve as a director on the BOD.

### **VI. Capital Structure:**

The authorized and issued capital of NEPSE is Rs.50 million. The issued capital is also Rs.50 million. Government of Nepal, NRB, NIDC and the members subscribe Rs.34.91 million Government. of Nepal has contributed 58.67%, NRB 34.60%, NIDC 6.13% and the members 0.60% on its capital.

**VII. Securities Available for Trading:**

- a. Shares
  - 1 Equity Shares
  - 2 Preferred Shares
- b. Debentures
- c. Bonds
- d. Government Bonds
- e. Mutual Funds

**VIII. Market Timing:**

Trading on equities takes place on all days of week (except Saturday and holidays declared by exchange in advance). On Friday only odd lot trading is done.

Trading time may extended, advance or reduce trading hours when it deems fit necessary.

| Type of Trading | Days               | Trading Time         |
|-----------------|--------------------|----------------------|
| Regular Lot     | Sunday to Thursday | 12:00 PM to 15:00 PM |
| Odd Lot         | Friday             | 12:00 PM to 13:00 PM |

Source : www. Nepal stock com.np

**IX. Listing Information:**

Trading on the floor of the NEPSE is restricted to listed corporate securities and government bonds. At present 163 companies have listed their securities to make them eligible for trading. Beside this, NCM Mutual Fund enlisted its units to make them eligible to trade in the floor.

**X. Listing and Annual Fee to be submitted:**

The listing fee and annual fee to be paid by listed companies for shares, debentures as well as for mutual funds are depends upon their issued capital.

| S.N. | Issued Capital        | Listing Fee              | Annual Fees |
|------|-----------------------|--------------------------|-------------|
| 1    | Up to Rs.10 Million   | 0.20% or min. Rs.15000   | Rs.15000    |
| 2    | Rs.10 M. to Rs.50 M.  | 0.15% or min. Rs.45000   | Rs.25000    |
| 3    | Rs.50 M. to Rs.100 M. | 0.10% or min. Rs.75000   | Rs.35000    |
| 4    | Above Rs.100 Million  | 0.075% or min. Rs.100000 | Rs.50000    |

Source : www. Nepal stock com.np

**XI. Circuit Breakers:**

Circuit Breaker is a technique that applies in order to curb excessive market movement. It is applied in case of 10% movement in either index.

NEPSE has implemented index-based circuit breakers with effect from 21 September 2007 (04/06/2064).

**XII. Price Range:**

Price range is applicable on individual securities. The trading of the individual securities are not halted but allowed to trade within the price range. The price band is 10% of previous close on either way. (During the at the opening session the range is 5% on either way of previous close price. After the band is 2% on either way of the last traded price till it reaches to 10% of the previous close).

**XIII. Trading Location:**

The trading can be done either from NEPSE's trading floor or from the broker's office. NEPSE uses sophisticated technology through brokers can trade remotely from their office located inside the Kathmandu valley. This remote trading facility was started from 1 November 2007.

**XIV. Trading System:**

NEPSE had adopted an "Open Out-Cry" System. It means transactions of securities were conducted on open auction principle on the trading floor. Now NEPSE is adopting fully automated screen based trading since 24th August 2007. This NEPSE trading system is called NEPSE Automated Trading System "NATS".

**XV. Order Matching Rules:**

The system adopts principle of order driven market. The best buy order is matched with the best sell order. An order may match partially with another order producing multiple trades. For order matching the best buy order is the one with the highest price and the best sell order is the one with the lowest price. This is because the system views all buy orders available from the point of view of the sellers and all sell orders from the point of view of the buyers in the market. So, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered. Hence, the best buy order is the order with the highest price and the best sell order is the order with the lowest price.

**XVI. Settlement:**

NEPSE has adopted a T+3 settlement system. Settlement will be carried out on the basis of paper versus payment. The trading is done at "T" and at T+1; the buying brokers have to submit bank vouchers for settlement with covering letter. At T+2, the selling broker must submit shares certificate with covering letter. At T+3, NEPSE prepares billing for payment and this will be forwarded to the bank.

Once the settlement is done the buying brokers with the consultation of the clients must decide and present the purchased shares if they want to record it as blank transfer. This must be computed within T+5.

**XVII. Blank Transfer (BT)**

Under this mechanism an opportunities to derive the market benefit is provided. By presently, the buying broker must complete the BT process within T+5. The transactions that are executed can be recorded in different way and NEPSE has considered all possible retention. The following are the major key points to be considered.

1. This is related only with buy of securities.
2. The buyer may decide to have make benefit either to have capital gains or to minimize the loss.
3. In order to do this s/he may partly send for name transfer or may register it in blank transfer.
4. If s/he register total purchase in blank transfer and can put for sale and if only the part of the shares are subscribed then s/he can handover the part and the part can be forwarded for name transfer to the concerned company. In order to do this s/he has to cancel the blank transfer.

**XVIII. Brokerage Commission:**

Brokerage fee depends upon trading amount.

**a. Brokerage fee for Equity**

| S.N. | Trading Amount             | Brokerage fee |
|------|----------------------------|---------------|
| 1    | Up to Rs.50000             | 1.0 %         |
| 2    | >Rs.50000 and < Rs.500000  | 0.9 %         |
| 3    | >Rs.500000 and <Rs.1000000 | 0.8 %         |
| 4    | >Rs.1000000                | 0.7 %         |

Source: [www.nepalstock.com.np](http://www.nepalstock.com.np)

**b. Brokerage fee for Government Bond**

| S.N. | Trading Amount           | Brokerage fee |
|------|--------------------------|---------------|
| 1    | Up to Rs.500000          | 0.20%         |
| 2    | >Rs.500000 & <Rs.5000000 | 0.10%         |
| 3    | >Rs.5000000              | 0.05%         |

Source: www.nepalstock.com.np

**c. Brokerage fee for all other stocks which is not listed in a and b**

| S.N. | Trading Amount           | Brokerage fee |
|------|--------------------------|---------------|
| 1    | Up to Rs.50000           | 0.75%         |
| 2    | >Rs.50000 & < Rs.5000000 | 0.60%         |
| 3    | >Rs.5000000              | 0.40%         |

Source : www. nepalstock.com.np

**XIX. Documents and Particulars to be submitted along with the Listing Application:**

**According to Securities Listing By-Laws, 2053 (1996)**

- (a) Name and address of corporate body.
- (b) Registration number and date of registration of corporate body.
- (c) Date of commencement of business by corporate body.
- (d) Main objectives of corporate body and business to be undertaken by corporate body.
- (e) In case of listing of securities other than shares, the purpose of issue of such securities, main term and conditions of contractor trust deed if any, targeted groups and provision for distribution of return.
- (f) In case of sale of securities to foreign investor, the particular thereof.
- (g) Particulars of shares registered in the name of director, chief executive, company secretary, auditor of the corporate body and persons holding more than 5% of shares.
- (h) Names, addresses, educational, qualifications, and professional experience of the Executive chief and directors of the corporate Body, and the details of the securities held by them.
- (i) In case the Executive chief or any directors of the corporate body holds 10% or more shares in the capital of any other corporate body or company, the name and address of such corporate body or company and the number of such shares and



the amount thereof.

- (j) In case the executive chief or any director of the corporate Body is also an incumbent director of any other corporate body or company, the name and address of such corporate body or company.
- (k) Particulars of any agreement or understanding relating to technology transfer, management, loan or share investment signed, if any, by the corporate body with any local or foreign bank, financial institution or any other corporate body or company.
- (l) In case the corporate body has invested more than 5% of its paid-up capital in the share capital of any other corporate body or company, the name and address of such corporate body or company, and the number of such shares and the amount thereof.
- (m) Prospectus or announcement letter published at the time of issuing securities, or any other notice or information published for the same purpose and their details.
- (n) Latest details of the names and address of securities-holders and the number and the amount of securities held by them.

**In addition to the particulars mentioned above following documents shall also be attached along with application.**

- (a) Memorandum of association, article of association and if the corporate body has been established or incorporated under any specific act, such act and rules and regulation made there-under.
- (b) Certified photocopy of certificate of registration of corporate body.
- (c) Current business position and future policies and opinion of management of corporate body.
- (d) Resolution of board of directors in relation to listing of securities.
- (e) Format of certificate of securities intended to be listed.
- (f) Audited balance sheet, profit and loss account, auditors report and particulars of business of last three years. Provided that in case of newly established corporate body, balance sheet, profit and loss account from the date of establishment and projected profit and loss account, balance sheet and particulars of business for the next 3 years shall also be submitted.
- (g) In case the corporate body has made investment of 50% or more in the share of any other corporate body or company, the audited balance sheet, profit and loss

account and auditors' report of the past three years of such corporate Body or company, and in case of such Corporate Body or company, is newly established one, its projected profit and loss account, balance sheet and related documents for the next three years.

## **XX. De-listing of Listing or Cancellation of Listing:**

NEPSE can de-list the company under the following conditions or situations: (Thapa et al., 2006).

1. If NEPSE feels necessary to de-list the company under the section 14 of the securities exchange Act, 1983.
2. The suspension continued due to the assigned responsibilities if not attained.
3. If the audited financial statements of the last two years are not submitted to SEBON and NEPSE.
4. If the company, directors, or promoters are not in contact of NEPSE or do not respond their correspondents.

In order to de-list the company in above said conditions, NEPSE must notify the concerned company. If the company feels listing should be continued must write with evidence within 15 days.

- ) If the clarification submitted is not satisfactory then the company will be de-listed.
- ) The notice regarded the de-listing must be sent to the SEBON and must published for the notification of general public either on the same day or the next day.

## **XXI. Provision Regarding Re-Listing:**

The securities, which are de-listed under the listing bylaw, can be re-listed if the company meets following conditions: (Thapa et al., 2006).

- ) If the management of the company provides commitment to continue the transactions of securities and if the NEPSE is satisfied on that.
- ) If the audited financial statements of the previous years with reports are obtained.
- ) If while reviewing the projected three years income, expenditures, and future programs seems logical and NEPSE feels the dynamic transactions are possible.

- ) If the copy of the renewed certificate of income tax and certificate of commencement is obtained.
- ) If the NEPSE is satisfied with the provision made for not repeating such situation for de-listing in future.
- ) If all the details are given to the NEPSE compiling all the provision of byelaws.

## **XXII. Criteria for the classification of the Listed Companies:**

According to listing Bylaws 2053 B.S. following are the classification criteria of the listed companies:

- 1 The paid up capital of the company must be a least Rs.20 million.
- 2 Number of common shareholders must be at least 1000.
- 3 The company must have made the public flotation a per Bylaws 9(Ka) Sub Bylaws (4).
- 4 The company must be in profit since last three years.
- 5 The book value per share must not be less than its paid up value.
- 6 Submission of the financial statement within six months from the closure of the fiscal year.

## **XXIII. NEPSE Index**

NEPSE index is that indicator, which shows fluctuation in total capitalization of all the companies trading in NEPSE. NEPSE index was calculated from 30 Magh 2050 B.S., which is taken as base day of NPESSE index and the base index is assumed 100. Increase in the index shows the increase in share price or increase in total capitalization of the companies and vice-versa. NEPSE index is calculated by considering all listed shares including promoter shares of all listed companies in NEPSE. NEPSE index was recorded 1175.38 points as the highest point in Bhadra-15, 2065 and 609.46 points as the lowest point in Magh-9, 2065 in fiscal year 2065/2066. NEPSE index is calculated as follows:

$$\text{NEPSE index} = \frac{\text{Total market capitalization of the day}}{\text{Total market capitalization of the base day}} \times \text{Index of the base day}$$

Total market capitalization is calculated by multiplying closing price of each company and total number of shares traded of each company. Increase in index shows increase in total capitalization but share price of all companies may not

increase and vice-versa. Total market capitalization of NEPSE was reached to Rs.512.94 billion in Ashad 2066. If share of new company is listed then market capitalization should be adjusted.

Adjusted base capitalization

$$= \frac{\text{New market capitalization}}{\text{old market capitalization}} \mid \text{base market capitalization before new listing}$$

NEPSE is calculating company wise index as well as other two indices (Sensitive index and float index). Sensitive index is calculated by market capitalization of "A" group companies listed in NESPE, which is being calculated from January 1, 2007. Float index represents the market capitalization of securities, which are floated to public. Promoter shares, employee shares and if any other shares which are blocked for trading, are not counted while calculating float index. Float index is being calculated from Bhadra-26, 2065 taking Bhadra-9, as the base day of the index. Total market capitalization is calculated by multiplying total number of shares and closing price of shares of the company.

### 2.1.6 Securities Analysis

Securities analysis involves examining a number of individual securities within the broad categories of financial assets previously identified. One purpose for conducting such examinations is to identify those securities that currently appear to be mispriced. "Wall street has scores of analysts, strategists and portfolio managers hired to do one thing, beat the market. Analysts are hired to find undervalued stocks. Strategist are hired to predict the direction of the market and various sectors. Portfolio managers are hired to put it all together and out perform their benchmark, usually measured as the S & P 500." (www.stockcharts.com.). "Security analysis is the step of investment process. It involves the examining of several individual securities within the broad categories of financial assets. One purpose for conducting such examination is to identify those securities that currently appear to be mispriced. There are many approaches to security analysis. However, most of these approaches fall into one of the two classifications. Analysts who use technical analysis are known as technicians or, technical analysts. The second classification is known as fundamental analysis and analysts are fundamentalists or, fundamental analysis" (Sharpe et al., 2005).

## **Fundamental Analysis Theory**

Fundamental analysis theory claims that at any point of time an individual stock has an intrinsic value of the future cash flows from the security discounted at appropriate risk adjusted discount rate. Fundamentalists attempt to reach the best estimate of the intrinsic value of a share by studying a company's sales, profit, dividends, management competency and numerous other economic and industrial factors which determine its future income and prospects of business opportunities. Fundamental analysis delves into a company's earnings, management and other factors.

Fundamental analysis begins with the assertion that the true or intrinsic value of any financial asset equals the present value of all cash flows that the owner of the asset expects to receive. Accordingly, the fundamental stock analyst attempts to forecast the timing and size of those cash flows and then converts them to their equivalent present value by using an appropriate discount rate. More specifically, the analyst must attempt not only to estimate this discount rate but also to forecast the stream of dividends that a particular stock of a particular firm has been determined. It is compared with the current market price of the common stock in order to see whether the stock price is a fairly priced stock that has a true value less than its current market price, known as overvalued or overpriced, whereas those that have a true value greater than their current market price are known as undervalued or underpriced stocks. The magnitude of the difference between the true value and the current market price is also important information because the analyst's conviction that the given stock is mispriced depends, in part, on it. Fundamental analysts believe that any notable cases of mispricing will be corrected by the market in the near future, meaning that prices of undervalued stocks will show unusual appreciation and the prices of overvalued stocks will show unusual depreciation.

The objective of the fundamental security analysis is to appraise the intrinsic value of a security. The intrinsic value is the true economic worth of financial assets. "The fundamentalist maintains that at any point of time every stock has an intrinsic value which should in principle be equal to the present value of the future stream of income from that stock discounted at an appropriate risk-related rate of interest." (Bhalla, 1983). Therefore, the actual price of a security is concerned to be a function of the sets of application and anticipation. Price changes as anticipation changes, which in turn change, as a result of new information. In other words, a new piece of news is released; securities market prices will adjust towards the new values.

“The value of common stock is simply the present value of all the future income which the owner of the share will receive” (Francis, 1986 ). The actual price should be reflect intrinsic value of the stock, i.e. good anticipation of cash flow and capitalization rate corresponding to the future time period. But in practice first, it is not known in advance what the appropriate discount rate should before a particular stock. Therefore fundamentalist estimates their intrinsic value by studying detail all matters that are relevant to company. The study would involve examining its sales earnings, profit margins, dividends, management proficiency and industry and business outlook. Labour competence any factor that would have an bearing on its performance in the future.

### **Technical Analysis Theory**

A technical analysts or technician is a security analyst who believes it is not productive to work through all the fundamental facts about the issuing corporation the companies earnings, its products, forthcoming legislation that might affect the firm.

Instead, technical analysts believe that these innumerable fundamental facts are summarized and represented by the market prices of a security. Technical analysis focuses most of their attention on charts of security market prices and on related summary statistics about security transactions. Technical analysts prepare and study charts of various financial variables in order to make forecasts about security prices, but an increasing number use quantities rather than graphical tools.

Technical analysis is the study of the internal stock exchange information as such. The word ‘technical’ implies the study of the market itself and not of those external factors, which are reflected in the market. Technical analysis is based on the widely accepted premise that security prices are determined by the supply of and the demand for securities. The tools of technical analysis are therefore designed to measure certain aspects of supply and demand. Typically, Technical analysts record historical financial data on charts, study these charts in search of patterns that they find meaningful, and endeavor to use the patterns to predict future prices. Some charts are used to predict the movements of a single security, others are used to predict the movements of a market index, and still others are used to predict the action of both individual assets and the market.

“The Technician believes the forces of supply and demand are reflected in patterns of price and volume of trading and that price fluctuations reflect logical and emotional forces. By examination of this pattern analyst predict whether prices are moving higher of lower and even by how much” (Fisher and Jordan, 2000).

Technical analysis is based on the widely accepted premise that security prices are determined by the supply of and the demand for the securities. The tools of technical analysis are therefore designed to measure supply and demand. Typically, technical analysts record historical financial data on charts, study these charts in an effort to find meaningful patterns, and use these patterns to predict future price. Some charting techniques are used to predict the movements of a market index, and some are used to predict both the action of individual securities and the market action.

Edwards and Magee articulated the basic assumptions underlying technical analysis are as follows:

- ) Market value is determined by the interaction of supply and demand.
- ) Supply and demand are governed by numerous factors, both rational and irrational.
- ) In disregard of minor fluctuations in the market, stock price tend to move in trends which persist for an appreciable length of time.
- ) Changes in trend are caused by shifts in supply and demand.
- ) Shift in supply and demand, no matter why they occur, can be detected sooner or, later in charts of market action.
- ) Some chart patterns tend to repeat themselves.
- ) In essence, technical analysts believe that past patterns of the market action will recur in the future and can therefore be used for predictive purpose.

Technical analysis boils down to an attempt to predict the directions of future stock price movements based on two major types of information: 1) Historical price and Volume behavior and 2) Investor sentiment (Cerrado and Jordan, 2002).

### **2.1.7 Efficient Market Theory**

Efficient market is concerned with the pricing mechanism of security market. It has two dimensions of price adjustment one is to the type of information reaching to and another is the speed and quality of adjustment of security to the information. As any random infusion of information instantaneously and correctly adjusts in

prices, there will be no subsequent lags that are profitable, pricing not only should be instantaneous but should discount accuracy of information so that the prices fluctuate closely around its intrinsic value.

Market efficiency may be defined in the context of number of areas for intense organizational efficiency, investment efficiency, allocation efficiency, informational efficiency and so on. The word 'efficiency' as applied to securities market has unfortunately been used to represent a variety of logically distinct concept. In particular it may exchange efficiency, production efficiency and information efficiency. Efficient market theory contents that in free and perfect competitive market. Stock price always reflects all the available information and adjust instantaneously every influx of new information.

“A market is efficient with respect to a particular set of information if it is impossible to make abnormal profits (other than by chance) by using this set of information to formulate buying and selling decisions” (Sharpe et al., 2005).

“In an efficient market all the relevant information is reflected and all prices are correctly stated in the current stock. So that there are no “bargains” in the stock market. James H. Lone explained what is meant by efficient security market in these words” (Bhalla, 1999).

Most financial economists agree that capital should be channeled to the place where it will do the most good, one goal of government policy is to encourage the establishment of allocation all efficient markets in which the firms with the most promising investment opportunities have access to the needed funds. However in order for markets to be allocation efficient, they need to be both internally and externally efficient. In externally efficient market, information is quickly and widely disseminated, which allows each security's price to adjust rapidly in an unbiased manner to new information so that it reflects investment value. An internally efficient market is one in which brokers and dealers complete fairly, making the cost of transacting low and the speed of transaction high (Sharpe et al., 2003). “An efficient financial market exists when security prices reflect all available public information about the economy, financial markets, and the specific company involved. The implication is that market prices of individual securities adjust very rapidly to new information. As a result, security prices are said to fluctuate randomly about their “intrinsic” values. New information can result in a change in the intrinsic value of a security, but subsequent security price movements will follow what is



known as a random walk (change in price will not follow any pattern)” (Van Horne, 2002).

The efficient market theory, being extreme hypothesis i.e. price is fully reflect all the information, cannot be tested in the empirical data in its precise form, however, postulating pricing mechanism with the types of information. Set being impounded in the stock market, it can be done, hypothesis of the market efficient depending upon types of information set impounded in to the price. There are:-

- ❖ The efficient market hypothesis (EMH)
- ❖ Theory of Weakly efficient market or, Random walk Hypothesis (RWH)

### **The Efficient Market Hypothesis (EMH)**

The efficient market hypothesis is not properly understood by a large segment of financial community. The development of EMH could be traced in to the random walk theory of stock market price behavior. Later, when largely random, endeavors were made to cloth the empirical results with economic contents, which lead to the advancement of efficient market theory. Market efficiency may be in the context of (a) Operational efficiency (b) Informational efficiency (c) Allocation efficiency.

The efficient market hypothesis says that the market rapidly incorporates all information affecting the value of a security. Tests of market efficiency require a model showing the impact of information upon share prices. The EMH can be broken down in to three sub-hypothesis, which differ according to the type of information.

|                                 |  |
|---------------------------------|--|
| Form of efficiency reflected in | Set of information security price        |
| Weak                            | previous prices of securities            |
| Semi-Strong                     | All publicly available information       |
| Strong                          | All information, both private and public |

Fama delineated three levels of market efficiency hypothesis. Its Hypothesis depending upon types of information set impound into the prices. If the pricing in the stock market has absorbed all the information available in the stock market. It is considered as weakly efficiency and participant of the technical analysis approach in the market becomes futile. If current prices of the stock reflect all the publicly available information i.e. past prices volume data and all the published accounting

information has no value because it would have been discounted by participants accurately and instantaneously when they are disclosed.

The weakly efficient markets hypothesis assumes that all historical information is reflected in security prices. The weakly efficient hypothesis stipulates that historical price and volume data for securities contain no information which can be used to earn a trading profit above what could be attained with a naive buy-and-hold investment strategy. This hypothesis suggests that technical analysis is well-recorded but worthless folklore.

The semi strong efficient market hypothesis assumes that all public information is reflected in security prices. It specifies that markets are efficient enough for prices to reflect all publicly available information. Consequently only those insiders who have access to valuable information could earn a profit larger than what could be earned by using a naive buy-and-hold strategy in a semi strong efficient market.

The strongly efficient markets hypothesis assumes that all information is reflected in security prices. It claims that no one can earn a profit larger than what could be earned with a naive buy-and-hold strategy by trading on short term security price movements. Security markets can be strongly efficient if the rates of stock price changes are independent random variables and none of the market participants use inside information.

The three hypotheses about pricing efficiency overlap they differ only in the degree of market efficiency.

### **Theory of Weakly Efficient Market or, Random Walk Hypothesis (WEM) (RWH)**

The weak form of efficient market hypothesis (EMH) states that current prices fully reflect the information contained in the historical price movement. The market is efficient in the weak sense if share price fully reflect the information implied by all prior price movements. Price movements in effects are totally independent of previous movement, implying the absence of any price patterns with prophetic significance. So, the past prices have no meaningful information to predict future course of price fluctuations, which can be used to earn above average return. The movements of future prices are independent to the previous prices or, the series of price changes are random phenomenon. Actually, the weak form of EMH is

referred to as random walk theory of share price behavior. Weak form of efficient market hypothesis is popularly known as the random walk theory. Random walk theories describe whether past prices can predict future prices. The fundamental beliefs at the back of RWH are that successive price changes of an individual stock are independent over time and that its actual price fluctuates freely overtime about its intrinsic value. Fama called this model an intrinsic value random walk market (Fama, 1965). But the contrast to this model, random walk theory denies the existence of any kind of “trends” or, “patterns”. Hence past price contains no useful information to predict future price behaviors. A Fama advocates, random walk theory implies the future path or, the price level of the security is no more predictable than the path of a series of accumulated random numbers. The random walk model in share prices actually involves two main hypotheses which state as:

- a) Successive price changes are independent.
- b) Price changes conform to some probability distribution.

“Statistically independence means the probability distribution for the price change during time period ‘t’ is independent from the sequence of price changes during previous periods” (Fama, 1965). More precisely it is expressed in the following algebraic term.

$$\Pr (X_t = X / X_{t-1}, X_{t-2} \dots) = \Pr (X_t = X)$$

Where the term on the left side of equation is the conditional probability that the price change during time t will take the value X, conditional on the knowledge, the previous price changes took the values  $X_{t-1}$ ,  $X_{t-2}$  etc. But the term on the right of the equality is the unconditional probability that the price change during t will take the value X. The expression means the conditional and the marginal probability distribution of an independent random variables are identical. (Gupta, 1989)

Out of two hypothesis of the random walk theory, independence of successive price changes is strong and most important one to make theory valid. The second one is price changes conforms to some probability distribution but its shape or, form of distribution need not be specified i.e. any distribution is consistent with the theory as long as it correctly characterizes the process generating the price changes. However, the parameter of the distribution should be stationary but not so strongly imposed if independent hypothesis is held true. However, still the form of distribution of price changes is important from investment decision, academic and research point of view.

Actually market mechanism establishes the existence of random walk theory that the successive price changes to be independent. The stock market poses steady in flow of information that influences the set of anticipations 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 Research Review**

This sub-section is concern with the previous research work done by the different scholars. More specially, the chapter includes the review of Journals, articles and Related previous dissertations.

### **2.2.1 Review of Journals & Articles**

Gurung (2004) has conducted study on the topic of “Growth and performance of security market in Nepali”. This study is based on secondary data only and covered 10 year time spans FY 1993/94 to 2002/03 and included corporate securities only. His study was focused on securities board of Nepal and NEPSE.

Securities Board, Nepal an apex regulator and facilitator of capital market, and Nepal Stock Exchange Ltd, only a single stock market, are the main constituents of securities market in Nepal. This paper attempts to study the growth trend and analyze the performance of Nepalese securities market. The variables such as number of listed and traded companies and their securities, number of transactions, trading turnovers, paid up value, market capitalization and NEPSE index are analyzed for the secondary market.

Mr. Gurung concluded that securities market plays a pivotal role in mobilizing savings and channeling them in productive purposes and many more like providing liquidity securities so that one can minimize the risk and maximize the returns. The study on the securities market performance reveals that there is no synchronization among different securities market performance indicators, but it is true that they almost have depicted an erratic trend during the observed period. This indicates the unstable and poor performance of securities market. Relative to the overall economy, the size of securities market is very small and the liquidity of securities also is poor. These facts suggest that the Nepalese capital market now is passing through a bearish situation. The growth and performance of Nepalese

securities market, even after the introduction of new mechanism in 1993/94 are not satisfactory through it is improving gradually.

GC (2008) has conducted the topic on Volatility Analysis of Nepalese Stock Market. His study covered the daily NEPSE Index return from 17<sup>th</sup> July, 2003 to 11<sup>th</sup> Feb, 2009 with a total number of observations of 1297. The Data covers the periods of varying volatility patterns observed in the Nepalese market.

Modeling and forecasting volatility of capital markets has been important area of inquiry and research in financial economics with the recognition of time-varying volatility, volatility clustering and asymmetric response of volatility to market movements. Given the anticipated growth of the Nepalese stock market and increasing interest of investors towards investment in Nepalese Stock Market. It is important to understand the pattern of Stock Market Volatility.

The study found the distribution of the daily return series for the Nepalese Stock Market to be leptokurtic, non-normal and exhibiting significant time dependencies. The Conditional Volatility of the NEPSE return series was modeled using a random walk model a non-linear GARCH (1,1) model and three asymmetric model GJR model, EGARCH (1,1) and PARCH (1,1). The study found that the NEPSE Index return series exhibits stylized characteristics as supported by empirical evidence in different studies such a volatility clustering time-varying conditional heteroskedasticity, and leptokurtosis. However, the asymmetric leverage effect as evidenced as various studies in advanced stock markets was no detected in NEPSE index return series. The GARCH (1,1) was found to be the appropriate model for volatility forecasting in Nepalese Stock Market. The parameter estimate of the GARCH models suggests a high degree of persistence in conditional volatility of stock returns. The evidence of high volatility persistence and long memory in the GARCH process indicate that integrated GARCH model might be a better model for volatility analysis of the NEPSE data series. The study revealed strong evidence of time-varying volatility, a tendency of the periods of high and low volatility to cluster and a high persistence and predictability of volatility in the Nepalese Stock Market.

Baral and Shrestha (2006) has conducted the topic on 'Daily Stock Price Behavior of Commercial Bank in Nepal.' Their study using the data set on daily stock prices during the fiscal year 2005/06 (July 16, 2005 through July 16, 2006), this paper attempts to analyze the stock price behavior of commercial banks in Nepalese markets.

The study concludes that observations of daily stock prices of sampled banks indicate that there is a large variation in their stock prices in the fiscal year 2005/06. They are not doing well in Nepalese stock market. Most of the serial coefficient is significantly deviated from zero and statistically insignificant. It signifies that the successive price changes are dependent. Therefore, the Nepalese stock market is inefficient in pricing the shares. Runs test results also show that the percentage of deviation between the observed and actual number of runs in the series of price changes is significant. It is obvious that the successive price changes are not random. Thus, RWH does not hold true in the context of Nepalese stock market.

Pradhan and Upadhyay (2006) has conducted that the research 'The Efficient Market Hypothesis and the Behavior of share price in Nepal.'

They conducted different tests as well as opinion survey of Nepalese financial expert to know Nepalese stock markets movement and as factors affecting it as well as share price trend of stock in Nepalese market.

Conclusions of their study were as follows.

Nepalese stock market may not be termed as “Weakly efficient” in pricing shares where market efficiency is defined as all historical information is reflected in security price. Another conclusion that drawn from the views of financial executives was that the current market price of shares in Nepal are useful to make buy or sell decision, to predict future average return, and to predict future prices. The main factors affecting share prices as perceived by the respondents are dividends, retained earnings, bonus share and right issue. The share prices have been found more volatile than expected dividends. Similarly, publicly available information is useful in identifying over or undervalued securities. Nepalese investors are not really indifferent towards makings or, non-makings of information public.

Islam and Khaled (2005) carried out a test of weak-form efficiency of the Dhaka Stock Exchange use of monthly versus daily data or, week. The study uses daily, weekly, 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 form 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 the 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.

Nepal has recently started OTC Market to make transaction of share of de-listed company is stock exchange. Share of different company which are de-listed from stock exchange or, are not eligible for listing in organized stock exchange are traded in OTC. If we take some example from international stock market, Tokyo Stock Exchange, NASDAQ are not listed the share of those company who do not distribute at least 10% bonus. But the shares of those companies are traded at the OTC market.

To provide liquidity in investment and make easy available capital for those company Nepal has been started OTC market, Nepal Stock Exchange said (Aarthik Abhiyan, July 7-13,2008).

Nepal Dhitopatra Board is the regulatory body and Nepal Stock Exchange Ltd, the only market for share trading in Nepal. One of the primary functions of both these institutions is to develop the share market in the country. But except carrying out the regular functions, neither of these institutes has been able to play a role of catalyst in the promotion of the share market. A new law on stock exchange is long overdue. The authorities used to say last year that the new law would be implemented after approval from the parliament. Bt the law is not ratified by parliament as yet. Perhaps this is enough to prove the ineffectiveness of these institutions because they can not pursue the bills.

The other major issue that the private sector has been raising for the last two years is a demand for opening up the brokers market for the newcomers. The country has adopted the liberal economic policy. But this principle does not apply in this market. A year ago the Board of Directors of Nepal Stock Exchange had formed a committee headed by one of the directors, which had submitted the report, which basically suggested opening the license in order to induct more quality brokers in the market. Why was the committee formed if the report was not to be put for the implementation at all? It is heard that again a committee formed at Nepal Stock Exchange to study this matter further (New Business Age, June 2002).

### 2.2.2 Review of Dissertation

There are not sufficient dissertations concerning with this particular topic but the researchers more or less resulted with the topics are reviewed here.

Aryal (1995) has conducted research topic on "The General Behavior of Stock Market Price." The objectives of the study was to find the laws of price fluctuation in the stock market. to discuss theoretically the movements of stock market prices as predicted by the random walk model and to examine whether he successive price change of stocks market are independent to each other or not.

In this study the general behavior of twenty-one security prices on Nepal Stock exchange is remarkable for that, mainly the assumption of independence as predicate by random walk model of security price behavior. The stock price changes are dependent on each other. The random walk of security speculative price behavior has been refuted at least in the Nepalese context Sample of securities they are incorrectly adjusted those past information to the present market prices. General stock market of Nepal for the initial period appeared to the in efficient in incorporating the possible appearance of information into the successive price changes. He concluded that the knowledge of past is useful in predicting the future movements of stock market prices. Therefore, investors on the floor of the exchanges for securities can make higher than expected profits in the future based solely on the historical prices series under the existing trading mechanisms than they would be under buy and hold strategy.

Shrestha (1995) ahs conducted research topic on "Stock Price Behavior in Nepal." This study aims to examine the efficiency of the stock market in Nepal. The study was conducted with the objectives to examine the serial correlation of the successive daily price changes of the individual stocks, to determine whether the sequence of price changes is consistent with changes of the series of random numbers expected under the independent Bernoulli



process and to determine the efficiency of the stock market through the theoretical model of efficient market hypothesis in the Nepalese stock market.

He has concluded that the study the random walk theory is not a suitable description for the stock price behavior in Nepal. Opportunities are available to sophisticated (both institutional and individual) investors to earn higher return in the market. The existence and participation of the sophisticated investors have not been realized. It is realized that mostly the naïve investors have dominated I the market that can cause prices to diverge significantly from intrinsic value because the very existences of the sophisticated traders cause to erase the opportunities of persistence in price which establish independence of successive price changes.

Dhal (2002) has conducted research on the topic "Stock Market Behavior of Listed Joint Stock Companies in Nepal." His study was mainly based on the secondary data during the period of year 1997 to 2001. The study was conducted with the objectives to analyze the rate of listing of new companies and maintenance of listed companies in Nepal Stock Exchange Ltd, to analyze stock price trend and volume of stock traded on the secondary market, and to examine the signaling factors impact on stock price with the help of NEPSE index.

He has concluded that the study the NEPSE index price trend and investment facilitators are not doing their work in systematic way and the majority of the investors are facing many difficulties in Nepal Stock Exchange. The efficiency of Stock Market like brokers, market makers, security exchange limited were not found efficient by analyzing interviewers expression as they were not getting required support from these purpose investment decision is based on market price of share and volume of stock traded in stock exchange during his study period was found is increasing trend but last year was decreasing trend. Focused the study the price of stocks rather than the brokerage services.

Neupane (2004) conducted research on the topic "Determinants of the Stock Price in Nepal Stock Exchange." He has taken 2 commercial banks, 2

manufacturing and processing company, 1 Hotel, 2 trading corporation, 1 insurance company, 2 finance company and 1 development bank as the sample. His study was based on the secondary data. The study was conducted with the objectives to determine the effect of earning and book value to the stock price in NEPSE to identify qualitative as well as quantitative factors affecting the stock price in NEPSE.

The study conclude that in NEPSE, DPS, BPS and EPS individually do not have consistent relationship with the MPS among the listed companies. The pricing behavior varies from one company to another. But EPS, BPS and DPS jointly have significant effect on MPS. Companies performance (earning, dividend, BPS, risk etc), information, disclosure, timely AGM, political stability, national economy, demand and supply situation, strikes/demonstration, cease-fire and peace-talk are major factors affecting the share price. Listed companies do not provide sufficient information to their shareholders and performance of the companies are not transparent and moist problem is also affecting NEPSE.

Niraula (2004) has conducted research on the topic "Stock Price Movement of listed companies on securities market." His study was based on the secondary data taken from fiscal year 1994/95 to 2002/03. The study was conducted with the objectives to analyze stock price volume and the trend of the Nepal Stock Market, to analyze rate of newly listed companies and maintenance of already listed companies in NEPSE, to examine the relationship between NEPSE index and other various important variables and to study the signaling factors impact on stock price with the help of NEPSE index.

He has concluded that the study Nepalese Stock Market is in developing stage but investors are not well aware about this and investment process NEPSE index price trend and investments factors are not in systematic way. Stock price trend is decreasing form many years as smoothly but from two years price of the stock is decreasing rapidly and new listing companies is increasing. Degree of relationship of NEPSE index with volume

of stock traded, number of listed companies in positive and significant. Volume of stock traded in stock exchange during the study period was found increasing trend but last a years is decreasing. The leading companies are insurance companies, development banks, manufacturing and processing companies on the basis of higher price but commercial banks are dominates other on the basis of volume traded.

Poudel (2005) has conducted research on the topic "share price behaviour of listed companies in Nepal." The sample for the study comprised of 21 companies representation form each sector listed in Nepal Stock Exchange. The study was based on the secondary data. Different statistical tools like serial correlation and run test were used. The objective of the study was tested the daily share price behavior of listed companies in Nepal.

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 more or less in a stable position in the capital market overall in the study period. The stock market performance is steadily increasing with the increase in the number of listed companies. The badly affected were hotels, trading, manufacturing and processing sectors due to different reasons. The NEPSE index showed a better performance during the study period. NEPSE index of commercial banks is in increasing trend as compared to the other sectors.

Poudel (2008) has conducted research on the topic "Stock Market Growth in Nepal." His study was based on the primary and secondary data during the period of year 1993/94 to 2007/08. The objective of the study was to examine pace of primary market and growth of listed companies in Nepal, and to analyze the trend of market capitalization, number of transaction, number of securities traded and number of securities listed etc.

He has concluded that the study the market capitalization value of listed securities was fluctuate in the research year and growth rate is negative in market capitalization. Daily turnover, total share traded and opening market NEPSE index was also increased. NEPSE and SEBON do not provide

information accurately and timely. The further added that information provided is not sufficient. Primary Market is more attractive for majority of the respondent because low risk. Majority of the respondent prefer to invest in banking and financial sectors because of its marketability and profitability.

Bogati (2005) has conducted research on the topic "Security Market in Nepal." Her study was based on the sample of seven companies among 114 listed companies. She has taken data of five years from fiscal year 2056/57 to 2060/061 for the purpose of analysis. The objective of the study was to give introduction of security market, to forecast the future trend of NEPSE in terms of annual turnover, paid value and market capitalization, to examine the signaling effects of some major national and international events on the return of securities and to recommend appropriate and remedial suggestions for the improvements and development of secondary market in Nepal.

She concluded that the study NEPSE index increase to 360.70 in fiscal year 056/057 from 195.25 in fiscal year 050/051, and then it fell down to 222.04 in FY 060/061. Market return is also negative 9.92%. The data indicates that the performance of almost all sectors is poor. Although there are some business companies that are doing well, these few companies are not enough to make higher to overall performance of each sector that are enlisted in NEPSE. Financial performance of almost all market is poor and the main cause of poor financial performance is decreased in NEPSE index due to Maoist activities and political instability. The study shows, investors were unwilling to invest in securities market because of lack of poor knowledge and well guidance in this field. Investors wanted to have full information about risk and return and they wanted to be confident about their investment being utilized in a secured field.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter describes the methodology employed in this study. Research methodology is the systematic method of finding solution to a problem i.e. systematic collection, recording analysis, interpretation and reporting of information about various facts of a phenomenon under study. This chapter has been divided into six parts. These are research design, population and sample size, Nature and Source of Data, Data Collection, processing and analysis tools and limitation of the methodology.

Thus it is the process of arriving at the solution of problems through a planned and systematic method of finding out solution to a problem with certain objectives in view. Research methodology helps to find out accuracy validity and stability of research.

#### **3.1 Research Design**

This study is carried out to get the empirical result of the Behaviour of Nepal Stock Exchange Index. Research Design serves as a framed for the study guiding the collection and analysis of the data. Analytical and descriptive approaches are used to pursue the objectives of the study.

#### **3.2 Population and Sample Size**

Nepal Stock Exchange has classified the companies into 9 (Nine) sectors. They are commercial Banks, Finance Companies, Development Banks, Insurance Companies, Hotel, Manufacturing and processing Companies, Trading Companies, Hydropower and Others. Whole sectors of NEPSE is taken for the study purpose hence, population is itself the sample size. It means this study covers whole population and sample size is 100

percent. The required data are collected from the various sources covering a period of fiscal year 2004/05 to 2008/09.

### **3.2.1 Sampling Method**

Whole population is taken for study purpose. So sampling method is not required for this study.

### **3.3 Nature and Sources of Data**

The required data for study were collected from the secondary sources. Nepal Stock Exchange Ltd and Securities Board of Nepal were the main institution which provides most of the secondary data required for the study. The website of NEPSE and its trading reports, website of SEBON and its annual reports were the major sources of Secondary data. Besides these necessary data were collected from different books, newspapers, article and thesis. Following websites were basically used:

- ) Nepal Rastra Bank ([www.nrb.org.np](http://www.nrb.org.np))
- ) Nepal Stock Exchange ([www.nepalstock.com.np](http://www.nepalstock.com.np))
- ) Securities Board of Nepal ([www.sebonp.com](http://www.sebonp.com))
- ) Research studies, articles, journals, books etc.

### **3.4 Data Collection Procedure**

The data is mainly based on secondary data obtained from earlier stated sources. For the purpose of the collection of data required for this study. First of all necessary study of data and the relevant documents were identified. Then visited Nepal Stock Exchange Ltd., to collect the required data. The reports and data were also collected from the website of NEPSE and other website different books, library, published magazines and other published, articles etc.

On the completion of data collection, data were processed and using the micro soft Excel application software.

### 3.5 Data Processing and Analysis Tool

Simple statistical tools have been used to this study. The statistical tools have been used to this study. The statistical tools used in this study are percentage, line charts, bar diagram, multiple bar diagram, sub divided bar diagram and standard deviation. They are used to analyzed the proportion of traded companies, listed companies, market opening day etc. Percentage has been used to analyze the proportion of traded companies listed in the NEPSE and group wise trading market capitalization etc. Bar diagram the sub-divided have been used considerably to analyze these variables. Line charts have been used to analyze the behavior of NEPLSE Index. Standard deviation, coefficient of variation and weighted average mean have been used to analyze the volatility of the behavior of NEPSE Index.

#### 3.5.1 Statistical Tools

To draw the conclusion by analyzing the collected data simple statistical tool like weighted average mean standard deviation, coefficient of variation, simple bar diagram, multiple bar diagram, sub divided bar diagram and line charts, percentage etc are used and tabulation are made to implicit the comparative results.

#### 3.5.2 Weighted Average Mean (Arithmetic Mean)

The central values that represents the characteristics of whole distribution or, the values around which all items of the distribution tend to concentrate are called average. Arithmetic mean is one of the important statistical measures of average. The arithmetic mean of a given set of observation is their sum divided by the number of observation (Bajracharya, 2058).

**Symbolically**

$$\text{Weighted Average Mean } \frac{\sum fX}{N}$$

Where,

$\bar{X}$  = weighted average mean, arithmetic mean

$\Sigma X$  = sum of observations

$n$  = total number of observation

### 3.5.3 Percentage

Percentage is one of the most useful tools for the comparison of two quantities or, variables. Simply, the word percentage mean per hundred. In other words, the fraction with 100 as its denominator is known as a percentage and the number of the fraction is known as rate of percent.

### 3.5.4 Standard Deviation

It is a statistical measure of the variability of distribution of return around its mean. It is square root of the variance and measure the total risk on stock investment.

$$\sigma = \sqrt{\frac{\sum X^2 - \frac{(\sum X)^2}{n}}{n}}$$

Where,

$\sigma$  = Standard Deviation

$\bar{X}$  = Arithmetic Mean (Weighted Average Mean)

$n$  = Number of observations

$\Sigma X$  = Sum of all Values

$x$  = Observation

### 3.5.5 Coefficient of variation (C.V)

It is applicable to calculate the risk per unit of the expected return. It is the ratio of standard deviation of return to the mean of that distribution. It is the major relative risk. Coefficient of variation is the unitary risk measure. It gives the result regarding the unit of risk to bear for earning one unit of return.

$$C.V. = \frac{\sigma}{\bar{X}} \times 100$$



Where,

C.V. = coefficient of variation.

$\Xi$  = standard deviation

$\bar{x}$  = expected return

### **3.5.6 Multiple bar Diagram and Graphs**

Diagrams and graphs are visual aids which give a bird's eye view of a set of numerical data which show the information in a way that enables us to make comparison between two or, more than two sets of data. Diagrams are in different types out of these variable types of diagram one of the most important form of diagrammatic presentation of data is multiple bar diagram which is used in cases where multiple characteristics of the same set of data have to be presented and compared.

### **3.6 Limitation of the Methodology**

The analysis of the study is fully based on secondary data. So the secondary data play a vital role on the study and the reliability of collected data affect the result of the study. The financial statement of the company is not readily available Nepal Stock Exchange Ltd publishes financial statement of listed companies and information of some listed companies is not available.

Nepal Stock Exchange Ltd publishes financial statement and other information of some listed companies it is still unsuccessful to keep data of listed companies on its websites.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSIS**

This chapter deals with the main body of the study, the presentation and analysis of the collected data. This chapter deal with the study of sector-wise listed companies, annual turnover, market capitalization, number of share traded (traded share quantity) and market opening days in a year in NEPSE. The rest part deals with the trend of NEPSE Index and the major findings of the study.

#### **4.1 Sector-wise listed companies**

Trading on the floor of the NEPSE is limited to listed corporate securities and government bonds. In the beginning, the listed companies established under company Act 1964 A.D. but at present new company Act 2063 B.S. (2006 A.D.) is formulated and running now. Security Exchange Centre was established in 1976 A.D. and it was converted into Nepal Stock Exchange (NEPSE) in 1993 A.D. Nepalese companies must be listed under the listing Act 2053 B.S. (1996 A.D.). Number of listed companies was 62 in the initial month of trading on NEPSE. Then the number of listed companies is in increasing trend till now. The trend of sector-wise listed company is increasing. The increasing number of listed companies in finance sector is providing golden opportunities to the investors to invest their fund in it as well as to manage investment portfolio.

The sector-wise listed companies are shown in the table and figure below. Hydropower sector is included in the other sectors.

**Table 4.1**  
**Sector-wise number of Listed Companies**

| Sectors             | 2004/05   | 2005/06   | 2006/07   | 2007/08   | 2008/09   |
|---------------------|-----------|-----------|-----------|-----------|-----------|
| Commercial bank     | 14        | 15        | 15        | 17        | 21        |
| Development bank    | 7         | 8         | 16        | 23        | 29        |
| Finance companies   | <b>44</b> | <b>50</b> | <b>53</b> | <b>55</b> | <b>61</b> |
| Insurance companies | 14        | 15        | 16        | 17        | 17        |
| Hotels              | 4         | 4         | 4         | 4         | 4         |
| Mfg. and processing | 29        | 29        | 21        | 18        | 18        |
| Trading             | 8         | 8         | 5         | 4         | 4         |
| Others              | 5         | 6         | 5         | 4         | 5         |
| Total               | 125       | 135       | 135       | 142       | 159       |

*Source:* Annual Reports of SEBON.

Table 4.1 shows that the total number of listed companies is in increasing trend in the study period that is from F/Y 2004/05 to F/Y 2008/09. The total numbers of listed companies were 125 in the initial year of study period (F/Y 2004/05). In FY 2005/06 the total number of listed companies in NEPSE is increased up to 135 and it remained constant till F/Y 2006/07 then it is increasing every year which was 142 companies in F/Y 2007/08 and 159 companies in F/Y 2008/09. The sector-wise listed companies in finance, development bank, commercial bank, manufacturing and processing sectors is increasing at higher rate than that of insurance companies, hotels, trading and other sectors. The numbers of sector-wise listed companies is in increasing trend but hotel sector is remained constant and trading sector is in decreasing trend from F/Y 2004/05 up to 2008/09.

Finance sector is dominating other sector in terms of number of listed companies. At the end of the study period (F/Y 2008/09), the number of listed companies of finance sector was 61 but hotel; trading and other sectors are not improving. In general overall total number of listed companies is in increasing trend, which indicates the expansion of capital market in Nepal.

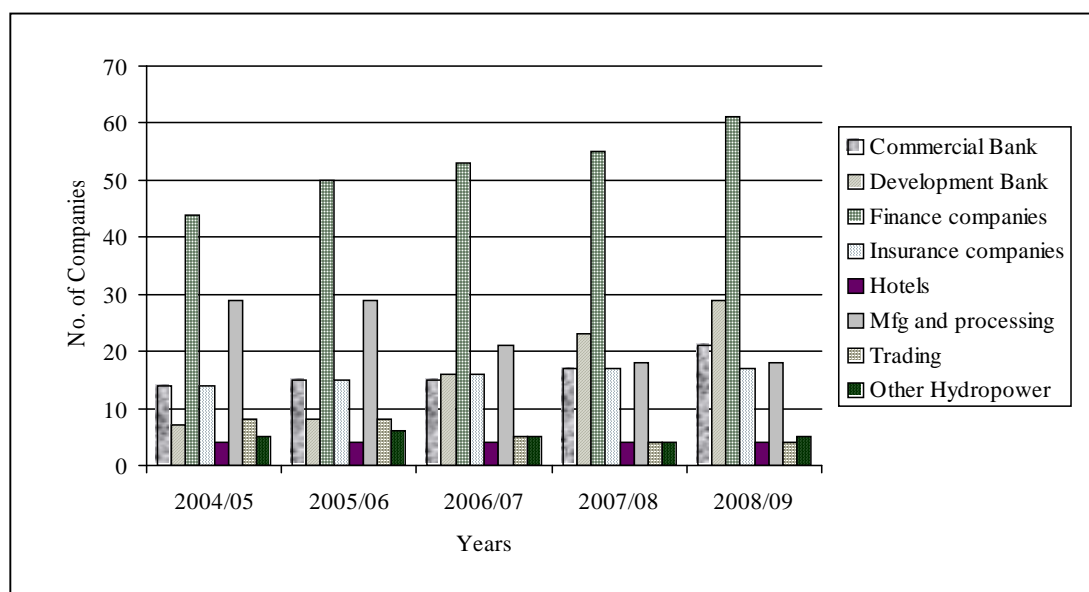
**Fig. 4.1 :Sector-wise Listed Companies**

Figure 4.1 shows that the number of listed companies in NEPSE. This indicator shows that the stock market in Nepal is expanding. It is found that total number of listed companies is increasing every year, which was 125 in F/Y 2004/05, 135 in F/Y 2005/06, 135 in F/Y 2006/07, 142 in F/Y 2007/08 and 159 in F/Y 2008/09.

## 4.2 Annual Turnover

Annual turnover measure the total amount of listed securities traded in NEPSE in a year, which is calculated by multiplying market days per year and average daily turnover amount of each company. Table 4.2 shows that the most successful year for Nepal Stock Exchange was F/Y 2007/08. In this year annual turnover of the market was Rs.22,820.80 million. In F/Y 2004/05 annual turnover was Rs.4,507.68 million and then in other years was in increasing trend except in F/Y 2005/06 and F/Y 2008/09 that was Rs.3,451.43 million and Rs.21,681.14 million respectively.

Commercial bank has domination over all other sectors in terms of turnover amounts. Highest annual turnover in the study period was Rs.22,820.80 million that was in F/Y 2007/08 and commercial bank covered

62.90% of the total annual turnover in that year. Annual turnover are shown on the table and analyze below.

**Table 4.2**  
**Annual turnover**

**(Rupees in million)**

| Year               | 2004/05 |       | 2005/06 |       | 2006/07 |       | 2007/08        |              | 2008/09  |       |
|--------------------|---------|-------|---------|-------|---------|-------|----------------|--------------|----------|-------|
|                    | Value   | %     | Value   | %     | Value   | %     | Value          | %            | Value    | %     |
| Com.Bank           | 4021.83 | 89.23 | 2696.28 | 78.12 | 5563.50 | 66.55 | 14351          | <b>62.90</b> | 12406.45 | 57.22 |
| Dev. Bank          | 22.01   | 0.48  | 82.76   | 2.40  | 577.50  | 6.91  | 2075.20        | 9.90         | 2740.36  | 12.64 |
| Finance            | 216.37  | 4.80  | 305.85  | 8.86  | 713.6   | 8.54  | 2518.50        | 11.04        | 2615.40  | 12.07 |
| Insurance          | 67.62   | 1.50  | 129.90  | 3.76  | 205     | 2.45  | 264.90         | 1.162        | 212.80   | 0.98  |
| Hotels             | 4.48    | 0.10  | 19.77   | 0.57  | 7       | 0.08  | 27.70          | 0.12         | 18.69    | 0.08  |
| mfg and processing | 114.90  | 2.55  | 17.19   | 0.50  | 24.3    | 0.29  | 343.40         | 1.50         | 26.08    | 0.12  |
| Trading            | 7.99    | 0.18  | 15.80   | 0.46  | 10.4    | 0.12  | 33.60          | 0.15         | 33.49    | 0.15  |
| Others             | 52.48   | 1.16  | 183.88  | 5.33  | 1258.80 | 15.06 | 3206.50        | 14.06        | 3627.87  | 16.74 |
| Total              | 4507.68 | 100%  | 3451.43 | 100%  | 8360.10 | 100%  | <b>22820.8</b> | 100%         | 21681.14 | 100%  |

Source: Annual Reports of SEBON.

Table 4.2 shows that the annual turnover volume is fluctuating. The total turnover of listed companies was in increasing trend except in F/Y 2005/06 and F/Y 2008/09. The total annual turnover value was Rs.4,507.68 million in F/Y 2004/05. It decreased in the next year, which was Rs.3,451.43 million, and it increased in F/Y 2006/07, which was Rs.8,360.10 million. In F/Y 2007/08 the annual turnover was Rs.22,820.80 million. It is highest in the overall study period but it was decreased in F/Y 2008/09, which was Rs.21,681.14 million.

Annual turnover of commercial bank was Rs.4,021.83 million in F/Y 2004/05 and in next other years were in increasing trend except in F/Y 2005/06 and F/Y 2008/09. It was Rs.2,696.28 million in F/Y 2005/06 and Rs.5,563.50 million in F/Y 2006/07; Rs.14,351 million in F/Y 2007/08 and Rs.12,406.45 million in F/Y 2008/09. Commercial bank covered the highest position in terms of annual turnovers. Annual turnovers values of commercial bank was in increasing trend from F/Y 2004/05 up to F/Y 2008/09 but the percentage of total turnover of NEPSE value of commercial bank was in decreasing trend that was 89.23%, 78.12%, 66.55%, 62.90% and 57.22% in F/Y 2004/05, F/Y 2005/06, F/Y 2006/07, F/Y 2007/08 and F/Y 2008/09 respectively. Total turnover percentage of commercial bank was 89.23% in F/Y 2004/05 and it decreased to 57.22% in F/Y 2008/09 because number

of listed companies of other sectors (like finance, development bank) were in increasing trend than the commercial bank. The number of listed companies of commercial banks was 14 in F/Y 2004/08 and it increased up to 21 in F/Y 2008/09 but finance and development bank dominated the commercial bank in terms of number of listed companies. The highest annual turnover value of commercial bank was Rs.14,351 million in F/Y 2007/08 and lowest turnover was Rs.2,696.28 million in F/Y 2005/06.

Annual turnover value of development bank is increasing. In the initial year of study period (F/Y 2004/05) the annual turnover value was Rs.22.01 million and 82.76 million in F/Y 2005/06, Rs.577.50 million in F/Y 2006/07, Rs.2,075.20 million in F/Y 2007/08 and Rs.2,740.36 million in F/Y 2008/09. The total annual turnover value percentage of development bank was 0.48% in F/Y 2004/05, 2.40% in F/Y 2005/06, 6.91% in F/Y 2006/07, 9.90% in F/Y 2007/08 and 12.64% in F/Y 2008/09. Annual turnover values and total turnover percentage of NEPSE is increasing because number of listed companies of all sectors is increasing except the finance sectors. The listed companies of development bank were 7 in F/Y 004/05 and it increased up to 29 in F/Y 2008/09.

The annual turnover of finance companies is increasing. It was Rs.216.37 million in F/Y 2004/05, Rs.305.85 million in F/Y 2005/06, Rs.713.60 million in F/Y 2006/07, Rs.2,578.50 million in F/Y 2007/08 and Rs.2,615.40 million in F/Y 2008/09. Percentage of total turnover of finance companies from F/Y 2004/05 to 2008/09 was 4.80%, 8.86%, 8.54%, 11.04% and 12.07% respectively. Annual turnover and percentage of total turnover in NEPSE of finance companies was in increasing trend because listed companies of finance companies were higher than the other remaining seven sectors that was 44 in F/Y 2004/05 and it increased up to 61 in F/Y 2008/09. Finance companies covering the highest position in NEPSE in terms of listing companies. Commercial banks, finance companies and development banks were in dominating position in NEPSE. The highest annual turnover of finance company was Rs.2,615.40 million in F/Y 2008/09 and lowest turnover was Rs.216.37 million in F/Y 2004/05.

Annual turnover of insurance companies from F/Y 2004/05 to F/Y 2008/09 was in increasing trend that was 67.62, 129.90, 205, 264.90 and 212.80 respectively. The values of annual turnover of insurance companies was increasing but the percentage of total annual turnover in NEPSE of insurance companies was fluctuating that was 1.50%, 3.76%, 2.45%, 1.16% and 0.98% from F/Y 2004/05 to F/Y 2008/09 respectively. Percentage of total annual turnover of insurance companies was 1.50% in F/Y 2004/05 and it increased up to 3.76% in F/Y 2005/06 and again it decreased to 0.98% in F/Y 2008/09. Such decrement in percentage is caused by increment in total annual turnover value of NEPSE than insurance sector. Listed companies of insurance companies were lower than the commercial bank, finance companies and development bank.

Annual turnover values of hotel sector is fluctuating and its percentage of total turnover in NEPSE is also fluctuating. Percentage of total turnover in NEPSE was 0.10%, 0.57%, 0.08%, 0.12% and 0.08% respectively from F/Y 2004/05 up to F/Y 2008/09. Listed companies of hotel sector in the study period was remain constant but the percentage of turnover in NEPSE was lowest in F/Y 2006/07 and F/Y 2008/09 that was 0.08% because listed number of companies of hotel sector was lower than other sectors.

Annual turnover of manufacturing and processing sector is fluctuating. It was Rs.114.90 million in F/Y 2004/05, and it decreased in next year that was Rs.17.19 million. In F/Y 2006/07 annual turnover was Rs.24.30 million and it increased up to Rs.343.40 million in F/Y 2007/08 and it slightly decreased to 26.08 million in F/Y 2008/09. Percentage of total turnover value of NEPSE is fluctuating. From F/Y 2004/05 up to F/Y 2008/09 the percentage of annual turnover value was 2.55%, 0.50%, 0.29%, 1.50% and 0.12% respectively. Number of listed company of commercial banks, development banks and finance companies were in increasing trend than the mfg. and processing companies, thus the percentage of this sector in total annual turnover of NEPSE was decreases.

Annual turnover of trading sector is increasing except in F/Y 2006/07. Turnover value of trading sector was Rs.7.99 million in F/Y 2004/05, and it increased in next year, which was 15.80 million, and again it decreased than previous year in F/Y 2006/07. It was Rs.10.40 million. In F/Y 2007/08 was Rs.33.60 million and in F/Y 2008/09 it remained constant. Annual turnover of trading companies value was increasing from F/Y 2004/05 up to F/Y 2008/09 but percentage of total annual turnover in NEPSE of trading companies was decreasing from F/Y 2006/07 to F/Y 2008/09. Turnover percentage of trading companies was 0.46% in F/Y 2005/06 and it decrease to 0.12% in F/Y 2006/07 and was 0.15% in F/Y 2008/09. Because number of listed companies of trading sectors is decreasing than the others sectors. In FY 2008/09 the number of listing companies of trading sectors was only 4.

Hydropower is included in other sectors. The annual turnover of other sector is in increasing trend. It was Rs.52.48 million in F/Y 2004/05 and it increased in next years went up Rs.3,627.87 million in F/Y 2008/09. In the other sectors, annual turnover values were in increasing trend and its percentage of total turnover was also increasing because number of listing companies of other sectors was higher than trading and hotel sectors.

The annual turnovers are also presented in figures that are shown below.

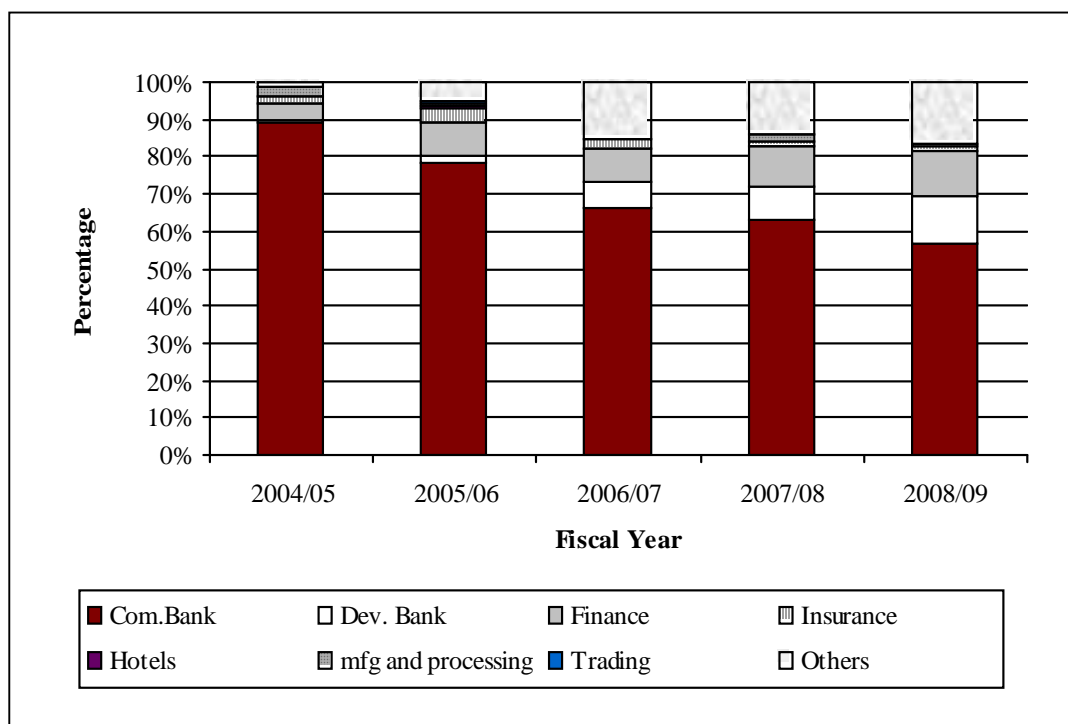
**Fig. 4.2: Annual turnover**

Figure 4.2 shows the annual turnover. Annual turnover of the commercial bank is the highest among eight sectors. It was Rs.14,351 million in F/Y 2007/08 and lowest turnover was Rs.4.48 million in hotel sector in F/Y 2004/05. Commercial bank, finance companies and development banks are dominating the other sectors in terms of annual turnover.

### 4.3 Market Capitalization

Market capitalization measures the total worth of shares floated in the economy, which is the sum of price per share multiplied by number of shares of each company. It is considered as an important secondary market indicator as it is compared with the indicators of the economy. Market capitalization of the listed companies at the secondary market is in continuous rise. The increased market capitalization shows the good performance of the



companies. Investors are highly interested to such companies. In this study period the market capitalization of the listed securities was highest in F/Y 2008/09 it was Rs.5,12,939.07 million and the lowest value was Rs.61,365.89 million in F/Y 2004/05.

Market capitalization value and percentage of each study years from F/Y 2004/05 to F/Y 2008/09 is shown on the table below.

**Table 4.3**  
**Market Capitalization**

(Rs. in million)

| Year               | 2004/05         |              | 2005/06         |              | 2006/07          |              | 2007/08          |              | 2008/09          |              |
|--------------------|-----------------|--------------|-----------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|
|                    | Value           | %            | Value           | %            | Value            | %            | Value            | %            | Value            | %            |
| Com.Bank           | <b>40119.88</b> | <b>65.38</b> | <b>68694.36</b> | <b>70.96</b> | <b>135588.40</b> | <b>72.78</b> | <b>259955.30</b> | <b>70.98</b> | <b>302219.29</b> | <b>58.92</b> |
| Dev. Bank          | 1050.07         | 1.71         | 1577.45         | 1.63         | 6010.60          | 3.23         | 17997.80         | 4.91         | 27137.89         | 5.29         |
| Finance            | 3666.13         | 5.97         | 5000.04         | 5.17         | 9889.30          | 5.31         | 97674.40         | 10.29        | 43007.13         | 8.38         |
| Insurance          | 3966.10         | 6.46         | 4952.19         | 5.12         | 8059.80          | 4.33         | 11241.40         | 3.07         | 10537.49         | 2.05         |
| Hotels             | 2308.38         | 3.76         | 2344.21         | 2.42         | 3261.10          | 1.75         | 4809.60          | 1.31         | 4851.95          | 0.95         |
| mfg and processing | 5024.83         | 8.19         | 5472.11         | 5.65         | 6200             | 3.33         | 7516.90          | 2.05         | 7706.09          | 1.50         |
| Trading            | 635.88          | 1.04         | 764.44          | 0.78         | 796.40           | 0.43         | 1170.20          | 0.32         | 1696.36          | 0.33         |
| Others             | 4594.62         | 7.49         | 8008.94         | 8.27         | 16495.70         | 8.85         | 25881.90         | 7.07         | 115782.88        | 22.57        |
| Total              | 61365.89        | 100%         | 96813.74        | 100%         | 186301.30        | 100%         | 366247.50        | 100%         | 512939.07        | 100%         |

*Source:* Annual Reports of SEBON.

Table 4.3 shows that the market capitalization of the listed securities in NEPSE. In F/Y 2008/09 it was highest ( Rs.5,12,939.07 million) and the lowest value was in F/Y 2004/05 (Rs.61,365.89 million). In the study period the market capitalization value from F/Y 2004/05 up to F/Y 2008/09 is increasing. It was Rs.61,365.89 million in F/Y 2004/05, Rs.96,813.74 million in F/Y 2005/06, Rs.1,86,301.30 million in F/Y 2006/07, Rs.3,66,247.50 million in F/Y 2007/08 and Rs.5,12,939.07 million in F/Y 2008/09.

The percentage of market capitalization value of commercial bank has the highest share that was 65.38%, 70.96%, 72.78%, 70.98% and 58.92% respectively in the F/Y 2004/05 to F/Y 2008/09 among eight sectors of the listed companies. Commercial bank is dominating the other sectors in terms of market capitalization. The market capitalization value of commercial bank was in increasing trend but percentage of market capitalization value was fluctuating. The highest percentage of market capitalization value of commercial bank was 72.78% in F/Y 2006/07 and lowest was 58.92% in F/Y 2008/09. In F/Y 2006/07,

commercial bank listed high volume of new shares (bonus share, equity share and right shares) than the others sectors and in F/Y 2008/09 its percentage was decreased because new listing shares of other sectors (development bank, finance, insurance and other) were increased than the commercial bank. Therefore total market capitalization percentage of commercial bank was decreased in F/Y 2008/09. The highest value of market capitalization value of commercial bank was in F/Y 2008/09 that was Rs.302,219.29 million and lowest value in F/Y 2004/05 that was Rs.40,119.88 million.

Market capitalization value of development bank is in increasing trend. Market capitalization value of development bank in F/Y 2004/05 was Rs.1,050.07 million and it increased up to Rs.27,137.89 million in F/Y 2008/09. Percentage of total market capitalization values of development bank was in increasing trend that was 1.71% in F/Y 2004/05 and it increased up to 5.29% in F/Y 2008/09 because new shares (equity, right and bonus shares) were listed in F/Y 2008/09 thus the percentage of market capitalization value of development bank was increased.

Finance sector is also better sectors in terms of market capitalization. Market capitalization value of finance sectors was increasing except in F/Y 2008/09. In F/Y 2004/05 the market capitalization value of finance sectors was Rs.3666.13 million and it increased up to Rs.97,674.40 million in F/Y 2007/08 but it decreased in F/Y 2008/09 to Rs.43,007.13 million. Percentage of market capitalization values of finance sectors was fluctuating in the study period. The highest percentage was in F/Y 2007/08 and lowest in F/Y 2005/06 that was 10.29% and 5.17% respectively. In F/Y 2007/08, the market capitalization value and percentage were also highest in this year because huge volume of equity shares, bonus shares, and right shares were listed in finance sectors comparing than the insurance, trading and other sectors.

Market capitalization value of insurance companies was increasing except in F/Y 2008/09. Market capitalization value of insurance company was Rs.3,966.10 million in F/Y 2004/05 and it increased up to Rs.11,241.40 million in F/Y 2007/08 but it decreased in next year to Rs.10,537.49 million. Percentage of market capitalization value of insurance sectors was in decreasing trend that was 6.46% in F/Y 2004/05 and it increased to 2.05% in F/Y 2008/09. The percentage of market capitalization values of insurance

sectors was decreasing because listing of new shares was decreased than the commercial bank, development bank and finance companies.

Market capitalization value of hotel sector is increasing. In the initial year of the study period (F/Y 2004/05) market capitalization of hotel sector was Rs.2,308.38 million and it was increasing in next years up to Rs.4,851.95 million (in F/Y 2008/09). Market capitalization value of hotel sector was in increasing trend but percentage of total market capitalization value was decreasing because no new listing of shares except in F/Y 2008/09 in hotel sectors. In F/Y 2008/09 only one hotel listed bonus shares of Rs.86.99 million.

Market capitalization value of manufacturing and processing sectors is also in increasing trend but percentage of total market capitalization was decreasing in the study period. The highest market capitalization value of manufacturing and processing sector was Rs.7,706.09 million in F/Y 2008/09 and the lowest value was Rs.5,024.83 million in F/Y 2004/05. The percentage of market capitalization value of manufacturing and processing sector was 8.19% in F/Y 2004/05 and it decreased to 1.50% in F/Y 2008/09 because new shares were not listing and five manufacturing and processing companies shares were delisted in F/Y 2008/09 thus the percentages values of market capitalization was decreased.

Trading and other sectors market capitalization value is in increasing trend in the study period from F/Y 2004/05 up to F/Y 2008/09. In F/Y 2004/05, capitalization value of trading sectors was Rs.635.88 million and it was increased up to Rs.1,696.36 million (in F/Y 2008/09). Other sectors market capitalization value is also increasing, in F/Y 2004/05 was Rs.4,594.62 million and it increased up to Rs.1,15,782.88 million in F/Y 2008/09. Trading and other sectors market capitalization values were in increasing trend but percentage of total market capitalization values were in decreasing trend in the study period. The number of new listing shares was decreased than the other sectors.

In the study period (from F/Y 2004/05 to F/Y 2008/09), among the companies' commercial banks, finance companies, manufacturing and processing sectors and other sectors are attractive to invest

Market capitalization values of these sectors are shown in the figure 4.3 below.

**Fig. 4.3: Market Capitalization**

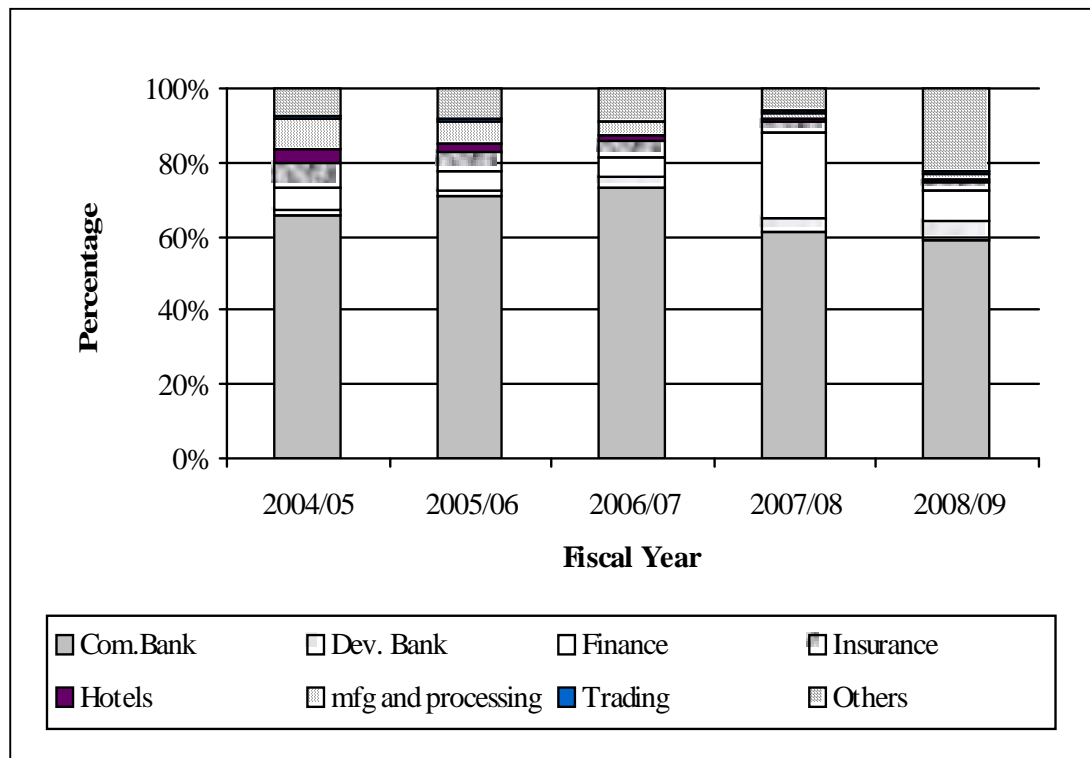


Figure 4.3 shows that the market capitalization value of commercial bank is dominating the other sectors. Insurance and hotel sectors are also shows the better performance than trading and development bank. Commercial bank is the most attractive sectors than other remaining eight sectors.

#### 4.4 Traded Share Quantity

The traded share quantity of the sector-wise listed companies is fluctuating in the study period (from F/Y 2004/05 to 2008/09). Table 4.4 shows that the traded share quantity of sector-wise listed companies in NEPSE trading floor. In the beginning of the study period (F/Y 2004/05) the total number of share traded was 1,84,33,340 and it decreased in next year, which was 1,22,23,330 again it was increased up to 1,81,47,050 in F/Y 2006/07. In F/Y 2007/08 the total number of share traded was 2,77,42,600 and it decreased in next year that was 2,56,58,420. Highest total number of share traded was in F/Y 2007/08 (27742600) and lowest share traded was in F/Y 2005/06 (1,22,23,330). Traded number of share and percentage of the study period from F/Y 2004/05 up to F/Y 2008/09 is shown on the table below and analyze them.

**Table 4.4**  
**Traded Share Quantity**

(in Thousand)

| Year               | 2004/05  |       | 2005/06  |       | 2006/07  |       | 2007/08  |       | 2008/09  |       |
|--------------------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|                    | Value    | %     | Value    | %     | Value    | %     | Value    | %     | Value    | %     |
| Com.Bank           | 6416.40  | 34.81 | 5534.90  | 45.28 | 8700     | 47.94 | 10695.60 | 38.55 | 12472.40 | 48.62 |
| Dev. Bank          | 135.62   | 0.74  | 386.39   | 3.16  | 1360.48  | 7.50  | 2985.40  | 10.76 | 3654.72  | 14.24 |
| Finance            | 1443.36  | 7.83  | 1957.68  | 16.02 | 2534.19  | 13.96 | 3204.06  | 11.55 | 4408.94  | 17.18 |
| Insurance          | 328.13   | 1.78  | 575      | 4.70  | 627.64   | 3.46  | 441.89   | 1.59  | 648.21   | 2.53  |
| Hotels             | 98.17    | 0.53  | 392.80   | 3.21  | 81.70    | 0.45  | 158.07   | 0.57  | 96.95    | 0.38  |
| mfg and processing | 7603.14  | 41.25 | 59.80    | 0.49  | 82.92    | 0.46  | 2865.15  | 10.33 | 95.12    | 0.37  |
| Trading            | 10.41    | 0.06  | 15.22    | 0.13  | 11.47    | 0.06  | 14.97    | 0.05  | 14.65    | 0.06  |
| Others             | 2398.11  | 13    | 3301.54  | 27.01 | 4748.65  | 21.17 | 7377.40  | 26.59 | 4267.43  | 16.63 |
| Total              | 18433.34 | 100%  | 12223.33 | 100%  | 18147.05 | 100%  | 27742.60 | 100%  | 25658.42 | 100%  |

*Source:* Annual Reports of SEBON.

Table 4.4 shows the sector-wise traded share quantity. Commercial bank is dominating the other seven sectors, as it captured the largest number of the total share trading. It was accounted 64,16,400 in F/Y 2004/05, 55,34,900 in F/Y 2005/06, 87,00,000 in F/Y 2006/07, 1,06,95,600 in F/Y 2007/08 and 1,24,72,400 in F/Y 2008/09. In terms of percentage of total share traded quantity in NEPSE it was 34.81%, 45.28%, 47.94%, 38.55% and 48.62% from F/Y 2004/05 up to F/Y 2008/09 respectively. In F/Y 2007/08,

total number of share traded percentage of commercial bank was lowest but values was not lowest that was 38.55%. In this year, the percentage was lowest than other years because others sectors (development bank, manufacturing and processing sectors and others) percentage was increased than the commercial bank. In F/Y 2008/09 the number of traded share and total percentage of NEPSE were also increased than the previous year because total number of traded shares percentage of manufacturing and processing sectors and other sectors were decreased than the commercial bank. Commercial bank has maximum share traded quantity in F/Y 2008/09 (1,24,72,400 shares) and lowest share traded quantity was in F/Y 2005/06 (55,34,900 shares).

Share traded quantity of development bank from F/Y 2004/05 up to 2008/09 in percentage were 0.74%, 3.16%, 7.50%, 10.76% and 14.24% and number of traded share were 1,35,620, 3,86,390, 1,3,60,480, 29,85,400 and 36,54,720 respectively. The number of traded shares of development bank was in increasing trend that was 1,35,620 in F/Y 2004/05 and it increased up to 36,54,720 in F/Y 2008/09. Total number of traded shares percentage of development bank is also increasing during the study period because the number of listed companies of development bank is in increasing trend and number of traded share of insurance, hotels, manufacturing and processing and trading sectors were decreasing in the study period.

In finance companies, share traded quantity trend is also increasing. Whose share traded percentage was 7.88% in F/Y 2004/05, 16.02% in F/Y 2005/06, 13.96% in F/Y 2006/07, 11.55% in F/Y 2007/08 and 17.18% in F/Y 2008/09. In F/Y 2004/05, then percentage of total number of traded share in NEPSE of finance companies was 7.88% and it increased up to 17.18% in F/Y 2008/09 because percentage of number of traded share of commercial bank, manufacturing and processing sectors and others sectors were increased than finance companies in F/Y 2004/05 and manufacturing and processing, and others sectors were decreased in F/Y 2008/09. In the study period the number of traded share of commercial bank, finance companies and development bank were found dominated in NEPSE.

Insurance companies have better share traded quantity in comparison to the trading and hotel sectors. Its share traded quantity trend is increasing from 3,28,130 (in F/Y 2004/05) to 6,48,210 (in F/Y 2008/09) and percentage of total number of trades shares was in fluctuating trend and its covered lowest percentage in NEPSE. Trading and hotel sectors have a lowest number of traded shares and it covers lowest

percentage comparing than the other remaining six sectors because number of listed companies of trading and hotel sectors were lowest and total number of traded shares of that sectors were also decreased than the other remaining six sectors.

Manufacturing and processing sectors share traded quantity is fluctuating. In the initial year of study period (F/Y 2004/05), the share traded quantity covered high position and it was decreasing in next years. In F/Y 2004/05 share traded quantity was 76,03,140 and it decreased to 59,800 in next year. In F/Y 2008/09 share traded quantity of manufacturing and processing sector was 95,120. Percentage of total number of traded shares of manufacturing and processing sectors was 41.25% in F/Y 2004/05 and it decreased to 0.37% in F/Y 2008/09 because number of listed companies of commercial bank, development bank and finance companies were increased than manufacturing and processing sectors in F/Y 2008/09.

Other sectors performance is better in terms of share-traded quantity in NEPSE. Its share-traded percentage was 13% in F/Y 2004/05, 27.01% in F/Y 2005/06, 26.17% in F/Y 2006/07, F/Y 26.59% in F/Y 2007/08 and 16.6% in F/Y 2008/09. Total number of traded share was increasing in the study period and its percentage was also increasing expect in F/Y 2008/09. In F/Y 2008/09 percentage of total number of traded share was decreased than the previous years because percentage of number of traded shares of commercial bank, development bank and finance companies were increased. The highest share traded quantity of other sectors was 73,77,400 in F/Y 2007/08 and lowest was 23,98,110 in F/Y 2004/05.

Above tabulated data are shown in the figure below.

**Fig.4.4: Traded Share Quantity**

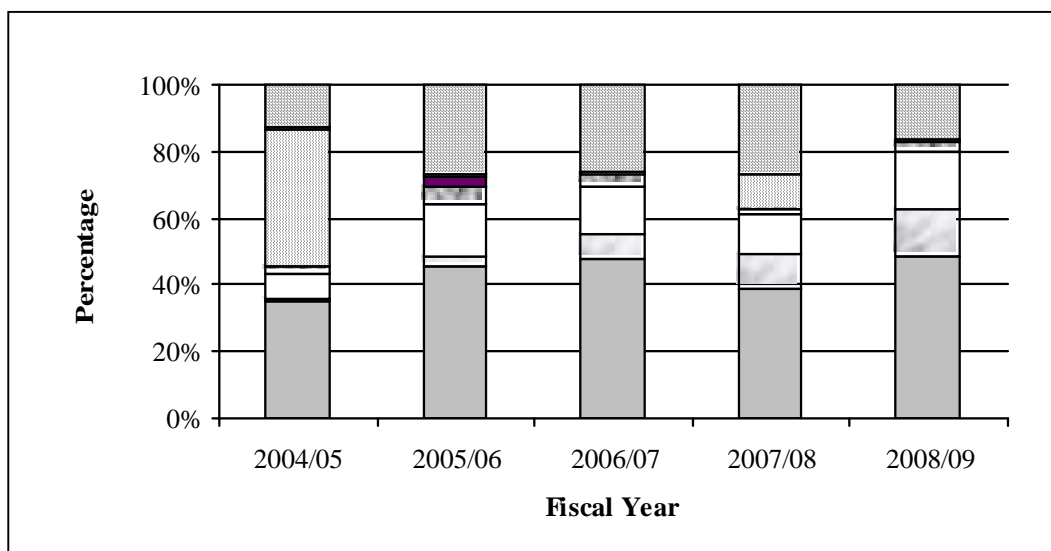


Figure 4.4 shows the share-traded quantity in NEPSE from F/Y 2004/05 to 2008/09. In F/Y 2004/05 manufacturing and processing sectors, commercial banks dominated remaining other sectors. In F/Y 2005/06, F/Y 2006/07 and F/Y 2007/08, commercial bank and other sectors dominated to the other remaining sectors. In F/Y 2008/09 commercial bank and finance companies dominated the other remaining six sectors.

#### **4.5 Market Opening Days in NEPSE**

NEPSE is the only one secondary market in Nepal for trading of securities. NEPSE has its fixed period in market opening days but it did not work because of on the country adverse situation, environment, political instability situation and NEPSE employees' conflicts. So little fluctuation in market opening days is found in the study period. The collected data are shown on the table and the figure below:

**Table 4.5**

#### **Market Opening Days in NEPSE**

| Year | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|------|---------|---------|---------|---------|---------|
| Days | 236     | 228     | 232     | 235     | 234     |

*Source:* Annual Reports SEBON.

Table 4.5 shows the market opening days in NEPSE. Market opening days in NEPSE from F/Y 2004/05 to 2008/09 was 236, 228, 232, 235 and 234 days respectively. In the study period, not so difference in the market opening days in NEPSE is observed. A highest market day was in F/Y 2004/05 that



was 236 days and lowest was 228 days in F/Y 2005/06. Figure 4.6 shows the market opening days in NEPSE as below.

#### 4.6 Trend of NEPSE Index

NEPSE Index is the index that represents the whole security market of Nepal. NEPSE calculates so many index such as NEPSE, sensitive, float and others sector wise indices. There are so many methods for calculating index such as value weight, price weight and equally weight but NEPSE is adopting value weight index system. NEPSE index is the oldest index in NEPSE that is calculating from the initial day of NEPSE and the base index is assumed 100. Increase in the index shows increase in total capitalization of the companies and vice versa. NEPSE index is calculated by considering all listed share including that of promoter shares and employee share of all listed companies in NEPSE. Index as are used to determine the relationship and economic variables and to determine the systematic risk for individual securities and portfolios.

Table 4.6 shows the monthly NEPSE index during the study period that is shown on the table and analyze below.

**Table 4.6**  
**Monthly NEPSE Index**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 241.51  | 300.05  | 390.86  | 705.96  | 1084.76 |
| September      | 234.58  | 293.35  | 382.56  | 817.08  | 976.01  |
| October        | 231.31  | 297.34  | 398.44  | 861.37  | 933.97  |
| November       | 235.08  | 302.39  | 447.43  | 915.38  | 806.90  |
| December       | 236.38  | 303.12  | 508.58  | 1064.09 | 734.85  |
| January        | 239.61  | 305.50  | 537.09  | 905.38  | 659.81  |
| February       | 257.29  | 317.79  | 523.94  | 795.89  | 663.52  |
| March          | 280.65  | 339.79  | 494.06  | 720.92  | 667.20  |
| April          | 393.26  | 334.77  | 494.59  | 734.83  | 661.27  |

|      |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|
| May  | 258.42 | 385.89 | 513.45 | 806.26 | 660.96 |
| June | 277.79 | 372.01 | 575.04 | 930.65 | 678.74 |
| July | 286.67 | 386.83 | 683.95 | 963.36 | 749.10 |
| SD   | 22.94  | 66.65  | 85.45  | 108.36 | 146.91 |
| CV   | 8.96%  | 17.43% | 17.23% | 12.72% | 19%    |

Source: www.nepalstock.com

Table 4.6 shows the NEPSE index from F/Y 2004/05 to F/Y 2008/09 that is average index of each month not the index of the last day of the month. The NEPSE index hit the Peak in August at 1084.76 point in F/Y 2008/09. In F/Y 2004/05 NEPSE index was 241.51 point in August and it decreased to 231.31 point in October then after it increased up to 293.26 point in April. It was peak point in the year and it slump down to 286.67 point in July. NEPSE index was fluctuating in F/Y 2004/05 because share trading stopped due to strike of NEPSE employee on 26 July 2004 and September 1-3 stopped trading because 12 Nepalese hostages killed in Iraq.

In F/Y 2005/06, NEPSE index was 300.05 point in August and it decreased to 293.35 in September that was lowest point in that year. After September NEPSE index was improving. In April NEPSE index was decreased because share trading stopped due to curfew and political situation on 8<sup>th</sup> April to 13<sup>th</sup> April and 18<sup>th</sup> April to 24<sup>th</sup> April then after index was increasing next months it went up to 386.83 point in July. At that time, the price of shares is increased, total market capital value is also improved and Nepalese political situation was also better.

In F/Y 2006/07, NEPSE index was 390.86 point in August and it decreased to 382.56 point in September because political situation and curfew on 17 September thus share trading was affected. After September political environment was improved and NEPSE index was slightly improved that was 683.95 point in July.

In F/Y 2007/08 at the beginning the NEPSE index was 705.96 point in August and it increased up to 1064.09 point in December but it slump down to 720.92 point in March and it was in increasing trend and it went up to 963.36 point in July.

In the overall study period, the NEPSE index was at the pick in August 2008/09 that was 1084.76 point but it was slump down to 660.96 point in May and than it improved in July that was 749.10. The NEPSE index was in decreasing trend after August to May because Maoist problem and countries political situation direct affected the share price.

The NEPSE index reflects the aggregate volatility of the share prices of the companies. High volatility refers high risk. Standard deviation measures the total risk of the companies. Low standard deviation refers low risk and vice versa. Coefficient of variation (C.V.) measures the risk per unit of return. Standard deviation of NEPSE index from F/Y 2004/05 up to F/Y 2008/09 was 22.94, 66.65, 85.45, 108.36 and 146.91 respectively. It is in increasing trend and it implies that the risk is increasing. The coefficient of variation of NEPSE index from F/Y 2004/05 up to F/Y 2008/09 was 8.96%, 17.43%, 17.23%, 12.72% and 19% respectively. F/Y 2004/05 is found less risky year because C.V. was lowest than other years and F/Y 2008/09 was high risky year. Figure 4.6 shows the average monthly NEPSE index in the study period as presented below.

**Fig 4.5: Monthly Movements of NEPSE index**

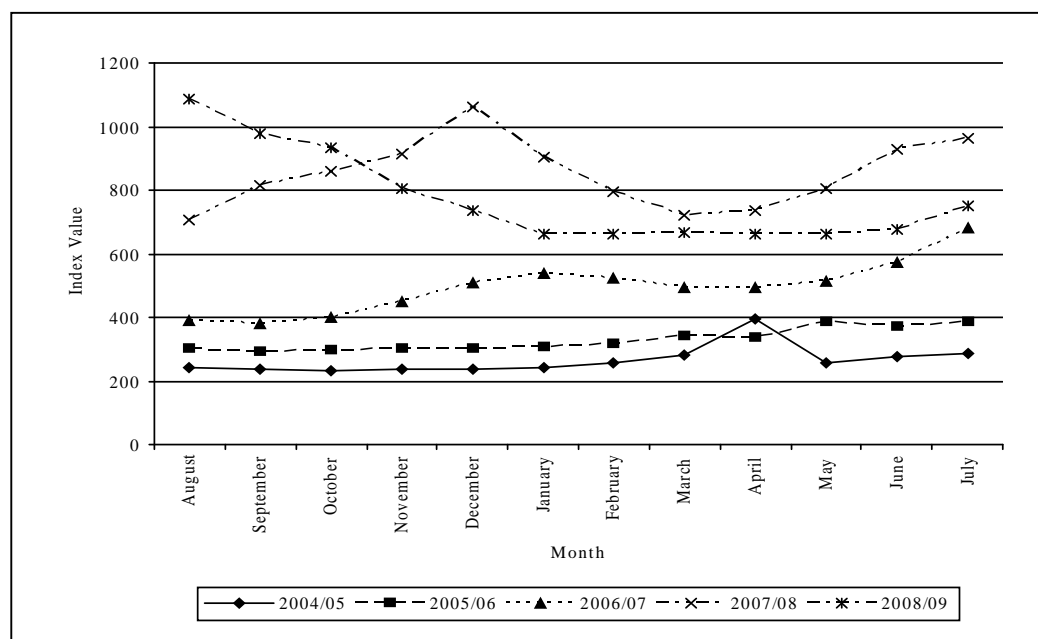


Figure 4.5 shows that the NEPSE index from F/Y 2004/05 to F/Y 2008/09. In F/Y 2004/05, at starting months the NEPSE index was 241.51 point. In F/Y 2005/06, 300.05 point in August and it fluctuated few months and it increased went up to 386.83 point in July. In FY 2006/07 NEPSE index was 390.86 point in August and it fluctuated. At the end of July index was 683.95 point. In F/Y 2007/08 the NEPSE was 705.96 point in August and it increased up to 1064.09 point in December and decreasing. In F/Y 2008/09 NEPSE index was 1084.76 point in August it was the peak point during the study period then after it was in decreasing trend.

## 4.7 Trend of Sector Wise NEPSE Index

### 4.7.1 NEPSE Index of Commercial Bank

Commercial Banks is the most important sector listed NEPSE. Commercial bank sector is the largest sector in NEPSE. In the study period (F/Y 2004/05 to F/Y 2008/09) daily sector wise index was collected and it converted into monthly index by calculated to weighted average method. Collected data is presented in table and graph and then analyze below.

**Table 4.7**

#### NEPSE Index of Commercial Bank

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 251.87  | 323.34  | 422.08  | 799.30  | 1117.97 |
| September      | 247.45  | 449.77  | 432.21  | 928.24  | 1030.59 |
| October        | 244.10  | 324.80  | 451.64  | 958.10  | 978.14  |
| November       | 253.96  | 327.83  | 511.08  | 930.04  | 739.30  |
| December       | 251.46  | 327.90  | 574.08  | 1040.47 | 704.55  |
| January        | 256.02  | 329.92  | 586.28  | 903.04  | 619.70  |
| February       | 282.55  | 333.78  | 567.45  | 748.03  | 645     |
| March          | 314.48  | 375.97  | 517.47  | 710.93  | 662.35  |
| April          | 320.66  | 376.89  | 531.46  | 720.85  | 657.64  |
| May            | 297.17  | 414.66  | 567.33  | 795.95  | 649.57  |

|      |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|
| June | 298.63 | 355.72 | 593.46 | 942.46 | 700.37 |
| July | 304.64 | 554.52 | 572.30 | 870.09 | 875.15 |
| SD   | 28.93  | 69.50  | 61.42  | 105.51 | 172.87 |
| CV   | 10.45% | 18.56% | 11.65% | 12.24% | 22.12% |

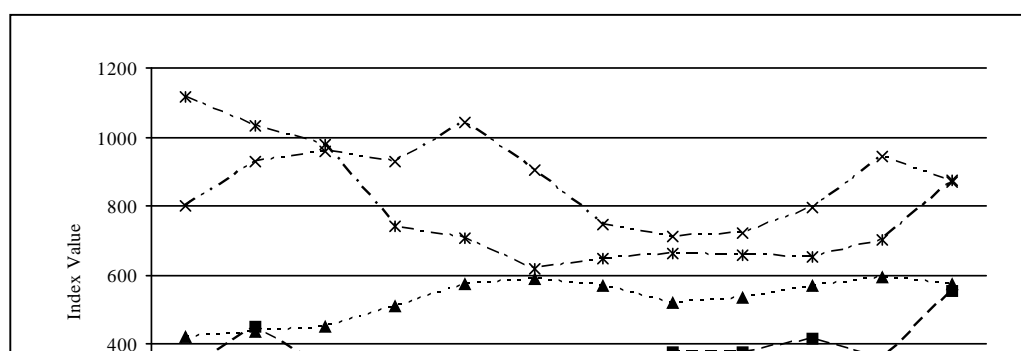
Source: www.nepalstock.com.

Table 4.7 shown on NEPSE index of Commercial bank. In F/Y 2004/05 commercial bank index was fluctuating in some months. 251.87 point was in August and decreased to 244.10 points in October and increased went up to 253.96 points in November. 320.66 point was in April and decreased in May and June, and again increased to 304.64 points in July. In F/Y 2005/06 index in August was 323.34 and it increased to 449.77 points in September but it decreased to 414.66 points in May and again it increased to 554.52 points in July. In F/Y 2006/07 the index of commercial bank was 422.08 points in August and it increased to 586.28 points in January and decreased to 517.47 points in March and again it increased to 593.46 points in June. The peak point was 1040.47 points in December of F/Y 2007/08 and lowest point was 710.93 in March and was 870.09 points in July. In F/Y 2008/09 the NEPSE index of commercial bank was 1117.97 point in August, which is the highest peak points during the study period. In September index was in decreasing trend and slumped down to 619.70 point in January than it increased to 875.15 points in July of F/Y 2008/09.

Risk of commercial bank index is fluctuating. The standard deviation of commercial bank was 28.93 in F/Y 2004/05, 69.50 in F/Y 2005/06, 61.42 in F/Y 2006/07, 105.51 in F/Y 2007/08 and 172.87 in F/Y 2008/09. Coefficient of variation of commercial bank index in F/Y 2004/05 up to F/Y 2008/09 was 10.45%, 18.56%, 11.65%, 12.24% and 22.12% respectively. The more risky year was F/Y 2008/09 and less risky year was F/Y 2004/05.

Above tabulated data are presented in figure 4.7 below.

**Fig. 4.6: Monthly movement of Commercial Bank Index**



Commercial bank index is found increasing every year. Although fluctuation in index is observed in every years but in the end of every years it is found increasing. High increment in commercial bank index in last three years is observed because most of the commercial banks distributed high rate of stock as well as cash dividends to their shareholders. High fluctuation in index is observed in last two fiscal years because listing of huge volume of shares of NTC had negative impact in market as well as economic recession 2008/09 had indirect impact in NEPSE.

#### **4.7.2 NEPSE Index of Development Bank**

Development bank is also one of the most important sectors listed in NEPSE. Development bank was listed in NEPSE in the year of 2001/02 in the month of January. Trading of this sector started with three companies. Fluctuation of development bank index as well as their S.D. and C.V. presented in table and figure as below.

**Table 4.8**

#### **NEPSE Index of Development Bank**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
|                |         |         |         |         |         |

|           |        |        |        |         |         |
|-----------|--------|--------|--------|---------|---------|
| August    | 199.19 | 231.40 | 284.80 | 541.79  | 1478.85 |
| September | 196.90 | 222.73 | 331.15 | 687.13  | 1454.54 |
| October   | 197.19 | 218.96 | 320.34 | 914.73  | 1410.81 |
| November  | 197.95 | 224.26 | 382.70 | 1181.31 | 1174.71 |
| December  | 203.22 | 216.29 | 487.34 | 1895.14 | 1110.67 |
| January   | 198.63 | 233.22 | 530.69 | 1598.10 | 1004.37 |
| February  | 212.66 | 247.55 | 530.74 | 1139.41 | 967.67  |
| March     | 215.95 | 277.37 | 487.05 | 1045.12 | 922.63  |
| April     | 238.82 | 273.59 | 451.44 | 969.46  | 845.52  |
| May       | 233.69 | 284.03 | 447.75 | 1045.03 | 760.05  |
| June      | 235.21 | 264.49 | 495.46 | 1159.08 | 728.49  |
| July      | 237.86 | 268.62 | 410.34 | 841.41  | 1051.88 |
| SD        | 17.67  | 25.30  | 83.88  | 361.36  | 260     |
| CV        | 8.26%  | 10.25% | 19.51% | 33.31%  | 24.17%  |

Source: [www.nepalstock.com](http://www.nepalstock.com).

Table 4.8 shows index of development bank sector. Development bank index was 231.40 point in August and it increased up to 284.03 in May but it decreased to 264.49 in June of F/Y 2005/06. In F/Y 2006/07 the index of development bank was 284.80 points in August and it started increasing and went up to 530.74 points in February but it decreased to 410.34 points in July. The NEPSE index of development bank was 541.79 points in August and increased up to 1895.14 point in December and it decreased to 841.41 point in July of F/Y 2007/08. In F/Y 2008/09 NEPSE index of development bank was in increasing trend in some months and then it started decreasing. In August it was 1479.85 point and 760.05 points in May. At the end of the year it improved and went up to 1051.88 point in July.

Standard deviation of development bank from F/Y 2004/05 up to F/Y 2008/09 was 17.67, 25.30, 83.88, 961.36 and 260, and C.V. was 8.26%, 10.25%, 19.51%, 33.31% and 24.17% respectively. Risky year for development bank sector was F/Y 2007/08 because C.V. of the index was highest (33.37%) and less risky year was F/Y 2004/05 because C.V. of the index was lowest (8.26%). The best year for the development bank was F/Y 2004/05 because C.V. was lowest in that year. Movement of development bank sector is presented in figure below.

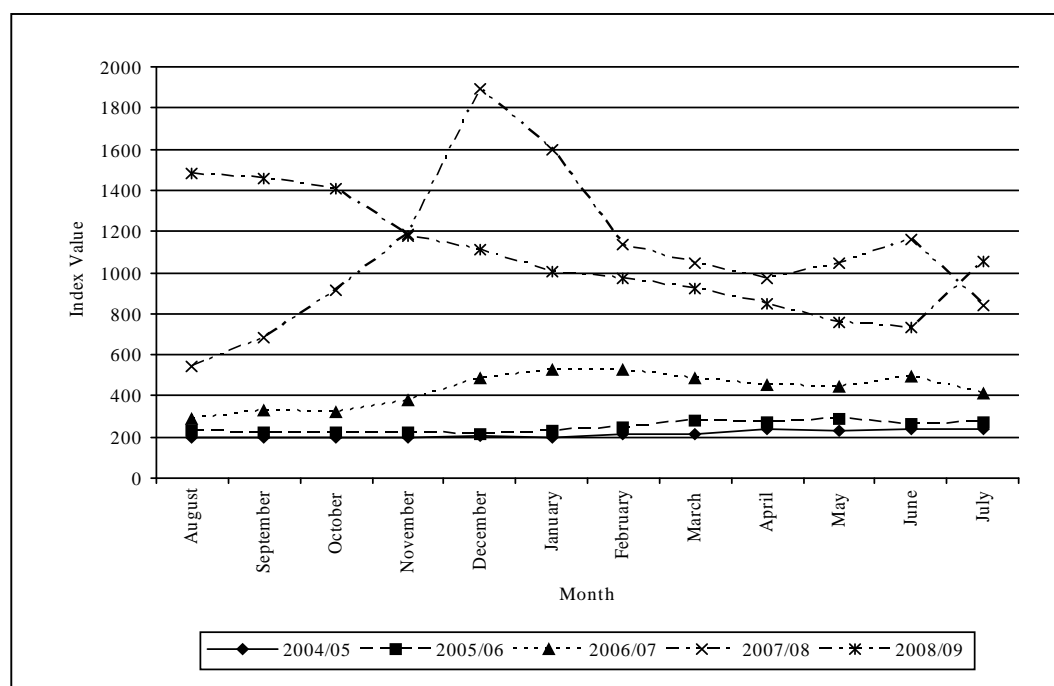
**Fig. 4.7: Monthly Movement of Development Bank Index**

Figure 4.7 shows the monthly movement of development bank index. It is found that development bank index was highly fluctuating in the study period except than in F/Y 2007/08. Although high fluctuation in index was observed but index was found generally increased in the end of years but in F/Y 2008/09 this index was high but high decrement is observed in the rest months.

#### 4.7.3 NEPSE Index of Manufacturing and Processing

Manufacturing and processing company is one of the important sectors in NEPSE. Monthly index of this sector is presented in table 4.10 and figure 4.10 as below.

**Table 4.9****NEPSE Index of Manufacturing and processing**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 265.27  | 286.62  | 311.24  | 347.94  | 431.04  |
| September      | 263.79  | 303.38  | 317.80  | 349.34  | 441.92  |



|          |        |        |        |        |        |
|----------|--------|--------|--------|--------|--------|
| October  | 268.13 | 299.90 | 315.96 | 350.19 | 435.94 |
| November | 267.42 | 290    | 314.50 | 350.19 | 432.79 |
| December | 272.07 | 272.84 | 316.50 | 350.19 | 432.78 |
| January  | 274.39 | 274.42 | 321.96 | 357.68 | 427.79 |
| February | 276.08 | 248.07 | 323.38 | 377.49 | 405.03 |
| March    | 276.96 | 287.43 | 346.11 | 407.45 | 408.46 |
| April    | 276.80 | 289.95 | 330.37 | 412.40 | 432.83 |
| May      | 276.29 | 288.85 | 329.77 | 414.12 | 412.18 |
| June     | 276.45 | 296.88 | 338.20 | 418.82 | 434.32 |
| July     | 276.50 | 273.21 | 324.45 | 417.78 | 428.99 |
| SD       | 4.99   | 15.17  | 10.37  | 31.10  | 11.82  |
| CV       | 1.83%  | 5.34%  | 3.20%  | 8.20%  | 2.77%  |

Source: [www.nepalstock.com](http://www.nepalstock.com).

Above table shows the NEPSE index of manufacturing and processing sector. NEPSE Index of manufacturing and processing sector was 265.27 points in August, 268.13 point in October and 274.39 point in January and it was constant up to July of F/Y 2004/05. In 2005/06 the peak point was in September that was 303.38 and it decreased to 248.07 points in February and it slowly increased and went up to 296.88 point in June. The NEPSE index of mfg and processing sectors index in F/Y 2006/07 was increasing. At the starting month it was 311.24 points and 338.20 points in June but July it decreased. In F/Y 2007/08 the index was increasing in the starting month 347.94 point was in August and in October to December the index was remain constant it increased to 418.82 points. For manufacturing and processing sector F/Y 2008/09 is recorded as the best year because this index was highest in this year. The highest index was 441.92 points in the month of September and lowest was 405.03 point in February.

The standard deviations (S.D) of manufacturing and processing sector was 4.99 in F/Y 2004/05, 15.17 in F/Y 2005/06, 10.37 in F/Y 2006/07, 31.10 in F/Y 2007/08 and 11.82 in F/Y 2008/09. The highest S.D. was 31.10 in F/Y 2007/08 and lowest was 4.99 in F/Y 2004/05. The coefficient of variation (C.V) of mfg and processing sectors was 1.83 in F/Y 2004/05, 5.34% in F/Y 2005/06, 3.20% in F/Y 2006/07, 8.20% in F/Y 2007/08 and 2.77% in F/Y 2008/09. Risk of the mfg and processing sector is fluctuating. In F/Y 2004/05

it was 1.83% and 8.20% in F/Y 2007/08 but it decreased to 2.77% in F/Y 2008/09. F/Y 2007/08 is observed as risky year in terms of C.V. of the index. Figure 4.10 shows the trend of this index as below.

**Fig. 4.8: Monthly Movement of mfg and Processing Index**

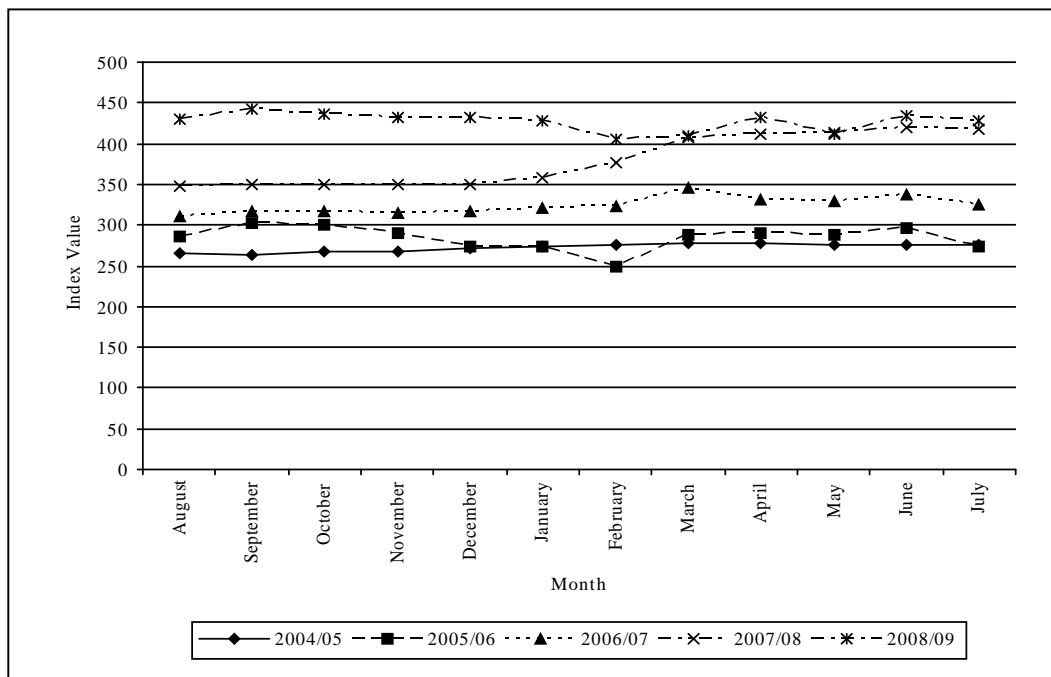


Figure 4.8 shows the trend of index movement of mfg and Processing sector. Except than F/Y 2004/05 in other years high fluctuation in index was observed. In F/Y 2007/08 high increment in index was observed at the end of year. Lowest index was observed in F/Y 2005/06.

#### 4.7.4 NEPSE index of Finance Companies

Finance company is the most popular sector among the listed companies in NEPSE. Number of listed company in Finance company is increasing than others sectors and it covered the highest portion. In the initial days of trading in NEPSE finance and insurance sector was combined but it separated in December of F/Y 2001/02. NEPSE index of finance sector of five fiscal years are shown on the table below and analysis them.

**Table 4.10**

### NEPSE Index of Finance Companies

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 208.86  | 319.62  | 263.26  | 505.90  | 1127.25 |
| September      | 207.80  | 229.49  | 267.63  | 526.97  | 1211.32 |
| October        | 208.53  | 231.72  | 273.58  | 630.56  | 1201.60 |
| November       | 205.12  | 235.38  | 267.35  | 752.31  | 1015.71 |
| December       | 208.47  | 241.94  | 306.25  | 926.33  | 917.37  |
| January        | 207.96  | 247.16  | 372.24  | 1020.03 | 902.71  |
| February       | 208.58  | 253.73  | 439.23  | 946.61  | 810.58  |
| March          | 210.13  | 249.65  | 439.44  | 982.30  | 785.47  |
| April          | 211.32  | 245.88  | 426.30  | 938.57  | 756.65  |
| May            | 227.33  | 251.27  | 447.34  | 1019    | 755.99  |
| June           | 227.62  | 256.94  | 459.54  | 1067.39 | 727     |
| July           | 228.39  | 244.59  | 365.12  | 984.99  | 919.43  |
| S.D.           | 8.83    | 23.34   | 80.64   | 200.69  | 174.98  |
| C.V.           | 4.14%   | 9.33%   | 22.36%  | 23.38%  | 18.86%  |

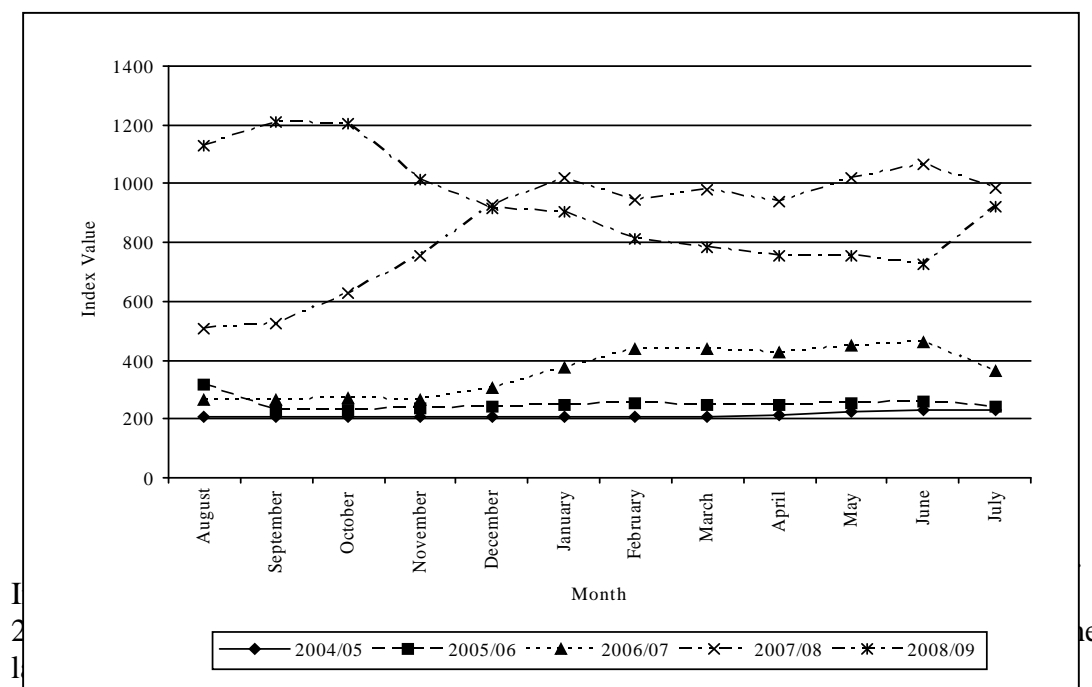
Source: [www.nepalstock.com](http://www.nepalstock.com).

NEPSE Index of finance sectors is found fluctuating but increasing trend is observed. In F/Y 2004/05 in August it was 208.86 point and it decreased to 207.96 point in December then increased up to 228.39 points in July. In 2005/06 NEPSE index of finance sectors was 319.62 point in August and it decreased to 229.49 point in September that was the lowest point in that year and it slowly increased up to 256.94 point in June but decreased 244.59 point in July. In F/Y 2006/07 the NEPSE index of finance sectors was 263.26 point in August and it increased up to 459.54 point in June but decreased to 365.12 point in July. In F/Y 2007/08 the NEPSE Index of finance sector was 505.90 points in August and then increased up to 1020.03 point in January then after it started decreasing up to 938.57 point in April and increased up to 1067.39 point in June. In F/Y 2008/09 the NEPSE index of finance sectors was in increasing trend of starting three months that was 1127.25, 1211.32 and 1201.60 point respectively than it started decreasing. The lowest point was 727 in June and highest point was 1211.32 points in September. Overall the highest index of the finance sector was 1211.32 points in September of

F/Y 2008/09 and lowest point was 205.12 points in November of F/Y 2004/05.

The standard deviation and coefficient of variation of finance sectors are 8.83 and 4.41% in F/Y 2004/05, 23.34 and 9.33% in F/Y 2005/06, 80.64 and 22.36% in F/Y 2006/07, 200.59 and 23.38% in F/Y 2007/08 and 174.98 and 18.86% in F/Y 2008/09. F/Y 2007/08 and F/Y 2006/07 are found risky years and F/Y 2004/05 and F/Y 2005/06 is found less risky year. Coefficient of variation is found increasing and went up to 23.38% in F/Y 2007/08. NEPSE index of finance sectors index points are shown in the figure below.

**Figure 4.9: Monthly Movement of Finance Sectors Index**



2008/09 it was in decreasing trend. It shows F/Y 2007/08 was the best year for finance sector than other years of the study period.

#### 4.7.5 NEPSE Index of Insurance Companies

Insurance company is one of the important sectors in NEPSE. During the 5 years study period the NEPSE index of Insurance companies was increasing up to March of F/Y 2006/07 than it started decreasing. In F/Y 2007/08 and F/Y 2008/09 index was also increasing in starting few month and then decreased which is shown in the table below.

**Table 4.11**

### NEPSE Index of Insurance Companies

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08       | 2008/09 |
|----------------|---------|---------|---------|---------------|---------|
| August         | 235.11  | 320.66  | 391.69  | 654.21        | 836.75  |
| September      | 231.80  | 336.42  | 396.44  | 664.45        | 821.98  |
| October        | 232.32  | 322.05  | 395.09  | 707.27        | 811.54  |
| November       | 237.33  | 318.51  | 401.47  | 752.15        | 782.45  |
| December       | 239.44  | 323.45  | 433.44  | <b>955.98</b> | 738.87  |
| January        | 238.64  | 330.92  | 526.27  | 890.81        | 691.44  |
| February       | 239.76  | 336.63  | 580.75  | 799.62        | 666.42  |
| March          | 258.09  | 342.85  | 624.12  | 738.91        | 671.05  |
| April          | 311.97  | 345.66  | 598.52  | 740.40        | 655.26  |
| May            | 301.97  | 349.63  | 546.17  | 750.74        | 636.77  |
| June           | 311.23  | 366.59  | 547.46  | 839.35        | 642.33  |
| July           | 320     | 366.24  | 467.19  | 730.04        | 561.14  |
| S.D.           | 36.41   | 16.60   | 87.74   | 89.03         | 87.31   |
| CV             | 13.83%  | 4.91%   | 17.82%  | 11.58%        | 12.30%  |

Source: [www.nepalstock.com](http://www.nepalstock.com). and appendix.....

Table 4.11 it is found that the NEPSE index of Insurance companies was 235.11 point in August of F/Y 2004/05 and it decreased to 231.80 points in September then started increasing up to 320 points in July. In F/Y 2005/06 the NEPSE index of insurance sector was 320.66 points in August and it increased up to 366.59 points in June but in July it decreased. In F/Y 2006/07 the index was 391.69 points in August and then increased up to 624.12 points in March but decreased to 467.19 points in July. NEPSE index of insurance company was 654.21 points in August and increased up to 955.98 points that was the highest point in the study period and it decreased to 730.04 points in July but it was recorded 839.75 points in June of F/Y 2007/08. In F/Y 2008/09 the highest point was 836.75 points in August and lowest point was 636.77 points in May than it started decreasing from September to May and then improved.

F/Y 2005/06 was the best year because its standard deviation and coefficient of variation were 16.60 and 4.91% which is lowest than other years and F/Y 2006/07 was the risky year because it has highest S.D. and C.V. that are 87.74 and 17.82% respectively. Above tabulated data are shown in the figure 4.12 below.

**Figure 4.10: Monthly Movement of Insurance Companies Index**

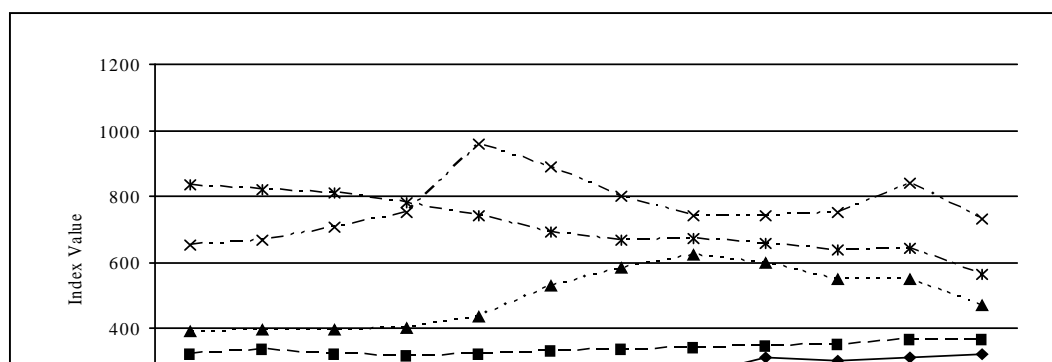


Figure 4.10 shows the trend of index movement of insurance company. High fluctuation in index is observed in last three years of the study period. F/Y 2005/06 is found less volatile year for insurance companies. In F/Y 2007/08 it was in decreasing trend but in F/Y 2008/09 high fluctuation in index is observed, highest index is observed in December of F/Y 2008/09.

#### 4.7.6 NEPSE Index of Hotel Sector

The NEPSE index of Hotel sector is not improving from F/Y 2004/05 up to January of F/Y 2006/07. NEPSE Index of hotel sector was 189.30 points in August and it fluctuated in some month and was 172.25 points in January then after it again fluctuated. In F/Y 2005/06 the index of hotel sector was 179.25 points in August and not improving till January than after it started increasing. In F/Y 2006/07 the index was 180.16 points in August and it slowly increased up to 239.18 points in June but decreased to 212.70 points in July. Which is shown on the table below.

**Table 4.12**  
**NEPSE Index of Hotel Sectors**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 189.30  | 179.74  | 180.86  | 382.73  | 351.13  |
| September      | 188.53  | 178.80  | 180.22  | 279.57  | 358.74  |

|          |        |        |        |        |               |
|----------|--------|--------|--------|--------|---------------|
| October  | 188.15 | 177.95 | 179.97 | 281.20 | 361.46        |
| November | 187.39 | 177.67 | 181.14 | 279.43 | 364.57        |
| December | 188.53 | 177.90 | 186.44 | 316.11 | 364.51        |
| January  | 172.25 | 179.82 | 189.44 | 417.41 | <b>365.58</b> |
| February | 172.63 | 182.01 | 203.03 | 413.48 | 357.60        |
| March    | 176.08 | 182.75 | 227.55 | 412.22 | 350.81        |
| April    | 177.04 | 182.36 | 134.71 | 408.70 | 360.55        |
| May      | 176.28 | 272.32 | 235.58 | 399.87 | 363.54        |
| June     | 177.23 | 179.73 | 239.98 | 387.25 | 367.85        |
| July     | 178    | 179.85 | 212.70 | 315.25 | 355.44        |
| S.D.     | 6.78   | 26.76  | 24.43  | 58.12  | 5.56          |
| CV       | 3.75%  | 14.27% | 11.96% | 16.24% | 1.54%         |

Source: [www.nepalstock.com](http://www.nepalstock.com).

Table 4.12 shows the NEPSE index of hotel sector under the study period. The NEPSE index of Hotel sector was at the peak point in the F/Y 2007/08 that was 417.41 points in January and the lowest point was recorded 279.57 points in September and it increased up to 417.41 points in the month of January and it decreased down to 315.25 points in July. The NEPSE index of Hotel sector was 351.13 points in the month of August of F/Y 2008/09 which is increased up to 365.58 points in the month of January and then decreased to 350.81 points in March and again started increasing up to 367.85 points in June but it decreased to 355.44 points in July of F/Y 2008/09.

The standard deviation and coefficient of variation in the study period of hotel sector from F/Y 2004/05 up to F/Y 2008/09 are 6.78 and 3.75%, 26.76 and 14.27%, 24.43 and 11.96%, 58.12 and 16.24%, and 5.56 and 1.54% respectively. Most risky year for the hotel sector was F/Y 2007/08 and less risky year was F/Y 2008/09. Above tabulated data are shown in the figure below.

**Figure 4.11: Monthly Movement of Hotel Sectors Index**

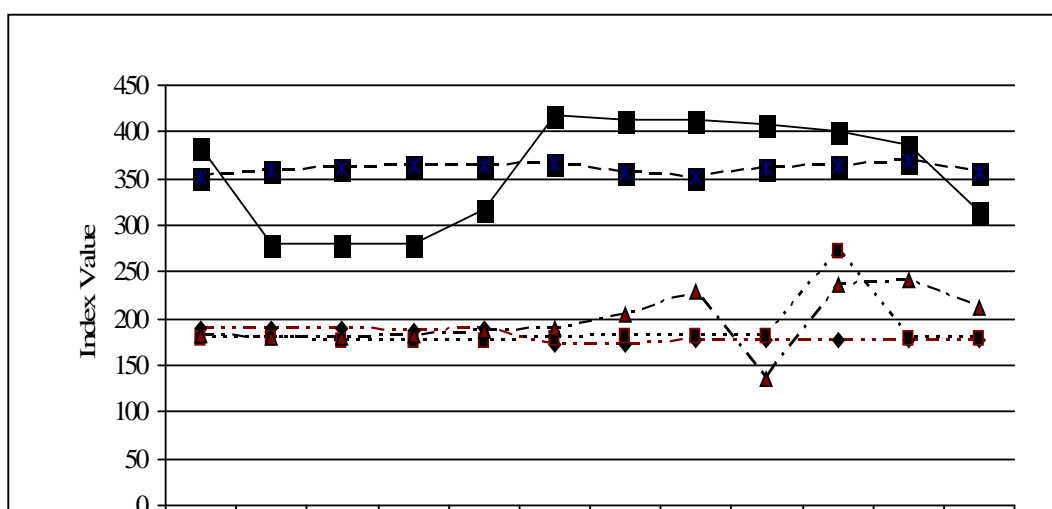


Figure 4.11 shows the trend of monthly index of hotel sector under the study period. Except F/Y 2004/05 other years this index is observed fluctuated. In F/Y 2005/06 and F/Y 2006/07 the index was observed highly fluctuated in the last six months only. High fluctuation is observed in F/Y 2007/08 but in F/Y 2008/09 index is observed less volatile. Among them F/Y 2007/08 is found most volatile year for hotel sector and index was highest at this year.

#### 4.7.7 NEPSE Index of Trading Companies

Trading company is also one of the important sectors of NEPSE. NEPSE index of trading sector in F/Y 2004/05 was record highest in July that was 123.20 points and lowest point was 98.87 points in August. NEPSE index of trading sector was remain constant up to January and increased up to 123.20 points in the month of July of F/Y 2004/05. Under the study period the highest index was 286.04 points in the month of June of F/Y 2008/09 and lowest was 98.87 points in August of F/Y 2004/05. The index of Trading sector are tabulated and analysis below.

**Table 4.13**

#### **NEPSE Index of Trading Companies**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 98.87   | 118.13  | 148.11  | 162.06  | 203.36  |
| September      | 98.87   | 133.94  | 150.26  | 162.04  | 210.79  |
| October        | 98.87   | 129.55  | 139.20  | 162.20  | 214.26  |
| November       | 98.87   | 132.34  | 149.71  | 162.20  | 214.26  |



|          |        |        |        |        |        |
|----------|--------|--------|--------|--------|--------|
| December | 98.87  | 134.84 | 149.76 | 165.67 | 205.70 |
| January  | 98.87  | 140.01 | 148.98 | 164.40 | 205.61 |
| February | 102.73 | 146.51 | 149.64 | 162.32 | 215.45 |
| March    | 111.04 | 144.45 | 150.85 | 149.09 | 216.17 |
| April    | 116.33 | 143.95 | 147.57 | 146.25 | 216.05 |
| May      | 118.97 | 147.41 | 151.91 | 201.60 | 243.99 |
| June     | 122.94 | 148.11 | 155.24 | 211.78 | 286.04 |
| July     | 123.20 | 135.66 | 151.74 | 186.99 | 249.78 |
| S.D.     | 10.34  | 8.92   | 3.76   | 20     | 24.39  |
| CV       | 9.63%  | 6.47%  | 2.53%  | 11.79% | 10.91% |

Source: [www.nepalstock.com](http://www.nepalstock.com).

Table 4.13 it is found that in F/Y 2005/06 NEPSE index of trading company was the highest in the month June that was 148.11 points and lowest was 118.13 points in the month of August. The NEPSE index of trading sectors in F/Y 2005/06 was increased up to 148.11 points in the month of June but decreased to 135.66 points in July. The NEPSE index of trading sector in F/Y 2006/07 was fluctuating. In F/Y 2007/08 the index of trading sector was 162.06 points in August and constant to November and increased to 165.07 points in December the it started decreasing and went down to 146.25 points in the month of April and then slightly increased up to 211.78 points in June and again it fell down to 186.99 points in July. The NEPSE index of trading sector was the highest 286.04 points in the month of June and lowest was 205.61 points in January of F/Y 2008/09.

In overall year, the most risky year was F/Y 2007/08 because C.V. was 2.53%. In F/Y 2004/05 C.V. of the trading sector was 9.36% in F/Y 2004/05, 6.47% in F/Y 2005/06, 2.53% in F/Y 2006/07, 11.79% in F/Y 2007/08 and 10.91% in F/Y 2008/09. Above tabulated data are shown in the figure below.

**Figure 4.12: Monthly Movement of Trading Companies Index**

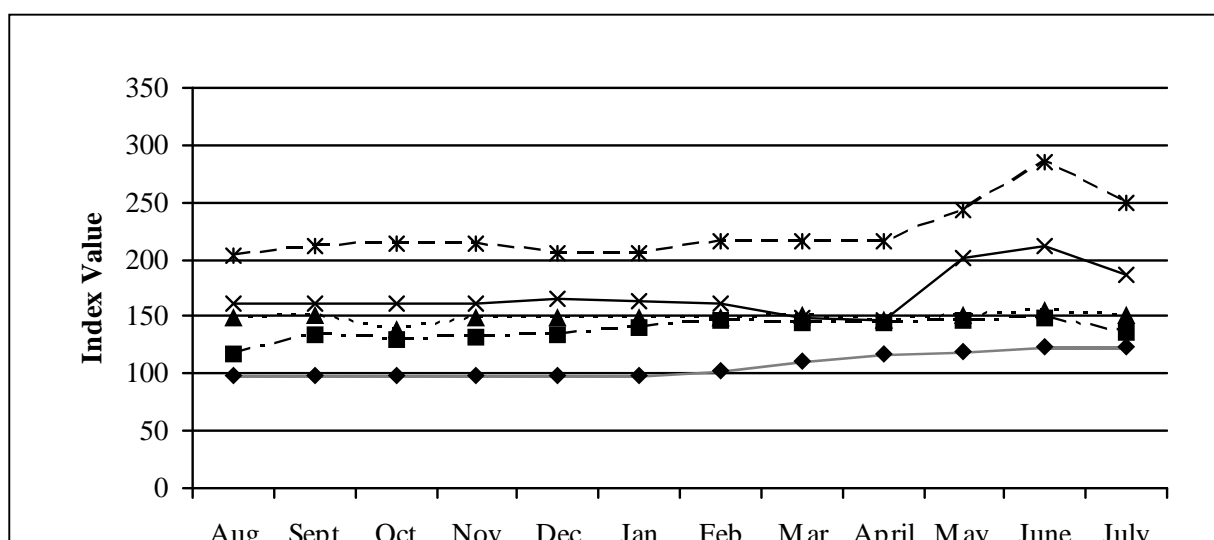


Figure 4.12 shows the trend of the NEPSE index of trading sectors under the study period. High fluctuation in index is observed only in last two years of the study period. In the first three years this index was not so volatile but volatility in index of last two years was in last four months of those years. This index was observed highest in the month of June of F/Y 2008/09.

#### 4.7.8 NEPSE Index of Other Sectors

Other sector is also one of the important sectors listed in NEPSE. As hotel sector was the best as compared to others sectors. The NEPSE index of other sector was in increasing trend up to F/Y 2007/08 and then constant; again increased and went up to 1027.30 points in September of F/Y 2008/09. The collected index of other sector is presented below and analyzes them.

**Table 4.14**  
**NEPSE Index of Other Sector**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | 145.24  | 331.50  | 417.96  | 818.92  | 910.71  |
| September      | 145.50  | 323.72  | 416.40  | 818.12  | 1027.30 |
| October        | 144.98  | 331.46  | 428.18  | 818.14  | 825.91  |
| November       | 144.46  | 299.65  | 489.54  | 818.12  | 744.98  |
| December       | 142.91  | 322.09  | 646.56  | 818.92  | 703.57  |
| January        | 329.28  | 346.40  | 677.62  | 818.12  | 640.84  |
| February       | 354.67  | 362.41  | 661.96  | 817.74  | 670.10  |
| March          | 308.33  | 337.69  | 654.29  | 817.47  | 648.60  |
| April          | 335.68  | 341.79  | 664.38  | 817.47  | 609.43  |
| May            | 335.63  | 363.11  | 705.04  | 817.47  | 662.86  |

|      |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|
| June | 329.28 | 385.83 | 762    | 817.47 | 650.30 |
| July | 347.65 | 370.79 | 612.29 | 815.56 | 722.63 |
| S.D. | 98.32  | 24.02  | 122.39 | 0.73   | 125.95 |
| CV   | 38.51% | 7%     | 20.58% | 9.45%  | 17.14% |

Source: Source: www.nepalstock.com.

Table 4.14 it is found that the NEPSE index of other sector was 145.24 points in August and it slowly increased up to 142.91 points in December but drastic incensement is observed that was 329.28 points in January of F/Y 2004/05. The index was 354.67 points in February than fell down to 308.33 points in March and again increased. In F/Y 2005/06 the highest index was 385.43 points in June and lowest was 323.72 points in the month of September. The NEPSE index of other sectors in F/Y 2006/07 was increasing than the F/Y 2005/06. The index was 417.96 points in August then after increased up to 677.62 points in January, again started fall down to 661.96 points in February and increased to 762 points in June. The NEPSE index of other sectors was 818.12 points in August and it was constant to January then it fall down to 817.47 points in March and again was constant in June then decreased to 815.56 points in July of F/Y 2007/08. In F/Y 2008/09 the highest index of other sectors was 1027.30 points in September and lowest was 609.43 points in the month of April.

The Standard deviation and coefficient of variation of the index during five-study period was 98.32 and 38.5% in F/Y 2004/05, 24.02 and 7% in F/Y 2005/06, 122.39 and 20.58% in F/Y 2006/07, 0.73 and 9.45% in F/Y 2007/08 and 125.95, 17.14% in F/Y 2008/09. In overall years, F/Y 2005/06 was the less risky year and F/Y 2004/05 was the more risky year than others.

**Figure 4.13: Monthly Movement of Other Sector index**

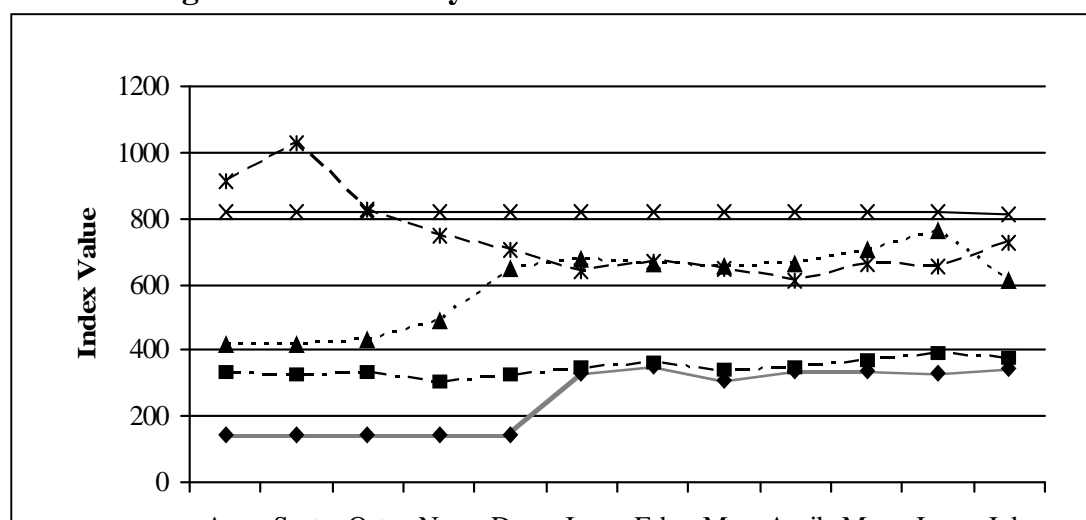


Figure 4.13 shows the trend of monthly index of other sector. The index was less volatile in F/Y 2007/08 and in other years the index was observed volatile but among them F/Y 2004/05, F/Y 2006/07 and F/Y 2008/09 are found more volatile years. Highest index is observed in September of F/Y 2008/09 but in this year index is found following decreasing trend.

#### 4.7.16 NEPSE Index of Hydropower Sector

In the beginning of the trading in NEPSE Hydropower and other sector was combined but it is separated in 3<sup>rd</sup> July 2007. So separately transaction took place in the NEPSE in July from F/Y 2006/07. Which shown in the table 4.16 below.

**Table 4.15**  
**NEPSE Index of Hydropower Sectors**

| Year<br>Months | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|----------------|---------|---------|---------|---------|---------|
| August         | -       | -       | -       | 1112.68 | 1286.66 |
| September      | -       | -       | -       | 1395.27 | 1202.89 |
| October        | -       | -       | -       | 1367.57 | 1123.58 |
| November       | -       | -       | -       | 1362.37 | 985.98  |
| December       | -       | -       | -       | 1568.01 | 923.69  |
| January        | -       | -       | -       | 1370.38 | 895.46  |
| February       | -       | -       | -       | 1188.36 | 830.88  |
| March          | -       | -       | -       | 1053.30 | 866.33  |
| April          | -       | -       | -       | 1024.88 | 216.05  |
| May            | -       | -       | -       | 1117.21 | 856.55  |

|      |   |   |         |         |         |
|------|---|---|---------|---------|---------|
| June | - | - | -       | 1238.98 | 882.59  |
| July | - | - | 840.30  | 1093.82 | 1094.31 |
| S.D. | - | - | 242.57  | 133.94  | 279.70  |
| CV   | - | - | 346.38% | 10.79%  | 30.06%  |

Source: Source: Source: www.nepalstock.com.

NEPSE index of hydropower sector separately traded in the NEPSE in the month of July 2007. The hydropower sector was trading on NEPSE floor in 9 days in July its index was 840.30 points in the beginning. In F/Y 2007/08 the NEPSE index of hydropower sector was 1112.68 points in August then it increased to 1395.27 points in the month of September and decreased in November. It increased to 1568.01 points in December and the decreased to 1093.82 points in July of F/Y 2007/08. In F/Y 2008/09, the index of Hydropower sector was 1286.66 points in August then it started decrease and fell down to 830.88 points in February. Drastic fell in index is observed that was 216.05 points in the month of April and increased up to 1094.31 points in month of July.

The S.D. and C.V. are 242.57 and 346.38% in F/Y 2006/07, 133.94 and 10.79% in F/Y 2007/08 and 279.70 and 30.06% in F/Y 2008/09. In the overall F/Y 2007/08 was the most risky year. Above tabulated data are shown on figure is below.

**Figure 4.14: Monthly Movement of Hydropower Sector Index**

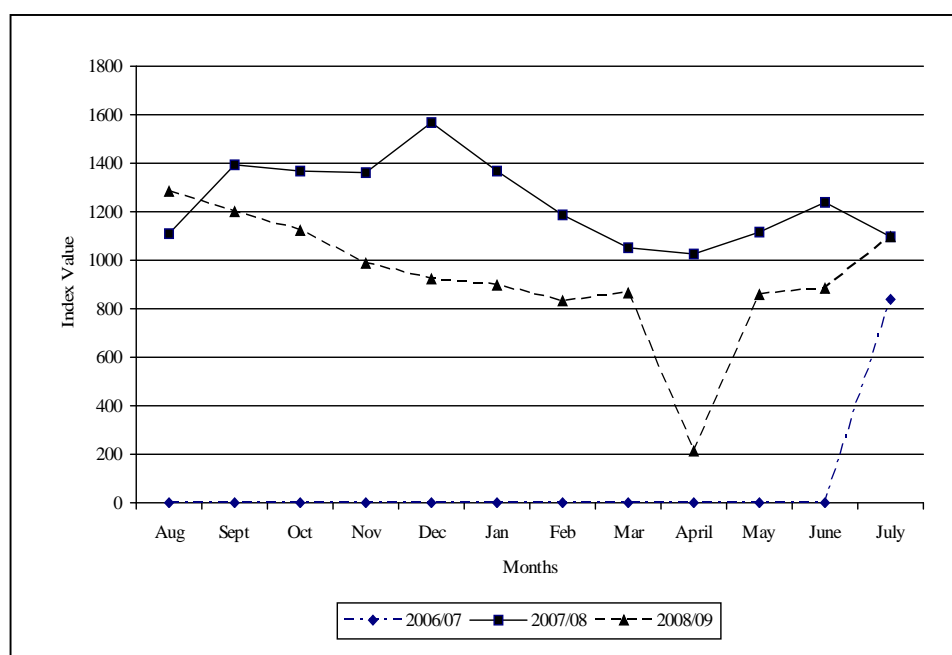


Figure 4.14 shows the trend of index movement of hydropower sector. Only data of two fiscal years is available because it is the new sector divided by NEPSE. High fluctuation in index is observed in these years. The highest index is observed in December of F/Y 2008/09 and lowest point is observed in April of F/y 2007/08.

## **4.8 Major Findings of the Study**

4.8.1 There are altogether 159 companies listed in Nepal Stock Exchange Ltd. Out of these, there are 21 commercial bank, 29 development bank, 61 finance companies 17 insurance companies, 4 hotels, 18 manufacturing and processing, 4 trading and 5 others till F/Y 2008/09 The NEPSE licensed to 11 dealers (primary) and 2 dealers (secondary) market.

4.8.2 The number of listed companies is in increasing trend. The number of listed companies in the initial year was 125 in F/Y 2004/05 and 135 in F/Y 2005/06 and it remain constant in F/Y 2006/07 went up to 142 in F/Y 2007/08 and 159 in F/Y 2008/09. Sector-wise listed company of commercial bank, Development Bank and Finance company are in increasing trend but manufacturing and processing, trading and insurance is decreasing in initial years and remain constant in years 2007 up to 2009. Hotel sector remained constant and other sectors is fluctuating.

4.8.3 The annual turnover is fluctuating. It is Rs.44507.68 million in year 2004/05 but sharp decline in 2005/06 with reaching the turnover Rs.3451.43 million in F/Y 2007/08. The Annual turnover of Commercial Bank is the highest in nine sectors its proportion is 89.23%, 78.12%, 66.55%, 62.90% and 57.22% during the years 2004/05 up to 2008/09 respectively.

4.8.4 Market capitalization value is in increasing trend, market capitalization of the year 2004/05 was Rs.61365.89 million and went up to Rs.512939.07 million in F/Y 2008/09. Market capitalization of

commercial bank is the highest and lowest is trading sectors in nine sectors. Commercial bank commands a lion's share in the NEPSE trading floor.

4.8.5 The trend number of share traded is fluctuating; highest value is Rs.27742.60 thousand in F/Y 2007/08 and lowest is Rs.12223.33 thousand in F/Y 2005/06. Commercial bank captured the highest of the total share trading. Trading sector has lowest share traded quantity comparing the other sectors.

4.8.6 The NEPSE market opening days is fluctuating. In the initial year (F/Y 2004/05) the market is opened 236 days and it is in decreasing trend. Market opening day was 228 days in F/Y 2005/06, 232 days in F/Y 2006/07, 235 days in F/Y 2007/08 and 234 days in F/Y 2008/09.

4.8.7 NEPSE index reflects the aggregate volatility of the share price of the companies listed in NEPSE.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents the summary and the conclusions of this study. Finally, it presents recommendations.

#### **5.1 Summary**

Nepal is one of the smallest, poorest and least developed countries in the world. It is land-locked country with 500km length and open border with India. Nepal launched planned economic development more than four decades ago. Recently it 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. At present, the institutional growth, primary and secondary market growth and number of listed companies are increased in Nepalese capital market. Nepal stock exchange is the only one secondary market in Nepal and playing a vital role in Nepalese capital market. The basic objectives of this study is concerned on capital market analyze, its performance and price behavior of share of listed companies and behavior of NEPSE index.

The second chapter presents the conceptual framework of the study and research review. In conceptual framework deals with concept of investment, security, security market, security market in Nepal, security Board of Nepal, Nepal Stock Exchange, security analysis theory and its types and efficient market theory. Investment is the sacrifice of fund today with the hope of achieving additional income in future. It involves the commitment of resources that have been save or put away from current consumption for the



future. There are two forms of investment these are financial investment and real investment Share bond debenture, preferred stock, T-bills, commercial paper, derivatives etc are securities in Nepalese security market. Primary and secondary, money and capital market are security market in Nepal. Securities board of Nepal is an apex regulator of securities market in Nepal and Nepal Stock Exchange Ltd is only one secondary market in Nepal. There are two types of security analysis theory. These are Technical Analysis and Fundamental Analysis. Technical analysis involves the study of the past volume price fluctuations where as fundamental analysis theory, the security analysis the factor economic influence, 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 b) semi-strong c) strong. In weak efficient of EMH, stock price behavior can be test by using parametric (serial correlation) and non-parametric (run tests).

Research methodology and presentation of data deals with the methods of analysis. This chapter presents the research design, population and sample size, nature and source of data, data collection procedure, data processing and Analysis Tools and limitation of the methodology of the study. This study covers five fiscal year from F/Y 2004/05 to F/Y 2008/09. Nepal Stock Exchange listed in 159 companies till F/Y 2008/09 and categories nine sectors these are 1) Commercial Bank, 2) Development Bank, 3) Finance Companies, 4) Insurance Companies, 5) Manufacturing and Processing Companies, 6) Hotels, 7) Trading Companies, 8) Hydropower and 9) others. In this study, the uses data and major sources of data are NEPSE and SEBON. For analysis of data used in simple statistical tools which are, percentage, standard deviated and coefficient of variation. It measure the volatility of behavior of NEPSE index. It is positive relation between risk and return. So from the view point of the investors, the attitude towards risk varies from investors to investors. Risk aversion approach where the investor doesn't want to bear additional risk and wants secured and safe return but risk favour investor

wants to take high risk and to gain high level of return. The level of risk is not easy to measure.

The number of total listed companies is increasing and sector-wise listed companies are also increasing but hotel sector is remain constant during the study period. Manufacturing and processing and trading sectors are decreasing trend and others sectors are increasing trend. The annual turnover and traded share quantity are fluctuating but market capitalization in increasing trend. Commercial banks recorded the highest position among nine sectors then trading sectors is not improving. Investors are encouraged to invest in commercial bank, Finance companies and Development bank than other sectors.

The NEPSE trading floor market opening day is fluctuating. the NEPSE index reflects the aggregate volatility of the share prices of the listed companies. View point of coefficient of variation, FY 2004/05 is the less risky year and FY 2008/09 is most risky year for the NEPSE index.

## **5.2 Conclusions**

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

5.2.1 Capital market is a vital role to develop the economy of the country.

The growth of institutional, growth of primary and secondary market and number of listed companies are increased. It implies that the capital market in Nepal is in developing process.

5.2.2 The number of total listed companies is in increasing. The number of transaction, share traded amount and market capitalization suggest that the commercial banks and finance companies as compared to others are in better position. They look less affected than the performance of hotel and trading companies.

5.2.3 The annual turnover and market capitalization value of commercial banks is covered 57.22% and 58.92% in the total value in the fiscal

year 2008/09. These indicators reveal that the shares of commercial banks have a dominant role in determining the key indicators of the Nepal Stock Exchange. Commercial banks have continued to appear as the most attractive investment alternatives since the opening of the floor.

- 5.2.4 The traded share quantity (no. of traded share) of the sector-wise listed companies is fluctuating. Commercial bank and other sector are better performance than other sectors. The number traded share of commercial banks and finance companies are better position than other remaining sectors.
- 5.2.5 NEPSE market opening days in trading floor is fluctuating. 236 days in FY 2004/05 and 234 days in FY 2008/09. Nepalese political situation, Maoists problem and strike of NEPSE employees are affected in NEPSE market opening days.
- 5.2.6 Market performance of NEPSE index shows that increasing trend but it fluctuated and it started decreasing in September 2008/09.
- 5.2.7 NEPSE index of commercial banks is in increasing trend. Coefficient of variation of NEPSE index of commercial bank during the study period FY 2004/05 to 2008/09 are 10.45%, 18.56%, 11.65%, 12.24% and 22.12% respectively. Manufacturing and processing and trading sectors are less risky than the others sectors according to coefficient of variation. Investors are suggested to invest in other sectors too but it depends on the investors attitude towards the risk. If investors is ready to bear more risk into obtain a higher level of return they wants to invest more risky sectors.

### **5.3 Recommendations**

- 5.3.1 The performance of commercial banks, finance companies and other sectors are better than the other remaining six sectors. So it is recommended to the investors to invest in these sectors.
- 5.3.2 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 a efficient capital market.
- 5.3.3 The number of transaction is in increasing trend but the number of brokers remains same. So it should be increase immediately.
- 5.3.4 The procedures for offering public issue should be simplified and rationalized. Securities Board of Nepal and other concerned authorities should conduct public awareness and investors education programs to increase the level of investors awareness.
- 5.3.5 Besides it, the most needed changes which are fundamental for stock market development are listed below.
- ) Stock Exchange should be privatized.
  - ) Stock market should be decentralized.
  - ) The automation in the clearance system
  - ) Tax system should be reformed which should encourage and stimulate capital formation.