

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Stock price is a place where shares of listed companies are treated or transferred from one hand to another at fair price through the organized brokerage system.

After the restoration of Democratic System in 1990, the political environment and the governance become more conducive and the investment increased in overall sector of the economy. The fast and increasing investment in overall sector of the national economy has been worth mentioning in this regard. These banking and financial institutions needed huge capital investment. One of the sources of fulfilling capital needs of those institutions was to attract the external fund from the public issuance of shares.

Nepal Stock Exchange was the only Capital Market institution in Nepalese Stock Market, which undertook the job of brokering, underwriting, managing public issue, marketing for Government bonds and other financial services. With the proliferation of banking, financial institutions and other companies like hotel, manufacturing and service sectors, the existing securities centre was not in a position to manage stock transaction after 1990.

In that situation, Securities Exchange Centre was converted into full-fledged stock exchange and under its supervision, the broker system of secondary market was established. Nepal Stock Exchange is a non-profitable organization which operates under Securities Exchange Act, 1983.

With gradual growth of Public Limited Companies in Nepal, the numbers of listed Companies also went on increasing with Nepal Stock Exchange for having rating of stocks for the interested investors. Through the number of listed Companies have remarkably increased and number of years have been elapsed since the establishment of Nepal Stock Exchange. It is said that Nepal Stock Exchange is operating in its recent stage attributed by low stock turnover, low participating Companies, low level of transactions, low level of market capitalisation and the volatile price situation. Viewing closely to the NEPSE level of

the country, it can be observed that the price of the shares within short span of time varies significantly.

On the other hand, recent studies suggest that over the past two decades. Stock Market Liquidity has been a catalyst for long run growth in developing countries. But in our contest, its uncertainty and volatility remained constant. Thus, now it is right time to determine the problem existing within Stock Market and recognise affecting variable that contribute to making it efficient so as to reduce the uncertainty.

The Stock Exchange acts as a measurement tool of the economy. If the market as a whole expects economic prospects to improve, share price should rise and vice versa. The market forces of supply and demand set share prices. Supply is affected by the amount of new issues being made at a particular time. It is further affected by the amount of shares that are being sold by investors.

Demand is influenced by how investors view economic prospects. It can be said that share price are set 'at the margin' on other words a very limited number of people those wishing to buy or sell at a particular moment effectively determine share prices. Thus, share prices, and their movements may not always seem rational.

1.1.1 Historical Development of Liberalization of Nepalese Economy

As a precondition to economic liberalisation, the Industrial Enterprise Act was enacted in 1982 and Foreign Investment and Technology Transfer Act came into effect since 1983. Since 1985 Nepal has been following liberal economic policy. In its first stage of implementation, banking and financial sector was liberalised. A policy to invite foreigners to invest jointly with the domestic investment in the banking and financial sector was introduced.

Finance Companies Act 1986 was also enacted with a view to provide non-banking services to the people in order to promote their economic benefit in general through industrialised investment. Accordingly, many Banks and Finance Companies were incorporate in the private sector and listed in the Securities Exchange Center. Nepal Rastra Bank liberalized the

regulation of interest rate and endeavoured to reform and strengthen the financial sector by implementing various prudential financial norms like income recognition, loan classification, maintenance of adequate loan loss provisions, reserves and capital adequacy ratio and liquidity position of the banks and finance Companies.

The Industrial Policy of 1988 introduced various reforms in order to encourage the establishment of corporate enterprises and guarantee the non-nationalization of private sector industrial organizations. In August 1988, Nepal was hard hit by major earthquake resulting in considerable loss of lives and properties. Nepal – India Trade and Transit Treaty came to an end on March 1989 and the country underwent more than a year long trade impasse with India which caused temporary set back to the Capital Market too. Most of the trade points with India were closed down and because of the short supply of fuel and other essential industrial input; the conduction of most of the industries was disrupted. After the restoration of Multiparty Party Democracy in 1999 and resumption of the Trade and transit stalemate with India in its status quo ante, new democratic constitution was enacted, which enshrined in its directive principles the provisions conducive to the private sector growth.

The Multiparty Election took place in April 1991 and the elected Government while steering the economy, realized the need to reform the financial sector and develop Capital Market along with the economic liberalization in the country for the growth of private sector. More joint venture Companies and market institution in Capital Market were opened in the country (Timilsina, 2001:23).

After the Restoration of Democracy in 1990, Nepal has adopted many new policies such as Industrial policy-1992, Foreign Investment and One windows policy-1992, Trade policy-1992, Labour policy-1992, Industrial Enterprise Act-1992 and many other. When we look at the implementation and major development in Nepalese business sector development in monetary, banking, insurance and finance sector can be taken as the major area. The most revolutionary changed sectors are airways, telecommunication, and service and education sectors.

Nepal has adopted liberalization from the end of Sixth Five-Year plan. Nepal has adopted and implemented privatization campaign after Restoration of Democracy. It has

significantly emphasized in reforming public sectors and encouragement to the private sectors in national development Liberalization scheme specially focused on privatization, deregulation, relicensing and abolition of subsidies. It also welcomes globalization process of Nepalese economy.

Nepalese Capital Market has significantly developed after 1990. However, there were few ups and downs during 2000. There were around 194 listed Companies at end of Financial Year 2064/2065 (Till Baishakh). Security Board, Stock Exchange Limited, Citizen Investment Trust. NIDC Capital Market, Listed Companies and Stock Brokers are the major components of today's Nepalese Capital Market.

1.1.2 Development of Nepalese Security Market

Before the establishment of the Securities Exchange Center (SEC) there were no any institutional arrangement to undertake new issue and manage the sales of the shares and debenture of the corporate bodies. A Public Limited Company could make public offering according to the provisions of the Companies Act 1964. When the SEC came into existence, it started managing new issues of shares and debentures according to the guidelines for new issues and Sales Management 2043 (1986). It used to charge commission for its service to the issuing company varying from a minimum of 1.35 percent to a maximum of 2 percent depending on the amount of new issue. A lower amount of transaction would attract a higher rate of commission and vice versa. Therefore, the issuing company had to pay a commission of 2 percent for the management of new issue and sales services to SEC for an amount upto Rs.2.5 million. The rate of commission for a new issue of Rs 10 million and above was 1.35 percent. At present, the rate of commission ranges from 1.5 percent to 2.5 percent depending upon the value of securities sold. The issue managers who arrange the sales of securities charge commission to the issuing Company at the rate of 2.5 percent of the value. If the value of the issue is more than Rs. 10 million, the rate of commission is 1.5 percent.

The corporate bodies were required to list their shares and debenture in the SEC in order to maintain quality to the trading. However, the Government bonds issued under the National Debt Act were exempted from such compulsory-listing obligation. Securities

Exchange Act 1983 made it obligatory to trade the securities through the recognized Exchange Center or through their licensed brokers. Therefore, the Securities Exchange Center opened its floor for secondary trading of corporate shares in November 1984. Before this, the SEC was restricted to the trading of Government Bonds.

At present 27 member brokers and two market makers have been operating on the trading floor. The rate of brokerage on equity transactions varies from 1 percent to 1.5 percent depending upon the volume of trade. Higher the amount of transaction lower is the percentage of commission. The seller and the buyer both the parties have to pay commission to the broker. However, it takes a very two months to get the securities transferred and registered in the name of buyer.

In mid-July 1986, there had been a total of 16 listed Companies with paid up share capital of Rs. 341 million. The market capitalization of listed shares on that date and the annual turnover for the FY 1985/86 amounted to Rs. 789 million and the market capitalization at mid-July reached Rs.1775, which is larger by more than three times to that of 1986. The total turnover of FY1986/87 was Rs. 25.3 million.

At the earlier stage of growth the secondary market of securities in Nepal was very weak. The Security Exchange Center Ltd. was converted into Nepal Stock Exchange Ltd. (NEPSE) in 1993 with a view to reform the capital market. It is a non-profit making organization operating under Securities Exchange Act 1983. Brokers and market makers operate on the trading floor as per the Securities Exchange Act rules and by laws of NEPSE. Nepal Stock Exchange started its taking operation on 13 January 1994 through its licensed members.

The Securities Board was constituted in 1993 under Section 1 of the Securities Exchange Act 1983. Its main objective is to provide essential policy direction for the systematic and regular exchange of securities and develop competitive Stock Exchange Market by protecting and promoting the interest of the investors; Nepal Stock Exchange is a trading (operational) institution, whereas Securities Board is the regulatory body. Before the Board came into existence, the Securities Center carried on both the functions. Any co-operate body desiring to carry out the transaction of securities can submit application to the Board for obtaining the license, till now Nepal Stock Exchange Ltd. alone is representing the Securities Market in the country.

The first six months of 1994 (mid-January to mid-June) witnessed a significant upward trend in the Stock Market of Nepal. Public sentiment towards the corporate shares was so strong that the prices of equity share of most of the Companies, especially shares of Companies in the banking and finance sector went up abruptly without any strong financial backing. When the Joint Venture Banks started to declare attractive rates of dividend, investors exhibited a grave concern over the shares of most of all corporate bodies irrespective of the nature and financial strength of the company. The NEPSE index tremendously went up to 265, the monthly Share Market turnover reached a record level of Rs. 963.9 million and the market capitalization of the listed shares reached to Rs. 16407 million. But this period onwards, the bearish tendency in the history of Stock Market in Nepal began gradually.

Most of the investors were not aware of the risks associated with the corporate investment. They were neither familiar with the corporate information nor were there any financial information disseminated regularly for public use. When some of the Companies like Gorakhkali Rubber Udhog, Joti Spinning Mill, Agro-Nepal, Ace Laboratories Nepal Ltd., Harisiddhi Bricks and Tile Factory, Bansbari Leatherage and Himgiri Textiles started showing poor performance; the investors tried to find out the reasons of their weaknesses and started to show their pessimistic outlook towards the Stock Market. They gradually started to showing their concern over the financial information of the Companies. Suddenly the share price of most of the Companies fell down and the Stock Market looks the downturn.

Investors were losing confidence on the performance on the Share Market mainly due to their experience of fraudulent and scandalous activities undertaken by a handful of market swindlers, (Shrestha, 1999). There had been also more subtle problems involving misuse of insider information and growing tendency of frauds in securities transaction. Moreover, credulous investors too were responsible for showing irresponsible behaviours due to greed of quick gains from share market. The unhappy episode had also emerged from wrong advice of the brokers. Thus, market disorders, price manipulation and fraudulent Share Market activities all together resulted in the bearish market in country.

The sudden market collapse in 1994 emphasized the need to correct several deficiencies in our financial system. Financial sector is comprised of the banks and depository as well as non-depository financial institutions, money markets and Capital Markets. It allows an efficient transfer of resources from the surplus units to high return investments most efficiently; an economy can achieve higher rates of growth. The development of the fundamental measures were needed to put the economy and financial system on a path to recovery.

The Government initiated the policy of economic liberalization in 1985 and in the first phase, measures to reform financial sector were adopted. Joint investment in the banking sector was invited, interest rate was deregulated, and various provision such as the maintenance of capital adequacy ratio, open market operation, exchange market intervention, loan loss provision, and credit ceiling were made. Now financial sector restructuring is broadly on track and the policy for cooperation restricting is largely in place. A strong financial development is underway. All these along with the privatization policy of the Government have prompted further development of Capital Market in Nepal.

1.1.3 Introduction of NEPSE

The history of Capital Market in Nepal dates back to the era of Rana Prime Minister Juddha Samsher when Gunjaman Singh, the first secretary of the Nepalese Embassy in England returned back to Kathmandu and set up the 'Industrial Council'. The Council drafted the Company Act and Nepal Bank Act for the first time in 1936. The first public floatation of shares in the Securities Market was initiated by Biratnagar Jute Mills Ltd. in 1937.

Introduction of the Company Act I 1946, the first issues of Government bond in 1964 and the establishments of Securities Exchange Center Ltd. In 1976 were significant developments in the field of Capital Market.

Securities Exchange Center was established with an objective of facilitating and promoting the growth of Capital Markets. Before conversion into stock exchange, it was only the Capital Market institution undertaking the job of brokering, underwriting, managing the public issues, market making for Government bonds other financial services.

Nepal Stock Exchange in short NEPSE is non profit organization operating under Securities Exchange Act 1983. The basic function of NEPSE is to promote marketability & liquidity to the Government and operate securities by facilitating transaction in its trading floor through market intermediaries, such as broker, market and market maker etc. NEPSE opened it's trading on 13th Jan. 1994 through licensed members. Nepal Sarakar, Nepal Rastra Bank, Nepal Industrial Development Corporation and licensed members are the shareholders of the NEPSE.

Board of Directors of NEPSE

The board of directors of NEPSE consists of 9 (nine) directors in accordance with Securities Exchange Act 1983. Government of Nepal nominate one licensed members nominate two General Manager of the NEPSE nominates six directors.

Table No. 1.1

Board of Directors of NEPSE

S.N.	Name of the Organization	No. of director	Designation
1	Minister of Finance	1	Chairman
2	Securities Board	2	Director
3	Nepal Rastra Bank	2	Director
4	Nepal Industrial Development Corporation	1	Director
5	Licensed Member	2	Director
6	General Manager	1	Director

(Source: NEPSE Index Annual Report 2007/2008)

Trading System of NEPSE

NEPSE has adopted an open cut-cry system. It means transactions of securities are conducted on the open action principle on trading floor. The buying broker with the highest bid will post the price and his code number on the buying column, while selling brokers with the lowest offer will post the price and code number on the selling column on the quotation board. The market quotes their bond and offer price match contrasts

between the buying and the selling brokers or between the brokers and markets makers that are conducted on their floor (www.nepalstock.com.np).

Trading Days and Hours of NEPSE

NEPSE has fixed the trading days and hours during which the brokers are allowed to enter the floor to make the transaction.

Table 1.2
Trading Days and Hours of NEPSE

Types of Trading	Days	Trading Time
Regular Trading	Sunday to Thursday	11am-1pm
Odd not Trading	Monday & Friday	2pm-3pm Monday 11am-12am Friday

(Sources: NEPSE Index Annual Report 2007/2008)

Capital Structure of NEPSE

The authorized and issued capital of the exchange is Rs.50 million of this Government of Nepal, Nepal Rastra Bank, Nepal Industrial Development Corporation and licensed members subscribes Rs.30.41 millions.

Table1.3
Capital Structure of NEPSE

S.N.	Share Holders	Rs. Million	Percent
1	Government of Nepal	20.48	58.67
2	NRB	12.08	34.6
3	NIDC	2.14	6.13
4	Members	0.21	0.6
Total		34.91	100

(Sources: NEPSE Index Annual report 2006/2007)

Listing Fees of NEPSE

The listing fees and the annual fees to be paid by the listed companies are based on capital of the company. The rates currently applicable are as follows:

Table 1.4
Listing Fees of NEPSE

Paid Up Capital	Fees(listing)	Fees(annual)
Up to Rs.10m*	0.20%minimum Rs.15000	Rs.15000
Rs.10m-50m	0.15% or minimum Rs.45000	Rs.25000
Rs.50m-100m	0.10% or minimum Rs.75000	Rs.35000
Above Rs.100m	0.075% or minimum Rs.100000	Rs.50000

*m=million

(Sources: NEPSE annual report 2006/2007)

Other Important Factors of NEPSE

Other important factors of NEPSE can be explained as below:

Board Lot: NEPSE

It has fixed the board lot of 10 shares if the value is Rs.100 or 100 shares if the face value is Rs.10. in this case of debenture the trading limit is 1 being the paid value of Rs.1000 the transaction of regular trading should be on at last lot. The transactions of less than 10 shares are admitted by as odd lot trading hours. There is no odd lot transaction is case of debenture.

Price Regulation

The opening price of any days shall not be more or less than 10% of previous trading day closing price. Once transactions are done within this range, the price can be charged within the limit of 5% in each consecutive transaction.

Settlement

NEPSE has adopted T+5 system, which means that settlement of transaction should be done within 5 working days following the transaction day. Settlements will carry out on the paper versus payment.

Brokerage

The rate of brokerage on equity transaction range from 1% of the transaction amount depending on the traded amount. (www.nepalstock.com.np).

Market Index Calculation

“Market Index is a single figure obtained from averaging the price of selected securities, which reflects the overall investment performance of a particular market for financial assets for a particular point of time.” (Francise; 1985:521)

- i. **Price Weight:** It is calculated by summing the price of stocks that are included in the index, and dividing this sum by a constant. (the divisor)
- ii. **Value Weight:** It is calculated by multiplying price of the stock in the index and their respective numbers of shares outstanding and then dividing the corresponding figure for the day the index was started. The resulting number is multiplied by any base that may be 10, 100, 1000 etc.
- iii. **Equal Weight:** This is computed daily by multiplying the level of index on the previous day to the arithmetic mean of the daily price relative (today price divided by yesterday price) to the different individual stocks which are included in the construction of the index (Francise; 1986:512)

Rights of the Stockholder

Its stock ownership represents ownership in a corporation. The corporation generally issues more than one types of stock, usually called classes of stocks. They must clearly define the rights and privilege that belongs to each class. If only one class of stock is issued it is referred as common stock, if two class of stock are issued, they are generally referred as common stock and preferred stock. Each enjoying specific rights and privileges and prophase each having certain restrictive provision attached to them.

Individual who buy the stock become the owner of a corporation and as a stockholder they acquire the following rights:

1. The right to share in the corporate earning. The owner of a share of stock has the rights to share proportionately in the corporate earning that being distributed as a dividend to all holders to this class of stock.
2. The right to vote, specially the right to elect by voting the members of the board of directors who in turn will represent the shareholders in determining broad level of corporate management policy.
3. The right to transfer ownership. Stockholders have right to sell or dispose of their shares of stocks in any manner they want.
4. The right to purchase any additional shares of stock, in the event that corporation issues more stock of same kinds. This right generally referred to as a preemptive right, entitles shareholders to have the first opportunity to purchase, in proportion to his existing holding, any additional shares that the corporation intends to issue, before they are offered for sales. (Hampton: 1996:29-33)

1.2 Focus of the Study

Volatility on price of stock of various listed Companies in Nepalese Stock Market has already been noted as one of the burning issues. It is talked that

1. Instability exists is Nepalese economy.
2. Low level of share transaction.

3. Small size of capital market.
4. Market penetration by handful of businessman.
5. Limited number of market makers and intermediaries.

Are the contributing variables, which led Nepalese Stock Market to inefficiency?

In this scenario, this study intends to analyze the problems and causes that led the market to inefficiency. In this context, some corrective measures are required to be initiated so the market certainty is to be ensured and interest of the investor can be protected.

1.3 Statement of the Problem

The investments in secondary Stock Market play crucial role in financial sector of the national economy. Stock Market being one of the prominent sources of economic development for a nation is trying to attract its potential investors who are their biggest assets. But due to some relevant and irrelevant issues in security market lots of hurdles can be seen and observed. It was characterized by the absence of professional promoters, underwriting agencies, market intermediaries, organized market, regulatory bodies and rules and regulations. However, after the restoration of democracy in 1990, a trend towards an organized Stock Market can be marked with numerous developments in the Nepalese Securities Market, removing its earlier deficiencies.

Political instability and interference, economic imbalances, ineffective implementation of liberal economy policy are the main problems in the Nepalese Stock Market. 'The big challenge to international and domestic monetary policies is to separate the economies from the politics. Unfortunately, the politics dominates, so one should try to build a structure that minimizes the impact of politics' (Backer, 2002:52). Therefore, we should try to reduce, if not eliminate the impact of politics on economy efforts must be directed towards creating conducive environment for its development.

Due to the lack of proper Government Policy, unrest and insurgency in country, the price of securities especially common stocks have been rapidly fluctuating. Low trading volume,

absence of professional broker, early stage of growth, limited movement of share price, limited information to investors, price instability in the secondary market, lack of proper investment decision of the investors etc. are the burning issue in Nepalese Stock Market. The Government has not brought any packages to reform the Stock Market that is why; investors are losing confidence on the performance of Share Market mainly due to their experience of fraudulent and scandalous activities undertaken by a handful of market swindlers.

In an efficient market, the price is set by the interaction of demand and supply. The higher transaction volume of share represents the market efficiency. Liquidity and efficient market requires a large number of interested and active investors but in NEPSE, the only Stock Exchange of Nepal, the investors are unable to identify the good and bad stock of proper information about the share that are not published from time to time. Several university researchers discovered that because of the lack of sufficient information, rumour and whim had played significant role in stock price volatility and that investment on common stock is based on intuition, imagination, guesswork and conscious judgement based on little understanding of technical and statistical NEPSE index.

The main issues or problems in Nepalese Stock Market can be pointed out as follow:

1. Centralized Stock Exchange located in Kathmandu.
2. Low trading volume of stock.
3. Lack of proper information to the investors.
4. High fluctuations of Stock Market prices.
5. Slow privatization process.
6. Lack of proper management and low competition in the market.
7. Government instability.
8. Unavoidable circumstances like Nepal Bandha, Terai Bandha, Nakabandhi etc. in the country which is declared by the various parties like Maoist, Terai Jana Adhikar Forum, Janatantric Terai Mukti Morcha and other small parties.
9. High corruption, favouritism and nepotism.

These problems can be solved only when the real determinants of stock price are diagnosed and identified. Thus, the present study is carried out to analyze the stock price

volatility in Nepalese Stock Market and recommend for the improvement in the development of Nepalese Stock Market.

In the context of above discussed statement of the problem of the study, following research questions are identified that are to be answered conducting present research. Some of these specific research questions are as follow:

1. What is the state of price fluctuation of Nepalese Share Market?
2. What are the most potential reasons behind the artificial price fluctuation of Nepalese Stock Market?
3. What are the remedies to prevent the artificial share price fluctuation and unfair manipulation of Nepalese Share Market?

Based on the above stated statement of problems and research questions, present study attempts to answer the above stated research questions following a survey research design.

1.4 Objectives of the Study

The basic objectives of this study are to analyze and identify the factors responsible in Nepalese Stock Market inefficient and to identify the probable solution to the minimization of their effect. Specific objectives of the study are presented as follows:

1. To study and examine the trend of price volatility of Stock Market.
2. To analyze causes and factors of inefficiency.
3. To see and evaluate price fluctuations in the Stock Market.
4. To provide suggestions to the concerned organization on the basis of the results.

1.5 Significance of the Study

Usually the price of common Stock in primary market is par value but in secondary market may be any price i.e. more, less or equal to par value. Stock price in secondary market is the main issue of the study. The prices of the stock are largely influenced by the various market-related factors, which have been mentioned above. Therefore, this study is made on the various related factors that are the major causes of the stock price volatility.

This study also has academic as well as practical significance. The findings and conclusion of the study will have practical importance to overcome artificial price fluctuation in share trading. The study will also be significant for individual investors who are willing to trade in Securities of Nepalese Organizations. The findings and conclusion of the study may be helpful in making investment decision for all parties involved in Nepalese Share Market. The findings will be important for the researchers and scholars who are related to Nepalese Stock Market as well as volatility.

1.6 Limitations of the Study

Present study might be milestone for exploratory study in searching the behaviour of Nepalese Share Market. Findings of the studies are very useful for both academicians as well as researchers. However, the study Stock Price Volatility and its Contribution Factors in Nepalese Share Market may have limitations. Cross sectional data some is one of the means to find the casual linkage between share price volatility and its possible causes. Limited variables are being used for the study.

1.7 Organization of the Study

This study comprises six related chapters. First chapters are the general introduction of the study. It highlights the conceptual issues, statement of the problem, objective, significance, and limitation & organisation of the study.

Second chapter related to the literature review that consists empirical and theoretical issue of the research topic. It focuses on theoretical framework, price behaviour, market & managing investment, capital market concepts, role of exchange and literature review.

Third chapter deals research methodology followed in the study. It introduces about research design, source of data, data collection & analysis procedures and statistical tools.

Fourth chapter is about present pattern of Nepalese Share Price Behaviour. Which mainly focus market trend and analysis of primary & secondary data, causes of stock in Nepalese stock market.

Similarly, it presents the analysis and results of price fluctuation and the finding data is the base for the fifth chapter's summary, conclusion and recommendation.

CHAPTER – II

REVIEW OF LITERATURE

2.1 Introduction

This chapter presents the review of relevant literature. It is divided into three sections: the first section deals with theoretical framework, the second section reviews the market efficiency theories, and the third section reviews the related studies in domestic and international level.

2.2 Theoretical Framework of Stock Volatility

Researchers have sought to analyse the relative importance of Economy-Wide factors, Industrial-Specific Factors and Firm-Specific Factors on a stock's volatility. This approach is borrowed from modern asset pricing theory and its emphasis on so-called factor models, or models that assume a firm's stock return governed by factors such as the overall market return, the return on portfolio of firms sampled from the same industry, or even changes in economic factors such as inflation, change in oil prices, or growth in industrial production. If returns have a factor structure, then the return volatility will depend on the volatilities of those factors.

(Campbell, et, al. 2001), assumed the factors as the overall market return, an industry return and an idiosyncratic noise term that captures firm specific information. They documented the important empirical fact that while volatility moves considerably over time, there was not a distinct trend upwards or downwards.

Amongst the literature of most relevance to the whole volatility issue is Robert Shiller's (1990) 'Market Volatility'. He is a firm advocate of the popular model explanation of stock Market Volatility. Popular models are a qualitative explanation of price fluctuation. In short, it proposes that investor reactions, due to psychological or sociological beliefs, exert a greater influence on the market than good economic sense arguments.

Excess volatility is the name given to that level of volatility over and above that, which is predicted by efficient market theorists, in Shiller's (1981) eyes this excess volatility can be attributed to investors psychological behaviour. He claims that substantial price changes can be explained by a collective change of mind by the investing public which can only be explained by its thoughts and beliefs on future events, i.e. its psychology.

Mahat (2004), published about the share volatility in Nepalese Share Market. He showed that the actual position of the volatility of share mainly in Banking Sector is very high on the basis of Price Volatility Index (PVI) by selecting eight major banks in the Share Market for five years period.

Mahat said that volatile market is not always risky for the investors. In the financial market, return can be maximized only at the cost of incurring high degree of risk. A fall in the market price of share results in decreasing the profit or increase in the loss to the investor. On the other hand, appreciation in the price so share may put the investor in a favourable position.

He added the short term fluctuation in the price of share affects the investors who intend to invest in the share and earn returns in the short span of time. The prospective investors need to find out the degree of price fluctuation in order to assess the degree of risk involved in the investment. The degree of fluctuations in the price of shares can be found by computing price volatility index of share. Volatility measures the dispersion about a central tendency. There are a number of measures to measure the price volatility of shares. One of the widely accepted measures is the price volatility index.

He computed the PVI figure to find out the volatility of share by selecting eight banks. PVI measures that if the PVI value greater than 1 is considered as aggressive security i.e. very risky and if the PVI value less than one is considered as defensive security i.e. less risky.

As mentioned in the annex no. 5, the volatility has been found on the basis of PVI, the highest risk or more volatile share is BOK and less risky and PVI is NSCB.

2.3 Theory of Price Behaviour

The force of supply and demand interacts to determine a stock price demand is high and supply is low then the price of stock goes up and vice versa. There are essentially three schools of thought to explain the stock price behaviour. They are Technical Analysis, Fundamental Analysis and Random Walk or Efficient Market, which are explained in the following section.

2.3.1 Technical Analysis

Technical analysis is the study of the internal stock exchange information as such. The word “technical” implies a study of the market itself and not of those external factors which are reflected in the market all the relevant factors, whatever they may be, can be reduced to the volume of the stock exchange transactions and the level of share prices; or more generally, to the sum of the statistical information produced by the market (Alexander, Sharpe & Bailey, 2000:287)

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

Technical Analysis is based on the widely accepted premise that security prices are determined by the supply and demand. The tools of Technical Analysis are therefore designed to measure supply and demand. Typically, technical analyst record historical finance data on charts, which can be meaningful in predicting future prices. Some

charting techniques are used to predict the movements of market index; and some are used to predict both the action of individual securities and the market action.

The basis assumptions underlying Technical Analysis are: a) Market value is determined solely by the interaction of supply and demand, b) Supply and demand is governed by numerous factors both rational and irrational, c) Aside from the effect of minor fluctuations in the market, stock prices tend to move in trends that persist for appreciable length of time, d) Change in trend is caused by shifts in supply and demand, e) Shifts in supply and demand, no matter why they occur, can be detected sooner or later in charts of market action, and f) Some chart patterns tend to recur and the recurring patterns can be used to forecast the price movement.

Technical Theory involves study of the past volume and price data securities to predict future price fluctuations. Technical Analysis Theory of share price behaviour is based on the past market information. On the assumption that history tends to repeat itself, it is believed that knowledge of past pattern of share prices will help to predict future price to similar circumstances. It involves study of past market behaviour with reference to various financial and economic variables to forecast the future. The change occurs in financial and economic variables can be adjusted in the light of the present situation. Technical analysts, or chartists, as they are commonly called, believe that they can discern patterns in price or volume movements, and that by observing and studying the past behaviour patterns to given stocks, they can use this accumulated theoretical information to predict future price movements in the security. Technical analysis comprises many different subjective approaches, but all have one thing in common that is, belief that these past movements are very useful in predicting future movements.

Technical analyst believes in the history behind chart formation and patterns. They read charts much like ancient astrologers read the stars, looking for “head and shoulders” formation. These which they believe, reflect the patterns of buying and selling accumulation and distribution, or market psychology.

Stock prices always move in trends because of an imbalance between supply and demand. When the supply of a stock is greater than the demand, the trend will be down as there are more sellers than buyers; when demand exceeds supply, the trend will be up

as buyers “bid up” the price; and if the forces of supply and demand are nearly equal, the market will move sideways which is called a “Trading Range”. Eventually, new information will enter the market and the market trend will begin to go either up or down. Depending whether the new informant is taken as positive or negative. Trend which are very brief are called minor trends; those lasting a few weeks are known as Intermediate Trends; and trends for a period of months are major trends. By analyzing trend lines we can determine what trend is in force. It helps us to act in market both in bullish and bearish market.

Price moves in trends. A trend indicates there exists an inequality between the forces of supply and demand. Such changes in the forces of supply and demand usually are readily identifiable by the action of the market itself as displayed in the prices. Certain patterns of formations that appear on the charts have a meaning and can be interpreted in terms of probable future trend development.

2.3.2 Fundamental Analysis

Fundamental analysts forecast, among other things, future levels of the economy gross domestic product, future sales and earnings for a large number of industries, and future sales and earnings for a larger number of firms. Eventually such forecasts are converted to estimates of expected returns of specific stocks and perhaps, certain industries and the Stock Market itself. In some cases the conversion is explicit. (Alexander, Sharpe & Bailey, 2004: 292 & 293)

The fundamentalists have the opinion that the value of a share depends upon the anticipated future stream of returns and corresponding capitalization rates. The capitalization rate is an appropriated risk related cost of equity. Therefore, value of share, under this model, is equal to the present value of future incomes from equity discounted at risk adjusted capitalization factor. It requires full disclosure of financial and economic information. If the dissemination of information is not regular, reliable and complete, the market value of share can not be properly ascertained. Two models are popularly used under this theory i.e. Earning Capitalization Model and Dividend Capitalization Model. The

market price of share is based on its intrinsic value. The shareholder would like to maximize the return by buying shares of the under-valued company and selling shares of the over-valued company. Buying pressure would increase the price of under-valued company and selling pressure would decrease the price of over-valued company until the equilibrium is restored.

Some of the way to go through with the fundamental analysis may be as follows:

- A. Top Down versus Bottom-up Forecasting:** Under top down analysis approach the analysis is down by making forecast for the economy, industries and companies. The industries forecast are based on the forecast for the economy and a company's forecast is based on the forecasts of both its industries and the economy. Likewise while doing bottom up forecasting estimation of the prospects of the Companies is down the then only estimation of the prospects is conducted. The assumptions under this approach are inconsistent. In practice a combination of the two approaches is often employed.
- B. Probabilistic Forecasting:** Explicit probabilistic forecasting often focuses on economy wide forecast, as uncertainty at this level is of the greatest importance in determining the risk and expected return of well-diversified portfolio. A few alternative economic scenarios may be forecasted along with their respective probability of occurrence. Then accompanying projections are made of the prospects for industries, companies and stock prices. Such an exercise provides an idea of the likely sensitivities of different stocks to surprise concerning the economy and hence is sometimes referred to as what if analysis.
- C. Econometric Model:** An econometric model that provides a means of forecasting the level of certain variables known as endogenous variables. In order to make this forecast the model relies on assumptions that have been made in regard to the levels of certain other variables supplied by the model users known as exogenous variables.
- D. Financial Statement Analysis:** A company's financial statement can be regarded as the output of a model of a firm. Many analysts do study financial statements to predict the future. Financial statement analysis can help an analyst to understand a company's current situation and where it is going. What factors affect it and how

these factors affect it. To fully understand a company is determined value of the share can be accessed. The price of the share can be estimated by examining the ratio of earning, after tax to the book value of equity.

2.3.3 Random Walk Analysis

The empirical evidence in the random walk literature existed before the theory was established. That is to say, empirical results were discovered first, and then an attempt was made to develop theory that could possibly explain the results. After these initial occurrences, more results and more theory were uncovered. This led to diversity of theories, which are generically called the Random Walk Theory.

The stock price appear to follow a random walk is an interesting result and proving it or attempting to disprove the occupied many researchers throughout the 1960s and 1970s. But what remained to be shown was why sock prices followed a random walk. There was plenty of evidence, but a formal theory was missing. Thus, an appropriate model of stock price behaviour was needed to explain the random walk. This gap was filled by a more general model based on the concept of efficiency of the markets in which stocks are traded, i.e. the efficiency of the markets in which stocks are traded, i.e. the efficient market hypothesis. (EMH)

In a perfect capital market, successive price changes will be independent and prices will follow a random walk. The first reason is due to the new inherent in the new piece of information concerning the company may be either good or bad. However, it will certainly be independent of the last piece of information and so the price changes towards the new equilibrium value will be independent of the last price change. Another reason is due to the number of traders in the market and the lack of barriers to trading in which the information will be absorbed so quickly that the new equilibrium value will be achieved straightway.

However, in market where transaction cost are high enough to fix trading or where information is slow to reach the majority of investors, and speculative dealing by those who has the new information is in some way prevented, it might take several days or

weeks for new information to be impounded in the stock price. There would then be a trend in the stock price as it moved towards its new equilibrium value. In such an imperfect and inefficient market, stock price changes would be serially dependent rather than random. As such, excess returns could be made either by spotting the trends from charts or by trading on new information before it was fully impounded into share prices. Thus, a Random Walk Theory for stock prices re-ejects a Stock Market where new information is rapidly incorporated into prices and where abnormal or excess return can not be made from spotting trends or from trading on new information (Chandra, 2000:56).

The Random Walk Theory assumes that all future streams of incomes from the equity investment are independent of preceding incomes. In other words, future prices can not be predicted on the basis of past price behaviour. The share prices fluctuate randomly, however, this does not mean that the market is irrational in the determination of prices. It operates through market mechanism. In a free and competitive market, the relative forces of demand and supply determine share prices. The so-called efficient market automatically adjusts the prices of shares since the market is very sensitive. Any discrepancies in the market are automatically corrected and actual prices fluctuate randomly about its intrinsic value. This is a free and most competitive market and the prices of shares in the market are assumed to reflect all relevant information.

A. Risk and Return: Compared to different investments avenues like fixed income securities, bank deposit, mutual fund schemes, equity share, tax sheltered investments schemes, real estates, gold equity investment are more risky assets because it is difficult to predict the rate of return and the rate varying. It is important that investors consider these risks as part of their financial planning, before planning takes place. However, it is necessary to understand what these risks are and how they apply to ever increasing variety of investments being made available to investors. Risks are always with us. Investors may see their investment in a business disappear because of lack of customers during a period of economic recession. They may find that dividends or interest income from security holdings are reduced or eliminated because the payer is no longer financially able to make payments. They may face the capital loss in the market due to the fall of securities

price. There are many reasons that an investment may produce unexpected results. Hence, investors should look into risk factors before making investments. There are varieties of risks major types of risk are business risk and market risk.

- B. Business Risk:** Investors are exposed to risk of poor business performance as an owner of corporate securities. This may be caused by variety of factors like heightened competition, appearance of new technologies, development of substitute products, shifts in consumer preference, inadequate supply of essential inputs, changes in Government policies, and so on.

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

2.4 Markets and Managing Investment

Investors have to understand the nature of market and prevailing practices in the existing market. There are many issues to be considered in effective investment decision of the investment. Risk and return issues are the major aspects to be considered. Portfolio management and finding suitable market is another issue to be considered. There are few models and hypothesis that help investors for efficient investment they are discussed in the following section.

2.4.1 Interest Rate Risk

Investors of common stock receive dividends. The rate of return earned by common stock is not certain. Unexpected movements in interest rate are one of the major factor, the changes in interest rates affect the market force of securities. In general, keeping the other thing constant, increase in interest rate supports the prices of common stock to fall. This is because investors demand higher return from common stocks. The changes in interest rates have an affect on firm's dividend payments. In Nepalese Stock Market commercial banks and financial institution occupy the major part. By nature, the revenue of these organizations depends closely on interest income. Like wise the changes on interest rate have affect on cost side. Firms have to pay huge amount out of its earnings as an interest expenses on borrowed amount if the rate is higher. This reduces the profit. By affecting the income of firms, dividend payments get affected. So the interest rates are the part of financial decision making.

2.4.2 Markowitz Model

Portfolio theory originally proposed by Garry Markowitz, it was the first formal attempt to quantity the risk of a portfolio and develop a methodology for determining the optimal portfolio. Portfolio theory is based on the assumption that the utility of the investor is a function of two factors: Mean (or expected) return and variance (or its square foot, the standard deviation) or return. Hence it is also referred to as the mean variance portfolio theory to two parameter portfolio theory. Ceteris paribus, the investor is assumed to (I)

prefer a higher mean return to a lower one, and (II) prefer a lower variance of return to a higher one (Prasanna Chandra, 2000:152).

2.4.3 Capital Assets Pricing Model (CAPM)

The basic foundation of the theory had been laid down in the micro economic studies of mean variance choice by Markowitz (1959) and Tobin (1958). The critical extension to equilibrium in the Capital Market and the development of the CAPM had accomplished by Sharpe (1964) and Linter (1965) (Ross, 1978).

Like the portfolio models of Markowitz and Tobin, the Sharpe-Linter asset pricing model assumes a market of risk-averse consumers who can make portfolio decision on the basis of the means and standard deviations of one period portfolio returns implicitly assuming that these standard deviations exist.

The CAPM substantiated the idea that, in competitive equilibrium, assets are premium over the risk less rate that increase with their risk, by showing that determining influence on risk premium is the covariance between the assets and the market portfolio, rather the own or intrinsic risk of asset (Ross, 1978:248). CAPM is concerned with two key questions:

- a) What is the relationship between risk and return for an efficient portfolio? And
- b) What is the relationship between risk and return for an individual security?

The CAPM is based on the following assumption (Chandra, 1998:53), it assumes that individuals are risk averse. Individuals seek to maximize the expected utility of portfolio over a single period planning horizon. They have homogeneous expectations, identical subjective estimates of means, variances and co-variance and among returns. They can borrow and lend freely at a risk less rate of return. The market is perfect; there are no taxes; there are no transaction costs; securities are completely divisible; and the market is competitive. The quantity of risky securities in the market is given.

2.4.4 Liquidity

Stock Market sectors systematically react to different stages of the financial and business cycle, as measured by shifts in the liquidity environment. The response of liquidity of money market is negative with stock trading. The fall on the prices of stocks facilitates liquidity. There is a link between interest rate and liquidity. The change in interest rate affects the supply of money. If the rate of interest is high, the demand for money is less than the supply. There is surplus liquidity. If the Stock Market is well developed and the corporate environment is brighter; individual shifts from money market to Stock Market. Interest rate acts as an important factor in making investment decisions. Liquidity is deeply existing securities falls, and vice versa. This happens because the buyers of securities are attracted towards bank deposits.

Though the liquidity is identified as one of the major economic problems in the country but no effective steps have been taken to manage liquidity. The huge amount of funds being inactive from years due to lack of investment opportunities. There are numbers factors are responsible for mounting liquidity. The major points are: a) Failure to mobilize the funds in productive fields, b) Unavailability of physical infrastructure, c) Failure to achieve investor's faith, d) No effective demand of capital for long term investment, e) Lack of matured capital market, f) No effective transparency in private sectors, g) Instability of favourable environment for both national and international, h) Political uncertainty, j) Ineffective rules and regulations in order to support long term investment policies k) No strong vision of Government and concerned bodies.

The well-developed and organised Stock Market plays vital role so as to mobilize savings. The more "liquid" (here the term liquid refer to the ability to easily buy and sell securities) Stock Markets encourage savings mobilization in long run profitable projects. First, liquid stock markets make investment less risky and more attractive because they allow savers to acquire an asset (equity share) and to sell it quickly and cheaply. If they need to access to they are saving and wanting to change their portfolio. Many portfolio investments acquire long-term commitment of capital and investors are often reluctant to relinquish the control of their saving for long period. This problem will be solved by Stock Market by way of freedom of entry and exist.

Secondly, liquidity in stock also improves the allocation of capital and increase prospects for long run economic growth by facilitating long-term profitable investment. Therefore, Companies have permanent access to capital raised through equity issues. Thirdly, liquid Stock Markets also lead to more savings and investments by making investments by making investment less risky and more profitable (Samal, 1999:158).

2.4.5 Efficient Market Hypothesis

A perfectly efficient market is a market in which all investors have access to all relevant information and in which news that affects stock prices is immediately available through the market. "An efficient financial market exists when security price reflect all available public information about the economic, about financial markets, and all about the specific company involved (Vanhorne, 1998:345). An efficient Capital Market is one in which it is available information (Brown, 1987:458). Efficient market theory content that in free and perfect competitive market, stock price always reflects all the available information and adjust instantaneously every influx of new information (Shrestha, 1999:128).

If new information becomes known about a particular company, how quickly do market participants find out about the information and buy or sell the securities of the company on the basis of the information? How quickly does the price of securities adjust to reflect the new information? If price respond to all relevant new information in a rapid fashion, we can say the market throughout the market, and if investors take time in analyzing the information and reacting and possibly overcasting to it, prices may deviate from values based on a careful analysis of all available relevant information. Such market could be characterised as being relatively inefficient (Haugen, 1997:564).

According to Fama, in an efficient market share prices instantaneously and fully reflect all relevant available information, which is known as the Efficient Market Hypothesis (EMH). The market efficiency of any stock is based on how fast the available new information results in an upward revision and unfavourable information push downward revision of security price. However, the assumptions to the efficient market being perfect Capital

Market are: a) Information freely and instantaneously available to all, b) Homogenous product, c) No taxes, d) Costless transactions, e) Perfect competition among investors.

Thus, in an efficient market is it not possible to purchase undervalued share or for share to overvalued. However, the measure of efficiency is seen in the speed with which the market re-elects new information in the share price. In this early work of 1970, Fama has categorized his work on market efficiency into three categories. However, in late 1991 published the revised version of 1970's could be summarized as: a) Weak efficiency market hypothesis, b) Semi-strong efficiency market and c) Strong efficiency market hypothesis.

2.4.6 Weak Efficiency Market Hypothesis

The weaker efficient market hypothesis says that historical stock price and volume data for securities contain no information that can be used to earn a trading profit above that could be attained with a naïve (it refers to the investment policy of randomly selecting securities, buying item and holding them over at least one complete business cycle while reinvesting all dividends) buy and hold investment strategy. In other words a weak firm says that then current price of stock already fully reflect all that information that is contained in the historical sequence of prices. "Under the weak firm of the efficient market hypothesis, stock prices are assumed to re-elect any information that may be contained in the past history of the stock price itself (Haugen, 1997:248)".

A market would be described as having weak firm efficiency if it is impossible to make abnormal profit by using past prices to make decisions about when to buy and sell securities (Sharpe, et al. 2001:758). This weak form of the efficient market hypothesis is popularly known as the Random Walk Theory. If this weak firm of the efficient market hypothesis is true, it is a direct repudiation of technical analysis. If there is no value in studying past prices and past changes, there is no value in technical analysis. However, technicians place considerable reliance on the charts of historical prices that they maintain even though the efficient market hypothesis refutes this practice.

The afore said definition does not mean that short term trades and speculators will never earn a positive rate of return, but that on average they will not outperform an investor using a native buy and hold strategy. Of course, some lucky traders do better than investors using a naïve buy and hold strategy, which unlucky traders do worst. But on average, the buy and hold strategy can not be beaten charities.

2.4.7 Semi Strong Efficiency of Market

Semi strong efficient markets are the market in which all relevant publicity available information is fully reflected in security prices. So that nothing will lead to profitable traders can be gained from public sources. In other words it says that current prices of stocks not only reflect all information content of historical prices but also reflect all publicly available knowledge about the corporation being studied. Furthermore the semi strong firm says those efforts by analysts and investors to acquire and analyze public information will not yield constantly superior to the analysts. “Under the semi strong form on the efficient market hypothesis, all publicity available information is presumed to be reflected in security prices (Haugen, 1997:225)”. Examples of the types of public information that will not be value on a consistent basis to the analyst are corporate reports; forthcoming stock split, and does forth. In effect the semi strong form of the efficient market hypothesis maintains that as soon as information becomes publicity available, it is absorbed and reflected in stock prices. Even if this adjustment is not the correct one, the market will in a very short time properly analyze it. Thus the analysts would have great difficulty trying to profit using fundamental analysis. Furthermore, even while the correct adjustment is taking place, the analyst can not obtain consistent superior returns. Because the incorrect adjustment will not take place consistently, that is sometimes the adjustment will be over adjustment and sometimes they will be under adjustment. Therefore an analyst will not be able to develop a trading strategy based on this quick adjustment to new publicly available information.

In a free and competitive market, price adjusts in such way which equates supply and demand. When supply and demand does not change equilibrium price will emerge that represents an opinion. For securities this equilibrium price should be the intrinsic value.

The equilibrium price will prevail until supply or demand will react, and a new price will be formed. The faster the news is assimilated and the new equilibrium price emerges, the more efficient market.

In order to be semi-strong efficient, news must be completely disseminated to the market without delay. Prompt news dispersion is important if prices are to reflect all relevant information immediately. The semi-strong form of the efficient market hypothesis could only be tested indirectly namely, by testing what happened to price in days surrounding announcements, and stock split announcements.

2.4.8 Strong Efficient Market Hypothesis

Strong markets are those in which all information reflected in securities prices. In other words, it maintains only publicly available information unless to the investors of analyst but also all information is useless.

Specifically, on information that is available either it is public or inside, can be used to earn consistently superior investment returns. Common sense suggests that such an extreme hypothesis is easily refutable. It is well known that insiders have profited from inside information. Under this form those who acquire inside information act on are buying or selling the stock. Their actions affect the price of the stock and the price quickly adjusts to reflect the inside information (Haugen, 1997:249). To test the strong form of efficient market hypothesis, even more indirect methods must be used. For the strong form has already mentioned, says that no types of information are useful. This implies that not even security analysts and portfolio managers who have access to information more quickly than the general investing public are able to use this information to earn superior returns.

The ability of investors to pick winners and make excess returns using new information is directly related to the speed and efficiency of a market at absorbing that information. Thus the efficiency can be considered terms of the "fair game" concept. The fair game for investors is an outcome of a market being efficient. If a market is efficient, then investment will be a fair game. This fair concept is useful in which it allows the different

levels of the EMH to be tested. Instead of trying to measure the amount of information impounded in share prices, we can look to see if by using prices of information, excess returns can be made. If they can not, it is one piece of evidence supporting efficiency but not a conclusive proof. The following model of share price behaviour gives clear idea about the EMH and the random walk theory (Janetle, 1994:346). Therefore, many of the tests of the strong form of the efficient market hypothesis deal with tests of mutual fund performance.

2.5 Capital Market Concepts

Some organizations and individuals have more money than they currently need, and are, thus, often described as lenders. Others need money more than they have and are thus called borrowers. It would be reasonable to suppose that surplus units and deficit units would be aware of each other's existence and thus the surplus unit would be willing to allow the deficit to use their surplus to their mutual advantages.

To protect the interest of both, an exchange would take place with somewhat understanding. Such an exchange may be called Direct External Finance to distinguish it from two other categories of Finance: indirect external Finance and internal Finance.

The direct external finance involves a third unit, usually called financial intermediary that concept money from surplus units and release to deficit with in the some economic unit.

Financial intermediaries are participants in the finance market along with individual and commercial Companies, individual and, of course, various agencies of Government. Term finance market is used to refer to short-term, medium term and long term market for funds. Thus the finance market may legitimately embrace in trading of Government Bond. Company debt and equity issues, short and medium term Government debts etc.

Finance market can be classified into the money market and capital market. Money market describes the short term and medium term markets only. Capital Market is used to refer to the long-term market for funds, although it is frequently used to cover the medium and short-term markets as well.

Capital Market refers to between lenders and borrowers of funds arranging of funds transfer process to seek another's benefit. These lenders and borrows coming together in Capital Market play effective financial intermediary role to achieve both the primary and secondary market through the use of various long term Capital Market instruments like common stock, bond, preferred stock, convertible issues and many more like that. The participants in the Capital Market are small business, large business and Government. Funds flowing into the Capital Market made are available by lenders for terms longer than those flowing in the money market (Philips, 1979:289).

Capital Market consists of the various suppliers and users of long-term finance. As it is differentiate from money and market, which embraces short-term finance. The Capital Market service is as a link between suppliers and users of finance. It is a mechanism for the mobilization of public saving and channelling them in productive investment.

In this way, an important component of the Capital Market is the securities market. It has a wide term embracing the buyers and sellers of securities and all those agencies and institutions that assist the sale and resale of co-operate securities (Gupta, 1978:159).

Thus, the Capital Market includes a) Activities relating to the organization distribution and trading in of securities, b) Organization which facilitates these activities, c) Individuals and institution which buy and sell securities, d) Rules, regulations, customs and practices that controls the organization and conduct of business in the market.

2.6 Role of Stock Exchange

Stock exchange is the market where second hand securities are bought and sold for investment or speculative purposes. It provides facilities for trading in listed securities. In recent year the role of stock exchange is being increasing recognized by the authorities (Mahat, 1981:21). Stock exchange is not and has at on time been the private concern of a few individuals. Nor have their activities been limited to the cyclical booms and slumps, which attracted so much popular attention. The stock exchange as the market for securities gives everybody access to a number of different opportunities for capital investment. The function of the stock exchange is to provide equal opportunities for as

many buyers and sellers of securities as possible. From a general economic point of view the stock exchange constitute the core of the capital market. It put its finger on the pulse of the economy and gives diagnoses to the public in the form of quotation.

Investment is like the blood of economic development. It is evident that stock exchange will continue to fulfil their vital function in the national economy. So long as private enterprise exists, we know that the stock exchange is the place where stock and share are bought and sold.

The substantial competition in innumerable buyers and sellers determines the prices with a measure of precision that can not be obtained in other unorganized market to such as the properly market where activity are of a spasmodic nature.

The stock exchange is intricately interwoven in the fabric of the nation's economic life. As well known author W.T.C. says "without the stock exchange, the saving of the community the sinews of economic progress and productive efficiency would be used much less completely and much more wastefully than they are now". The task of mobilizing and distributing of savings could be attempted in the old days by a much less specialized institution than the stock exchange. But as business and industry expanded, the economy assumed a more complex nature and needed for a permanent finance arouse. Investors wanted liquidity the facility to convert their investment into cash at any given time. The answer was a market for investments and thus was how the stock exchange cares into being.

This institution plays a role in the economic life of the country acting free market for securities, where price are determined by the forces of supply and demand. The function of a stock exchange is not only to provide a market for securities but also in the raising of fund for Government and industry. Thus a free and active market in stock and share has become a pre-requisite for the mobilization and distribution of a notion's saving as to support modern business (Mahat, 1981:25).

In this way, we can say that the stock exchange has a vital role to play in helping industries to raise necessary finance. They have a supremacy important function to perform in developing a stock capital and to enable Government to raise loans. Their

services are indispensable in the operation by the authority for the regulation of the country's credit play. It is generally through that a stock exchange serves only those who have money to invest and securities to sell. This is an understatement for a stock exchange benefits the whole community in variety of ways. By enabling producers to raise capacity it indirectly gives employment to millions of people and helps consumers to get goods needed by them.

2.7 Review of Related Thesis

There are many thesis related this topic written by various researchers in past year. Among them some thesis are reviewed here for analysis of literature.

Upadhya (2001), his study accomplished by "Share Price Behaviour in Nepal". His study mainly deals with the following issues: a) Do share prices over the short periods, such as day, or a week or a month, display random phenomenon? Whether the successive price changes are uncorrected of one another? He applied Serial Correlation, Runs Test, Weighted Mean, Median, Chi-square test and Spearman's Rank Correlation and conducted findings such as a) The random walk hypothesis does not seem to fit the equity shares Nepalese Stock Market, b) The information of past price change have low power to predict the future price changes of longer week and c) The price change are not random or the price changes in the future will not be independent from the price changes of past. The randomness in some remaining equity share is weak enough to prohibit excess profit.

Poudhael (2002), has conducted the thesis "A Study of Securities Market in Nepal". The main purpose of this study is to examine and analyze the trend as well as the risk and return of different sectors listed in securities market. To achieve this purpose, specific objectives have been set up such as; to find out and analyze the risk and return of different sectors of Securities Market and to analyze the inter-relationship between the risk and return of each sector.

In order to support the study the sophisticated technique of analysis such as correlation method, regression method, statistical tools and test of significance were adopted to

analyze the provided data from the Securities Market and the various listed joint stock companies.

She has pointed about the risk and returns trend of the different sectors i.e. Banking, Finance, Insurance and Manufacturing and Services Organization, in her study. According to her “Among all sectors listed in the securities market, Banking sectors have the highest expected return (50-30)% followed by the Finance Sector with (47-36)%. The sectors having the lowest expected return are the one categorized as other with just 10.3% and the Trading sectors with 10.65%”.

Ms. Poudhael has used the different tools and technique to analyze and interpret the data to meet the concrete report about Securities Market but she has not centralized her study on specific subjects matter.

Kandel (2002), entitles “A Study of Liquidity, Corporate Performance and Share Price Behaviour in Nepal”. He applied standard deviation, coefficient of correlation, regression equation and finding of Markowitz with time frame of data from 1995 to 2000 of selected listed Companies to find out the share price behaviour. His findings were on the basis of Standard Deviation (a) Observed market price is more consistent than the expected prices (b) Market price is more stable and less variable than that of with expected market price (c) Equity investment has lower risk in 1995-1997. However, in 1997/98 the equity investment has average risk and others found the same. Similarly in 1998/2000 the equity investment has higher risk and others were remaining the same.

The finding from the coefficient of correlation throughout the review period were (a) The value of coefficient of correlation is considered significance, (b) Market price of share of depends more on DPS (c) The coefficient of determinates of both EPS and DPS have decreasing trends, this is the sign of risk associated with equity investment was increasing. Similarly, the finding from regression equation were, in 1995 to 1997 the market price was affected more by variable dividend per share compared to earning per share is very weak and the effect of which is negligible in compared to dividend per share, in review period 1997/1998 dividend per share was still stronger than earning per share, during the review period in 1999/2000 dividend per share was stronger than earning per

share. In 1999/2000 the influences of DPS over market price of securities was higher during the review period.

It concluded that DPS plays vital role on price formation. Though the effect of EPS has been increased but still DPS ruled over market prices. Hence the sensitivity of DPS is high instant response in the market.

On the basis of expected return on a portfolio and the portfolio variance (Covariance between govt. bond between share, govt. between NPB bond, shares and NRB) of sample Companies (commercial banks) has been calculated individually by using Markowitz model than he found (a) Portfolio variance is very minimal, (b) The co-response among the securities is not sensitive, (c) Changing in interest is in favour of investors, as the interest rate goes up, the market price of existing fixed income securities falls, and vice versa, they affect the price of equity either. But the effect is too weak in the case of Nepalese market as Markowitz model. It is evident that the Securities Market of Nepal was in nascent stage.

Then the last findings was from CAPM Mode by calculating Beta were (a) the responds of investment's return to market forces found weak since most of the banks having low beta (b) the investment have relatively low systematic risk, also goes under the name of non diversifiable risk.

Through these studies have many useful findings, there are limitations, too.

Paudel (2005), studied on "A study on the movement of Stock Price of Joint Venture Commercial Bank" and found that, generally banking sectors NEPSE index has dominated to the other sectors. The movement of the stock prices is dependent to the historical price. The stock of all sampled companies is under priced since their expected rate of return is higher than the respective required rate of return.

Gautam (2006), his study on "A Study of Stock Market Behaviour in Nepal" concluded that political instability and other laws related issues are the prominent factors for the underdevelopment of security market in Nepal. She further concluded that the stockbrokers and stock market are not being much active to create investment environment in stock market. Most of the investors are influenced through media only.

Information deficiency in the capital market may be one of the reasons for determination of share price by excessive speculation. The available information is of low quality and people have very little knowledge of the trading procedure and price formation mechanism in NEPSE. Lack of effective laws and effective implication of the existing laws are the contributing factors for the less development of the capital market. She also argued that some of the major problems experienced by stock market are the poor regulatory controls and supervision by SEBO/N and NEPSE.

Neupane (2007), made a research entitled “Determinants of Stock Price in NEPSE” and tried to explore the factors that have significant influence on the stock price in NEPSE. He concluded his study by quoting:

-) Nepalese investors have not adequate education about the capital market. They do not have good knowledge and information to analyze the scenario and to forecast share price. Perhaps due to this reason stock price in NEPSE rather shows irrational behaviour.
-) In NEPSE, DPS, BPS & EPS individually do not have constituent relationship with the market price of the share among the listed companies. The pricing behaviour varies from one company to another. But EPS, BPS & DPS jointly have significant effect in market price of the price of the share. So, there may be other major factors affecting the share price significantly.
-) Commercial banking sector has dominated the overall performance of NEPSE. Manufacturing and processing trading and hotel sectors have weak performance. So, financial intermediaries are strong but their ultimate investment is suffering.
-) Companies performances (earning, dividend, book value, risk etc.), political stability, national economy, demand & supply situation are the major factors affecting the share price in NEPSE.
-) There is deficiency of proper laws and policies regarding the capital market. Shareholders are feeling unsecured to invest in security markets due to poor regulatory mechanism to protect shareholders interests. The implementation of existing laws is weak.

-) Since NEPSE is in increasing trend, in spite of unfavourable environment for investment, Nepalese citizens have a huge amount of scattered fund remained unproductive, which can be used in the industrial development through capital market to accelerate the economic growth of the nation.
-) With the existing different Armed Groups, industrial development and capital market development is impossible. So, the peaceful solution of the Armed Groups problem is preliminary condition for capital market and economic development in Nepal.

2.8 Researcher Gap

Different researchers perform the above researches. Their weakness and drawbacks are also mentioned there with. This study will analyze the price determination of common stock in Securities Market of Nepal. The prices of common stock are largely influenced by the various related factors. Therefore, here the studies are made upon the various related factors that are the major cause of the fluctuation of the stock price.

The researchers have not deal with dividend per share but this thesis is mainly focused on correlation, regression of listed Companies under Nepal Stock NEPSE.

Though these studies are found to be quite useful for academic use, the question of inefficient Capital Market that faced abnormal price fluctuation and its contributing factors in the context of Nepal is still unresolved. The researcher deals only with efficiency of Stock Market and daily price change. The research, which are based on stock price movement of listed company on Securities Market of Nepal deals with monthly change as well as annual change in stock price. The above researchers have presented the data only up to 2002 but the research has the data up to 2007.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Research Design

This study followed a combination of two major research designs which are Descriptive Design for Analytical Research Design and Survey Research Design.

3.2 Population and Sample

The population of this study is the entire number of investors of financial instruments. The total population of investors is very large, which includes from very small investors to analysts and professional investors. Investors were taken as subject on random sampling basis. Hundred investors were taken as subjects for this study, including all types of investors randomly like: small, large, male, female, less informed, analyst and so on. But only 60 responses could be collected. Some of the left were dropped out and some were incomplete. Survey was conducted on various points like: NEPSE floor, broker's offices and other several places.

3.3 Sources of Data

This study is based on Primary as well as Secondary data. To know about the financial instruments the historical data are used, for this the secondary sources like: NEPSE reports, SEBON reports, NRB reports, reports of issue managers etc are used. Various annual reports and other publications are used to collect the data concerned with institutional investors. On the other hand, to know about the preferences of the investors primary data are collected. Thus, both-primary and secondary sources are used for the data collection. This study depends upon the primary source, since the main objective of research is to know about the preferences of investors over financial instruments.

3.4 Data Collection Procedures

For the collection of data researcher has adopt the Questionnaire and Interview method.

All the Companies listed in the stock exchange and some stakeholders, some academicians and some practitioners are taken as population of the study and few conveniently selected listed Companies are the sample of the study. In the survey design, all Nepalese people who keep information or playing in the Capital Market are taken as the population of the study and conveniently approached few experts of focus group study are the sample. Therefore, the study covered two data sets secondary and primary. A schedule of questionnaire is developed to the Bankers, Brokers, Investors and Bureaucrat to collect primary data and information.

The researcher had to visit NEPSE to collect the Primary data on a week between 10 o'clock to 1 o'clock in July 15 to 25. On that particular data the researcher has taken the data from 100 brokers and 100 investors. On the process of collecting data researcher also visited to four different banks Viz. Standard Chartered Bank, kumara Bank, Laxmi Bank and Citizen Bank. The researcher also visited to different office and bureaucrat to collect the primary data like Rural Urban Partnership Programme, MLD and NEPSE.

Table 3.1

Sample and Population

Bodies/Agency	Population	Sample %
Brokerage Firm	100	80
Government (Stock Exchange)	100	80
Investors(Market Maker)	100	80
Listed Company	100	80

Note, only those candidates are considered as a population whom researcher can found 15 July to 25 July 2007. And only valid answers are taken as a sample.

The secondary data is used through the study which consists of the entire listed stock in NEPSE and traded through the institution brokerage system on its floor. All the obtained

data used are from the official record of NEPSE, SEBO and their Annual Report, which were available from the office of securities exchange. To get reliable information, discussions were also conducted with investors, NEPSE staff and other related or interest parties.

3.5 Data Analysis Procedures

Few statistical packages such as Excel and SPSS were used to process and analyze information. Secondary information collected from security Board was first tabulated in Excel Spreadsheet and then analyzed using formula and charts of the some software. Primary data were collected from carefully designed questionnaire. Such data were first tabulated in SPSS after properly defined variables. Some data were parametric and some were some-parametric data. Suitable tools such as descriptive statistics and one sample “t” test was calculated in case of parametric data set. Ranking and Friedman’s chi-square test were completed to analyze the non-parametric test. Majors finding are based on the analysis and interpretation of data.

3.6 Tools of Analysis

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

3.6.1 Average/Mean

An average is a single value related from a group of values to represent then in someway, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group (Gupta, 1992:238). There are various types of averages. Arithmetic mean (AM, Simple & Weighted), median, mode, geometric mean, harmonic

mean are the major types of averages. The most popular and widely used measure representing the entire data by one value is the AM. The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically:

Arithmetic Mean (AM) is given by,

$$\bar{X} = \frac{\sum X}{n}$$

Where, \bar{X} = Arithmetic Mean

$\sum X$ = Sum of all the values of the variable X

n = Number of observations

3.6.2 Standard Deviation

The standard deviation (σ) measures the absolute dispersion. The greater the standard deviation, the greater will be the magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of uniformity of the observations as well as homogeneity of a series and vice versa.

Mathematically:

$$\sigma = \sqrt{\frac{1}{n} \sum (X - \bar{X})^2} \dots\dots\dots (3.2)$$

3.6.3 Research Hypothesis

The distribution of sample statistic “T” of the simple random sample approaches to the normal distribution as ‘n’ becomes increasingly large (i.e. greater than 30). It is true even if the parent population is considerably different from normal. Thus for every population the statistic

$$Z = \frac{\text{Difference}}{\text{Standard Error}}$$

behaves like a normal variate i.e. $z \sim N(0,1)$ provide that the sample size 'n' is sufficiently large. With an increased simple size, the sample variance s^2 can safely be taken as an approximation to the population variance σ^2 without any significant error of approximation. The Z-test is used under the assumptions.

1. When the sample size is 30 or more
2. The sample have been drawn from normal population
3. The population standard deviation is known
4. The samples are independent

Z-test is used to test the significance of parametric tests for sampling of variables and sampling if attributes. The sampling of variables comprises the test of significance of a single mean and test of significance of difference between two means. Whereas the sampling of attribute comprise test of significance is a sample proportion and test of significance between two sample proportions.

Null Hypothesis

$H_0 : \mu = \mu_0$ i.e. there is no significant difference between the sample mean and the population mean

Alternative Hypothesis

$H_1 : \mu \neq \mu_0$ i.e. there is significant difference between the sample mean and the population mean

Test Statistic

$$Z = \frac{\bar{X} - \mu}{\frac{s}{\sqrt{n}}}$$

where, \bar{X} = Sample mean

μ = Population mean

σ = Population standard deviation

n = Sample size

CHAPTER –IV

PRESENTATION AND DATA ANALYSIS OF DATA

Data presentation and analysis is important part of the research work. This chapter is for number of closely related operations, which have been performed with the purpose of summarizing and organizing data in such a manner that they answer the research questions.

The basic objective of this chapter is to analyze and elucidate the collected data following the conversion of unprocessed data to an understandable presentation. Thus, this chapter presents the analysis and interpretation of the data related to Stock Price Volatility and Its Contribution factor in Nepalese Share Market.

As stated earlier in the methodology section, this study consists of both primary as well as secondary data. However, primary data collection does not fully satisfy the need of research work on this topic. As a consequence, the study has utterly relied on the secondary source of data. Data collected from the secondary sources are also tested with sophisticated statistical tools. Data presentation and analysis reveals performance of securities during the year 2006/2007 to 2007/2008.

The main purpose of this chapter is to examine the price trend of different Joint Stock Companies and their volatility with the help of NEPSE index. The study aim is also to analysis the number of stock traded during five years period of different Joint Stock Companies. In the same way the study try to check the impact of signalling effect of fluctuation of the stock price with the help of different major events during the year 2005/2006 to 2006/2007. The study also want to explore the attitude of Brokerage firm, Stock Exchange Board. Investor and Listed companies by taking primary data with the field survey filled by different groups (Banker, Broker, Investor and Bureaucrat) who are interested with Stock Market are considered.

Price is the major element in the Stock Market analysis. For analyzing Stock Price Volatility and Its Contribution Factor in Nepalese Share Market the price trend can be used. By seeing the NEPSE index trend one can conclude its nature in different aspects, e.g.

volatility of price in different period. Similarly the number of stock traded is also accounted for seeing pattern of stock price volatility.

Finally, this chapter contains analysis the trend of Stock Market Development, and Analysis of Secondary Data and Analysis and Results of Price Fluctuation.

4.1 Trend of Stock Market Development

The level of Stock Market and its impact on the national economy can be measured by using various indicators, broadly classified into following categories:

1. Stock Market size
2. Liquidity
3. Concentration and
4. Volatility

4.1.1 Stock Market Size

Generally large Stock Market indicates developed Stock Market and vice versa. One of the sizes of the measures of the Stock Market size is the number of Companies and scripts listed with the stock exchange. The size increase with the increase in the number of listed Companies. In Nepal, the number of listed Companies with the Nepal Stock Exchange Ltd. was 66 in 1993/94 which increase to 139 in 2006/2007. Similarly the number of listed securities increased from 43 million to 226 million during 2005/2006. Similarly the paid up value of the listed securities increased from Rs. 2.18 billion in 1993/94 to Rs. 20 billion in 2005/2006. It is however, interesting to note that despite the increasing the number of Companies and paid up value of the securities listed with the stock exchange, only about one-tenth of the Companies registered with the office of the Companies Register as public limited Companies were listed with the Nepal Stock Exchange during the period.

Stock Market size is also measured in terms of market capitalization ratio which is the aggregate market value of the listed shares divided by Gross Domestic Product. This ratio indicates the relative importance of Stock Market to the national economy and assumes

the Stock Market size is positively correlated with the ability to mobilize capital and diversify risk. The market capitalization ratio has, on an average been only around 0.08 for the period between 1993/94 and 2007/08. It is important to remember that in countries with developed Stock Market, this ratio is greater than 1 and in many developing countries it is between 0.2 and 0.4. Low market capitalization ratio in Nepal indicates that the Stock Market is yet to show its impact on the country's economic activities.

Indicators of Stock Market Development in Nepal 1993/94 to 2007/08.

Table 4.1
Indicators of Stock Market Development in Nepal
1993/94 to 2007/08

Years	Market Capitalization to GDP	Value of Shares Traded to GDP	Value of Shares Traded to Market Capitalization	Value Trade Ratio to Volatility
1993/94	0.07	0.002	0.0311	0.001
1994/95	0.06	0.005	0.0813	0.011
1995/96	0.05	0.001	0.0170	0.004
1996/97	0.05	0.002	0.0328	0.012
1997/98	0.05	0.001	0.0142	0.003
1998/99	0.07	0.005	0.0632	0.017
1999/00	0.12	0.003	0.0268	0.005
2000/01	0.10	0.006	0.0583	0.006
2001/02	0.09	0.004	0.0444	0.003
2002/03	0.08	0.001	0.0163	0.005
2003/04	0.09	0.004	0.0518	0.077
2004/05	0.12	0.009	0.0735	0.122
2005/06	0.17	0.006	0.0357	0.173
2006/07	0.15	0.008	0.0753	0.167
2007/08	0.11	0.006	0.0437	0.153

Source: Nepal Rastra Bank & NEPSE

4.1.2 Liquidity

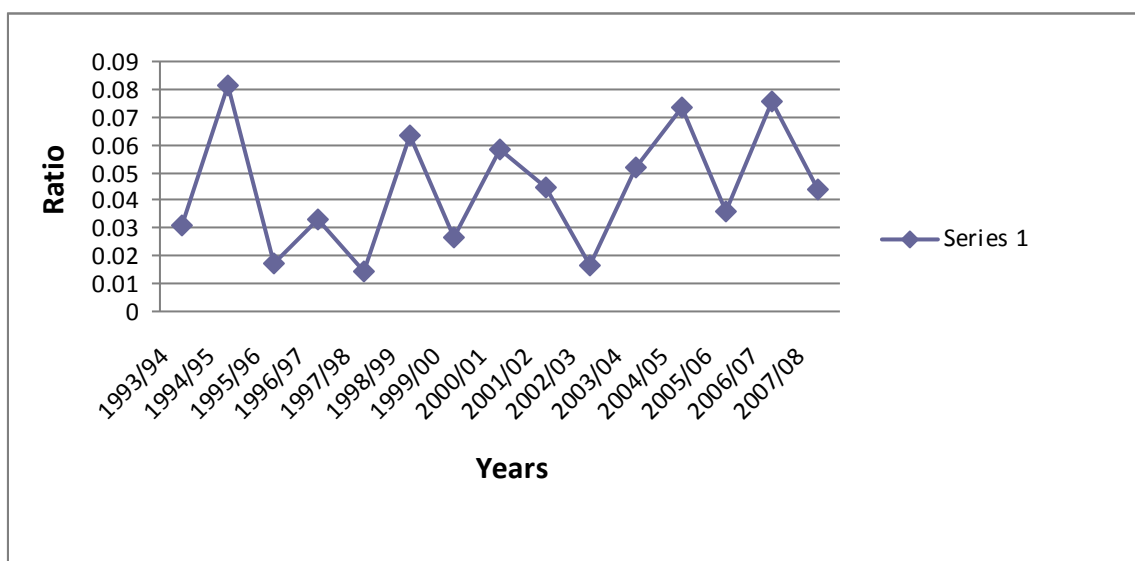
Liquidity in the Stock Market refers to the convenience in trading of securities in the market. By allowing investors to alter their investment portfolios conveniently at any time and low cost, liquidity makes the securities less risky. This ensures efficient allocation of resources and promotes long-term economic growth. Liquidity measured in terms of the total value of shares traded in the Stock Market as a percentage of Gross Domestic Product, indicates the extent of ease in trading in Stock Market in a country. It is expected that the volume of organized trading of equities as a share of national output increase which such trading is less costly and easy. Evidence shows that countries with relatively liquid Stock Markets tend to grow much faster when compared to countries with illiquid markets.

The value of shares traded accounted, on an average, for about only 0.003 of the GDP during the period between 1993/94 and 2007/08. It was normally below 0.004, except in a few years in countries with a developed Stock Market this figure is as high as 0.04 and in many developing countries the values of shares traded vary in a range of 0.001 to 0.009 of the GDP. Low ratio of value of shares traded to GDP indicates that trading in equity relative to the size of economy is very low in Nepal.

4.1.3 Indicators of Liquidity

Figure 4.1

Value of Share Traded to Market Capitalization

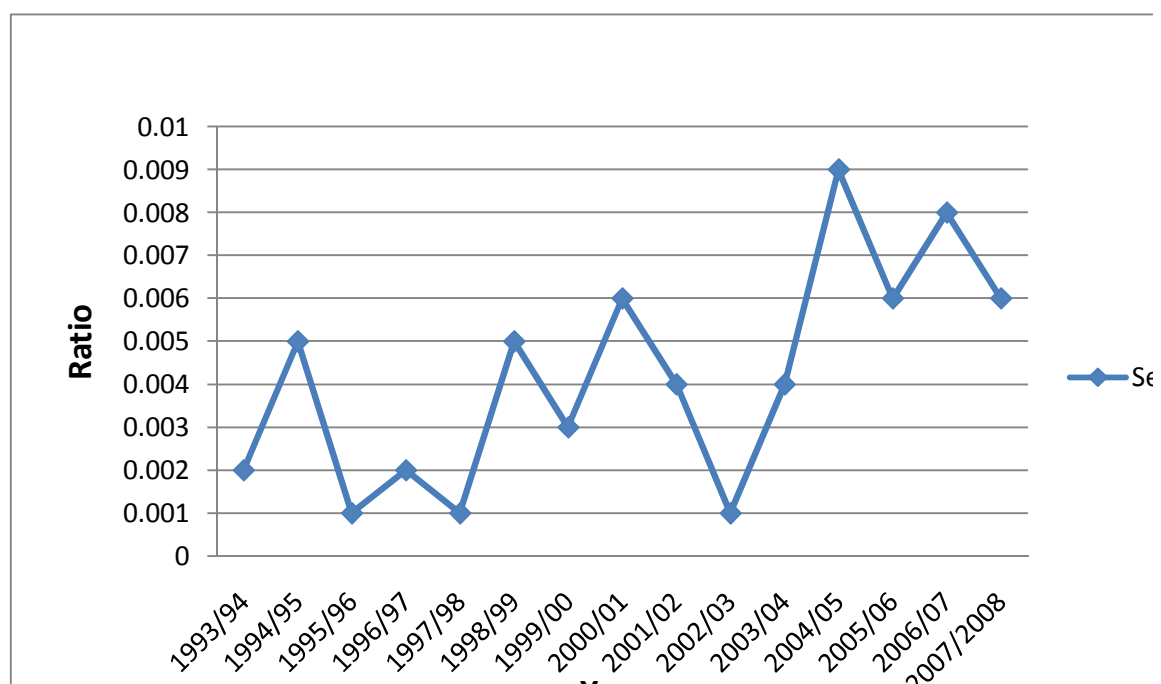


Another measure of liquidity of Stock Market, the ratio of value of shares traded to market capitalization, also known as turnover ratio, is indicative of trading relative to the size of the Stock Market. A high turnover ratio indicates low transaction cost and relative ease in buying and selling of shares. Experience shows that countries with a high turnover ratio develop faster than countries with a low turnover ratio. In developed countries this ratio stands in the range of 0.15 to 0.3. In Nepal the turnover ratio has remained very low i.e. 0.042, and highly fluctuate, during the period between 1993/94 and 2007/08. The value of shares traded relative to both GDP and market capitalization is on a decline since 2001/02, except in 2004/05 indicating growing illiquidity in the country's Stock Market.

Taken together these ratios i.e. market capitalization, value of shares traded to GDP, and turnover, indicate that the Stock Market in Nepal is very small relative to its economy, and highly illiquid and it is yet to make its presence felt in the national economy.

Figure 4.2

Value of Share Traded to GDP



The value of shares traded accounted, on an average, for about only 0.0037 of the GDP during the period between 1993/94 and 2007/08. It was normally below 0.004, except in a few years. In countries with a developed Stock Market this figures is as high as 0.4 and

in many developing countries the value of shares traded vary in a range of 0.001 to 0.01 of the GDP. Low ratio of value of shares traded to GDP indicates that trading in equity relative to the size of economy is very low in Nepal.

4.1.4 Concentration

Nature of Stock Market development can also be analyzed with concentration. Whether the Stock Market is concentrated to certain firms or dispersed throughout can be examined through concentration ratio. In a Stock Market which has high concentration, compiled for major percentage of total market value and stocks of such Companies are traded more frequently than that of others.

Concentration in a Stock Market is generally measured by computing the share of the ten largest stocks to the total market value of shares. A country's Stock Market is considered highly concentrated if a few large Companies dominate it. In other words, in a Stock Market which has a high concentration ratio, the shares of a few Companies account for a major percentage of the total market value and are traded most frequently relative to stocks of other Companies. High concentration is not desirable as it adversely affects liquidity. Countries with family-owned, closed enterprises and limited number of listed Companies have high concentration ratios.

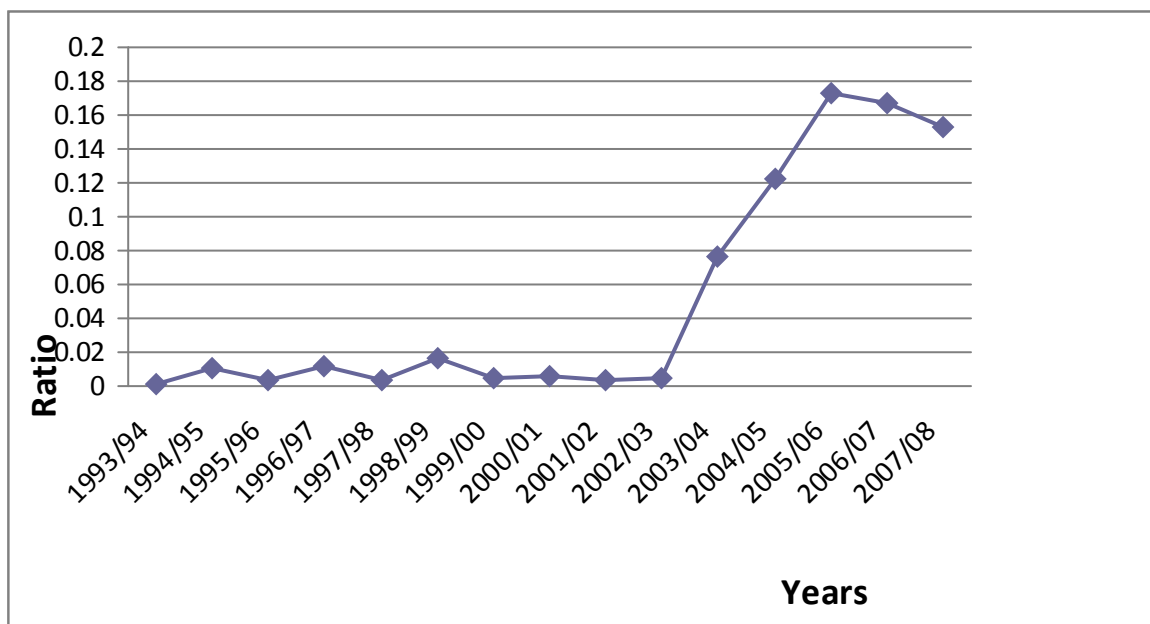
Countries with a developed Stock Market have concentration ratios of about 0.2 of the market whereas in a country with underdeveloped Stock Market this ratio is as high as 0.9. In Nepal the ratio was on an average around 0.65 over the past 15 years which indicates that the market value of shares of the 10 largest Companies account for two thirds of the total market value. The concentration ratio is as high as 0.8 when it is computed on the basis of turnover. This indicates that the Nepalese Stock Market is dominated by the largest 10 Companies in terms of their market capitalization or turnover. It is interesting to note that of the 10 Companies dominating the market in 2008, nine are commercial banks, indicating that the Stock Market is highly dominated by them. High concentration has adversely affected liquidity and the significance of the Stock Market in the national economy.

4.1.5 Stock Volatility

Volatility is one of the important indicators of development of a country's Stock Market. Stock volatility measures the risk in equity investment and it does not mean that higher volatility is the sign of underdeveloped Stock Market but higher risk must accompany with higher and fair return in order for such market to be developed. Simply it is said that higher volatility is less preferred to lower.

Higher volatility in the Stock Market denotes risks in equality investment. It is generally expected that Stock Markets, when well developed, absorb risks in financial assets and offer higher return with less volatility. Put simply, it means that as an indicator of a country's Stock Market development, less volatility is preferred. Volatility may be measured as a 12 month rolling standard deviation of market returns. Higher standard deviation means higher volatility and more risk.

Figure 4.3
Value Traded Ratio to Volatility



Although volatility in the Nepalese Stock Market was high during the initial years. It was in a decline till 1996/97 indicating that equity prices in the Stock Market trended to stabilize during this period from 1998/99 onwards. Volatility had a wider fluctuation but it showed a tendency to rise consistently till 2001/02. From 2002/03 it increased suddenly and

reached at pick in 2005/06 then it got slight fallen. Countries with high inflation rates seem to have higher volatility in the equity markets. In general, volatility in the Nepalese Stock Market is less than the average volatility of other developing countries. The reason is mainly low volume of trading of equities due to the increase in the volume of trading triggers by the speculative motive of investors.

Analysts argue that developed Stock Markets should not only provide high liquidity but also handle large volume of trading with less price swings. In other words a liquid market should allow large volume of trading with less volatility. One of the indicators to measure this is a ratio of value-traded ratio to volatility. A high ratio indicates the ability of the Stock Market to provide liquidity and handle risk. Although this ratio showed an increasing trend during the last three years, it indicates the Nepalese Stock Market's inability to handle risk relatively to the volume of the trading of shares, a positive but very weak relationship is observed between volatility and the volume of trading of shares in the stock Market.

Various measures of Stock Market development indicate that the Nepalese Stock Market is underdeveloped and has failed to show significant impact on the national economy. The small market size has made it vulnerable to manipulation and price rigging. Low turnover ratio and value traded ratio to volatility, and high concentration ratio indicate that Stock Market because they can not invest in securities according to their risk-return preference. Similarly, firms shun it because the Stock Market is a less reliable source of raising funds. Due to this, the financial system in Nepal has remained basically bank dominated.

4.2 Presentation and Analysis of Secondary Data

This section provides interpretation and analysis of secondary data. Thus this section is exclusively devoted for the analysis of common stocks of different Companies through price trends, signalling factors impact on NEPSE index with the help of NEPSE index provided by Nepal Stock Exchange Center.

4.2.1 Pattern of Nepalese Share Price Behaviour

Nepalese Share Market has undergone through many ups and downs. High fluctuation was observed in the past few years in Nepalese shares price. Therefore, it can be argued that share price behaviour in Nepalese Capital Market is volatile and fluctuating. Present chapter aims to analyze the real price fluctuation trend in Nepalese Capital Market so that the pattern of the price fluctuation could be analyzed. All the listed Companies were taken as the population of the study. Out of them, few Companies that had satisfactory transaction were taken as the sample of the study. Secondary data were gathered from Nepalese stock exchange limited and analyzed them. The results are presented in the following section.

4.2.2 Trends of Share Price Behaviour of Selected Companies

Only eight listed banks in Nepalese Share Market are included in this analysis. The Companies are NABIL Bank Ltd, Himalayan Bank Ltd, Nepal SBI Bank Ltd, Nepal Bangladesh Bank Ltd, Everest Bank Ltd, Bank of Kathmandu Ltd and Nepal Industrial & Commerce Bank the first year was taken as the base year for calculating the percentage change in share price of each selected company.

Each bank was designed in the column and the year into row. Each bank was taken as the variable in the data sheet. Thereafter, data were tabulated in Excel Spreadsheet then formula was defined in the each next column of the variable. Results are presented in the following table.

Trends of share price behaviour of selected Companies (in %)

Table 4.2**Trends of share price behaviour of selected Companies**

Date	NABIL	STD. Chartered	Himalaya n Bank	SBI Bank	Nepal Bangladesh Bank	Everest Bank	Bank of KTM	Nepal Ind. & Comm. Bank
15 Jan 2002	100	100	100	100	100	100	100	100
15 May 2002	89.34	96.36	97.12	43.81	63.44	96	92.17	98.07
13 Sep 2002	79.12	106.06	85.57	35.13	52.22	81.2	79.82	71.06
15 Jan 2003	80.25	84.54	74.52	28.94	39.77	83.80	65.75	65.91
15 May 2003	80.25	99.75	78.65	30.44	40	90	68.67	67.20
15 Sep 2003	81.93	103.03	81.25	29.64	41	91.2	62.35	57.88
15 Jan 2004	85.29	95.75	82.69	24.95	50	84.20	62.05	51.12
14 May 2004	91.47	99.39	77.21	28.54	40.11	104	66.76	55.31
15 Sep 2004	124.57	106.27	87.01	35.13	31.22	133	87.34	74.91
15 Jan 2005	131.31	104.84	96.15	35.42	26.11	136	91.15	77.49
15 May 2005	160.60	127.69	88.94	37.02	29.55	179	136.44	118
15 Sep 2005	175.19	145.76	92.59	36.92	29.55	174	141.26	118.97
15 Jan 2006	195.28	162.84	90.38	40.51	24.66	176.8	164.15	127
15 May 2006	257.57	224.24	113.55	67.86	21.11	275	265.36	176.84
14 Sep 2006	240.17	219.69	100.48	58.38	24.22	258	163.6	151.12
15 Jan 2007	381.59	278.79	116.35	80.83	44	380	331.32	209.32
14 May 2007	392.82	272.73	114.42	82.34	33.89	350	286.14	199.36
15 Sep 2007	673.40	424.85	205.77	133.73	68.33	535	434.94	316.72
15 Jan 2008	516.27	408.79	191.83	206.59	100.56	500	617.47	432.48
15 May 2008	457.24	314.91	153.56	123.15	66.44	455.40	526.81	319.61

Above fourteen tables represents increasing trend of share price of Nepalese Share from beginning of year 2002 to last quarter of the 2008. The only one bank Nepal Bangladesh Bank is decreasing.

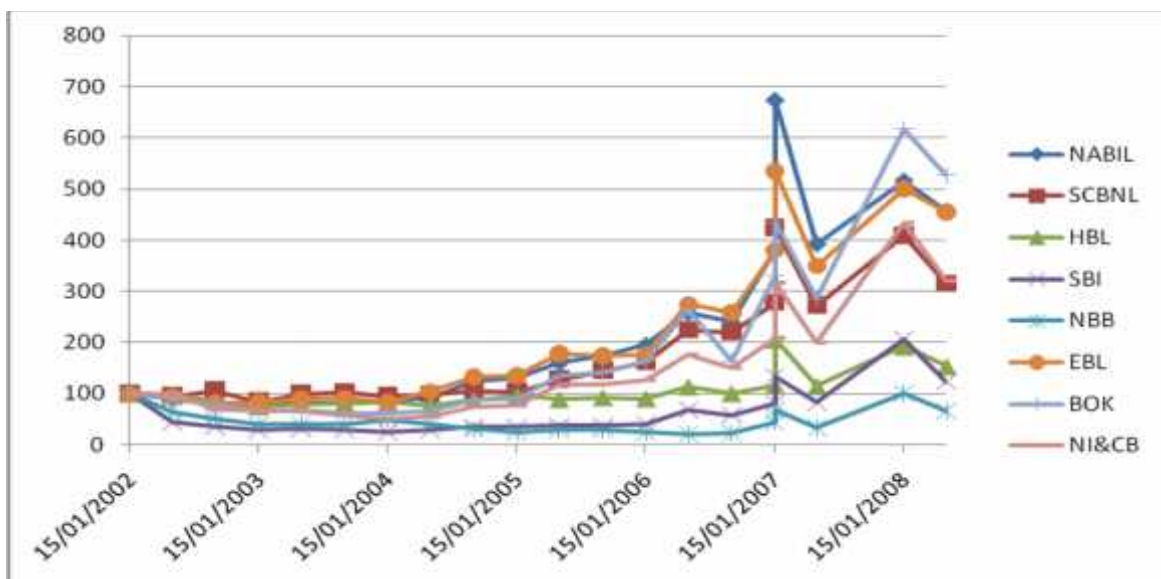
Therefore, we can conclude that the price of Nepalese Share Market sharply increased. It is clearly evident that Nepalese Share Market has artificial price fluctuation due to some external factors. Company’s internal strategies earning and dividend might not be the major reasons in such price volatility in Nepalese Market. Intermediaries such as broker or the investors might be major factors in such price fluctuation. Furthermore, the Maoist Movement increased after 2001 to till 2005 that might have influenced the share price pattern in Nepalese Market. Other major factors might be the instable political factors and issues that has also influence the share price in Nepalese Capital Market.

4.2.3 Trends of Share Price Behaviour in Terms of Trend Line

It would be better to analyze the pattern of the share price behaviour of selected Nepalese listed Companies for the five years in terms of trend lines. Graphical presentation is a very powerful tool for presentation and its analysis. The following figure clearly presents the share price behaviour of selected listed banks for the fifteen quarters period.

Figure 4.4

Trends of Share Price Behaviour in Terms of Trend Line



The figure represent on X-axis fiscal year and Y-axis change percentage. And the figure represented a clear pattern of share price volatility in Nepalese Capital Market during 2002 to 2008. The year 2002 was taken as a base year. The share price of the year was assumed 100 and changed share price in each quarter was calculated as the ratio increment in 100. The change in share price of selected listed Companies has been presented in the above figure.

The presented figures showed that share price of many selected listed banks were increased. But Nepal Bangladesh Bank was decreasing. Very high fluctuation was observed in case of Nepal SBI Bank and Himalayan Bank. However, the share price of other listed Companies also increased significantly during the period. It clearly shows that the price increment was not just because of company performance or the dividend policy and demand and supply but it might be due to market mechanisms or environmental forces and political situation. The share price of all the banks sharply increased from January 2004 and reached at top in January 2007 and again slightly fallen in January 2008 to till May 2008.

4.2.4 Major Findings of the Study

Results of analysis showed very important findings based on secondary data analysis. In general, increased share price was observed in Nepalese Capital Market in past few years. But there was also high price volatility. So these results showed high price fluctuation during 2002 to 2008. The entire banks share prices (except Nepal Bangladesh Bank) were found at the high level at beginning of 2007.

Above figure showed at the mid of 2004 the share price were almost constant. After 2004 the share price of the selected banks, they are NABIL Bank, Standard chartered Bank, Himalayan Bank, Everest Bank, Bank of Kathmandu and Nepal Industrial & Commerce Bank sharply increased due to some internal factors. But the Nepal Bangladesh Bank was did not have good performance. Everest Bank, NABIL Bank and Standard Chartered Bank were increasing continuously. At the same time SBI increasing slowly. However, the share price of other listed Companies also have significant price increased in this period.

In conclusion, research findings showed that both market index and market capitalization have increased. But it has not gone on the qualitative improvement. Thus the present study attempts to identify the influencing forces in abnormal price fluctuation in Nepalese Capital Market in the coming chapter Analysis and Results of Price Fluctuation. It also investigates the parties responsible in market inefficiency and major environment of all forces in Nepalese Capital Market.

4.3 Analysis of Primary Data

This section presents the analysis and results of issues relating to the market price volatility in Nepalese Capital Market. This section Present chapter investigate the affecting factors for Stock Market inefficiency and some potential strategies to make the better Stock Market practices.

There are many factors which influences the stock price volatility in Nepalese Stock Market. Thus, the research questions have been designed so as to get the measure contributing factors and possible corrective major for the ultimate benefit to all the stakeholders.

Questionnaire was designed in four options like totally agree, slightly agree and totally disagree, slightly disagree. The questionnaire was administered to hundred respondents but few respondents did not return the questionnaire and respondents were not usable thus rejected. Finally, researcher found only eight questionnaire paper for the analysis.

4.3.1 Gender of the Respondents

Following table shows the actual status of male and female ratio of the respondents.

Table 4.3
Gender of the Respondent

Category	Frequency	Percent	Valid percent	Cumulative percent
Male	47	58.75	61.04	61.04
Female	30	37.50	38.96	100
Total	77	96.25		
Not Identified	3	3.75		
Total	80	100		

Above table shows there are around 61% male and 39% female out of total respondents. Out of total respondents 3 respondents did not identified their gender. Thus in total it can be concluded that there are nearly double of men in compare to female out the total respondents in the present data set.

4.3.2 Age of the Respondents

Present survey design attempted to gather the information from diverse groups of respondents. Age is also one factor in this campaign. Following table depicts the age group of the respondents.

Table 4.4
Age of the Respondents

Category	Frequency	Percent	Valid percent	Cumulative percent
Age below 25	8	10	10.25	10.25
26 to 30	18	22.5	23.07	33.32
31 to 35	26	32.5	33.33	66.65
36 to 40	17	21.25	21.80	84.45
41 and above	9	11.25	11.54	100
Total	78	97.5	100	
Not identify	2	2.5		
Total	80	100		

Above statistics shows that majority of the respondents were from the age group of below 40. Altogether, around 84.45 percent of the respondents were under the age group of 40. It is clearly evident that the respondents were young in the present study.

4.3.3 Profession of the Respondents

Data were collected from the diverse group. The following table presents the profession of the respondents.

Table 4.5
Profession of the Respondents

Category	Frequency	Percent	Valid percent	Cumulative percent
Banker	20	25	25	25
Broker	20	25	25	50
Investor	20	25	25	75
Bureaucrat	20	25	25	100
Total	80	100	100	

Above table shows equal distribution of respondents among the five focus groups selected from the study. These groups are banker, broker, investor, and bureaucrat. Each group are made of 20 numbers of respondents in the present sample, therefore, each comprise 25% of the total sample.

4.4 Causes of the Stock Price Volatility and Its Contribution Factors in Nepalese Share Market

In order to assess the cause and their significance for abnormal price fluctuation in Nepalese Stock Market, few statements were designed. The opinion of the respondents has been processed through one sample 'Z' test. First of all descriptive statistics are

presented so that the actual level of the variable could be analyzed. After assessing the mean and standard deviation of the variable used to assess the causes for abnormal price fluctuation each variables 'Z' statistic is computed to find the significance of the mean differences. The following table presents the descriptive statistics of the potential variables for abnormal price fluctuation in Nepalese Share Market.

Table 4.6

Causes of Stock Price Volatility and Its Contribution Factors in Nepalese Share Market

Causes	Disagree	Slightly Disagree	Slightly Agree	Agree	Total
Investors are not rational in assessing rise and return	10	18	24	28	40
Organizations manipulate their financial statement	12	20	26	22	80
International environment does affect the Nepalese Share Market	27	13	18	22	80
The dividend decision of the company does not affect the price of share	30	13	15	22	80
Demand and supply do not affect the price of share	30	13	15	22	80
Investment opportunities of the company do not affect the price of stock	35	13	10	22	80
Lack of development of Share Market	8	6	23	43	80
Few numbers competitions in the market	10	8	28	37	80

Causes	No.	Mean	Standard deviation	Standard error of mean
Investors are not rational in assessing rise and return	80	2.875	1.02925	0.1150
Organizations manipulate their financial statement	80	2.725	1.02439	0.1145
International environment does affect the Nepalese Share Market	80	2.725	1.2128	0.1356
The dividend decision of the company does not affect the price of share	80	2.3625	1.2375	0.1383
Demand and supply do not affect the price of share	80	2.3625	1.2375	0.1383
Investment opportunities of the company do not affect the price of stock	80	2.2375	1.2673	0.1416
Lack of development of Share Market	80	3.2625	0.97138	0.1086
Few numbers of companies in the market	80	3.1125	1.0246	0.1145

Above table shows mean opinion of respondents in regard to the causes of abnormal price fluctuation in Nepalese Capital Market. Highest mean score and related low standard deviation with low standard error proves that lack of developed in Share Market is one of the main causes in price fluctuation in Nepalese Share Market. Similarly, few numbers of competitions in Share Market has been identified as the second major reason of abnormal price fluctuation. Along that investors are not being rational, organization manipulate their financial statement, international environment does affect the Nepalese Share Market, the dividend decision of the company does not affect the price of share, demand and supply do not affect the price of share and lastly investment opportunities of the company do not affect the price of stock are also identified as significant causes respectively.

At the same time the respondent have almost denied that investment opportunities of the company do not affect the price of stock and demand and supply do not affect the price of stock that means the price of the stock in Nepalese Share Market are more or less affected due to investment opportunities and demand and supply volume.

To analysis the significance of the difference of the mean variance among the variables one sample “Z” test was used to find out the significance of the differences among the variables used for the study. It helps to confirm the most important causes among all the eight variables used for the study. In other words, it further will help to identify the causes that have significant contribution for abnormal price fluctuation in Nepalese Share Market. The following table shows that the result of the significant difference of the mean variables of eight variances used for the study.

Table 4.7

Analysis of One Sample Test for Abnormal Price Fluctuation

Variables	Z cal.	Z tab for two tail	Conclusion	Sample mean
Investors are not rational in assessing risk & return	7.6038	1.960	H ₁ accepted	2.875
Stock price is not actual because organizations manipulate their financial statement	6.330	1.960	H ₁ accepted	2.725
International environment does affect the Nepalese Share Market	3.2265	1.960	H ₁ accepted	2.4375
The dividend decision of the company does not affect the price of share	2.62	1.960	H ₁ accepted	2.3625
Demand and Supply do not affect the price of stock	2.62	1.960	H ₁ accepted	2.3625
Investment opportunities of the company do not affect the market price of share	1.6762	1.960	H ₁ accepted	2.2375
Lack of development of share market	11.6248	1.960	H ₁ accepted	3.2625
Few numbers competition in the market	9.71159	1.960	H ₁ accepted	3.1125

Above test statistics confirm the differences of variables among each other. Differences of all the variables were found significantly different among each other. Thus, it can be concluded that lack of development of Share Market was reported as the most important factor and less competition in the market was reported as the second important factor in

share price volatility in Nepalese Capital Market. Similarly, investors are not rational in assessing risk & return, Stock price is not actual because organizations manipulate their financial statement, International environment does affect the Nepalese Share Market, the dividend decision of the company does not affect the price of share, demand and supply do not affect the price of share and investment opportunities of the company do not affect the price of stock are identified third, fourth, fifth, sixth, seventh and eighth important factors in share price volatility in Nepalese Capital Market.

4.4.1 Responsible Agencies for Nepalese Share Market in Efficiency

Researcher selected four major agencies in today's Nepalese market, which were played almost major role in Nepalese Share Market. They were given questionnaire and requested the respondents to present their agreement or disagreement in those four, Institutions or agencies such as brokerage firm, stock exchange board, listed Companies and market maker or Investors were selected among such list of agencies. Respondents were asked to find out how far each agency was responsible for the market inefficiency. Questionnaire based on four points like 1 = disagree, 2 = slightly disagree, 3 = slightly agree and 4 = agree have been designed and distributed to the respondents. The opinions collected from the respondents were processed and descriptive analysis was conducted to find whether or not those bodies are responsible for market inefficiency. Following table deals with descriptive analysis of the collected information.

Table 4.8

Responsible Agencies for Nepalese Share Market Inefficiency

Bodies/Agencies	Disagree	Slightly disagree	Slightly agree	Agree	Total
Brokerage Firm	7	19	27	27	80
Government (Stock Exchange Board)	10	20	25	25	80
Market Maker (Investors)	7	19	27	27	80
Listed Company	21	23	24	22	80

Bodies/Agencies	No.	Mean	Standard Deviation	Standard error of Mean
Brokerage Firm	80	2.925	0.9588	0.1071
Government (Stock Exchange Board)	80	2.8125	1.01375	0.1133
Market Maker (Investors)	80	2.925	0.9588	0.1071
Listed Company	80	2.4625	1.15047	0.1286

Above table shows that brokerage firm and market maker or (investors) were found equally responsible for market inefficiency. After that Government or Stock Exchange Board was found responsible agency for the inefficiency of Nepalese Share Market inefficiency. Mean score of opinion about the listed company was found 2.4625, which is the lowest among the four agencies.

One sample “Z” test has been computed to find whether the differences among variables are significance. The analysis under following table deals presents level of significance and means score.

4.4.2 Analysis of the Potential Affecting Factor for Market Inefficiency

Bodies / Agency	Z Calculation	Z table for two tail	Conclusion	Sample mean
Brokerage Firm	8.6289	1.960	H_1	2.925
Government (Stock Exchange Board)	7.1686	1.960	H_1	2.8125
Market Maker (Investors)	8.6289	1.960	H_1	2.925
Listed Company	3.595	1.960	H_1	2.4625

Above table clearly shows that all the variables are significantly different among each other. Thus, it is clearly evident that listed Companies were found relatively less responsible in the Stock Market inefficiency in Nepalese Capital Market. Government or Stock Exchange Board was found more responsible agency in the Stock Market inefficiency in Nepalese Share Market. In general remaining, other two agencies such as a Brokerage firm and Market maker or investors were found responsible in the market inefficiency of Nepalese Stock Market.

Present analysis is focused in finding potential factors that affected for the inefficiency of Nepalese Stock Market. Researcher has attempted to cover most of the important environmental factors and close factors that are responsible for effectiveness of capital market. Information was collected in ordinal scale and suitable non-parametric Friedman's Chi-Square test was used to identify the relative importance of each of the selected relevant external environmental actors that affect Nepalese Capital Market. The following table presents the mean rank of all these variables.

Table 4.9
Ranks of Potential Affecting Factors for Market Inefficiency

Variables	Mean Rank
Adverse economic situation	2.8875
Insatiable political situation	3.2625
Non convertibility of capital account for foreign investment	6
Tax policy of the Government imposing tax in dividend & capital gain	4.8875
Stock exchange board is not active and effective	5.075
Not having clear and perfect law and policy	3.75
Small size of capital market	3.975
Investor are invest in stock only for social status	6.8375
Friedman Test Statistics: Chi-Square 2.85989, d f = 7, significance 0.05, N = 80	

Note: 1 = most important, 2 = second important and 8 = least preferred in rank

The above mean rank clearly shows that adverse economic situation of the country is the most relevant affecting forces for the inefficiency of Nepalese Capital Market. It means the poor economic condition and present environment is the one of the external influencing force in Nepalese Capital Market. Similarly, Instable political situation was identified as second important factor and the third and fourth were not having clear, perfect law and policy and the small size of capital market. Furthermore Tax Policy of the Government (imposing tax in dividend & capital gain) and other variables were found less relevant to the issue.

Friedman's Chi-Square test was calculated to find out the mean differences of the ranking variables. The result showed the Friedman's calculated Chi-Square 2.58989, degree of freedom = 7, significance level 0.05 and critical value is 14.07. It is clearly evidence that the calculated Chi-Square is less then the tabulated Chi-Square at 0.05 level of significance, then null hypothesis H_0 is accepted. Thus, it is evident that the low mean score showed the most preferred and highest mean score showed the least preferred variable among the eight variables.

4.4.3 Corrective Measures for Improving Stock Market Inefficiency

Researcher had designed the questionnaire to identify the political corrective measures for removing inefficiency that exists in Nepalese Stock Market. Ordering scale was used following ranking method so that respondents could rank the important aspects were selected to ask the respondents for their ranking so that respondents could assign 1 to the most preferred 2 to the next and so on accordance to their significance.

The following table's shows mean rank of those corrective measures.

Table 4.10

Corrective Measures for Improving Stock Market Inefficiency

Variables	Mean Rank
Actual information to the investor about financial market/companies	2.2
Establishing stock pricing bodies/institution	2.9125
Stock price should be based on market interest rate	3.4
Demand & supply of stocks should be determination of stock price	3.45
Monitoring & controlling mechanism for determination of stock price	2.975
Friedman Test Statistics: Chi-Square 0.8741, d f = 4, significance 0.05, N = 80	

Respondents rated flow of actual information to the investors about the financial market as one of the most important strategy for the corrective measure of today's market inefficiency. Respondents also specified important issue appeared as establishment of stock pricing institution for the corrective measure in today's market mechanism. Third specified monitoring mechanism for determination of stock price is the third preferred strategy in this regard. Rest two variables were not found very important in respondent's viewpoint.

Hence, on the basis of above analysis it can be concluded that Stock Market inefficiency in Nepalese stock exchange can be minimized by improving the factors and giving priority to them according to their significance.

Friedman's Chi-Square test was computed to find out the significance differences among the ranked variables. The Chi-Square statistics is highly based on the responses collected from 80 respondents. The statistics was found significant at 0.05 level of significance in 4 degree of freedom. The result shows the calculated Chi-Square is 0.8741 and critical value is 9.49. It is clearly evidence that the calculated Chi-Square is less than the tabulated Chi-Square at 0.05 level of significance, the null hypothesis H_0 is accepted. Therefore, it can be calculated that flowing information, establishing institution for price determination and better monitoring mechanism were found the most important corrective measures for Nepalese Capital Market.

4.4.4 Major Findings of the Study

Findings of present analysis can be very important for the academicians and researchers. Researchers can design future research to investigate research issues in this regard and practitioners can play appropriate roles in minimizing the artificial price fluctuation in the Nepalese Capital Market.

The present study identified very important findings based on the basis of information generated from the primary survey. In general, high price volatility was observed in the Nepalese Capital Market in the past few years and respondents reported responsible causes for such price volatility, responsible institutions in this regard, the major environment of artificial price fluctuation and appropriate measures to solve the problems in this regard.

Survey design was based on 80 respondents. Out of them around 61 percent were male and 39 percent were female. More than 84 percent of the respondents were 26 to 40 years old. And there were equal numbers of respondents from four different sectors for the present primary survey design.

Lack of development in the Share Market was found as one of the main causes of stock price volatility in the Nepalese Capital Market. Similarly, few numbers of competitors in the Share Market have been identified as the second major reason of stock price volatility in the Nepalese Stock Market. Along with that, investors are not being rational, organizations manipulate their financial statements, international environment affects the Nepalese Share Market, dividend decisions of the company do not affect the price of shares, demand and supply do not affect the price of shares and investment, and opportunities of the company do not affect the price of stock are also identified as significant causes respectively. Differences of all the above-described factors were found significant among each other in one sample "Z" test.

Brokerage firms and market makers were found equally responsible for market inefficiency. Then the stock exchange was identified as second responsible for market inefficiency but the listed companies were found relatively less responsible in this issue. One sample "Z" test showed the significant difference among the variables. Adverse economic situation of the country was found the most relevant affecting force for the inefficiency of the Nepalese

Capital Market. It is one of the external influencing forces in Nepalese Capital Market. Instable political situation and not having clear and perfect law and policy were identified as other two responsible factors. Similarly, small size of capital market, stock exchange board is not active and effective, non convertible of capital account for foreign investment and investors in Nepalese Capital Market inefficiency. These identified factors were found significantly different among each other in Chi-Square Test.

Few appropriate measures were found from the survey. Flow of actual information to the investors about financial market was identified as one of the most important strategy for the corrective measure of today's market inefficiency. Respondent also specified establishment of stock pricing institution as the second preferred strategy in this regard. Similarly, third important issue was appeared as monitoring mechanism for determination of stock price. The entire variables were found significantly different in Friedman's Chi-Square Test.

Chapter – V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Presentation chapter attempts to summarize the major findings of the earlier analysis and results. Researcher also attempts to draw some meaningful conclusion based on those findings. Such conclusions might be very much useful for academicians and practitioners. Based on the summary and conclusion of the study, researcher also attempts to identify some recommendation for the effective action plan for development of Nepalese Capital Market. Issues regarding to summaries, conclusions and recommendation are discussed in the following sections.

5.1 Summary

Lack of development of Share Market was found as one of the main causes that stock price volatility in Nepalese Capital Market. Similarly, few numbers of competitors in share market has been identified as the second major reason of stock price volatility in Nepalese Capital Market. Brokerage firm and market maker were found equally responsible for market inefficiency. Adverse economic situation of the country was found as the most relevant affecting force for the inefficiency of Nepalese Capital Market. Similarly, insatiable political situation was identified as second important factor and third one was the not having clear and perfect law and policy.

Responsible rated 'flow of actual information to the investors about financial market' as one of the most important strategy for the corrective measures of today's market inefficiency. Respondents also specified establishing stock pricing bodies / institution as the second preferred strategy in this regard.

5.2 Conclusion

In conclusion, present research is a very important breakthrough in analysis of stock price behaviour in Nepalese Capital Market. It has investment secondary information and found high price volatility pattern in Nepalese Capital Market. Further, it has also identified the responsible factors in such price volatility, responsible agencies or institution in share price volatility, general environment responsible for price volatility and some potential measures to minimize such artificial price volatility in Nepalese Capital Market.

Present study was found very successful. Most of the test showed significant and meaningful results. It can be concluded that the finding of the study will be pertinent to both academicians and practitioners. Present research might be a good basis in designing very useful future research. Similarly the facts and results found in the research might be very interesting for interested groups and stakeholders of Nepalese Capital Market.

5.3 Recommendations

Based on the above findings and conclusion present research recommends few major issues to the concerned authority, academicians, and practitioners. It is necessary to make a better information disclosure system in Nepalese Capital Market. Concerned authority should have better mechanism of supervision and control of artificial price fluctuation in market to prevent such factors. Furthermore, Security Board should make more effective and active control mechanism for healthy practices in Nepalese Capital Market.

Hence the following major points are recommended to minimize the abnormal price fluctuation in Nepalese Share Market that directly or indirectly supports in the development of Nepalese Capital Market. Researcher has found lack of development of Share Market as one of the main causes in stock price volatility in Nepalese Share Market. Thus some relevant points to uplift the existing Nepalese Share Market are recommended as follows.

Regular Publication of Financial Information

Nepal stock exchange should enforce all the listed members Companies to publish latest financial information to general public within a specific timeframe. In the mean time, NEPSE should also publish updated data and information related to the performance of listed Companies and should be make it publicly available.

Adoption of Advance and Effective Regulatory Framework

Though the establishment of Nepal stock exchange has not been so long, the prevailed regulatory process has not been found effective and satisfactory. The role and responsibility of NEPSE and Security Exchange Board should be clear and effective towards the monitoring and supervision of the exchange activities. The role of market makers, brokers and other stakeholders should be more effective and their actives should be more effective and their activities should be focused on fair-trading. Government of Nepal as well as Nepal Rastra Bank has to play parental role in the systematic development of capital market. The malpractices like insider trading should be penalized immediately after the revelation. NEPSE has to keep proper co-ordination with Company Register's Office, Minister of Finance, Nepal Rastra Bank, Security Exchange Board and all listed Companies.

Awareness Campaign for the Investors

To develop the Nepalese Stock Market smoothly, the potential investors should be informed and educated properly about the prevailing rule and regulation of NEPSE. More over, they should be access to the current affairs of the business as well as relevant financial information of the listed Companies. If the investors are aware of the prevailed rules of fair-trading, then they will be able to analyze the market situation and make selling or buying decision after proper risk return analysis of the particular stock. If all the investors are benefited by the Stock Market transactions then it will have better image and increase the listed amongst investors to invest in the stock and there will be no change of unfair trading as well as abnormal price fluctuation.

Improvement in the Infrastructures

The present infrastructures available in the NEPSE's trading floor are not adequate to make quick and reliable stock transaction. Online information system and computerized dealing therefore, it is advisable to the NEPSE to adopt modern and sophisticated technology like ATM, VISA card as availed in the developed share market.

Effective Use of Banking System for Share Trading

A well establishing banking is an essential prerequisite for the successful stock market. As the present banking system seems to be quite sufficient and make clearing f check and other financial transactions, the transaction of stocks should be canalized through the banking network to make fast service materialized in share trading also. For this effective transaction, NEPSE should make more proper initiation with the banks and finance Companies for the market creation and cheaper underwriting of shares.

Establishment of Regional Stock Exchange

At present, only NEPSE has only a Kathmandu based office for entire stock exchange activities, which has reverse impact to the outsider investors as well as bank and financial institution established outside the Kathmandu valley. Thus, it is advisable to the NEPSE to open regional stock exchange in the country to provide an easy excess to all investors and facilitate public transaction. Then after the volume of activities will be strengthened and have positive impact in the development of the NEPSE Capital Market.

Preparation of Sector Index to Minimize Risk

Till now, NEPSE prepares only market index that is an average of all traded stocks. So Stock Market is the lacking position of the sector index like Bank, Financial Companies, Insurance Companies, Hotel Industries, and other Industries. Sector indices help the potential investors to compare the risk and return inherited with the available stocks and beat the market by proper analysis.

Development of New Financial Instruments

For the expansion of the capital market, different types of instrument are needed for this purpose another recommendation is for researchers of academicians research should be attempted to investigate in hidden or unexplored issues using qualitative and behavioural research to identify the most appropriate strategy to develop Nepalese Capital Market. Practitioners should not be the agent of rumour and propaganda but they should encourage in making the fair transaction of shares based on company performance and their dividend policy.

Increase the Number of Brokers

The reason behind the low level of competition between Nepalese brokers is low number of broker in the market. Now we have only 23 brokers. Nowadays it is necessary to make the brokers services professional, qualitative and competitive in Nepalese Share Market. So NEPSE should formulate the criteria and recommendation the brokers.

BIBLIOGRAPHY

Books:

Alexander, Sharpe And Bailey, **Investment Analysis And Management**, New Delhi: Tara Mc- Grawhill, 2000:22-25

Bigham, E.F. & Houston, J.F. **Fundamental of Financial Management**. Singapore: Thopso Asia Pvt. Ltd, 2004.

S. Chandra, **Financial Analysis**, New Delhi, India, 2001:75-76

Parasanna, Chandra. **Management Investment**. New Delhi: Tata Mc Grawhill, 1998.

Parasanna, Chandra. **Management Investment**. New Delhi : Tata Mc Grawhill,2000.

Rutterford, Jenette **Introduction of Stock Exchange Investment**. New Delhi: Maomilan, 1994.

Vanhorne, James **Financial Management and Policy**, New Delhi: Prentic Hall of India,2000.

Shiler, R.J. **Market Volatility**. Pp London. MIT Press, 1990.

Thesis:

Gautam, Uddhav. **A Study of Stock Market Behaviour in Nepal**. An Unpublished Master Degree Thesis, Public Youth Campus, T.U. 2004.

Aryal, Mukti **A Study on General Behaviour of Stock Market Price**. An Unpublished Master Degree Thesis, Shanker Dev Campus, T.U. 1995

Bhattarai, Anjani Raj. **Share Marketing Nepal**. An Unpublished MBA thesis. Shanker Dev Campus, T.U. 1990.

Gurung, Jas Bahadur. **Share Price Behaviour or Listed Companies in Nepal**. Shanker Dev Campus, T.U. 1999.

Kandel, Nirajan. **A Study of Liquidity, Corporate Performance & Share Price Behaviour in Nepal**. An Unpublished Master Degree Thesis , Nepal Commerce Campus, T.U.2002.

Mahat L.D. **Volatility Shares**. An article published in Kathmandu Post daily. Source: idmahat@mos.com.np,2004.

Neupane, Sambhu, **Determinants of Stock Price in NEPSE**. An Unpublished Master Degree Thesis, Shankar Dev Campus, T.U. 2004.

Poudel, Rita. **A Study of Securities Market in Nepal**. An Unpublished Master Degree Thesis, Shankar dev Campus, T.U.2002.

Poudel, Shekhar. **A Study of Movement of Stock Price of Joint Venture Commerce Bank**. An Unpublished Master Degree Thesis, Shankar Dev Campus,T.U. 2003.

Upadhyya, Dinesh. **Share Price Behaviour in Nepal**. An Unpublished Master Degree Thesis, Nepal Commerce Campus, T.U. 2001.

Journals:

Adhikiri, Nabaraj **Securities Markets in Nepal**. SEBO Journal, 2004, 1: 75-79

Business Age. Revamping Nepali Course. Nepal 2007,3:43-44.

Campbell, J.M. Lettau, B Malkiel, and Y. Xu. **Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk**. 2001:56.

Timilsina, Bishnu. **Securities Market in Nepal**. NEPSE 2001:232-36

Others:

Nepal Stock Exchange 2002 to 2008. Kathmandu, Nepal Annual Report (2001/2002 to 2007/2008).

Security Exchange Center Ltd. (2001/02 to 2007/08) Kathmandu: SEC Market Review.

www.nepalstock.com

www.nrb.org.np

www.csb.gov.np

ANNEX – 1

QUESTIONNAIRE

Cover Letter to Respondents

Dear Respondents,

The researcher is conducting a study entitled “Stock Price Volatility and Its Contributing Factors In Nepalese Share Market” as the partial fulfilment of the requirements for the completion of the course, Master of Business Studies (MBS).

You the respondents are cordially requested to complete the each questionnaire after duly filled up. The views collected from you will only be used for the purpose of this study. The views will be kept confidential and will not be published anywhere. It is the request of the researcher to complete the questionnaire without any biasness. Your valuable co-operation will be contributing a lot for the complete success of the study.

Your co-operation in this matter shall be highly appreciated

Yours faithfully

SANJIV KUMAR SAH

Researcher

[E-mail-sanjivjnk@yahoo.com](mailto:sanjivjnk@yahoo.com)

1. Give your view regards to the following causes that have stock price volatility and its contribution factors in Nepalese Share Market.

Causes	Disagree	Slightly disagree	Slightly agree	Agree
1. Investors are not rational in assessing risk & return.				
2. Stock price is not actual because organization manipulated their financial statement.				
3. International environment affect the Nepalese Share Market.				
4. The dividend decision of the company does not affect the price of share.				
5. Demand and supply do not affect the price stock.				
6. Investment opportunities of the company do not affect the market price of share.				
7. Lack of development of share market.				
8. Few numbers of companies in the market.				

2. How far do you believe that the following agencies are responsible for abnormal price fluctuation and inefficiency in Nepalese Share Market?

Agencies	Disagree	Slightly Disagree	Slightly Agree	agree
1. Brokerage Firm				
2. Government (Stock Exchange Board)				
3. Investors (Market Maker)				
4. Listed Company				

1. The following are some potential affecting factors for Nepalese Stock Market inefficiency. Rank them in accordance to their significance. Please allocate 1 to most 9 to least.

- Adverse economy situation
- Insatiable political of capital for foreign investment
- Non convertible of capital for foreign for foreign investment
- Tax policy of the Government imposing tax in dividend & capital gain
- Stock Exchange Board is not active and effective
- Not having clear and perfect law and policy
- Small size of capital market
- Investors are not investing in stock only for social status
- Others

2. Market inefficiency to some extent can be removed by improving following factors. Please give the priority by allocating 1 to the most prefer 2 to the next and so on.
- By following up actual information to the investor about financial Market / Companies
 - By establishing stock pricing bodies / institutions
 - Stock pricing should be based on market interest rate
 - Demand and supply of stocks should determine stock price determination of stock price
 - By enchaining strong monitoring & controlling mechanism for
 - Others

Profession of the Respondent:

Tenure of the Respondent:

Gender of the Respondent:

Age of the Respondent:

ANNEX – 2

LIST OF CAUSES IN SURVEY DESIGN

Causes of that have Stock Price Volatility and Its Contribution Factors in Nepalese Share Market

case	Investors are not rational in assessing risk & return	Stock price is not actual because organizations manipulate their financial statement	International environment affect the Nepalese Share Market	The dividend decision of the company does not affect the price of share	Demand and supply do not affect the price of stock	Investment opportunities of the company do not affect market price of share	Lack of development of share market	Few numbers of competitions in the market
	I	II	III	IV	V	VI	VII	VIII
1.	1	1	1	1	1	1	1	1
2.	1	1	1	1	1	1	1	1
3.	1	1	1	1	1	1	1	1
4.	1	1	1	1	1	1	1	1
5.	1	1	1	1	1	1	1	1
6.	1	1	1	1	1	1	1	1
7.	1	1	1	1	1	1	1	1
8.	1	1	1	1	1	1	1	1
9.	1	1	1	1	1	1	2	1
10.	1	1	1	1	1	1	2	1
11.	2	1	1	1	1	1	2	2
12.	2	1	1	1	1	1	2	2
13.	2	2	1	1	1	1	2	2
14.	2	2	1	1	1	1	2	2
15.	2	2	1	1	1	1	3	2
16.	2	2	1	1	1	1	3	2
17.	2	2	1	1	1	1	3	2
18.	2	2	1	1	1	1	3	2
19.	2	2	1	1	1	1	3	3
20.	2	2	1	1	1	1	3	3
21.	2	2	1	1	1	1	3	3

22.	2	2	1	1	1	1	3	3
23.	2	2	1	1	1	1	3	3
24.	2	2	1	1	1	1	3	3
25.	2	2	1	1	1	1	3	3
26.	2	2	1	1	1	1	3	3
27.	2	2	1	1	1	1	3	3
28.	2	2	2	1	1	1	3	3
29.	3	2	2	1	1	1	3	3
30.	3	2	2	1	1	1	3	3
31.	3	2	2	2	2	1	3	3
32.	3	2	2	2	2	1	3	3
33.	3	3	2	2	2	1	3	3
34.	3	3	2	2	2	1	3	3
35.	3	3	2	2	2	1	3	3
36.	3	3	2	2	2	2	3	3
37.	3	3	2	2	2	2	3	3
38.	3	3	2	2	2	2	4	3
39.	3	3	2	2	2	2	4	3
40.	3	3	3	2	2	2	4	3
41.	3	3	2	2	2	2	4	3
42.	3	3	3	2	2	2	4	3
43.	3	3	3	2	2	2	4	3
44.	3	3	3	3	3	2	4	4
45.	3	3	3	3	3	2	4	4
46.	3	3	3	3	3	2	4	4
47.	3	3	3	3	3	2	4	4
48.	3	3	3	3	3	2	4	4
49.	3	3	3	3	3	3	4	4
50.	3	3	3	3	3	3	4	4
51.	3	3	3	3	3	3	4	4
52.	3	3	3	3	3	3	4	4
53.	4	3	3	3	3	3	4	4
54.	4	3	3	3	3	3	4	4

55.	4		3	3	3	3	4	4
56.	4	3	3	3	3	3	4	4
57.	4	3	3	3	3	3	4	4
58.	4	3	3	3	3	3	4	4
59.	4	4	4	4	4	4	4	4
60.	4	4	4	4	4	4	4	4
61.	4	4	4	4	4	4	4	4
62.	4	4	4	4	4	4	4	4
63.	4	4	4	4	4	4	4	4
64.	4	4	4	4	4	4	4	4
65.	4	4	4	4	4	4	4	4
66.	4	4	4	4	4	4	4	4
67.	4	4	4	4	4	4	4	4
68.	4	4	4	4	4	4	4	4
69.	4	4	4	4	4	4	4	4
70.	4	4	4	4	4	4	4	4
71.	4	4	4	4	4	4	4	4
72.	4	4	4	4	4	4	4	4
73.	4	4	4	4	4	4	4	4
74.	4	4	4	4	4	4	4	4
75.	4	4	4	4	4	4	4	4
76.	4	4	4	4	4	4	4	4
77.	4	4	4	4	4	4	4	4
78.	4	4	4	4	4	4	4	4
79.	4	4	4	4	4	4	4	4
80.	4	4	4	4	4	4	4	4

Potential Agencies of Share Price Fluctuation

S.No.	Brokerage Firm	Government (Stock Exchange Board)	Investors (Market Maker)	Listed Companies
	I	II	III	IV
1.	1	1	1	1
2.	1	1	1	1
3.	1	1	1	1
4.	1	1	1	1
5.	1	1	1	1
6.	1	1	1	1
7.	1	1	1	1
8.	2	1	2	1
9.	2	1	2	1
10.	2	1	2	1
11.	2	2	2	1
12.	2	2	2	1
13.	2	2	2	1
14.	2	2	2	1
15.	2	2	2	1
16.	2	2	2	1
17.	2	2	2	1
18.	2	2	2	1
19.	2	2	2	1
20.	2	2	2	1
21.	2	2	2	1
22.	2	2	2	2
23.	2	2	2	2
24.	2	2	2	2
25.	2	2	2	2
26.	2	2	2	2
27.	3	2	3	2
28.	3	2	3	2

29.	3	2	3	2
30.	3	2	3	2
31.	3	3	3	2
32.	3	3	3	2
33.	3	3	3	2
34.	3	3	3	2
35.	3	3	3	2
36.	3	3	3	2
37.	3	3	3	2
38.	3	3	3	2
39.	3	3	3	2
40.	3	3	3	2
41.	3	3	3	2
42.	3	3	3	2
43.	3	3	3	2
44.	3	3	3	2
45.	3	3	3	3
46.	3	3	3	3
47.	3	3	3	3
48.	3	3	3	3
49.	3	3	3	3
50.	3	3	3	3
51.	3	3	3	3
52.	3	3	3	3
53.	3	3	3	3
54.	4	3	4	3
55.	4	3	4	3
56.	4	4	4	3
57.	4	4	4	3
58.	4	4	4	3
59.	4	4	4	4
60.	4	4	4	4

61.	4	4	4	4
62.	4	4	4	4
63.	4	4	4	4
64.	4	4	4	4
65.	4	4	4	4
66.	4	4	4	4
67.	4	4	4	4
68.	4	4	4	4
69.	4	4	4	4
70.	4	4	4	4
71.	4	4	4	4
72.	4	4	4	4
73.	4	4	4	4
74.	4	4	4	4
75.	4	4	4	4
76.	4	4	4	4
77.	4	4	4	4
78.	4	4	4	4
79.	4	4	4	4
80.	4	4	4	4

Factors to be improved in improving following factors.

S.No.	Actual information to the investors about financial market	Establishing stock pricing bodies/institution	Stock price should be based on market interest rate	Stock price should be determined by demand and supply of the stock	Strong monitoring and controlling mechanism for determination of stock price
	I	II	III	IV	V
1.	1	3	5	4	2
2.	1	2	3	4	5
3.	2	4	3	5	1
4.	5	3	1	1	4
5.	3	1	4	2	3
6.	2	2	4	5	1
7.	2	3	5	6	1
8.	1	2	2	3	4
9.	4	3	2	1	5
10.	4	5	3	2	1
11.	5	1	3	2	4
12.	4	5	3	1	2
13.	2	3	5	1	1
14.	2	4	5	1	3
15.	2	4	5	1	3
16.	2	3	1	5	4
17.	1	2	3	5	4
18.	3	2	4	5	1
19.	3	2	5	4	1
20.	2	1	3	4	5
21.	1	2	5	4	3
22.	1	3	5	4	2
23.	3	1	4	2	5
24.	1	3	4	5	2
25.	1	3	2	5	4

26.	3	1	4	2	5
27.	1	3	4	5	2
28.	1	3	2	5	4
29.	3	2	5	2	1
30.	2	5	4	1	3
31.	5	3	1	2	3
32.	1	5	4	2	3
33.	1	3	5	4	2
34.	1	3	5	4	2
35.	1	3	5	4	2
36.	1	5	2	4	3
37.	1	4	2	3	5
38.	1	2	5	4	3
39.	1	3	4	5	2
40.	3	1	4	5	2
41.	3	1	2	5	4
42.	1	4	5	3	2
43.	2	4	5	1	3
44.	2	5	4	3	1
45.	1	4	5	1	2
46.	1	2	4	3	5
47.	1	4	5	2	2
48.	1	5	1	3	2
49.	2	3	4	4	5
50.	2	1	2	3	5
51.	5	1	2	3	4
52.	1	4	2	3	4
53.	1	5	2	3	4
54.	1	5	2	3	4
55.	1	2	4	5	3
56.	3	2	4	2	5
57.	5	3	1	2	4

58.	5	4	2	1	3
59.	4	3	2	1	5
60.	1	3	4	5	2
61.	4	5	3	1	2
62.	1	5	2	3	4
63.	2	3	4	5	1
64.	1	5	3	4	2
65.	1	3	5	4	2
66.	3	1	2	5	4
67.	4	1	2	5	3
68.	4	3	2	1	5
69.	4	1	2	5	3
70.	3	4	1	5	5
71.	1	2	4	5	3
72.	1	3	4	5	2
73.	2	1	4	5	3
74.	1	3	4	5	2
75.	1	5	3	4	2
76.	3	1	5	4	2
77.	2	5	3	1	4
78.	2	1	4	5	3
79.	3	1	2	4	5
80.	3	1	4	5	2

ANNEX – 3

SECONDARY DATA OF SHARE PRICE

		2002					
		15 January		15 May		13 September	
		%	Share Price	%	Share Price	%	Share Price
S.no.	Selected Bank & Finance Company						
1	NABIL BANK LIMITED	100	891.00	89.34	796.00	79.12	705.00
2	STANDARD CHARTERED BANK LIMITED	100	1650.00	96.36	1590.00	106.06	1750.00
3	HIMALAYAN BANK LIMITED	100	1040.00	97.12	1010.00	85.57	890.00
4	NEPAL SBI BANK LIMITED	100	1002.00	43.81	439.00	35.13	352.00
5	NEPAL BANGLADESH BANK LIMITED	100	900.00	63.44	571.00	52.22	470.00
6	EVEREST BANK LIMITED	100	500.00	96	480.00	81.2	406.00
7	BANK OF KATHMANDU LIMITED	100	332.00	92.17	306.00	79.82	265.00
8	NEPAL INDUSTRIAL & COMMERCE BANK	100	311.00	98.07	305.00	71.06	221.00
9	LAXMI BANK LIMITED						
10	KUMARI BANK LIMITED						
11	NIDC CAPITAL MARKETS LIMITED	100	400.00	49.75	199.00	45	180.00
12	NEPAL MERCHANT BANK & FINANCE LIMITED	100	251.00	90.03	226.00	85.26	214.00
13	DEVELOPMENT CREDIT BANK LIMITED						150.00
14	NEPAL DEVELOPMENT BANK LIMITED						
15	LUMBANI FINANCE & LEASING COMPANY LIMITED	100	195.00	91.28	178.00	82.05	160.00

		2003					
		15 January		15 May		13 September	
		%	Share Price	%	Share Price	%	Share Price
S.no.	Selected Bank & Finance Company						
1	NABIL BANK LIMITED	80.25	715.00	80.25	715.00	81.93	730.00
2	STANDARD CHARTERED BANK LIMITED	84.54	1395.00	99.75	1646.00	103.03	1700.00
3	HIMALAYAN BANK LIMITED	74.52	775.00	78.65	818.00	81.25	845.00
4	NEPAL SBI BANK LIMITED	28.94	290.00	30.44	305.00	29.64	297.00
5	NEPAL BANGLADESH BANK LIMITED	39.77	358.00	40	360.00	41	369.00
6	EVEREST BANK LIMITED	83.80	419.00	90	450.00	91.2	456.00
7	BANK OF KATHMANDU LIMITED	65.75	215.00	68.67	228.00	62.35	207.00
8	NEPAL INDUSTRIAL & COMMERCE BANK	65.91	205.00	67.2	209.00	57.88	180.00
9	LAXMI BANK LIMITED						
10	KUMARI BANK LIMITED						
11	NIDC CAPITAL MARKETS LIMITED	35	140.00	36.25	145.00	32.5	130.00
12	NEPAL MERCHANT BANK & FINANCE LIMITED	67.72	170.00	67.72	170.00	62.15	156.00
13	DEVELOPMENT CREDIT BANK LIMITED		159.00		162.00		152.00
14	NEPAL DEVELOPMENT BANK LIMITED		133.00		135.00		128.00
15	LUMBANI FINANCE & LEASING COMPANY Ltd.	78.46	153.00	71.79	140.00	58.97	115.00

		2004						
		15		January	May		15 September	
		%		Share Price	Share Price		Share Price	
Selected Bank & Finance Company								
1	NABIL BANK LIMITED	85.29	760.00		815.00	124.57	1110	
2	STANDARD CHARTERED BANK LIMITED	95.75	1580.00		1640.00	106.27	1761	
3	HIMALAYAN BANK LIMITED	82.69	860.00		803.00	87.01	905	
4	NEPAL SBI BANK LIMITED	24.95	250.00		286.00	35.13	352	
5	NEPAL BANGLADESH BANK LIMITED	50	450.00		361.00	31.22	281	
6	EVEREST BANK LIMITED	84.20	421.00		520.00	133.33	665	

7	BANK OF KATHMANDU LIMITED	62.048	206.00		221.00	87.34	290
8	NEPAL INDUSTRIAL & COMMERCE BANK	51.12	159.00		172.00	74.91	233
9	LAXMI BANK LIMITED				112		159
10	KUMARI BANK LIMITED						239
11	NIDC CAPITAL MARKETS LIMITED	25.25	101.00		107.00		
12	NEPAL MERCHANT BANK & FINANCE LIMITED	59.36	149.00		166.00	79.68	200
13	DEVELOPMENT CREDIT BANK LIMITED		160.00		160.00		185
14	NEPAL DEVELOPMENT BANK LIMITED						85
15	LUMBANI FINANCE & LEASING COMPANY Ltd.						

			(
			(
			!			
14	Janu	1	Ma	1	S	e
4	ary	5	y	5	p	t
					e	

		%	Share Price	%	Share Price	%	Share Price
	Selected Bank & Finance Company						
1	NABIL BANK LIMITED	131.31	1170	160.6	1431	175.5	1561
2	STANDARD CHARTERED BANK LIMITED	104.84	1730	127.69	2107	145.75	2405
3	HIMALAYAN BANK LIMITED	96.15	1000	88.94	925	92.59	963
4	NEPAL SBI BANK LIMITED	35.42	355	37.02	371	36.92	370
5	NEPAL BANGLADESH BANK LIMITED	26.11	235	29.2	266	29.2	265

				55		55	
6	EVEREST BANK LIMITED	136	680	179	895	174	870
7	BANK OF KATHMANDU LIMITED	91.15	304	1364	453	14126	469
8	NEPAL INDUSTRIAL & COMMERCE BANK	77.49	241	118	367	11897	370
9	LAXMI BANK LIMITED		216		330		290
10	KUMARI BANK LIMITED		270		385		370
11	NIDC CAPITAL MARKETS LIMITED			3625	145	3625	145
12	NEPAL MERCHANT BANK & FINANCE LIMITED	83.66	210	9760	245	9960	250
13	DEVELOPMENT CREDIT BANK LIMITED		180		355		260
14	NEPAL DEVELOPMENT BANK LIMITED		90		100		
15	LUMBANI FINANCE & LEASING COMPANY Ltd.			4666	91		

		2006					
		15 January		15 May		14 September	
		%	Share Price	%	Share Price	%	Share Price
S. no.	Selected Bank & Finance Company						
1	NABIL BANK LIMITED	195.28	1740	257.57	2295	240.77	2140
2	STANDARD CHARTERED BANK LIMITED	162.84	2687	224.24	3700	219.69	3625
3	HIMALAYAN BANK LIMITED	90.38	940	113.55	1181	100.48	1045
4	NEPAL SBI BANK LIMITED	40.51	406	67.86	680	58.38	585
5	NEPAL BANGLADESH BANK LIMITED	24.66	222	21.11	190	24.22	218
6	EVEREST BANK LIMITED	176.8	884	275	1375	25.8	1290

7	BANK OF KATHMANDU LIMITED	164.15	545	26 5. 36	881	1 6 3 . 6	818
8	NEPAL INDUSTRIAL & COMMERCE BANK	127	395	17 6. 84	550	1 5 1 . 1 2	470
9	LAXMI BANK LIMITED		330		366		
10	KUMARI BANK LIMITED		337		469		459
11	NIDC CAPITAL MARKETS LIMITED	45.25	181				
12	NEPAL MERCHANT BANK & FINANCE LIMITED	92.43	232	93 .6 2	235	1 0 9 . 9 6	276
13	DEVELOPMENT CREDIT BANK LIMITED		276		387		425
14	NEPAL DEVELOPMENT BANK LIMITED						
15	LUMBANI FINANCE & LEASING COMPANY Ltd.			58 .9 7	115	6 5 . 6 4	128

				2 0 0 7			
	1 5	Janu ary	14	Ma y	15	Sep tem ber	
	%	Shar	%	Sha	%	Sha	

			e Price		re Pric e		re Pric e
	Selected Bank & Finance Company						
1	NABIL BANK LIMITED	3 8 1 . 5 9	3400	39 2. 82	350 0	673 .40	600 0
2	STANDARD CHARTERED BANK LIMITED	278.79	4600	27 2. 73	450 0	424 .85	701 0
3	HIMALAYAN BANK LIMITED	116.35	1210	11 4. 42	119 0	205 .77	214 0
4	NEPAL SBI BANK LIMITED	80.83	810	82 .3 4	825	133 .73	134 0
5	NEPAL BANGLADESH BANK LIMITED	44	396	33 .8 9	305	68. 33	615
6	EVEREST BANK LIMITED	380	1900	35 0	175 0	535	267 5
7	BANK OF KATHMANDU LIMITED	331.32	1100	28 6. 14	950	434 .94	144 4
8	NEPAL INDUSTRIAL & COMMERCE BANK	209.32	651	19 9. 36	620	316 .72	985
9	LAXMI BANK LIMITED		658		460		739
10	KUMARI BANK LIMITED		825		590		880
11	NIDC CAPITAL MARKETS LIMITED	75	300	10 0	400	75	300

12	NEPAL MERCHANT BANK & FINANCE LIMITED	436.65	1096	34 8. 61	875	460 .16	115 5
13	DEVELOPMEN T CREDIT BANK LIMITED		970		642		900
14	NEPAL DEVELOPMEN T BANK LIMITED		171		120		166
15	LUMBANI FINANCE & LEASING COMPANY Ltd.	69.23	135	79 .4 9	155	92. 31	180

		C C S					
		1 5	Janu ary	1 5	Ma y	Sep tem ber	
		%	Shar e Price	%	Sha re Pric e	Sha re Pric e	
Selected Bank & Finance Company							
1	NABIL BANK LIMITED	5 1 6 .2 7	4600	4 5 7 .2 4	407 4		-
2	STANDARD CHARTERED BANK LIMITED	408.79	6745	3 1 4 .9	519 6		-

				1			
3	HIMALAYAN BANK LIMITED	191.83	1995	153.56	1597		-
4	NEPAL SBI BANK LIMITED	206.59	2070	123.315	1234		-
5	NEPAL BANGLADESH BANK LIMITED	100.56	905	66.44	598		-
6	EVEREST BANK LIMITED	500	2500	45.540	2277		-
7	BANK OF KATHMANDU LIMITED	617.47	2050	52.681	1749		-
8	NEPAL INDUSTRIAL & COMMERCE BANK	432.48	1345	31.961	994		-
9	LAXMI BANK LIMITED		1185		886		-
10	KUMARI BANK LIMITED		1225		812		-
11	NIDC CAPITAL MARKETS LIMITED	173.5	694	140	560		-

12	NEPAL MERCHANT BANK & FINANCE LIMITED	1513.55	3799	3 3 2 .6 7	835		-
13	DEVELOPMENT CREDIT BANK LIMITED		2900		650		-
14	NEPAL DEVELOPMENT BANK LIMITED		515		328		-
15	LUMBANI FINANCE & LEASING COMPANY Ltd.	120.51	235	1 4 1 .0 3	275		-