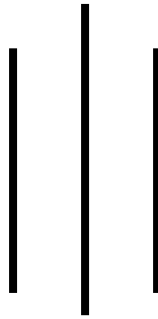


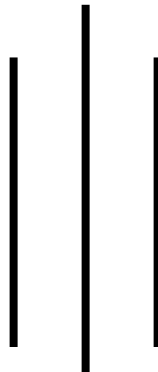
SHARE PRICE DETERMINANTS AND INVESTORS' BEHAVIOUR IN NEPAL

**(With special focus on commercial banks, development
banks & finance companies)**



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Office of the Dean
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**In partial fulfillment of the requirement for the
Degree of
Master in Business Studies (M.B.S.)**

**Kathmandu, Nepal
January , 2009**

RECOMMENDATION

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Share Price Determinants and Investors' Behaviour in Nepal

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DECLARATION

I hereby declare that the work reported in the thesis entitled “**Share Price Determinants and Investors' Behaviour in Nepal**” submitted to Shankerdev Campus ,Faculty of Management, Tribhuwan University is my original work done in the form of partial fulfillment of the requirement of the degree of Master of Business Studies(MBS) under the guidance of Reader Mrs. Amuda Shrestha and Lecturer Mr. Govinda Thapa of Shankerdev Campus, Tribhuwan University.

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Now a day almost all nations in the world are suffering from economic recession. Among the numerous contributing factors towards the economic prosperous, stock market is significant component. So, stock market is considered as a mirror of the nation's economy because it reflects the economic condition of the nation. If the market as a whole expects economic prospects to improves, share price will rise and vice versa. Mass participation in every public issue and increment in entry of new investors in secondary market are the recent activities of Nepalese capital market clears the rising interest of general public towards the stock market. But the stock market in Nepal's is criticized that it is yet to mature in terms of it's infrastructures, governances, investors confidence, financial institution dominant market etc. In this study I have tried to find out which factors determine share price of a company. For this, correlation analysis, multiple regression analysis, personal interviews and questionnaires analysis have been applied. Dividend distribution, right share to the existing shareholders, board members of company seemed main attraction to determine and invest in shares. However other qualitative and quantitative factors directly and indirectly affect the share price.

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At last but not least, I hope this thesis could be useful to related aspects in the future. I am also sole responsible for any errors present in this study and extend warm welcome to any creative comments and suggestion.

Rajan Bhandari
January, 2009

ABBREVIATION

ARR	:	Actual Rate of Return
CAPM	:	Capital Asset Pricing Model
CG	:	Capital Gain
CGY	:	Capital Gain Yield
CIT	:	Citizen Investment Trust
CML	:	Capital Market Line
COV	:	Covariance
DCBL	:	Development Credit Bank Limited
DPS	:	Dividend Per Share
DY	:	Dividend Yield
Exp	:	Expected
HBL	:	Himalayan Bank Limited
MOF	:	Ministry of Finance
MPS	:	Market Price per Share
NDBL	:	Nepal Development Bank Limited
NEPSE	:	Nepal Stock Market
NG	:	Nepal Government
NH&MFL	:	Nepal Housing & Merchant Finance Limited
NIBL	:	Nepal Investment Bank Limited
NRB	:	Nepal Rastra Bank
NSBL	:	Nepal SBI Bank Limited
NSM&FL	:	Nepal Share Market & Finance Limited
NUBL	:	Nirdhan utthan Bank Limited
NWPS	:	Net Worth Per Share
PFL	:	Peoples' Finance Limited
R _m	:	Return of Market
RRR	:	Required Rate Return
SCBNL	:	Standard Chartered Bank Limited
SD	:	Standard Deviation
SEBON	:	Security Board of Nepal
SML	:	Security Market Line
T-BILLS	:	Treasury Bill
UF&CML	:	Universal Finance & Capital Market Limited
VAR	:	Variance
WWW	:	World Wide Web

TABLE OF CONTENTS

	Page
No.	
Recommendation	
Viva-voce sheet	
Declaration	
Acknowledgement	
Table of Contents	
List of Tables	
List of Figures	
Abbreviations	
CHAPTER I :INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of Problem	8
1.3 Objective of the Study	10
1.4 Significance of the Study	10
1.5 Limitation of the Study	11
1.6 Organization of Study	12
CHAPTER II : REVIEW OF LITERATURE	13
2.1 Conceptual framework	13
2.2 Concept of Capital market	16
2.3 An introduction to NEPSE	19
2.4 Security Board of Nepal (SEBON)	23
2.5 Theory of Price behavior	25
2.5.1 Inefficient market theory	25
2.5.1.A Technical Analysis	25
2.5.1.B Fundamental Analysis	32
2.5.2 Efficient market theory	39
2.6 Review of Previous Studies	50

2.6.1	Foreign Context	51
2.6.2	Nepalese Context	55
2.6.2A	Review of Dissertation	57
2.7	Research Gap	64
CHAPTER III: RESEARCH METHODOLOGY		65
3.	Introduction	65
3.1	Research Design	66
3.2	Population and Sample	67
3.3	Nature and Sources of Data	68
3.4	Tools of Data Analysis	69
3.4.1	Financial Tools	69
3.4.2	Statistical Tools	73
CHAPTER IV: DATA PRESENTATION AND ANALYSIS		77
4.	Introduction	77
4.1	Analysis of Secondary Data	77
4.1.1	Analysis of Market Risk-Return, and Risk Free Rate of Return	77
4.1.2	Analysis of Financial Indicators of Commercial Bank	81
4.1.3	Analysis of Himalayan Bank	81
4.1.4	Analysis of Nabil Bank	85
4.1.5	Analysis of Nepal Investment Bank	88
4.1.6	Analysis of Nepal SBI Bank	92
4.1.7	Analysis of Standard Chartered Bank	95
4.1.8	Summary Result of Commercial Banking Sector	98
4.1.9	Analysis of Financial Indicators of Development Banks	102
4.1.10	Analysis of Development Credit Bank	103
4.1.11	Analysis of Nepal Development Bank	106
4.1.12	Analysis of Nirdhan Utthan Bank	109
4.1.13	Summary Result of Developing Banking Sector	113
4.1.14	Analysis of Financial Indicators of Finance Companies	116
4.1.15	Analysis of Citizen Investment Trust	116
4.1.16	Analysis of Nepal Housing and Merchant Finance Limited	120

4.1.17	Analysis of Nepal Share Market and Finance Company Limited	123
4.1.18	Analysis of Peoples' Finance Limited	127
4.1.19	Analysis of Universal Finance and Company Limited	130
4.1.20	Summary Result of Finance Company	134
4.2	Pricing Status	137
4.3	Analysis of Primary Data	140
4.3.1	Types of the Respondents	141
4.3.2	Responses from Open End Question	144
4.4	Major Findings	145
4.4.1	Major Findings from Secondary Data Analysis	155
4.4.2	Major Findings from Primary Data Analysis	149
CHAPTER V: SUMMARY, CONCLUSION AND RECOMMENDATION		151
5.1	Summary	151
5.2	Conclusion	152
5.3	Recommendation	156

Bibliography

Annexes

LIST OF TABLES

Table No.	Title of Table	Page
No.		
2.1	Board of director in NEPSE	20
2.2	Capital Structure of NEPSE	21
2.3	Commission on Share Transaction	22
2.4	Commission on Corporate Board Transaction	22
3.1	Proportion of Sample Companies	67
3.2	No of Observation Sample Companies	68
3.3	Average Risk free Rate	70
4.1	The Movement of NEPSE Index	78
4.2	The T-Bills Return	79
4.3	MPS, EPS, DPS, NWPS and Capital Gain of HBL	81
4.4	Correlation Between MPS and Selected Financial Indicators of HBL	83
4.5	Regression Coefficient of HBL	84
4.6	MPS, EPS, DPS, NWPS and Capital Gain of NABIL	85
4.7	Correlation Between MPS and Selected Financial Indicators of NABIL	86
4.8	Regression Coefficient of NABIL	87
4.9	MPS, EPS, DPS, NWPS and Capital Gain of NIBL	88
4.10	Correlation Between MPS and Selected Financial Indicators of NIBL	90
4.11	Regression Coefficient of NIBL	91
4.12	MPS, EPS, DPS, NWPS and Capital Gain of NSBIL	92
4.13	Correlation Between MPS and Selected Financial Indicators of NSBIL	93
4.14	Regression Coefficient of NSBIL	94
4.15	MPS, EPS, DPS, NWPS and Capital Gain of SCBNL	95
4.16	Correlation Between MPS and Selected Financial Indicators of SCBNL	96
4.17	Regression Coefficient of SCBNL	97
4.18	MPS, EPS, DPS, NWPS and Capital Gain of Commercial Banking Sector	98
4.19	Correlation Between MPS and Selected Financial Indicators of Commercial Banking Sector	100
4.20	Regression Coefficient of Commercial Banking Sector	101
4.21	MPS, EPS, DPS, NWPS and Capital Gain of DCBL	103

4.22	Correlation Between MPS and Selected Financial Indicators of DCBL	104
4.23	Regression Coefficient of DCBL	105
4.24	MPS, EPS, DPS, NWPS and Capital Gain of NDBL	106
4.25	Correlation Between MPS and Selected Financial Indicators of NDBL	107
4.26	Regression Coefficient of NDBL	108
4.27	MPS, EPS, DPS, NWPS and Capital Gain of NUBL	109
4.28	Correlation Between MPS and Selected Financial Indicators of NUBL	111
4.29	Regression Coefficient of NUBL	112
4.30	MPS, EPS, DPS, NWPS and Capital Gain of Development Banking Sector	118
4.31	Correlation Coefficient Between MPS and Selected Financial Indicators of Development Banking Sector	114
4.32	Regression Coefficient of Development Banking Sector	115
4.33	MPS, EPS, DPS, NWPS and Capital Gain of CIT	117
4.34	Correlation Between MPS and Selected Financial Indicators of CIT	118
4.35	Regression Coefficient of CIT	119
4.36	MPS, EPS, DPS, NWPS and Capital Gain of NH&MFL	120
4.37	Correlation Between MPS and Selected Financial Indicators of NH&MFL	121
4.38	Regression Coefficient of NH&MFL	122
4.39	MPS, EPS, DPS, NWPS and Capital Gain of NSM&FL	123
4.40	Correlation Between MPS and Selected Financial Indicators of NSM&FL	125
4.41	Regression Coefficient of NSM&FL	126
4.42	MPS, EPS, DPS, NWPS and Capital Gain of PFL	127
4.43	Correlation Between MPS and Selected Financial Indicators of PFL	128
4.44	Regression Coefficient of PFL	129
4.45	MPS, EPS, DPS, NWPS and Capital Gain of UF&CML	130
4.46	Correlation Between MPS and Selected Financial Indicators of UF&CML	132
4.47	Regression Coefficient of UF&CML	133
4.48	MPS, EPS, DPS, NWPS and Capital Gain of Financial Sector	134
4.49	Correlation Coefficient Between MPS and Selected Financial Indicators of Financial Sector	135
4.50	Regression Coefficient of Financial Sector	136

4.51	Pricing Status of Listed Companies	138
4.52	Categorization of Respondents	141
4.53	Analysis of Security is Essential Rather than Random Decision	141
4.54	Decision to Purchase Share of a Certain Company	141
4.55	Correlation Share Price in NEPSE	142
4.56	The Crucial Factors to Determine Share Price	142
4.57	Comments about Present Scenario of Nepal Stock Market	143
4.58	The Theoretical Knowledge about Beta Coefficient	144

LIST OF FIGURES

Figure No. No.	Title of the Figure	Page
4.1	Yearly Movement of NEPSE Index	78
4.2	Annual T-Bill Return	80
4.3	Movement of MPS of HBL	82
4.4	Movement of MPS of NABIL	85
4.5	Movement of MPS of NIBL	89
4.6	Movement of MPS of NEPAL SBI Bank	92
4.7	Movement of MPS of SCBNL	95
4.8	Movement of MPS of Commercial Banks	99
4.9	Movement of MPS of DCBL	103
4.10	Movement of MPS of NDBL	106
4.11	Movement of MPS of NUBL	110
4.12	Movement of MPS of Development Banks	113
4.13	Movement of MPS of CIT	117
4.14	Movement of MPS of NH & MFL	120
4.15	Movement of MPS of NSM & FCL	124
4.16	Movement of MPS of PFL	127
4.17	Movement of MPS of UF&CL	131
4.18	Movement of MPS of Finance Companies	135

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Common stock represents as ownership position in a corporation. It is a residual claim in the sense that creditors and preference shareholders must be as scheduled before common stockholders can receive any payment. The holders of common stock are paid called stockholders. Such stockholders are legal owners of the company. Being the owners of the company, shareholders bear the risk of ownership; they are entitled to dividends after the income claims of others have been satisfied. Similarly, when the company is wound up, they can exercise their claims on assets after the claim of other suppliers of capital have been met (Pandey,1997:905).

The market value of a share is the price at which it trades in the stock market. It is generally based on expectation about the performance of the company. Ordinary shares of all companies may not be traded on stock markets. Therefore, the market value of ordinary shares of all companies may not be available (Pandey,1997:905).

Holders of common stock have no guarantee of receiving any periodic distribution of earning in the form of dividends nor are they guaranteed anything in the event of liquidation. Common stockholders are like to receive nothing as result of bankruptcy proceeding. However, one thing assured of is that as long as they pay more than the par value of the stock, they can not lose any more than they have invested in firm. More over the common stockholders can receive unlimited return through the distribution of the earnings and through the appreciation of the value of holdings. Nothing is guaranteed, but the possible rewards for providing risk capital can be great (Gitman,200:85).

“Capital” is regarded as the life blood of business enterprises. Therefore, business enterprises require tremendous amount of capital funds for smooth operation and finally survival of the enterprises. Inadequate capital leads an organization to the point of liquidation. In this ground, organization must have source of financing when they

actually require. It is true that short term, intermediate term and long term capital funds are essentials to grow and expansions of organizational activities. Out of that, long term funds are highly significant for future growths and prosperity of these areas. Most of the organizations generate these types of funds from financial markets. Similarly governments must borrow large amount of funds to provide goods and services demanded by the people. "The financials market permits both business and government to raise needed funds by selling securities. Simultaneously, investors with excess funds are able to invest and earn in return enhancing their welfare (Johns1992:261). The purpose of financial market in an economy is to allocate savings during the period of time a day a week or quarter to parties who use funds for investments in real assets of consumption (Vanhorne1994:491).

In this way securities are regarded as the primary instruments to raise short term capital(91 treasury bills) and long term capital(equity shares, debentures, preference share and so on)

This study basically based up on the search and analysis of such factors, which either explicitly or implicitly influence market price of common stock. Though there are thousands of factors, this study includes major factors, which largely shape equity prices. As explained above, corporation issues shares to raise equity capital. Those who participate in corporation" IPO (Initial Public Offering) are the initial investor as they buy shares at par from primary market. Listing of newly issued shares in local national stock markets starts trading of this shares. Therefore the real value of shares will be fixed in floor of stock market. Stock market reports each day's closing price at every day at end. This closing price is regarded as the market price of the particular day. Investor and broker bid up prices, their continuous bargaining finally yields the closing prices. Demand of stock mounts up if the related relevant factors are in good position, this huge demand leads to maximum stock prices and if the opposite situation exists. Supply of stock will be large which ultimately lowers the stock price Here the considerable points is the information. Good information results high prices where negative information results low price. Information significance any notice or results related to the corporation. Efficiency of stock market determines the volume of trading of common stock. huge trading results the best prices. Nevertheless, the role of stock market can not be ignored in searching and predicting the equity price."The

efficient financial markets are also essential to adequate development of financial markets, which is necessary for growth and prosperity of economy. But in actual practice, equilibrium is not found in real world. When there is imbalance in supply and demand for funds, adjustment in cost and return, it is because important to set new equilibrium.”(Shrestha M 1988:11).

In Nepalese context ,some financial institutions involved in capital market are: Nepal Rastra Bank, commercial banks, Agriculture Development Bank, Nepal Industrial development corporation, Employee provident fund, citizen investment trust, co-opretive agencies,⁵ rural development banks, Securities board, NEPSE, Rastriya Bima Sans than Insurance companies, financial institutions, Non Governmental Organization ,some hotels .few hydro power companies, manufacturing and trading agencies etc. These institutions play a vital role in the development of the capital market. Nepale capital market can be classified in organized sectors and non organized sectors. Government agencies and other institution, which are already mentioned above, categorized in organized sectors. They provide long term for the development of agriculture, industrial and commercial sectors by investing in stock, debenture and government bonds in individual sectors, merchant and private sectors also help for the development of capital market. Rural areas are still dominated by unorganized sectors. It implies that mass poverty and exploitation from higher classes are still found in these areas.

The main motto of 21st century's corporation is to provide maximum benefits to to its shareholder. Corporation's performance ultimately affects its shareholder welfare and the degree of welfare is measured by the price of equity .Shareholder shall have handsome capital gain and annual returns in term of cash dividends due to which investors tempted to invest in equity shares .Huge participation in an IPO of any corporation clearly reflects this facts. When the corporation's performance is well, this fact will be reflected by its equity price. We can take an example of Standard charted bank's share and Nepal Bangladesh bank's share price .At one time (nearly 4 years ago) the MPS OF NB Bank share was Rs3400.00 however at present in FY 2002/03 ,it is near about Rs300.What might be the reason behind this case? Obliviously, it is because of the decreasing performance of NB bank. Likewise there

are some industries in NEPSE whose stock price is negative or far below than its par value.

This study attempts to explore the cause, which actually affects equity price. In this connection, historical data 15 established corporations is taken under consideration .Not the least ,this study tries to carry out the effects of all relevant factors the upon MPS by analyzing their correlation and generating regression equation.

The portion of equity capital in the capital structure of any firm obviously higher than that of other components. This equity capital is raised from the promoters and then investors. Here the important considerable point is that why investors want to invest in any firm? The only reason behind it, is the very desire of having increasing wealth. Therefore, corporation's prime concern is to yield higher return for its investors .For this corporations must have strong profitability index. The degree of investor's welfare is represented by the price of equity, they hold. Equity price is only the measuring rod, which shows the corporation's strength in generating returns over its capital employed. The main issue of this study is to identify the determinants of equity price and the degree of influences of such determinants upon equity price. In general, it is assumed that stock prices move randomly i.e. unidentified movement; however, the basic track of the prices take is due to the performance – related – indicators of the corporations. Needless to say, earning per share indicates the probability of the corporations, dividend per share reflects the direct cash benefit to the investors. Net worth per share signifies the real or intrinsic value of shares, growth rate is related to the growth potentialities/possibilities of earnings and dividends , required rate of return indicates the rate of return which the investors actually desire , last but not the least , earning multiplier reflects the ratio of MPS to the EPS. In fact these variables provide the real way for the stock price movement if we identify the factors in proper manner, we can predict the future price of equity.

In addition to above, efficient market hypothesis also suggests some clues to identify the behavior of stock prices .If market is efficient, demand and supply results the fixation of equity prices where, new information is reflected by equity price. There it

is required to explain about security market .Security market is one of the major ingredients of capital market.

Capital market plays a vital role in the national economy .It plays an important role in reinvigorating and boosting economic activities in the country .It is an important intermediary between the borrower and lender of funds with in the economy and hence it facilitates for mobilizing the invisible resources. So the primary function of the capital market is to allocate resources optimally.’ One of the mechanisms of financing the industries from the external resources in modern times is the capital market through which the industrial enterprises with the corporate and organizational assemble of funds by issuing the various forms of securities. For the surplus spending units directly and via financial enterprise. (Mahat1981:39).Long term securities having the maturities greater than one year traded in capital market. It is an organized institution where various securities are issued and traded for the purpose of collection and mobilization of private and institutional savings. Capital markets also allow altering liquidity position, risk of their perspectives portfolios in response to availability of information and marketable securities. The efficient pricing mechanism of capital market allows the proper allocation of funds. Efficiency is the ability of capital markets, which facilitates securities to incorporate all relevant information in its prices. If capital market is efficient, the current shares prices of companies fully reflect available information and there is no question of share price being under price and over priced. However, more evidence of market efficiencies has been accumulating recently but investor should learn as fully and carefully as possible about the actual environment that exists in today’s investment world. Economical, political, social and technological factors are also directly affecting the capital market. Capital market consists of securities market and non securities market. Securities market implies mobilization of the funds through issuance of the securities like share, bonds and debentures by corporate sectors and bond .bills and debentures by government. These securities traded in secondary market are generally negotiable and hence can be traded in secondary markets. Non securities market refers to the mobilization of the financial resources by the financial institutions in firm of deposits and loans.

Primary and secondary markets are two wings of the capital market. Primary market concern with the issue of new companies stocks where as the secondary markets deal with the previously issued shares. The majority of all capital market transactions occur in the secondary market. The proceeds from the sale of securities in this market do not go to the original issuer, which means that it does not create any new additional capital. In other words .securities are traded among the individuals as well as institutional investors.

The forces of demand and supply interact to determine a stock market price.Prices move in trends because of imbalance between supply and demand. When the supply of the stock is greater than the demand, the trend will be down as there are more sellers and buyers when the demand exceeds supply price tend to rise. There are essential three concepts to explain the movement of stock price:

A financial system is a set of institutional arrangements through which financial surpluses in the economy are mobilized from surplus units and transferred to deficit spenders. Financial assets, financial markets and financial institutions are the basic ingredients of any financial system.

Financial market refers to the place where the transactions of mobilizing funds are performed. It is especially the market for paper or documents. Analytically, financial markets are very much like the market for goods and services. It deals with financial assets and instruments of various kinds such as currency, deposits, cheque, bills, bonds, etc.

Financial markets are the centers where the people with surplus funds interact with the business firms, which can utilize such funds efficiently. Speaking broadly, the purpose of financial markets in an economy is to allocate savings efficiently during a period of time to parties who use funds for investment in real assets or for consumption.

Efficient financial markets are essential to ensure adequate capital formation and economic growth in an economy. With financial intermediaries in an economy, the flow of saving from savers to user of the funds can be indirect. Financial

intermediaries include institutions such as commercial banks, life insurance companies, credit unions, and pension and profit sharing funds. These intermediaries come between ultimate borrowers and lenders by transforming direct claims into indirect ones. They purchase primary securities and, in turn, issue their own securities.

In sum, financial markets refer to the institution arrangements for dealings in financial assets and credit instruments of different types such as currency, cheques, bank deposits, bills, bonds, etc. Thus, financial markets facilitate a systematic transfer of funds to productive business companies and projects.

Financial markets are broadly classified as negotiated-loan markets and open markets. The negotiated-loan market is a market in which lender and borrower personally negotiate the terms of the loan agreement. A business person borrowing from a bank and an individual borrowing from small loan companies are examples of negotiated loans. In contrast, the open market is an impersonal market in which standardized securities are trade in large volumes. Buyer and sellers may never meet, and there is comparatively little latitude for tailoring an instrument to the precise needs of a given issuer. The stock market is an example of an open market. Securities are bought and sold by a myriad of investors through stock market. Thus, the open market provides the binding that ties the country's financial institutions together into an integrated part. However, open market is only concern of this study.

Financial instruments facilities the transfer of founds from surplus-spending units to deficit-spending units on the basis of credit required for short run and long run. Short run credit is required for the purpose of working capital of the companies whereas long run credit is required to purchase fixed assets. Short run credit is provided by money market and long run by capital market. In this way, the open market further can be classified into (i) the money market and (ii) the capital market. Moreover, capital market is relevant to the present study. So, this section deals with the theoretical aspect of only capital market.

1.2 Statement of Problem

Securities prices play a vital role in channeling the flow of capital into various industries. The behaviour of price of securities has been a controversial subject matter among the academics of financial and economic circles. To some extent fairly competitive and well-advanced economy, the pricing of securities is very satisfactory in capital market. The market prices of securities are competitive and determined by market forces. There ought not to be any difference between present value and market value of shares. In other words, securities price are set by the demand and supply of securities. This is, this study is trying to test the impact of various determinants upon equity prices. More specifically, the focus of this study is to identify the key determinants of equity prices and their relationship to the MPS. There are various approaches that handle and describe what kinds of law govern the securities prices and how they behave over period. However there are main two approaches to analyze the securities i.e Technical analysis and fundamental analysis. Likewise efficient market theory is also one of the best approaches to predict the successive price movement of stocks. Technical analyses are designed to measure certain aspects of supply and demand of securities. Technical analysis predict future price by studying the historical price movement of stock. If the market prices changes are independent then the securities markets are efficient market where the impact of new information upon security price is instantaneously. Therefore, successive price change show dependence, security analyst can just perform technical analysis otherwise shift to fundamental analysis.

In response to the economic liberalization and globalization policies adopted by the Nepalese government, the number of public limited companies is increasing rapidly, especially in service sectors such as banking, insurance, finance companies, airlines, hotels etc. The development of Nepal's capital market is also going in sound manner, as there is mandatory to enlist public limited companies in Nepal Stock Exchange (NEPSE). There are lots of companies listed in NEPSE. Though the banking sectors has dominant position. Most of the investor are not aware of the financial strength of the companies and they do not analyze companies financial indicators before they invest their funds through primary market participating in IPO and secondary market-NEPSE. The market price of common stock does not seem to

be in accordance with the financial indicators-Net worth per share (NWPS), Earning per share (EPS), Dividend per share(DPS) and so on. Instead of determination of the market price of share, there has been major influence of rumors rather strength of the companies. The market price per share (MPS) of commercial banks, especially foreign venture banks has been much higher than MPS of other sectors. More over, the overall NEPSE is depended upon MPS of such companies.

It has been observed that the MPS of public quoted companies is above than their book value .The market value is determined by the supply and demand functions .However in an efficient market; MPS fully reflects all the historical information publicly available. Here arise the questions of efficiency of the Nepalese Capital Market. The high movement of share prices may be the out comes of the efficient market behavior.

It is seen that Nepalese investors do not devote much time in analyzing the strength of the companies whose shares they are going to buy. Most of the investors are investing their funds haphazardly without considering risk involved and return pattern in their investment. Therefore it is must that every investor should be well aware of the degree of risks in which they are investing or going to invest their funds saving funds. The practice of analyzing various relevant aspects must brought up in context of Nepal. The center issue of this study is whether the MPS of listed companies especially for selected companies, are really representing the financial indicators, i.e. EPS, DPS, NWPS and price appreciation.

More specially, the research questions are:

1. What are the major financial indicators which have major influenced on determining the MPS ?
2. Is there any specific relationship of MPS with fundamental financial indicators ?
3. Is the trend of MPS running according with these financial indicators ?
4. Are the comon stock of sampled companies equilibrium priced ?

1.3 Objective of Study

The main objective of this study is to determine the factors affecting the stock price in Nepalese capital market. The special objectives are as follows.

- 1) To identify the major financial indicators this affects on determining the equity prices.
- 2) To examine and evaluate the relationship of MPS with various financial indicators like EPS, DPS, NWPS and price appreciations.
- 3) To identify whether stocks of the sampled companies are over price under price or equilibrium priced,
- 4) To know the investor's and market behaviour in Nepal stock market

1.4 Significance of the Study

Determinant of equity price are important nowadays because it is getting considerable attention in financial management. Determinants of equity determine and analysis the corporations' strength in getting returns over its capital employed .This study mainly analysis the degree of influences of such determinants upon equity prices in Nepalese companies. It also discusses the relationship between EPS, DPS, NWPS growth rate ,required rate of return and earning multiplier.

A corporate sector is an expanding one but there is an information gap between the management of Nepalese companies and the Nepalese investors who are eager to invest in shares. Moreover, they are investing in the shares in trial error methods. There fore the clear picture of determinants of equity price can be an effective way to attract new investor along with keeping present investors happy and maintaining reputations of the companies This study is devoted to analysis interpretation, and compare of various applicable variables .Thus it provides important guidelines to the management in setting suitable equity price determination in their respective corporations .It also helps regulatory body in counseling investor to make rational decisions while investing in shares. It also hope that it will provide relevant and pertinent literature for future research on the area of equity price determination .Thus the study of “Share Price Determinates and Investors' Behaviour in Nepal" may be very respectful and rewarding.

1.5 Limitation of the Study

Due to the lack of adequate infrastructure, limited activities of stock exchange and recent phenomenon, the development of secondary market has remained in floor .It ,therefore signifies that the NEPSE index alone could not measure the degree of overall economic activities .Once NEPSE crossed the four digit index (i.e. 31 Aug., 2008). Even more stock exchange could not cover all the firms under its umbrella. The listed companies as well, do not report their annual report to the SEBO. Nevertheless, this study is mainly concerned with the financial indicators, which influence equity price.

Basically the study is conducted for the partial fulfillment of MBS. As it is said that human beings are bound to mistake with some obvious limitation. The limitations of the study as follows:

- 1) The study mainly concerned with banking and finance sectors, which are listed in stock exchange limited .These data, are based on up to seven years transactions period in secondary market.
- 2) The study is mainly based on secondary data as well as primary data.
- 3) It is also limited to analyze these problems directly affect the stock price.
- 4) Information collected from SEBO published balance sheet, profit and loss account and other articles and concerned websites. Foreign information and rules affecting the share price is ignored.
- 5) Among various financial indicators are taken under consideration to assess their combined effect on equity price.
- 6) Descriptive factors of political, economical, legal and social environment are ignored because of the lack of their numerical values.
- 7) Some of the sample companies have been upgraded in their status given by Nepal Rastra Bank which is omitted here (e.g. DCBL have become commercial bank but has been taken as development bank in this study.
- 8) Due to the unavailability of data, market price of share, earning price per share and dividend per share of some years of some companies are not included in this study. Likewise, due to the time constraints all the concerned areas are not possible to cover in depth.

- 9) Hundred Questionnaires had been distributed to the respondents but only eighty respondents gave answers which certainly affect the results

1.6 Organization of the Study

This study has been organized into five chapters each devoted to some aspect of the study of Factors affecting on stock price and pricing status in Nepal. The title of each of these chapters is as follows:

Chapter One : Introduction

This chapter contains the introductory part of the study. As already mentioned, this chapter describes the major issue to be investigated along with the objectives, focus of the study, and significance of the study and limitation of the study.

Chapter Two: Review of the Literature

This chapter is devoted to theoretical analysis and brief review of related and pertinent literature available. It includes the discussion on conceptual frame work and review of the major studies.

Chapter Three : Research Methodology

This chapter describes the research methodology employed in the study. This chapter deals with research design, population and sample, sources of data, data collection techniques and data analysis tools.

Chapter Four : Data Presentation and Analysis

This chapter deals with the presentation and analysis and major findings of the study on equity prices.

Chapter Five : Summary Conclusion & Recommendation

This chapter states summary, conclusion and recommendation. The bibliography and appendices are incorporated at the end of the study.

CHAPTER II

REVIEW OF LITERATURE

This chapter is related to the review of literature related to the study. This chapter deals with the basic theoretical concept upon which this study is based. It can be divided into two parts first part deals with conceptual frame work and a second part implies the review of previews studies.

2.1 Conceptual Frame Work

This setting presents the concept of common stock it's trading on stock market, concept of financial and different approaches of recruiting analysis.

Common stock represents equity or an ownership position in a corporation. It is a residual claim, in the sense that creditors and preferred stock holders must be paid as scheduled before common stockholders can receive any payment. In bankruptcy, stockholders are in principle entitled to any value remaining after all other claimants have been satisfied. Hence, common stock is a legal representation of the right to receive perspective future benefit under stated conditions.

Common stocks are generally 'fully paid and no assessable'. It is in the sense that common stockholders may lose their initial investment, but not more. That is, if the corporation fails to meet its obligations, the stockholders cannot be forced to give the corporation the funds are needed to pay off the obligations. However, as a result of such a failure, it is possible that the value of a corporation's share will be negligible. This will result in the stockholders' have lost an amount equal to the price previously paid to buy the shares.

Common stockholders are entitled to stock certificate, which in fact represents ownership position. In other words, a single certificate has typically represented the ownership of a firm's stock with the number of shares held by the particular investors noted on it. Such a stock certificate is usually registered with the books. Dividend payments, voting materials, annual and quarterly reports and other mailing are sent directly to the investors taking in to account the size of his or her holdings.

A share of a common stock can be authorized either with or without par value. The par value of a stock is merely a stated figure in the corporate chapter and is of little economic significance.' A company should not issue stock at a price less than par value because stockholders who bought stock for less than value would be liable to creditors the difference between the below - par price they paid and the par value.' As stated frequently, common stockholders are legal owner of the corporation and thus they are entitled to bear the risk of ownership. Common stock entitles its owner to dividends but only if the company has earnings out of which dividends can be paid and only if management chooses to pay the dividends rather than to retain all the earnings. Common stock in legal sense does not provide any promise to pay dividends. The holders of common stock may expect dividends but such expectation may not in fact be met. It is, therefore, said that investing in common stock is riskier than investing in any other 'fixed income securities'. In this way, common stockholders expect to collect dividends and eventually cash dividends stream and the price appreciation. Suppose that the current price of share is P_0 , the expected price at the end of a year is P_1 and the expected dividend is D_1 , the rate of return that investors expect from the share over the next year is defined as the expected dividend per share D_1 plus expected price appreciation per share $P_1 - P_0$, all divided by the price at the start of the year P_0 .

$$\text{Expected return} = \frac{D_1 + (P_1 - P_0)}{P_0}$$

= Dividend yield + Capital gain yield

This return that is expected by investors is often called the market capitalization rate. Prasana Chandra has defined the term 'return' very precisely as the he stated that "the return from an investment is the realizable cash flow earned by the beginning of period value of investment". In this way, in one hand realizable cash flow in from of cash dividend is the main source of return, which in real sense promotes investors to invest when they sell their holdings. Capital gain may be their attraction which may realize when they sell their holdings. Capital gain can be defined as the access money over the purchase price of stock. If stock is sold at a price higher than its purchase

price, the investors will be entitled by capital gain. On the contrary, if reverse situation of the above exists, stockholders suffer from capital loss.

As far the legal rights and privileges of common stockholders, they are the owners of a corporation. They have the right to elect the firm's directors, who in turn elect the offices who will manage the business. Each share of stock has one vote. Stockholders can appear at the annual meeting and vote in person, but typically they transfer their right to vote to a second party by means of proxy. Proxy is a "a document giving one person the authority to act for another, typically the power to vote shares of common stock." (Weston & Brigham 7th edition 676). Management always solicits stockholders' proxies and usually gets them. However, if earnings are poor overthrow management and take over control of the business. This practice is widely known as proxy fight by which we mean 'an attempt by a person, group, or company to gain control of a firm by getting the stockholders to grant them the authority to vote their shares of stock in order to vote a new management' into office. In this way, voting right is the main and foremost important right of stockholders.

Common stockholders often have the right, called the pre-emptive right, to purchase any additional shares sold by the firm. It is necessary to specifically insert into the charter. In other words, preemptive right is a "provision in the corporate charter or bylaws that gives common stockholders the right to purchase on a pro rate basis new issues of common stock (or convertible securities)" (Weston & Brigham 7th edition 676). The purpose of the preemptive-right is of two fold. First, it protects the power of control of present stockholders. If it were not for this safeguard, the management of a corporation under criticism from stockholders could present stockholders from removing it from office by issuing a large number of additional shares and purchasing these shares itself, management would thereby secure control of the corporation and frustrate the will of the current stockholders.

The second, and by far the more important reason for the preemptive right is that it protects stockholders against a dilution of value. If preemptive right does not exist, a management decides to issue additional shares, this would decline market price per share significantly due to which the value of old 1000 shares of common stock, each with a price of \$100 were outstanding, market the total market value of the firm

\$100000. If an additional 1000 shares were sold at \$50 a share, or for \$50000, this would raise the total market value of the firm to \$150000. When the total market value is divided by the new total shares outstanding, a value of \$75 a share is obtained. The old stockholders thus lose \$25 per share and the new stockholders have an instant profit of \$25 per share. Thus, selling common stock at a price below the market value would dilute its price and would transfer wealth from the presents such occurrences (Weston & Brigham 7th edition 676).

Generally common stocks are not of various types i.e. must firm have only one type of common stock. However, in some instances, classified stock is used to meet the special needs of the company. In true sense, common stock that is given special designations, such as class A, class B and so forth, in order to meet special needs of the company, is known as classified common stocks. Small, new companies seeking to obtain funds from outside sources frequently use different types of common stocks.

2.2 Concept of Capital Market

The capital market (CM) refers to that market in which long-term funds are borrowed and lent. In other words, it refers to the links between lenders and borrowers of funds arranging a funds transfer process to seek each other's benefit. It is just the market for capital funds. The word "Capital" used in this context, implies a long-term commitment on the part of the lender and a long-term need for the funds on the part of the borrower: Both lenders and borrowers coming together in capital market play effective financial intermediary role in primary and secondary market through the use of various, convertible issues, etc. Thus, strictly speaking, the market encompasses any transaction involving long-term debt or equity obligations.

In literal sense, the term "Capital Market" is used to desirable the institutional arrangement for facilitating the borrowing and lending of long-term funds. Businesses, in the form of public limited companies require long-term or permanent capital in order to finance their activities, or to undertake expansion schemes. In a similar way, government needs large quantities of funds in order to be able to provide and expand service such as education, health-care, and defense. As both companies and government require the money they raise money by issuing different securities.

Stock exchange plays a significant role in mobilizing funds in capital market. Investment institutions, unit trusts, industrial banks, insurance companies, etc, also raise funds from public and sometimes from government too through various securities and use the m for long run investments. Securities dealt in capital market are long-term securities. Some securities are of perpetual nature and others are for a longer period. Debentures may be either redeemable or irredeemable, the proceeds of life insurance policies may be repayable at death or at maturity. Stock exchange, investment trust and insurance companies are the major segments of capital market.

In developing countries, the unorganized capital market is still a prevailing characteristic of the economy. But it has crucial role to play in channeling funds from savers to users of funds as they hold huge amounts of the financial assets.

The capital market can be usefully sub-divided into the primary market and the secondary market. The primary market deals with the selling of new securities whereas the secondary market deals with the securities previously issued in the market.

Primary Market

Securities available for the first time are offered through the primary markets. The issuer may be the brand new company or one that has in business for many years. Primary markets are used to denote the market for the original sale of securities by an issuer to the public. The volume new issue in the primary market, particularly of common stock, is directly related to market conditions. When the market is high or rising, the number of new issues being offered to the public rises and when the market is low or falling, the number declines.

The institution that dominates the primary market is the investment-banking house. It is a traditional middleman in the primary market. When a company decides to acquire new funds from the outside, it will frequently do so through the intermediation of an investment banker in the developed countries. The investment banker's principle activity is to bring sellers and buyers together in the market. They are specialists in the market in of new securities. They advise companies in the design of the security. Although there are a number of possible arrangements, the investment-banking house underwrites to buy the securities from the issuing company and them sells them to the public.

In addition, placing new securities through the intermediation of investment bankers, many companies engage in the private placement of securities. In private placement, the issuer of the securities sells securities directly to investors without underwriting services of an investment banker. This method is cheaper, and it avoids the underwriting costs.

Secondary Market

Securities that have been previously (Primarily) issued are traded in the secondary market. The majority of all capital market transactions occur in the secondary market. The proceeds from sale of securities in the secondary market do not go to the original issuer but to the owners of the securities. In other words, securities are traded among the individual as well as institutional investors.

The function of the secondary market is to provide liquidity for securities purchased in the primary markets. Once investors have purchased securities in the primary market, they need the place to sell those securities in the secondary market. Secondary market can be categorized into two parts i.e.

- i. Organized Securities Exchange.
- ii. Over the counter market.

Over The Counter Market (OTC)

The over-counter-market (OTC) is the market for these securities not listed on the stock exchanges. When the company first sells its securities to the public, the securities are traded in the OTC. It includes all transaction in securities other than those taking place on the stock exchanges. In practice, however, the term is usually limited to the activities of dealers and brokers specializing in unlisted securities. OTC has every low entry barrier, and traders may range in size from very large houses doing an international business to one person firms that trade only in local markets.

The Stock Exchange: Stock exchange are voluntary associations of members who come together for the purpose of buying and selling, for the general public, the securities of the great companies. Only listed securities are traded in the exchange and are bought and sold by auction. Since the members of these exchanges have branches

throughout the country, the stock exchanges are truly a national market in which virtually anyone may participate.

The stock exchanges play an indispensable role in mobilizing funds in capital market. The essential function of a stock exchanger is to provide active market place for corporate shares and other listed securities. The various virtues governing stock exchange include enhanced marketability of securities, rational allocation of investible funds, facilitate economic growth and wealth generation and proper maturity, liquidity, marketability and diversification of investment. The growth of capital market through the vehicle of stock exchange has brought a flow of the information about various securities in addition to the sound listing criteria that prove worthwhile to the investors. However, the secondary market is said to give liquidity to primary issues, and this liquidity is an essential ingredient in the capital formation process of the economy.

Organized Securities Exchanges

Organized securities exchange are the physical location where trading of securities are done under a set of rules and regulations. Investors usually purchase securities in the Secondary Market by calling securities Broker. In the Secondary Market investors buy and sell securities themselves, the issuer never gets any cash flow from the trades. Nepal Stock Exchange (NEPSE) is an example of organized stock exchange and this is the only one stock exchange of Nepal. Similarly New York Stock Exchange (NYSE), Tokyo Stock Exchange, American Stock Exchange (AMEX), S & P 500 Dow, John are the examples of organized stock exchanges. Organized securities market is a place where people buy and sell financial instruments. Specialized markets may also exist to deal in specific type of securities such as bond markets, stock markets and govt. bond markets.

2.3 An Introduction to NEPSE

Securities Exchange Centre was established with an objective of facilitating and promoting the growth Capital Market. Before its conversion into Stock Exchange, it was only the Capital Market Institution undertaking the job of Government Bonds and other financial services. In 1993 the centre was converted in Nepal Stock Exchange (NEPSE) with the basic objective of importing free marketability and providing

liquidity to the Government and Corporate Securities by facilitating transactions in its trading floor through market intermediaries, such as Broker, Market Markets etc. NEPSE is a non profit organization, operating under Securities Exchange Act 1983. "The basic objective of NEPSE is to impart free marketability and liquidity to the government bonds and corporation securities by facilitating transactions in its trading floor through market intermediaries, such as brokers, market markers, etc."

NEPSE opened its trading floor on 13th January 1994 through licensed members. HMG, Rastra Bank, Nepal Industrial Development Corporation and licensed members are the shareholders of the NEPSE.

Board of Directors

The Board of Directors of the NEPSE consists nine Directors in accordance with Securities Exchange Act, 1983. Six Directors are nominated by HMG/N and different institutional investors. Two from the licensed members and the General Manager of the NEPSE is the Ex-official Director of the Board. The Board of Directors in NEPSE is presented in Box 2.1.

Table 2.1
Board of Director of NEPSE

S.N	Name of Organization	No. of Direction	Designation
1.	Ministry of Finance	1	Chairman
2.	Securities Board	2	Director
3.	Nepal Rastra Bank	2	Director
4.	Nepal Industrial Development Cor.	1	Director
5.	Licensed Members	2	Director
6.	General Manager of NEPSE	1	Director

Sources : nepalstock.com

Capital Structure

The authorized and issued capital of the exchange is Rs.50 million, of this Rs.43.01 millions is subscribed by HMG/N, Nepal Rastra Bank, Nepal Industrial Development Corporation and Licensed members. The capital structure of NEPSE is presented in Box 2.2.

Table 2.2
Capital Structure of NEPSE

S.N.	Shareholders	Rs. in Million	Percentage (%)
1.	NG/N	20.48	58.67
2.	NRB	12.08	34.60
3.	NIDC	2.14	6.13
4.	Members	0.21	0.60
Total		34.91	100.00

Sources : nepalstock.com

Members of NEPSE

Members of NEPSE are permitted to act as intermediate in buying and selling of Government Bonds and listed corporate securities. Presently there are 27 members Brokers operating on the trading floor as the securities Exchange Act, 1983, rules and bye-laws of the exchange. Besides this, NEPASE has also licensed to dealer for Primary and Secondary Market. Primary Market Dealer operates as a portfolio Manager. Presently, NEPSE licensed to 12 Dealers for Primary Market and 2 Dealers for Secondary Market.

Price Regulation

NEPSE has brought our change in price quoting rules since the fiscal year 2003/2004. The percentage of fixation of operating price has been reduced from 10% to 5%. It means the opening price of any day shall not be more or less than 5% of the previous trading day's Closing Price. Once the transactions are done with in the range, the price can be changed within a limit of 2% inn each consecutive transaction.

In the same way the opening price of the corporate Bond shall be quoted with in the range of 0.2% of the previous day's Closing price and once the transaction is done the price can be changed within the range of 0.10 or multiple of it. The list of security broker is presented in Annex 2.

Settlement

NEPSE adopted T+5 systems. The existing system of settlement system has been changed from T+5 to T+3. The changed system has been implemented since 17th July

2003. Under the prevailing system the transactions done in the trading floor need to be settled within 3 working days excluded the transaction date. Settlement will be carried out on the basis paper versus payment.

Brokerage Commission

The rate of brokerage commission on equity transaction ranges from 1% to 1.5% depending on the trade amount. The rate of brokerage commission on debenture ranges from 0.15 percentage to 0.75 percent. As per the rules, the rate of brokerage commission is presented in Box 2.3 and Box 2.4.

Table 2.3
Commission on Shares Transaction

Traded Amount	Rate of Commission
Up to Rs.25,000/-	1.5%
Rs.25,001/-	1.4%
Rs.50,001/- to Rs.1,00,000/-	1.3%
Rs.1,00,001/- to Rs.5,00,000/-	1.2%
Rs.5,00,001/- to Rs.10,00,000/-	1.1%
Above Rs.10,00,000/-	1.0%

Source : nepalstock.com

Table 2.4
Commission on Corporate Board Transaction

Traded Amount	Rate of Commission
Up to Rs.1,00,000/-	0.75%
Rs.1,00,000/- to Rs.5,00,000/-	0.60%
Rs. 5,00,001/- to Rs. 10,00,000/-	0.45%
Rs. 10,00,001/- to Rs.50,00,000/-	0.30%
Above Rs.50,00,000/-	0.15%

Source : nepalstock.com

Stock Exchanger Membership and Transaction by law (1998) specify three alternatives to the investors to state the price while placing an order to the Brokers. The three alternative prices are fixed price, maximum or minimum price and

appropriate price perceived by the brokers. A study was conducted dividing the three alternatives in two types of order: limit order (Fixed Price, Maximum and Minimum Price) and market order (appropriate price perceived by the Broker). Total orders during 14th March to 12th, April, 2004 from 27 Brokers were observed. The study showed that 62% orders were market orders and 38% limit orders and concluded that most of the Nepalese investors place market orders and they are highly dependent upon the Brokers.

2.4 Securities Board of Nepal (SEBON)

Securities Exchange Board of Nepal was established by HMG/N on June 7, 1993, under the Securities Exchange Act, 1083. The objective of SEBO is regulating, monitoring, directing, controlling and coordinating the entire capital market. The SEBO works under the ministry of finance. It's 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 invest of investors. Nepal Stock Exchange is a trading instituting, whereas Securities Board is the regulatory body. Before the Board came into existence, the corporate body desirous to carry out the transactions. Though any corporation body desirous to carry out the transaction of securities can submit application to the Board for obtaining the license, till now Nepal Stock Exchange Ltd., alone is representing the securities Market in the country.

As per the Securities Exchange Act an Regulation, following are the major function of SEBO.

- Develop and implement polices and programme for the development of Securities Market and advice HMG/N in this regard.
- Register Securities and grant issue approval.
- Provide license to corporate bodies to operate stock exchange business.
- Provide license to operate securities business.
- Supervise and monitor stock exchange and securities business persons.
- Conduct research, study and awareness programmes regarding securities market.

A Board composed of seven members including a Chairman governs SEBO. The board has representatives from Government line ministers and institutions as well as the Private sector. The Chairman of SEBO is appointed by HMG/N for a period of four years. Other members of the Board include representatives one each from Ministry of Finance, Ministry of Law, Justice and Parliamentary Affairs, Ministry of Industries, Commerce and Supplies, Nepal Rastra Bank, Federation of Nepalese Chambers of Commerce and Industries and Association of Chartered Accountants of Nepal. In this fiscal year, a total of 18 board meetings were held. SEBO, in its organizational structure has two departments, six divisions and ten sections. Under the corporate Finance and Administration Department, there are division, Account and Administration Division and HRD and Educational Division. There are also three divisions under the securities market regulation Department, which are legal and enforcement division, Market regulation and compliance Division and Market Analysis and Planning Development Division. SEBO, in performing its responsibilities is also taking expert opinions from Accounting and Legal professionals as and when required.

Similarly to make prospectuses of issuer companies more informative and reliable, SEBO has formed "Securities Registration and Issue Approval Committee" with representation from SEBO, NEPSE and CRO. Provision has also been made for the representation from Nepal Rastra Bank and Insurance Board in this committee.

SEBO is basically relying on Government grant to finance its activities. Other financing sources for SEBO include registration of corporate securities, renewal of Stock Exchange and Registration of its revolving fund.

People's participation in security investment and its dynamic trading play a vital role in overall economic development of a nation. For this purpose potential investors must be able to analyze risk and return of stock investment and increase the degree of market efficiency that is essential to speed up economic development of the nation.

2.5 Theory of Price Behavior

Demand and supply forces interact to determinate the stock market price. If demand is high and supply is low then the price of stock goes up and vice-versa. There are essentially two schools of thought to explain the stock price behavior. They are:

- I. Inefficient Market Theory
- II. Efficient Market Theory

2.5.1 Inefficient Market Theory

The main theme of this theory is that the security market is inefficient. This theory is also known as conventional approach of security price analysis. It includes technical analysis theory and fundamental analysis theory, because "Prior to the development of efficient market theory, investors were generally divided into two groups: Fundamentalists and Technicians" (Reilly 1986: 347). The two groups are explained as follows.

(A) Technical Analysis Theory:

Technical analysis theory includes study of past price and volume data of stock to forecast future price movements. It is an alternative approach to predicting stock price behaviour in literature of investment management. Technical approach is market oriented philosophy and it can concentrate on the forces supply of and the demand for shares as reflected in the action of markets rather than the intrinsic worth of share. The analysts or prospective investor who analyze securities to predict the future price of a share on the basis of study of its price movements in the past known as technical analysts.

A technical analysis or technician is a security analyst who believes, it is not productive to work through all the fundamental facts about the issuing corporation the company's earnings, its products, forthcoming legislation that might affect the firm. Instead, technical analysis believe that these innumerable fundamental facts are summarized and represented on charts of security prices and on related summary statistics about security transactions. As a result, technical analysts are sometimes called chartists. Most technical analysts prepare and study charts of various financial

variables in order to make forecasts tools. Professional technical analysis use dozens of different techniques.

Technical analysis is based on the widely accepted premise that security prices are determined by the supply of, and the demand for, securities. The tools of technical analysis are, therefore, designed to measure certain aspect of supply and demand. Typically, technical analysts record historical financial data on charts, study these charts in search of patterns that they find meaningful and Endeavour to use the patterns to predict future prices. Some charts are used to predict the movements of a single security, others are used to predict the movements of a market index, and, still others are used to predict the action of both individual assets and the market. The basic assumptions underlying technical analysis are listed below:

- I. Market value is determined by the interaction of demand and supply.
- II. Supply and demand is governed by numerous factors, both rational and irrational.
- III. Security prices tend to move in trends that persist for an appreciable length of time, despite minor fluctuations in the market.
- IV. Changes in a trend are caused by the shift in supply and demand.
- V. Shift in supply and demand, no matter why they occur, can be detected sooner or faster in charts of market transactions.
- VI. Some charts patterns tend to repeat themselves.

Stock price 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 prices; and if the forces of supply and demand are nearly equal, the market will move sideways in what is called a 'trading range'. Eventually, new information will enter into the market and the market will start to react again resulting the share price up and down depending on weather the new information is taken as positive or negative. Trends, which are very brief, are called minor trends; those lasting a few weeks are known as intermediate trends; and trends lasting for a period of months are us to act safely in market both in bullish and bearish market.

Price moves in trends. A trend indicates that there exists an inequality between the forces of supply and demand. Such changes in the forces of demand and supply are usually 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.

Followings are the tools used by technical analysts to measure supply and demand and forecast securities prices. The remarkable limitation of these tools is that it is quite descriptive or subjective in its type.

The Venerable Dow Theory

The Dow Theory is one of the oldest and most famous technical tools; Charles DOW, founder of the Dow Jones Company and editor of the wall street journal around 1900, originated it. Though, the Dow Theory is old, many versions of the theory exist and are used even today; it is the basis for much of the work done by technical analysts. The Dow Theory is used to delineate trend in the market as a whole or in individual securities. According to Mr. DOW; "The market is always considered as having three movements, all going at the same time. The first is the narrow movement from day to day. The second is the short swing, running from two weeks to a month or more; the third is the main movements, covering at least 4 years in duration." (The wall street journal Dec 19, 1900) Dow Theory practitioners refer to these components as:

- I. Primary trends are commonly called bear or bull markets. Delineating primary trend is the primary goal of the Dow theorists.
- II. Secondary movements last on ly a few months. Secondary movements are sometimes called corrections.
- III. Tertiary moves are simply the daily fluctuations. The Dow Theory asserts that daily fluctuations are essentially meaningless random wiggles. Nonetheless, the chartist should plot the asset's price or the market average each day in order to trace out the primary and secondary trends.

Bar Charts

Technical analysts employ different charting techniques. Bar charts have vertical bars representing each day's price movement. Each bar spans the distance from the day's highest price to the day's lowest price, and a small cross on each bar marks that day's closing price.

Line charts and bar charts usually have bar graphs along the bottoms of the charts showing the volume of shares traded at each date. Next to the prices, trading volume is the second most important statistic technicians follow. As an example of how technical analysts try to relate stock price moves and the volume of shares traded, we can consider a "head and shoulders" pattern formation. A head and shoulders top (HTS) is a formation, which is supposed to signal that the security's price has reached a top and will decline in the future. The market action that forms a HST can be broken down into four phases.

- I. Left shoulder: A period of heavy buying followed by a lull trading pushes the price up to a new peak before the price begins to slide down.
- II. Head: A spurt heavy buying raises prices to a new high and then allows the price to fall back below the top of the left shoulder.
- III. Right Shoulder: A moderate rally lifts the price somewhat but fails to push prices as high as the top of the head before decline begins.
- IV. Confirmation or break out: Prices fall below the neckline, that is, line drawn tangent to the bottoms of the left and right shoulders. This break out is supposed to precede a price drop and is a signal to sell.

Contrary opinion theories:

Theories of contrary opinion advocate doing the opposite of what some particular group of investors is doing. The odd-lot theory, for instance, assumes that small investors are usually wrong, and it is therefore advantageous to pursue strategies that are the opposite of what the odd-lotters are doing.

Round lots are transactions involving multiples of 100 shares. Odd lots are transactions of less than 100 shares. Since the sales commission on odd lots is higher than the commission on round lots. Most odd-lot purchases are made by amateur investors with limited resources "The man in the street."

The profound idea in these theories is the construction of odd-lot purchases sales index, which is typically plotted concurrently with some market-some chartists use it as a leading indicator of market prices. High odd lot purchases-sales ratios are presumed to forecast falls in the market, and low purchases-sales ratios are presumed to occur towards the end of bear markets.

Several chartists follow short sales trading statistics. Some short sales followers use sales for individual securities in search of information about that security. However, both groups interpret a high level of outstanding short sales as a sign of increased future demand for securities with which to cover outstanding short positions. Thus, rising short sales is believed to foretell future demand for securities that will bid up their prices. This is the short sales contrary theory.

Confidence Index

Two indicators of confidence have been popular with market analysts. One is based upon Barron's ratio of higher to lower-grade bond yield. The other compares standard and Poor's low priced and high-grade common stocks.

Barron's indicator divides high-grade bond yield by the relatively higher yields of low-grade bonds. A rise in the index indicates a narrowing of the spread between high-and low-grade bonds. Narrowing yield spreads were indicative of boom times or rising stock markets; so a fall i index would imply widening yield spreads and recessed conditions in the economy and markets. The assumptions behind the value of index is that 'smart' money moves from high to low quality, or vice-versa, in anticipation of major market shifts, and such a move causes yield spreads to change. To the extent that this is true, Barron's confidence index is a leading indicator of the economy and the stock and market.

The S & P confidence indicator measures low priced common stocks and high-grade common stocks. Speculative stocks are assumed to be closely identified with low priced shares. When the market is become advance, investors are willing to take greater risks and buy speculative (low priced) stocks. During market declines, quality (in high-grade stocks) is sought. The index (low-priced/high grade) would fall prior to

a market peak as confidence wanes and speculative stocks are changed for high quality shares. A rise in the index would signal revival from a market bottom.

Breadth of Market:

Breadth-of-market indicators are used to measure the underlying strength of market advances or declines. To gauge the real underlying strength of the market, analysts need tools to measure the breadth of the market's moves. One of the easiest tools is to compare the number of issues that advanced in price and the number that declined in some particular market. More specifically, the number of issues whose prices declined is subtracted from the number of issues whose prices advanced each day to get daily net advances or declines. Cumulating the daily net advances and declines; the breadth of market statistic is obtained. Only the direction, not the level, of the breadth of market statistics is relevant.

Relative Strength Analysis

The relative strength approach to technical analysis suggest that the some securities rise relatively faster in a bull market or decline relatively more slowly in a bear market than other securities-that is Some securities exhibit relative strength. Relative strength technicians believe that by investing in securities that have demonstrated relative strength in the past, an investor will earn higher return because the relative strength of a security sometimes continues for some times. The relative strength may be applied to individual securities or industries. Technicians measure relative strength in several ways. Some simply calculate rate of return and classify those securities with historically high average returns as securities with high relative strength.

Charting volume of shares traded data:

Many technical analysts believe they can get a better idea of whether a market is bullish or bearish by studying trading volume. Volume is supposed to be a measure of the intensity of investors' emotions. There is a Wall Street adage that "it takes volume to move a stock ", either up or down in price. And a large amount of trading volume is often associated with large price changes. Thus, it is reasonable for stock price chartists to study volume data in an effort to discern what might cause specific stock price movements. But the cause-and-effort to discern what might cause specific stock price and the price change in the trade security is vague and hard to unravel.

Volume technicians watch volume most closely on days when supply and demand appear to be moving to a new equilibrium. If high volume occurs on days when prices move up, the market is considered to be bullish. High volume on days when prices are falling is a bearish sign. If the same price changes occurred on low trading volume, they would be considered less significant.

There is one occasion when falling prices and high volume are considered bullish. When technicians feel the end of a bear market is near, they watch for a high volume of selling as the last of the bearish investors liquidate their holdings-this is called a "selling climax." A selling climax is supposed to eliminate the last of the bears that drive prices down by selling, clearing the way for the market to turn up.

Some technicians also look for "speculative blow off" to mark the end of a bull market. A speculative blow off is a high volume of buying that pushes prices up to a peak; it is supposed to exhaust the enthusiasm of bullish speculators and make way for a bear market to begin. Technicians who believe that a speculative blow off marks the end of a bull market say, "The market must die with a bang, not a whimper."

Moving-average analysis:-

Technicians, who follow this tool to analyze and predict the security prices, are called moving average technicians or rate change technicians. Under this method, they predict security price by watching a moving average of the price of security. The moving average is used to provide a smoothed, stable reference point against which the daily fluctuations can be gauged. Rate-of change analysis is used for individual securities or market indexes.

Selecting the span of time over which to calculate the moving average affects the volatility of the moving average. Some technicians who perform rate of change analysis as the most recent day is added and the two-hundred-and first day is dropped. In this way, technicians construct moving average chart.

When the daily prices penetrate the moving-average line, technicians interpret this penetration as a signal. When the daily prices move downward through the moving

average, they frequently fail to rise again for many months. Thus, a downward penetration of a flattened moving average suggests selling. When actual prices are above the moving average but the difference is narrowing, this is a signal that a bull market may be ending. Several buy and sell signals followed by moving average chartists are given below.

Moving average analysts recommend buying a stock when (1) the moving average flattens out and the stock's price rises through the moving average, (2) the price of a stock falls below a moving average line that is rising, and (3) a stock's price that is above the moving average line falls but turns around and begins to rise again before it ever reaches the moving average line.

In conclusion of this segment, it is observed that all the technical analysis tools have one common characteristic—they attempt to measure supply and demand. Technical analysis assumes that at least some of the shifts in supply and demand occur gradually over time, rather than instantaneously. When shifting prices are detected, they are presumed to be the result of gradual shifts in supply and demand rather than a series of instantaneous shifts. Shifts are expected to continue as the price gradually reacts to news or other factors; the price change pattern is extrapolated to predict future price changes.

B. Fundamental Analysis Theory:

Fundamental analysis approach involves working to analyze different factors such as economic influences, industry factors, governmental actions, firm's financial statement, its competitors and pertinent company information like product demand, earnings dividends and management in order to calculate an intrinsic value of stock is popularly known as fundamental analysts or fundamentalists .

Fundamental analysis approach involves working to analyze different factors such as economic influences, industry factor, governmental actions, firm's financial statement, its competitors and pertinent company information like product demand, earnings, dividends and management in order to calculate an intrinsic value for firm's securities. The analyst who believes on fundamental facts to determine the intrinsic value of stock is popularly known as fundamental analyst or fundamental.

Fundamentalists forecast stock price on the basis of economic industry and company statistic. The principle decision variables ultimately take form of earning and value with as risk-return framework base upon earning power and the economic environment. Fundamental analysts believe in to companies' earnings. Their management, economic outlook, firm's competitors' market conditions and many other factors.

The objective of fundamental security analysis is to appraise the intrinsic value of a security. The intrinsic value is the true economic work of financial assets." The fundamentalists maintain that any points of time, every stock has intrinsic value, which should in principle be equal to the present value of the future stream of income from that discounted at an appropriate risk related rate of interest." (Bhalla, 1983:2833). Therefore the actual price of security is considered to be a function of a set of anticipation. Price changes as anticipation changes which in turn change, as a result of new information. In order words: a new piece of new is released, securities market price value of the future income which the owner of the shares will receive." (Francis, 1986:398) And the actual price should reflect intrinsic value of the stock i.e. good anticipation of cash flows and capitalization rate corresponding to future time period. But in practice, first it is not know in advance what the appropriate discount rate should be for a particular stock ? Therefore, fundamentalists estimate their intrinsic value by studying in detail of all matters that is relevant to company. There are various factors that fundamentalists talk in to account to reflect the price of the securities. These factors are identified as the determinants of equity and effects of such factors over MPS shall be explored. Fundamental analysis includes the following variables under consideration:

- A. Business Environment Analysis
- B. Industry Analysis
- C. Company Analysis

Business Environment Analysis

The primary motive for buying a stock is to sell it subsequently at a higher price. In many cases, dividends will be expected also. Dividends and price changes are the principal ingredients in what investors regard as return or yield.

If an investor had impeccable information and insight about dividends and stock price over subsequent periods, he would be well on his way to great riches. But the real world of investing is full of political, economic, and social and other forces that we do not understand sufficiently to permit us to predict anything with absolute certainty. Forces intermix and flow at cross currently. Nothing is static.

The significance of this theme is that stock price is highly affected by external factors (i.e. out of control of management). Determination of stock price is thus a critical task and investors should put their full efforts to analyze existing environment so that they could forecast the future dividends more accurately and price changes more precisely.

Business environment influence is the root cause, which appears in the general economic environmental and has great influence over stock price. General economic environment includes national income, defence expenditure, monetary policy, fiscal policy, trade and commerce, export and import etc. it indicates the economic movement of the country. For example, issuance of new financial policy, new monetary policy, rules and regulation regarding trade and industry, changes in economic growth rate, existing political situation and so on. These all have direct relationship to the nation's economic activities i.e. such changes will shape the economic activities enough, share prices reflect the changed situation in terms of capital gain or loss. In this way if the elements of economic environment function well, that must generate higher economic growth rate and finally yield higher stock prices: stock price reflects the financial achievement of and finally yields higher stock price: stock reflects the financial achievement of corporations and handsome achievement is possible only when the elements of economic environment react positively. Hence, economic factors plays vital role in determining equity price.

The significance of these conclusions seems to be that in order to estimate stock price changes, an analyst must spend more than a little time probing the forces operating in the overall economy, as well as influences peculiar to industries he is concerned with. A failure to examine overall economic industry influences is a naive error, that of assuming that individual companies follow their own private paths in a vacuum.

It is important to predict the course of the national economy because economic activity prices. An outlook of sagging economic growth can lead to lower corporate profits, a prospect that can engender investor pessimism and lower security prices. Some industries may not decline as much as securities in general. The key for the analyst is that overall economic activity manifests itself in the behaviour of stock in general-or the stock market, if the analyst will. This linkage between economic activity and the stock market is critical.

General economic influences are quite subjective factors because it is not possible to measure the degree of influences, which arise due to the changes in economic factors. However ranking is possible and investors could understand the forthcoming fluctuations in share prices and degree of influences could be perceived subjectively rather discretely.

In conclusion, changes in the elements of general economic environment surely bring change in the price of equity. Because such elements have direct appreciation will be possible. On the contrary, if adverse situation exists, there must be either lower corporate profit or loss, which eventually leads to decline in equity price. It is, therefore, regarded as the principle determination of equity price.

Industry Analysis

Investing is a business of relative changes. When the economic outlook is assessed along with the direction of changes in the overall market for stock, the analyst must realize that even though industry groups and/or individual companies may find it difficult to 'buck the trend', they do not necessarily respond to the same degree.

For the analyst, industry analysis demands insight into 1) the key sectors or subdivisions strength or weakness of particular industry or other grouping under specific sets of assumptions about economic activity.

Economic research and studies have proved that when the GNP is growing, unemployment is relatively low and the general economic climate is optimistic. An economic forecast based upon any of the approaches would probably show high and increasing levels of expenditures on consumer durables, inventory and plant &

equipment. Because business is buoyant and it is generally expected that this will continue, businessmen accumulate inventory in anticipation of still higher sales level and they also increase their capacity through plant and equipment expenditures. At the same time on the consumer's side of the market, individual households are experiencing high level of personal discretionary income and they are free to spend some of this money on such things as residential housing, automobiles and other consumer durables. As a result sales volume mounts up which eventually increase corporate profit. Hence, it enhances market price of equity. Therefore, it is far more important to analyze the economy and industry relationship.

Company Analysis

I. The attitude of government toward the industry:-

It is another factor, which is more influential in determining the possible investment decision. It affects equity price by way of shaping corporate profits. Therefore, it is important for the analysts or perspective investors to consider the probable role; government will play in the industry. Will it provide support-financial or otherwise? Or will it restrain the industry's development through restrictive legislation and legal environment? For example, if the government feels that foreign competition is too severe for a particular domestic industry, it can impose restrictive import quotas and/or tariffs that would tend to assist the domestic industry. Conversely, if the government feels the domestic industry is becoming too independent, it can remove any existing barriers and thus aid foreign competition. Furthermore, government can assist selected industries through favourable tax legislation.

As government becomes more influential in attempting to regulate business and to advocate consumer more protection, the permanence of the industry might well be substantially lessened. Sometimes an industry declines in importance because of legal restrictions that are placed upon it.

II. Labor Conditions:-

Another influential factor, which affects corporate profit, is the state of labor conditions. That is, as unions grow in power in economy, the state of labour conditions in the industry under analysis becomes ever more important. In other words, if we are dealing with a very labour intensive production process or a very

mechanized capital-intensive process where labour performs crucial operations, the possibility of a strike looms as an important factor to be reckoned with. This is particularly true in industries with large fixed costs, for fixed costs such as rent and insurance continue even when production is curtailed. If a strike occurs in such an industry, for example, steel manufacturing; the large fixed costs would cut deeply into profits earned before and after the strike.

In a labour intensive industry, the variable costs would undoubtedly dominate the fixed costs; even here, the loss of customer goodwill during a long strike would probably more than offset the possible advantages of low fixed costs. That is, customers would find other suppliers and even the low fixed costs might be difficult for the firm to cover.

III. Competitive Conditions

Another significant factor in industry analysis is the competitive condition in the industry under study. One way to determine the competitive condition is to observe whether any barriers to entry exist. Three general types of barriers are

- i. A product differentiation edge that forestalls the entry of competition
- ii. Absolute cost advantages
- iii. Advantage arising from economic of scale.

The investment implication when examining an industry that has significant barriers to entry should be clear. An analyst or prospective investor would like to see that the industry in which he is considering investment seems to be well protected from the inroads of new firms; if the industry were protected by product differentiation, not only would it be difficult for new firms to enter it but it would also be exceedingly difficult for new industries to develop in competition with the market currently owned by existing industry. Hence, competitive conditions demand for the best product and services in order to survive in the market. The successful companies shall have remarkable corporate profit and as a result such companies' equity price certainly mounts up. In this way, competition is regarded as one of the important determinant of equity price.

iv. Paste sales and earning performance:

Before taking any investment decision, investors sought information about the past performance of the concerned industry in terms of past sales and earnings. It is generally believed that industries having better performance in the past will perform at least the same as of before if other factors remained constant. Due to this reason, assessment of the historical performance is regarded as one of the most effective steps in forecasting company's future.

Certainly, two factors with a central role in the ultimate success of any security investment are sales and earnings; therefore, in order to gain a perspective from which to forecast, looking at the historical performance of sales and earnings is helpful.

One important factor the analyst might uncover is that the historical record of the industry is very brief. This finding alone might make him more cautious about a commitment in this industry because if the industry has not proved its ability to weather a variety of economic growth prospects, the opportunity of getting in on the ground floor might be a paramount consideration.

The historical record of the industry is crucial for yet another reason—namely, the calculation of both average levels and stability of performance in both sales and earnings, including growth rate calculations. Even though past average levels or past variability may not be repeated in the future, the analysts need to know how this industry has reacted in the past. With knowledge and understanding of the reasons behind past behavior, he is better able to assess the relative magnitudes of performance in the future.

Cost structure of the industry is another related factor that the analyst must also consider. It is due to the reason that cost structure shapes corporate profit. By cost structure, we mean the relationship of fixed to variable costs. Higher the fixed cost component, the higher the sales volume necessary to achieve the firm's break-even point. Conversely, the lower the relative fixed costs, the easier it is for a firm to achieve and surpass its break-even point.

v. Permanence of the industry

Another important factor in an industry analysis is the relative permanence of the industry. Permanence is a phenomenon related to the products and technology of the industry. If the investors felt that the need for this particular industry will vanish in an extremely short period of time, it would seem foolish to invest funds in the industry. Sometimes an industry fades from the scene because of a replacement industry that eliminates or diminishes the need for the original industry. Thus in this age of rapid technological advancement, the true degree of permanence of an industry has become an ever more important consideration in industry analysis.

2.5.2 Efficient Market

Efficient market in this context may be defined as the market where stock prices reflect all the available information and adjust instantaneously every influx of new information. In other words security prices fully reflect available information in an efficient market.

According to Eugene F. Fama (1960), “an efficient market is defined as a market where there are large number of rational profit maximizers actively competing with each trying to predict future market values of individual securities and where important current information is almost freely available to all participants.”

In an efficient market, the new information plays vital role of changing the price of stocks. In such market the only price changes that would occur, are those, which result from new information. The efficient market theory says that security prices correctly and almost immediately reflect all available information and expectation. Efficient market uses all available information to determine stock price. The efficient market reflected from the perfect competition market where all information is available without cost and rational investor with no taxes or transaction cost.

“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” (Timilisina, 2001: 17).

Thus, efficient market means a market in which share prices follow an independent path, this happens because of the presence of (Khatri, 2006: 145)

- Large number of investors in the market.
- Free flow of information to all the investors.
- Every investor is capable to interpret the information.
- Every kind of price sensitive information is discounted in the prices immediately.
- No one is in a position to influence the market unduly.

When a market is efficient then each price of a share is independent of the previous price, the prices are influenced by the equilibrium of demand and supply. A market can be either identified as efficient or inefficient. The market efficiency totally depends upon the facilities, full disclosure, transparency and regulatory provision governing the market.

Efficient Market Hypothesis

Efficient market hypothesis is based on the fundamentals that markets are efficient and prices make an independent movement in these markets. Each price of an individual share is independent of the previous price, the implication of this is that price of a moment does not affect the price of another moment, this type of movement of price is called random walk of prices, and therefore, this hypothesis is also called 'Random Walk Hypothesis.' According to this hypothesis prices get affected by the demand and supply position. Price reflect equilibrium position of the demand and supply, these show a wide fluctuation, only on account of disequilibrium in the demand and supply position (Khatri, 2006:147).

A number of studies on RWH have been conducted abroad as well as in Nepal also. In Nepalese capital markets context, most of the studies show that RWH does not hold true. Studies conducted by Aryal(1995), Shrestha(1999), Paudel (2003), Bajracharya(2003), Mainali(2003), Pradhan and Upadhya (2004), Shresths(2004), and Paudel(2005) have tested the RWH in the context of Nepalese capital markets. All these studies have provided the evidence against the proposition of RWH. None of the studies shows that RWH hold true in Nepalese capital markets (Baral, 2006: 101).

The random walk hypothesis states that stock markets are highly efficient and that at any one time, therefore, share prices reflect all the available information about companies and economics, including the best guess of million of investors about what the future holds. In these conditions prices will change for one reason only: that new information has become available, including any facts or ideas that alter perceptions of the future (Cowdell, 2002: 224).

Basis of Efficient Market Hypothesis

Efficient market hypothesis believes that markets are efficient and every kind of price sensitive information is available to all the investors, who are capable to interpret it efficiently. It is based on the following (Khatri, 2006:147-148):

- Full disclosure and transparency.
- Free flow of information.
- Large number of investors.
- Price reflects information effect.
- No one can influence the market unduly.

Full Disclosure and Transparency

It is assumed that companies, government and the regulator maintain a high degree of transparency. All the information is discriminated immediately and widely. The effect of this is that the information is disclosed properly in the prices. Therefore, subsequent study of the prices cannot help an investor to gain from such information.

Free Flow of Information

Everyone who is associated with the market or affected by the market is provided a free access to the information on about companies, government policies or stock market activities. The information may be about the financial performance of companies, government policies, traded volume, etc. This free flow makes all the investors at par with respect to the accessibility of the information.

Large Number of Investors

An efficient market should have a large number of buyers and sellers in all the securities available in the market. This helps in creating proper demand and supply for the securities. It is like perfect competition.

Price Reflect Information Effect

All the price sensitive information is reflected in the prices immediately, prices move only on account of the information about companies, government policies, demand and supply facts, and other market related information.

No one can Influence the Market Unduly

In an efficient market none of the investors, whether big or small, can influence the prices in his/her favor. Market has a system of transparency and full disclosure due to which none of the investors is at an advantageous position.

Forms of Market Efficiency

Efficient Market Hypothesis assumes the following three forms of efficiency (Khatri, 2006:148-149):

- Weak form of efficiency
- Semi strong form of efficiency
- Strong form of efficiency

Weak Form of Efficiency

A market is considered efficient in weak form only when each subsequent price is independent of the previous price. The price always makes a random walk, and gets affected only by the demand and supply position. If a market reflects such form of efficiency then 'Technical Analysis' cannot benefit the investors in making investment decisions. Under technical analysis it is presumed that past price trends and traded volumes affect the price trend in the future, the study of past trends can help in predicting near future trends.

Semi-strong Form of Efficiency

A level of efficient market in which companies, industrial houses and government, follows the principal of full disclosure and transparency. Every kind of prices sensitive information is made available in the market as soon as it is generated. The effect of this is that such information gets reflected in the prices immediately and influences the price only during the shorter span of time; it has no subsequent effect on the prices. If a market has such form of efficiency, then, even 'Fundamental Analysis' cannot benefit. Fundamental analysis is the study of fundamental factors about the economy; industries and companies for investment decisions.

Strong Form of Efficiency

Market is considered to be efficient in strong form, when an insider is not able to gain from the information. A strong form of efficiency is achieved only when high level of disclosure standards and transparency at the end of company is maintained; it may be obligatory or voluntary. Such a strict restriction and check on insider trading, this can be achieved through immediate, regular and full disclosure by companies, this does not give any chance for insiders to gain from insider information.

According to the efficient market hypothesis it can be concluded that share price follow an independent movement because of the market efficiency. Provisions of full disclosure and transparency do not provide any one to exercise undue influence on the market. Presence of large number of investors having capability to interpret the information in right direction, make the prices to move independently. In an efficient market neither fundamental analysis nor technical analysis can help in decision making, it is the demand and supply position which influences the price movement. In a high degree of efficiency of market even an insider cannot achieve undue gains.

Limitations of Efficient Market Analysis

Efficient market analysis has been issue of study for the academicians and researchers. But the Chandra (1994) and Dreman (1984) had criticized in following points:

- Information inadequacy: information is neither freely available nor rapidly transmitted to the entire participant in the stock market.

- Limited information processing capabilities: human information processing capabilities are sharply limited.
- Irrational behaviors: in theory, it is generally assumed that investors' rationality will insure a close correspondence between market prices and intrinsic value. In practice, this may not be true.
- Monopolistic influence: in theory, the market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over price. In practice, powerful institutions and big operators has highly influence over the market.

I) Earning Per Share

It is the most popular financial indicator. It gives close insight about the earning power of the firm. In fact, it is the net profit, represented in terms of per share. Equity shareholders shall receive cash dividend from this EPS. If EPS is not sufficient, shareholders entitle no any cash benefit. Therefore, EPS is assumed as the source of benefit to existing performance because higher the amount of net profit more will be the EPS. Investors invest their funds in equity share for future benefit. That is, their prime desire is to achieve higher cash divided annually. Here notable point is that the stocks having lower EPS. Therefore EPS is regarded as the root determinant of MPS. EPS always influence MPS positively. It is seen that firms, having zero or negative EPS, have market value below than par. If cash dividend is not distributed from EPS, or the firm retains profit, this also benefits investors because it pushes up the amount of price appreciation. Therefore EPS is must for every organization to have higher market value of their common stock.

II. Dividend Per Share (DPS):

Common stock or share represents the ownership position in a company and the holders of common stocks are the owners who share all the profit and losses of the corporation. In this ground, investor forgoes opportunity in the expectation of receiving handsome annual return with increased value of their holdings.

Dividend refers the portion of firm's net earning which are paid out to the shareholders. After the successful completion of business operation, every corporation

in each fiscal year report their financial statement from which new information about the corporation can be gathered. One of the mostly valued information is net profit. This net profit will be appropriated among various stakeholders i.e. some of its part will be distributed to the stockholders as a cash dividend and some portion will be retained for investment. When cash dividend is distributed, it is the direct benefit to the common stockholders and retained earning will benefit them in future by ay of having appreciated price of the stock from which investors will able to achieve capital gain. Therefore, the amount of cash dividend is highly influenced by corporate profit and the management's decision regarding the distribution of cash dividend.

"When the board of directors of a corporation declares a cash dividend, it specifies a date of record. At the closes of business that day, lists of stock holders on the list are entitled to the dividend." (Van Horne 12ed: 309).

Once a dividend is declared, stockholders become general creditors of the company until the dividend is actually paid; the declared but unpaid dividend is a current liability of the company coming out from retained earnings. Most company that pays dividend that do so on a quarterly basis, though semi annual or even annual intervals are sometimes used.

The division of a earning of a company between dividend payout and retention of earning affects the market price of shares or not, is an important question. The prime objective of corporate management is to maximize the value of the company and the market prices of shares of the company is considered as a competent variable to indicate the value of the company. However, behaviour of market price of share fails to show simple relationship of this nature. The precise effect of dividend policy on market value of shares is not at all clear.

In conclusion, DPS influences equity price on short-term. Though many theories have suggested that DPS never influence MPS, it reduces fund, which can be plough, backed if not distributed. However, investors are generally tempted annual cash benefit. The basic reason behind investment in equity shares is to get instant cash benefit. Never the less, in our stock market, DPS plays significant role in forming

equity price. DPS promotes trading of securities. High trading precisely fixes equity prices.

III. Net Worth Per Share (NWPS):

It is also called book value per share. It is one of the most popular indicators among numerous financial indicators. NWPS indicates the shareholder's wealth in terms of per share. Net worth per share is the core value of equity. In other words, net worth is the shareholders' capital, which includes equity contributed by shareholders along with undistributed profit. More precisely, it includes paid up capital, share premiums, general reserve, special reserve, capital reserve, sinking fund, and any undistributed profit appearing in balance sheet. However, fictitious assets must be deducted while computing shareholders' capital.

By definition, there is always a positive relationship between market price and net worth. Higher the amount of net worth, more will be the amount of MPS. As stated earlier, net worth is the book value of shares outstanding. Net worth is also a good measuring rod of financial health of any corporation. If net worth per share is less than paid up capital per share; such companies' shares are less tradable and reliable in the security market. Investors hesitate to buy and sell of such securities. Considering this fact, our study has taken NWPS as a principle determinant of equity price.

Financial goal of a firm is to maximize the shareholders' wealth. It means that shareholders always prefer increased value of their holding. If net worth is significantly higher than paid up capital or par value of share, it brings positive information about the company which eventually affects security market. Due to the positive information, security market reports a sizable closing price at the day end. Therefore, analysts/prospective investors must consider NWPS before taking a decision regarding the investment in share.

i. Price appreciation

By investing in equity share, investors are benefited from two ways;

1. Annual cash inflow form of cash dividend
2. Price appreciation of their holding

Price appreciation is the synonym of capital gain. Shareholders extremely desire for higher market value of their holding. Because they can earn high volume of instant cash benefit if selling price of share is significantly higher than their purchase price. Capital gain is represented by the capital gain yield, which is calculated as under.

$$= \frac{\text{Closing MPS} - \text{Beginning MPS}}{\text{beginning MPS}}$$

In case of Nepalese stock market investors are highly tempted by capital gain. The recent trend in this regard is that investors participate in IPO or bought share, they sold their holding when price of their holdings approaches maximum amount therefore capital gain to a significant extent influences trading and formatting of market price of equity. Investors first analyze the historical pattern of capital gain, if it is positive, demand of such securities mounts up resulting higher closing price. It is just the trend; there is no any theoretical base in this regard. However, the demand and supply theory and interaction between demand and supply, which if from economics, provide some theoretical basis.

Capital gain plays significant role in underdeveloped security market. Because in such market, short-term analysis primarily takes place leaving the fact that historical capital gain pattern does not have any connection with future capital gain. Investors of our security market believe that historical pattern will repeat in future as well, so that they will be benefited. Nevertheless, it is assumed that capital gain affects trading of securities, which ultimately influence in forming market price of share.

In this way for major financial indicators are taken as the main independent variable of this study. In practice, it is seen that the selected variables have remarkable influences up on equity price. This study tries to show the functional relationship between MPS and selected financial indicators.

IV. Pricing Status of Stock

Analysts or prospective investors take pricing status of common stock under consideration to draw concrete conclusions from their analysis. Pricing status analysis suggests investors about whether a particular stock is over priced or under priced. It also gives the idea that the common stock is weather defensive or aggressive in

comparison to market. To test the pricing status, two major factors should be calculated. They are actual realized rate of return and required rate of return. In the same way, comparing stock's beta with market beta coefficient, which is assumed as I, supports us to declare whether the stock is aggressive or defensive. If stock's beta exceeds market beta, then it can be classified as aggressive stock. On the contrary, if stocks beta is less than market beta i.e. I, then such stock is called defensive stock.

If stock's actual return exceeds its corresponding required, then such stocks are called under price valued stocks. On the contrary, if required return exceeds actual return, such stocks are called over priced or over valued stocks. And if actual return equals to required return, such stocks are typically known as equilibrium priced stock. However, such stocks are rarely found in stock market. Thus testing of pricing status requires two vital calculations.

i. Actual/Realized rate of return

It is calculated by obtaining annual dividend yield and capital gain yield. The sum of dividend yield and capital gain yield is annual realized return. Dividend is the direct cash benefit to the investors where a capital gain occurs due to the price appreciation and it is receivable when investors sell their holdings. High actual realized return attracts investors, which eventually pushes demand of stocks. Investors invest their funds in the expectation of high monetary benefit. They primarily concern to that rate of return, which must commensurate their required rate of return.

Symbolically

Actual realized rate of return = dividend yield + capital gain yield

$$\bar{R} = \frac{\text{dividend}}{\text{Closin gMPS}} + \frac{\text{Closin gMPS} - \text{OpeningMPS}}{\text{closin gMPS}}$$

Thus, actual realized rate of return is total rate of return from a stock consists of a dividend yield plus a capital gains yield.

Required rate of return:

It is the return, which a particular security must provide. In order works, it is the expected return on an individual security or productive investment, represented by the

risk free rate of interest plus a risk premium. According to capital market theory, the risk premium to be equal to the market premium $R_m - R_f$, weighted by the index of the systematic risk, β of the individual security of productive investment. Thus the return required for any security is equal to the risk free rate plus the market risk premium times the security's beta.

Symbolically

Required return = Risk free rate + Risk Premium

$$E(R_j) = R_f + (\bar{R}_m - R_f) \times \beta$$

where

$E(R_j)$ = required rate of return. If it were less than expected rate of return, investors would not purchase this stock or would sell it. On the contrary, if required return were greater than expected return, investors would not to buy the stock and they would be indifferent if required return equals to expected return.

R_f = Risk free rate of return. In this study, R_f is generally measured by the return on 91 days Treasury bill issued by Nepal Rastra Bank.

B_j = Beta coefficient of the stock. The beta of an average stock is $B_a = 1.0$

\bar{R}_m = Required rate of return on a portfolio consisting of all stocks, which is the market portfolio, \bar{R}_m is also required rate of return on an average ($B_a = 1.0$) stock.

$\bar{R}_m - R_f$ = Market risk premium. This is the additional return over risk free rate required to compensate an average investors for assuming an average of risk. Average risk means $B_a = 1$

Beta Coefficient

β for an individual security reflects industry characteristics and management policies that determine how returns fluctuate in relation to variations in over all market returns. If the general economic environment is stable, if industry characteristics remain unchanged and management policies have continuity, the measure of β will

be relatively stable when calculated for different time periods. However, if these conditions of stability do not exist, the value of β will vary.

The tendency of a stock to move with the market is reflected in its beta coefficient, which is a measure of the stock's volatility relative to that of an average stock. Thus the stock's beta coefficient β , is a measure of the stock's market risk. Beta measures the extent to which the stock's returns move with the market. It is a theoretically correct measure of the stock's riskiness.

By definition, the beta of an average stock is $\beta_a = 1$. To set stocks relative volatility, individual stock's beta should be compared with average beta. Some benchmark betas are

$\beta = 0.5$; Stock is only half as volatile, or risky, as the average stock.

$\beta = 1.0$; Stock is of average risk

$\beta = 2.0$; Stock is twice as risky as the average stock

The status of the pricing of the stocks of a particular company is calculated by comparing the required rate of return and actual rate of return. If required rate of return is more than actual rate of return then the stock is called over priced and if actual return exceeds required return, then such stocks are typically known as under priced. Similarly, if required rate of return equals to actual rate of return then that stock is called equilibrium priced. In the same way, if stock's beta coefficient is less than 1, then such stock is called defensive stock. If stock's beta equal to 1 then it is called average stock.

2.6 Review of Previous Studies

The behavioural study of stock market plays a significant role in the development of capital market and to find out the realistic theoretical model to test the appropriate hypothesis in stock market. Considering this, various studies have been conducted about stock price / market behaviour in developed countries and international prospects.

2.6.1 Foreign Context

All of the empirical work on efficient markets can be considered with in the context of the general expected return or "fair game" model; in particular, the expected profits to the speculators should be zero. The pioneer works in this filed is due to French mathematician Louis Bachelier (1900) who used the data of commodity price during the period of 1894-1898. He concluded that commodity speculation in France was "fair game" that ha no expected profits for buyers and sellers. Unfortunately, his insights were so far ahead of the time that was largely unnoticed for a long period until his paper was rediscovered and eventually translated into English and published in 1964.

Additional evidence that security prices followed a random walk was found by Hal brook Working 1934. He extensively analyzed commodity prices and noted that speculative price patterns might be shown to be random comparing with artificially generated series of price. According to him, "It has several times been noted that time series commodity possess in many respected the characteristics of series of cumulated random numbers. The separate item in such time series dare by no name random in character, but the changes between successive items tend to be largely random."

In 1953, Kendall examined the behaviour of weekly changes in nineteen indices of British Industrial share prices and min spot prices for cotton (New York) and wheat (Chicago). He found no relationship between share price change in the current week and the previous week. After extensive analysis of serial correlations, he suggested that "the series looks like a wandering one, almost as if once a week the demon chance of drew a random number from a population of fixed dispersion and added it to the current price to determine the next week's price.

In 1959, H.V. Roberts compared Dow Jones Industrial Average Index (DJIAI) with simulated price index generated on the basis of series of random numbers for 1965. He found considerable similarity in the graphs of these two series and it is difficult to distinguish between the series of random numbers and the stock market index. Thus concluded that random movement of the prices index cannot be used to forecast future

share prices. Another study conducted by Osborne, one of the distinguished physicists, ignorant about the stock market at the time watched the numbers representing stock prices to see whether they conformed to certain law governing the motion of physical objects. He found the movement of stock prices similar to that of the movement of small particles suspended in a chemical solution so called "Brownian Motion", Although, Osborne attempted to give the empirical justification for his theory, most of his data were cross-sectional and could not provide an adequate test. Though his point of view is different, the findings are consistent with Robert's work (1959).

Alexander (1961) tested the filter rule technique on the closing prices of two indices, the Dow Jones Industrials from 1897 to 1959 and Standard & Poor's Industrials from 1929 to 1959 and reported that in general, Filters of all different sizes and all different periods yield substantial profits, significantly greater than that of simple buy-and hold policy. Finally he concluded that the independence assumption is not validated as a description of reality by his data. But later in 1964, he corrected the shortcomings of his previous study were the failure to realize that dividends were cost rather than benefit. Alexander found that his filter rules produced very large rates of return, particularly for small filters. However, when transaction costs are considered, the abnormal returns disappear for all filter rules.

In 1962, A.B. More examined weekly price changes of 29 randomly selected stocks for 1951-58 and found average serial correlation coefficient of -0.06. This value is extremely low, indicating that data on weekly changes are valueless in predicting future changes. This interpretation of his test is that low coefficient estimate suggests that previous price changes do not provide any reliable information in estimating future price changes.

Granger and Morgenstern (1962) published article about the random walk hypothesis of stock market behaviour applying spectral methods of analysis to the weekly, monthly end volume series from the New York Stock market using Dow Jones, Standard & Poor and other various indices as well as price series of individual stocks. Especially there exists no linear relationship of dependence between lagged price changes.

In 1965, Samuelson though lacked theoretical discussion in his paper, but his findings supports the independence hypothesis of random walk theory in stock prices. He concluded that if a market has zero transaction costs, if all available information are free to all interested parties and if all market participants either potential and existing have the same time horizons and expectations about prices, the market will be efficient and prices will fluctuate randomly.

In 1965, Fama analyzed the movement of stock market priced changed of all stocks that make up Dow Jones Industrial Index for the period end of 1952-1962, and investigated the daily proportional xprice changes of those 30 industrial stock and auto correlation were estimated for a variety of lags ranges from 1 to 10 days. In his study, he found that the auto correlation coefficients for daily changes are small, the average being 0.03, near to zero. Out of thirty, eleven auto correlation coefficients were significantly different from zero and alged price changes show some degree of dependence. He further analyzed the data by run tests by total number of runs, number of runs by signs, and distribution of runs by length. He found slight tendency for this to occur, but again the result were sufficient to accept the random walk hypothesis.

King in 1966 also examined the behaviour of 63 securities from six industries of New York Stock Exchange, from 1927 to 1960. This study also concludes that there exists low degree of co-efficient estimates of serial correlation, i.e. 0.018 which is close to zero. This helped him in concluding that stock market prices follows random walk model.

In 1966, Fama & Blume used the filter technique to overcome the shortcomings of Alexander's mechanical rules. They tested the profitability of 24 filters ranging from 0.5% to 50% to buy and hold return of each of the stock of the Dow Jones. Ignoring transaction costs, only two out of thirty is superior to buy and hold policy, when commission are taken into considered only four out of thirty have positive returns and not comparable with buy and hold return. Therefore larger than those under a naive buy and hold policy.

Brealy (1970) examined the various stocks using similar methodology to that used by Fama in 1965 also supported the random walk model and concluded that successive price change in stock market are independent. Cootner (1964) tested the randomness of the series by using serial correlation on the logarithms of daily price changes of 45 companies stocks from New York Stock Exchange. In his study he found the low serial correlation coefficient of -0.046, which are insufficient to predict the future price changes.

Dryden (1970) concluded that the share price movements were non random. However in his later study, he used serial correlation and runs analysis to examine the daily closing prices of 14 individual stocks of U.K. market and supported that the independence hypothesis of successive price change. Similarly, Kemp and Remp's study (1971) was also against the random walk theory. They derived the conclusion that share price movements were conspicuously non random over the period considered.

In 1971, Niarchos studied price series of 15 individual stocks from Stock Exchange for the period from 1957-1968. He found serial correlation coefficients for individual stock as 0.036, close to zero. So, he concluded that the price fluctuations were random walk and past price has no meaningful information to predict future prices.

Sweeney (1988) developed a filter rule which was able to earn modest profits. He replicated Fama and Blume's results in the short positions usually generated the trading losses. In contrast, Sweeney found that the long positions were often profitable. So he used an X% filter rules as follows:

If the price of a security at least X% buy and hold the security until its price drops at least X% from a subsequent high. Then, liquidate the long position and invest the proceeds in risk free short-term bonds until price reaches its next trough and then rises X%. Sweeney also found that filter rule trading tended to be fairly and consistently profitable in some stocks. His filter rules could mechanically trade some stock and earn a statistically significant rate of profit after deducting tiny trading costs incurred.

However this filter rule seems to be unprofitable if the higher commission rates that most investors pay were deducted.

Fama, Fisher, Jensen and Roll examined the effect of stock splits on security prices. A number of prior studies had suggested that stock splits increase the value of the firm. This was disturbing to many because stock splits simply involve changing the percentage ownership of any share holder or the asset or earning of the company. Fama and other scholars argued that stock splits might be associated with other more fundamental changes and the effects that research were attributing to stock splits might be better attributed to these other phenomena.

While talking about Indian context, Rao (1988) conducted the study on the weekend prices of the eight blue-chip stocks for years from July 1982 to June 1987. He applied serial correlation analysis, runs

2.6.2 Nepalese Context

There are very few independent studies in finance in Nepalese perspective on the loose concept of capital market and determinants of the stock price in stock market very negligible studies have been made. Such research studies are made on shareholders democracy and dividend policy etc. Even though these studies have been made many years ago, these can provide intellectual ground, since there are no researching made on the specific topic.

A book about market by Dr. R. S. Mahat entitled. "Capital markets financial flows and Industrial finance in Nepal" was written in the early period of the development of capital market and before the establishment of stock exchange. So Dr. Mahat made the first priority to establish stock exchange for the development of stock market. He has also written that Nepalese stock market is still in infancy stage and some drawbacks to the development of stock markets are strong historical and social reasons as well as mass poverty and illiteracy in Nepalese society. He further pointed out that some conscious and educated people of urban areas are also not investing in the industrial sector instead they are investing on the real estate especially in building construction. Although the book was written in the early stage of the development of

stock market, the limitations of Nepalese society regarding the investment in stock market is still reality of Nepalese capital market.

Dr. R.S. Pradhan provides very close insight for analyzing the capital market in Nepal. He advocated. "A number of studies have been conducted on the stock market behavior in developed and big capital markets but their relevance is yet to be seen in the context of smaller and underdeveloped capital markets." (Pradhan, 1994:43-43)

As per the book, the stock market behavior in smaller and underdeveloped capital markets is thus one of the important areas of the study in finance. Information on stock market behavior in such smaller and underdeveloped capital markets would help development of realistic theoretical models and formulation of relevant hypotheses for empirical testing in finance.

In Nepal, the listing of shares in stock exchange center (SEC) and their trading in the stock market is a recent phenomenon. Low trading volume, absence of professional brokers, early stage of growth, limited movement of share prices, and limited information available to investors characterize the Nepalese stock market. A number of researchers are available on government owned public enterprises but researches on enterprises whose stocks are listed in SEC and trade in stock market are yet to come up in Nepal. View in this way, this chapter is expected to provide at least some insights into stock price behavior in Nepal.

Prof. Manohar Kumar Shrestha, in this book "shareholder's democracy and AGM feedback" has focused various depends related to protection of shareholder's expectation this be accomplished is main question. Thus it is necessary to develop a possible guidance for enhancing the efficiencies for public limited companies to contribute directly in the growth of national economy on one hand and ensuring handsome return to the shareholders on the other hand to make their investment meaningful and worthwhile. At present the overall shareholders' democracy in terms of protection of their interest is basically focused son the payment of satisfactory dividend and the maximization of shareholders' wealth by appreciating the value of shares they hold. (Shrestha 1999:25).

The study about "Dividend policy and value of the firm in small stock market" in the context of Nepal has conducted by Kamal Das Manandhars in 1998 in management dynamics. The basis objective of this study is to find out the financial variables that are related to market equity, "the study is aimed at identifying some of the significant variables that are significant to the value of firm. The analysis, to some extent, helped to understand the dividend policy of the sample companies and their effects on market value of the firm as represents by market capitalization and this understanding helps to know the relevance and irrelevancy of dividend policy on market capitalization in the stock market in Nepal" (Manandhar 1998:16). At the time of research, he has found the following problems in stock market and dividends practices.

1. Most companies are underrating the expectation of investors and thereby resulting marketability of share and trading floor of stock exchanges.
2. Majority of the companies are declaring dividends less than risk free rate plus market risk premium.
3. The relationship between earnings, dividends pay out and growth of the expansion program of the companies doesn't match with financial needs of companies,
4. Companies do not follow sound dividend policy. These are the main causes that re related to the price of stock and low volume stock market.

2.6.2 Review of the Dissertation

Bhattarai (1990) has carried out a study on share market, in Nepal. In which, he emphasized the historical background and the analysis of various financial variables affecting the smooth operation of share market. The study was mainly based on secondary data obtained from various sources. He has applied both financial and statistical tools in the study. He found that of 12 sample companies, only 2 companies were useful to cross over the average price-earning ratio, as a result, market price of shares were highly skewed. Moreover, there was mismatch between calculated and quoted price. However, he concluded that involvement of more and more institutions of more and more institutions as well as individual investors in capital market through broker's network raised the transaction volume. Remorse spread by brokers, and create genuine speculation. Fair play of bulls and bears makes the market equilibrium

resulting price stabilization. Speculation on the trading of shares is encouraged. Thus, the market starts to walk randomly reflecting true value of shares. Investors are facilitated by providing alternatives to market diversified portfolio.

Aryal (1995) has studied behavior of stock market prices with the objective to discuss the movement of stock market prices and to develop the empirical probability distribution of successive price change of an individual common stock and a stock market as a whole. This study was based on secondary information obtained from Nepal stock exchange. This study covers almost 8 months period and the sample was 21 listed stocks. He applied serial correlation and runs test as statistical tools to analyze the data. Through the analysis he has concluded that the assumption of independence, as predicted by random walk model of security price behavior has been refused at least for Nepalese context as the first approximation even in the rough way for early days of stock market operation. This rejection of hypothesis made clear that the knowledge of past and present becomes useful in predicting the future movements of stock market prices. The investors, on the floor of exchange, can make higher expected profits in future based on these historical price series. In other words, the dependence nature of price series produced by general market fluctuation statistically implied that there is a sufficient lack of financial and market analysts who are sophisticated and superior in analyzing the general market fluctuations, predicting the occurrence of future potential and economic events that their eventual effects on price series.

Bhatta (1995) has conducted a study on assessment of the performance of listed companies in Nepal. The study was based 10 listed companies with data from 1990 to 1995. In this study, he has focused on the performance of listed companies in terms of i) company's performance in market, in PE multiples, dividend yield, liquidity, leverage, and profitability ii) risk and diversification of risk through portfolio. He has analyzed the companies' performance in the market in relation to the market price of shares. He found that highly significant positive correlation ship between risk and return characters of the company. Investors expect higher return from those stocks which associates higher risk. Nepalese stock market is not efficient one so the stocks prices do not contain all the information relating to market and company itself. Investors in Nepal have not yet participated to invest in portfolio of securities. An

analysis of the two securities portfolio shows that the risk can be minimized if the correlation is perfectly negative. The analysis shows some have negative correlation and some have positive one. Negative correlation between securities return is preferred for diversification of risk. On the basis of findings he concluded that many companies have higher unsystematic or specific risk. There is a need of expert institution, which will provide consultancy service to the investors to maximize their wealth through rational investment decision.

Bhatta (1997) conducted research on the topic "Dynamics of Stock Market in Nepal" with the objectives to diagnose and compare sectoral financial status of the stocks in Nepalese stock market and to analyze the market share prices of the Nepalese stock market. The main conclusion of his research was that the stock market and economic activities move in similar direction and EPS and ROE have a decisive effect on the market share prices of stocks through the stock market in the Nepalese economy. It is necessary to develop the entrepreneurship and encourage entrepreneurs to start the productive venture as soon as possible. Development of manufacturing sector is the backbone of an economy, which in turn, assists to foster banking, finance and insurance sectors. Unfortunately, the manufacturing sector doesn't have good performance in Nepalese economy. The secondary aspect of stock market is not also functioning well in Nepal. There is almost no liquidity in the stock market for shares except that of banking and some finance and insurance sectors. Although it has become late to take steps to overcome such problems of the Nepalese stock market in order to make it active and supportive, the stock market has good prospect for the resources mobilization to finance the productive enterprises in Nepalese economy.

Gurung (1999) has also carried out a study on share price behavior of listed companies. He applied statistical tools like percentage, correlation coefficient, bar graphs, and line charts for analyzing the data. The findings of the study area; the correlation coefficient of 0.97 between the number of traded and listed companies is significant, whereas it negative in trading group and perfectly positive in the case of banking group. The market capitalization value was in erratic trend for every group in each year. The proportion of market capitalization of banking group was the highest among other groups. During the study, the number of transactions in banking group was highest which showed that investment in this group was highly attractive and

liquid. The capital market in Nepal was bullish in the initial periods but it turned bearish in the successive year. In the initial period share prices, trading turnovers, market index as well as earnings have moved positively except market capitalization, but they moved negatively in the subsequent years. Thus, now the capital market is passing through the bearish trend in Nepal and there is a lack of investor's opportunities and the economy is passing through the recession year by year.

Shrestha (1999) has conducted research on stock price behaviour in Nepal, which aims to examine the efficiency of the stock market in Nepal. For this purpose he used the data constituting the daily closing price of 30 stocks out of the total listed companies in NEPSE. He applied serial correlation and runs test as statistical tools. The serial correlation coefficients of the daily price changes for 1 to 15 lag days, and runs of the series of daily price changes lead him to conclude that the successive price change are not independent random variable for the 30 sample stocks. Therefore, the random walk theory is not a suitable description for the stock market price behaviour in Nepal. The dependence in the series of price changes observed implies that the price changes in the future will not be independent from the price changes of the previous days. It also implies that the information of the past price changes is helpful in predicting future price changes in a way that the speculation through technical analysis can make higher expected profit than would be under naive buy-and-hold policy. Therefore, opportunities are available to sophisticate (both institutional and individual) investors to earn higher return in the market. The existence and participation of the sophisticated investors have not been realized from the findings of this study.

Paudel (2001) undertake his study on share price movements of joint venture commercial banks by using various financial and statistical tools like, standard deviation, correlation, beta, t-test ect. The major objective of the study was to examine Nepal stock exchange market and to judge whether the market shares of different banking indicators (book value per share and major financial ratio) explain the share price movements. After applying the stated methodologies he concluded that the market share and the growth rates of different banking indicators used are not captured by the market shares of these banks. The ordinary least square equation of book value per share on market value per share reveals that the independent variable

does not fully explain the dependent variable on the basis of above mentioned points. So, Nepal stock exchange operates in a weak form of efficient market hypothesis, indicating that the market prices move randomly. The market value per share does not accommodate all the available historical information. The beta coefficient which measures the riskiness of individual security in relative term, suggests that the stocks of joint venture commercial banks are less risky as compared to other average stocks traded in the stock exchange.

Paudel (2002) in his article published on Economic Review titled 'Investing in Shares of Commercial Banks in Nepal: An Assessment of Return and Risk Elements' concluded that all the share produced higher rates of return than the return on market portfolio. But the risk-return characteristics do not seem to be the same for all the shares reviewed.

Kharel (2002) also studied stock market efficiency and behaviour of share prices. He used serial correlation test and runs tests as statistical tools, further he used technical trading rule named filter rule for analyzing the data. He found that standard deviations of each and every individual stock's price changes are higher than the mean. Thus, the general shape of empirical frequency distribution is flatter than normal distribution's shape. Most of the results obtained from the serial correlation test for 30 stocks are absolutely large and significantly isolated from zero. The results obtained from the runs test are also consistent with the results of serial correlation tests. When the runs test analyzed by lengths, it was found that actual numbers of runs are not normally distributed. Therefore, there exists substantial persistence in the successive price changes series of Nepalese stock market. Similarly, the result obtained from the filter test showed that sophisticated mechanical trading rule can beat the average market return. As most of the filter's trading returned higher than buy-and-hold strategy, it supports the results of serial correlation and runs test. Thus, he concluded that today's price changes are not an unbiased outcome of yesterday's price changes.

Dahal (2002) conducted his study on stock market behaviour by banking 67 sample companies. To analyze the gathered data he used simple percentage and paired t-test as an analyzing tools. He found that most of the investors were attached with banking sector for investment. On analyzing primary data it was found that the stock market in

Nepal is in developing stage as investors are not well aware about the investment process and its other factors like NEPSE index, price trend and investment facilitators are not doing their work in systematic way. It was also found that the investor's motive for owning shares of company is to receive the dividends from the shares. On analyzing the price trend of two years NEPSE index in different months with the help of monthly trend showed that the price trend of different months of the year 2000 was in increasing trend, while that of year 2001 was in decreasing trend. Similarly, the result of paired t-test for signalling factors with reference to major seven events showed that signalling effects had played major role in fluctuation of stock prices.

Bhattari (2002) has also performed study on efficiency of Nepalese stock market. The objective of his study were to find out the level of efficiency of NEPSE and to find out some facts about the Nepalese investors and their behaviour. Using serial correlation and runs test for the market return of today in NEPSE is affected by the return of yesterday. The stock price sequences. Similarly, runs test for the daily market return has also revealed the similar result that the stock price formation process in NEPSE is not independent from the historical price series. The subjective analysis of Nepalese investor's behaviour shows some serious problems in their side, which is responsible for market to be such inefficient. Investment decisions of Nepalese investors are based on the rumours and speculations. They do not compare the yield of their investment with other opportunity, rather they look at the market movement and if they found stocks to be increasing, they buy the security and if it is decreasing they sell the security. Nepalese investors are not familiar with investment banking. They do not have an idea about the mutual funds so they are making direct investment towards the companies. Thus, he concluded that the average Nepalese investors are behaving irrationally and the market inefficiency is also the consequence of irrational behaviour of Nepalese investors.

Bhattra (2004) in his article entitled 'History Repeats' mentioned that the NEPSE index reached the peak of 545.82 points on 23rd November 1999 before turning bearish. The pessimism of investors towards the investment through secondary markets rose unexpectedly but the last few months bullish trend has aroused a hope in the investors that the history definitely will repeat itself in the stock market. He also urged that the stock market is very much unpredictable but the movement can some

how be forecasted on the basis of past pattern of price movement through the trend analysis and behavior analysis. Bhattraï's prediction seems to be correct. By the end of July 16, 2007 NEPSE index reached up to 683.95. From this it is clear that technical analysis can be taken as reliable tools to predict or analyze the stock price trend.

Gautam (2005) in her research on 'A Study on the Behavior of Stock Prices' concluded that NEPSE is not providing facilities for investors such as general awareness about investment, investment procedure for general public and movement of stock trend in different periods and their cause. Market makers, brokers, and NEPSE staffs are making coalition for fraudulent activities towards investors. She also concluded that signaling factors play major role for fluctuating NEPSE index.

Ghimire (2005) in his study on 'Stock Price Behavior in Nepal' concluded that the information concerning the market and the implications involved are not disseminated efficiently and quickly to all potential investors. As a result, chartists and superior fundamental analysts should be able to make greater gains than those of the market. He also added that the implication of the non-random behavior of share prices is that the Nepalese stock market may not be termed as "weekly efficient" in pricing of shares where market efficiency is defined as all historical information is reflected in security prices.

Ghimire (2006) in his article stated that NEPSE is operating in unhealthy way. His logic behind this is that artificial boom of share price, less numbers of brokers, lack of institutional investors, and limited supply of shares i.e. only 3% of shares are on trading (Kantipur Daily, December 13)

Bhattarai (2006) in her study on 'Stock Price Behavior of Financial Institutions and Commercial Banks' concluded that there is not a single financial indicator that has dominated role to determine MPS & EPS. The degree of interrelationship of MPS&EPS with different financial indicators varies from one company to another. There is uniformity in the relationship between MPS & EPS of various financial indicators of the sampled companies.

Pathak (2006) in her study on 'Stock Market Movement of listed Companies on Securities Market of Nepal' concluded that price trend were not in predictable trend, NEPSE index, volume of stock traded and number of listed companies are in positive relationship and signaling factors are major components of the price movement in NEPSE.

Thus, various studies have been conducted in the field of share price behaviour. As the share prices are the crucial phenomenon in the stock market and large numbers of investors are attracted in this investment, updating of previous studies is the most important. The new aspect of this study is to find out whether the successive daily price changes of all listed commercial banks are independent or not in natural logarithms. In the same time risk and return of the sampled commercial banks are also examined to analyze the individual returns patterns and risk involved.

2.7 Research Gap

Research means to search or study about a phenomenon. The word research is composed by 're' and search where 're' means repeatedly or happened again and again and 'Search means to investigate or find. Thus, to search again and again is called research. Generally research is an effort to search new fact knowledge and principle in scientific member.

Most of the previous researcher studied about the determination of share price in Nepal. Most of them only focused on joint venture banks' share, some focused in financial institution. They don't have studied about development bank share price. Now a days development banks and finance companies also plays vital role to determine NEPSE Index. Development banks group index occupied huge portion in overall NEPSE index (i.e. commercial banking index, Finance Companies Index, insurance index, hotel index and others). Almost all researchers have omitted this reality. Similarly, an effort has been made to know the investors' and market behavior in Nepal Stock Market. This research tries to part this gap. Finally the researcher believes it is original and slightly different than others.

CHAPTER III

RESEARCH METHODOLOGY

3. Introduction

During each research work, to accomplish the objective effectively, specified methods and process should be followed which is called research methodology, “Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with a certain objectives in view”. (Kothari, 1998 p2) Research methodology basically describes the method processes, tools and techniques applied in the entire process of a scientific research. Thus the main purpose of this study is to stress on the different research methods and conditions, which are used in this study.

The purpose of this is to analyses the factors affecting on stock price and pricing status in Nepal. To achieve these objectives some methodology has been adopted which include research design, population and sample, sources of data, data collection techniques, data analysis tools and so on.

This chapter deals with some methods that are used in the period of research and also brief introduction to financial parameters used in the study. Hypothesis, research design, sources and nature of data, sampling method and statistical and financial tools for data analysis are basically explained in this chapter.

By definition, research is a systematic and organized effort to investigate specific problems that needs solutions and methodology refers various steps that are generally adopted by a researcher in studying his research problem along with the logic behind it. Thus research methodology is a way to systematically solve the research problem, what we are doing at present.

Basically, historical and diagnostic types of research are employed to fulfill the objective of research work.” A historical research is concerned with past phenomena. It is a process of collecting, evaluating, verifying and synthesizing past evidence systematically and objectively. To reach the conclusion.”(woolf and pant 1975:54) In this study, historical data of various firms are taken under consideration show the relationship with MPS in the past and how did they affect in shaping the MPS? Thus

historical research requires accuracy of gathered information, as it is the main ingredients of success in this type of research. The diagnostic analysis mainly highlights to explore the degree of influences of various financial variables upon market price of equity, formation of equity price and pricing behavior, and finally the responsiveness of share price when the determinants are fluctuated. Further, it is associated with the calculation of risk and return of over all market, each sector and also individual companies. These all computations and analysis will be conducted by using statistical tools of multiple regression and also financial tools. So the methodology is based on some statistical and financial tools to analyze and presentation of data.

3.1 Research Design

The research design includes specification of the method of the purposed study and detailed plan for carrying out the study with various empirical data for the analysis of the problem.” research design is a plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances.(Kothari1991:24) for identifying the major determinants of the stock price, the relationship of selected variables with market price of share shall be analyzed. Correlation coefficient measures the degree of influences of each identified variables upon observed market price. this connection, historical data will be used. Hence, it is the historical design. Data required for the study will be extracted from www.nepalstock.com. Therefore, secondary sources of data as well as primary data (Questionnaire) shall be applied in this study.

The major activities of this study are the collection of data, tabulation and compilation of data, computation and compiled data and financial parameters, findings, conclusion and recommendations. These activities will be arranged as according to the model prescribed by TU, faculty of management. Full efforts made to cover all significant factors, which either implicitly or explicitly shape market price of share. Numerical analysis will be carried as far as practicable and the technique of descriptive analysis will also be used whenever necessary. For example, informational forces can not be measured directly. So their impact on MPS has been quantified in descriptive manner in of this study. The research design is thus an integrated frame that guides the research in planning and executing the research work.

3.2 Population and sample

To arrive at logical inferences, three major sectors of the stock market are taken under consideration. They are (1) *Commercial Banking sector* (2) *Development Banking Sector* (3) *Finance companies*. This study has taken banking sectors i.e. commercial bank, development bank and the study of finance companies. So, three wings of banking and finance companies have been focused in this study. However there are others sectors as well, but due to the low volume and amount of share transaction and insufficient data of other sectors i.e manufacturing sector, service sector, insurance companies, hydropower sectors and others have been ignored, further more, the sample procedure also consider financial status, size, maturity and market volume of listed companies The samples will be taken using stratified as follows:

Table 3.1
Proportion of Sample Companies

S.N.	Sector	Total Numbers Licensed Company	No. of Company Listed	No. of Sample Companies	Percentage	Sample Companies
1	Commercial Bank	24	20	5	38.46	HBL, NABIL, SCBNL, NIBL, NSBL
2	Development Bank	58	24	3	23.07	DCBL, NDBL, NUBL
3	Finance Companies	79	59	5	38.46	NSMFL, NH&MFL, UF&CML, CIT&PFL,

*(As of 30 November 2007)

* From 25th May 2008 DCBL has been upgraded to commercial bank

For the research work, only 13 companies as stated above, has been taken as sample companies out of total population. Out of them 5 from commercial Banks, 3 from Development Banks and rest 5 from Finance Companies, Due to the high volume of share transactions and business volume as well as more contribution to the economy, such companies are taken on the basis of size, maturity and share transaction.

Considering the study period of 2000/01-2006/07 useful data could be obtained for banking and finance sectors, as indicated below:

Table 3.2
No. of Sample Observation Companies

S.N.	Name	Observations Year	Number of Observation
01	HBL	2000/01 – 2006/07	7
02	NABIL	2000/01 – 2006/07	7
03	NIBL	2000/01 – 2006/07	7
04	NSBL	2000/01 – 2006/07	7
05	SCBNL	2000/01 – 2006/07	7
01	DCBL	2000/01 – 2006/07	7
02	NDBL	2000/01 – 2006/07	7
03	NUBL	2000/01 – 2006/07	7
01	CIT	2000/01 – 2006/07	7
02	NH&MFL	2000/01 – 2006/07	7
03	NSM&FL	2000/01 – 2006/07	7
04	PFL	2000/01 – 2006/07	7
05	UF&CML	2000/01 – 2006/07	7

3.3 Nature and Sources of Data

The study is based on primary sources of data as well as secondary sources of data. The required primary data have been collected from concerned respondents (i.e. share experts / analysts, general investor, others – Lectures, students, brokers, stockholders) and secondary data from financial statements of listed companies which were located at www.nepalstock.com, an official website of Nepal Stock Exchange Ltd., officer level staff of concerned bank, annual reports of such institution.

Relevant data is collected from financial statement of listed companies in the web page, these data are copied for this study however, and the website is not regularly updated for new information and new data of listed companies.

Financial data of previous 6 year i.e. July 2000 to 2006 of the selected companies are downloaded from www.nepalstock.com. Different books from library, periodicals,

newspaper cutting, and companies' magazines will also be used whenever required. Needless to say that this study is associated with past phenomenon, therefore, only the secondary data will be used to carry out whole calculations. Thus, the historical data from NEPSE's website shall be used which obviously the secondary sources and past phenomenon in nature. Similarly primary data has been used to find out investors' behaviour.

After the identification of sources the require data for the study have been gathered. The study is based on primary and secondary data. As already stated the computer technology makes data collection technique very simple. One can view, copy, carry and send data from computer. At first, the website of NEPSE is visited (www.nepalstock.com)and then

3.4 Tools of Data Analysis

To analyze and interpret relevant data some statistical tools and financial tools are used.

3.4.1 Financial Tools

(a) Capitalization of earning:

EPS ratio is used to measure the profitability of a firm from the owner's viewpoint. In this model the market value of shares of a company is dependent of earning of the company. The rate of earnings or the earning per share is capitalized, by normal rate of return, in order to measure the present market value of the equity share is the capitalized value of the earning per share of a company at the cost of equity (Ke).

Hence,

$$P_a = \frac{EPS}{Ke}$$

Where,

Po = Expected value of an equity

EPS = Earning per share

Ke = Cost of capital

(b) Capitalization of dividend:

Dividend refers the percentage of earnings paid in cash to its stockholder. “As long as there are investment projects with returns exceeding those that are required, it will use retained earnings and the amount of senior firms has retained earnings left over after financial all acceptable investment opportunities, these earnings then would be distributed to stockholders in form of cash dividends.(Van Horne 1990:328). People make investment in stock because they shall get dividends as return. Therefore, the price they are willing to pay will depend on their expectation of dividends. Under this model, future stream of cash dividends are to be evaluated and discounted by the cost of equity (Ke). Hence the value of an equity share is the present of all future streams of cash dividends an investor expects to receive, according to this model.(Timilsina2001:20)

$$P_a = \sum_{T=0}^{\infty} \frac{DT}{(1 + Ke)^t}$$

Where,

- Po = Present Market value of an equity
- Ke = The required rate of return for equity
- Dt = Expected future dividend at each future date t.

c) Risk free rate (Rf):

The risk free rate of return has been taken from Nepal Raster Bank (NRB), 91 days treasury bill of different years. In other words Rf in this study, is the discount rate of 91 days T-bills issued by NRB which are as follows:

Table 3.3

Fiscal Year	Average Risk Free Rate
2000/01	4.96
2001/02	4.71
2002/03	3.48
2003/04	2.93
2004/05	2.46
2005/06	2.84
2006/07	2.42

Source : *Quartily Economic Bulletin Mid July 2007, Nepal Rastra Bank*

d) Rate of return on common stock:

Rate of return on common stock can be defined as the change in value plus any cash distribution expressed as percent of the beginning of period investment value. An investor can obtain two kinds of income from an investment in a share of stock: Income from price appreciation or losses from depreciation and income from cash dividend. The rate of return on common stock can be expressed in percentage as follows:

$$\begin{aligned} \text{Rate of Return} &= \frac{\text{Price Change} + \text{Cash Dividend}}{\text{Purchase price at the bg. of period}} \\ &= \frac{(P_1 - P_{1-1}) + D_1}{P_{t-1}} \end{aligned}$$

Where,

- Pt = Ending Stock Price
- Pt-1 = Starting Stock Price
- Dt = Cash Dividend for time t.

e) Required rate of return (Ke):

Required rate of return is calculated as the risk free rate plus the risk premium on the risk of the particular stock Total risk contains two parts: diversifiable or unsystematic risk and non diversifiable risk or systematic risk. Under the assumption of CAPM, investors are not compensated for total risk; rather they are compensated in the market for facing the systematic risk. According to CAPM model, the required rate of return on any stock is equal to the risk free Rate plus market risk premium times stock beta. However, it is not possible to calculate the annual beta of the stock's return of any individual company. Therefore, average beta coefficient of the observation period will be taken as the stock's beta. The formula of calculating the required return is given as below:

$$Ke = Rf + (\overline{R_m} - Rf) \times \beta_j$$

Where,

- Ke = required rate of return on stock j
- Rf = Risk free rate of return
- $\overline{R_m}$ = Market return or average return

β_j = Beta Coefficient of Stock j

f) Market returns (\bar{R}_m):

Market return is the average return of the stocks of all companies in an industry. For this research purpose, market return will be calculated by dividing the difference of this year's market index and previous market index by previous year's market index. The method of calculating market return is given below:

$$\bar{R}_m = \frac{\text{This year's market index} - \text{last year's market index}}{\text{Last year's market index}}$$

g) Financial parameters:

Some of the financial variables, stated as below have been employed to analyze the market price of stock

Earning per share:

Net earning means after tax profit, which are considered after deducting reserves etc. to shareholder. Earning per share would be calculated by dividing net earning by the total number of common share outstanding. Symbolically,

$$\text{EPS} = \frac{\text{Profit after tax}}{\text{No. of shares outstanding}}$$

Dividend per share:

Dividend is the portion of profit that is ready to be available for shareholders. Dividend per share would be calculated after deducting retained earnings from total value of earnings. Symbolically,

$$\text{DPS} = \frac{\text{Earning available to shareholders} - \text{R/E}}{\text{No. of shares O/s}}$$

Price earning ratio:

The reciprocal of the earning yield the price earning ratio. It is widely used by the security analysis of the value of the firm's performance as expected to investor and also the growth of the firm's earnings.

$$\text{Price earning ratio} = \frac{\text{Market Value per share}}{\text{Earning share}} = \frac{MV}{EPS}$$

Return on equity (ROE):

The return of shareholders equity is net profit after tax dividend by shareholder's equity. It indicates how well the firm has used the resources of owners.

$$\text{Return on equity} = \frac{\text{Net Profit}}{\text{Shareholders' equity}}$$

This also reflects the rate of return at which the firm can actually plough its retained earnings.

Retention ratio:

It is the ratio, which shows the portion of net to be retained by the fir. Profit will be retained for various purposes. However, it must generate returns at least equal to ROE.

Symbolically,

$$\text{Return Ratio} = 1 - \frac{DPS}{EPS}$$

Growth rate:

It indicates the growth potentialities of the firm's earnings. Exactly, the growth rate is the product of return on equity time retention ratio. Symbolically,

$$\text{Growth rate} = \text{ROE} \times \text{retention ratio}$$

3.4.2 Statistical tools

a) Arithmetic mean (AM):

Arithmetic means of given set of observation is their sum divided by the number of observation. In general, if X1, X2.....Xn are the given "n" observations then their arithmetic mean, usually denoted by X is given by,

$$\bar{X} = \frac{\sum x}{N}$$

Where

$$\sum x = \text{Sum of observation}$$

$$N = \text{No. of observation}$$

To calculate average return of different companies as well as overall market, the arithmetic mean has been employed.

b) Standard deviation/ Variance:

It is a quantitative measure of the total risk of assets. It provides more information about the risk of the asset. It measures the dispersion of returns around the mean. Its advantage is that the uncertainty of returns can be summarized into a single easily calculated number. The standard deviation of a distribution is the square root of the variance of returns around the mean.

$$(\sigma) = \sqrt{\frac{\sum (r_j - \bar{r}_j)^2}{n - 1}}$$

Where,

r_j = Return on asset A.

\bar{r}_j = expected return on asset A.

The square of standard deviation is known as variance of asset's return from the average return.

c) Karl Pearson's coefficient of correlation:

It is a statistical tool for measuring the intensity or magnitude of linear relationship between the two variables series. Karl Pearson's measure, known as Pearsonian correlation coefficient between two variables series X and Y, usually denoted by "r(x, y)" r_{xy} or simply 'r' can be expressed as,

$$r = \frac{n \sum xy - \sum x \cdot \sum y}{\sqrt{\{n \sum xy^2 - (\sum x)^2\} \times \{n \sum y^2 - (\sum y)^2\}}}$$

Where,

N = No. of observation in series X and Y

$\sum x$ = Sum of observations in Series X

$\sum y$ = Sum of observations in Series Y

$\sum x^2$ = Sum of Squared deviations in Series X

$\sum y^2$ = Sum of Squared deviations in Series Y

$\sum xy =$ Sum of the product of observations in Series X and Y.

The value of correlation coefficient 'r' lies between ± 1 i.e. $-1 \leq r \leq 1$. If $r = 1$, there is perfect positive relationship and if $r = -1$, there is perfect negative relationship or if $r = 0$, then there is no relation at all.

d) Multiple Regression Analysis:

The factors that affect estimates of the MPS may be quantified and estimated econometrically using multiple regression analysis. Multiple regression analysis is a statistical tool, which facilitates in estimating or predicting the value of dependent variable from the value of independent variable. It is a mathematical measure of the average relationship between two or more variables in terms of the original value of data. And then estimates the value of unknown variable (dependent) on the basis of other known variable (independent). The variable whose value is influenced or is to be predicted is called dependent variable and the variable which influences the value or is used for prediction, is called independent variable.

Generally, in multiple regression analysis, the methods of least square, standard error of estimate and multiple coefficient of determination are computed for this purpose.

The multiple regression equation is

$$\text{MPS} = a + b_1 \text{EPS} + b_2 \text{DPS} + b_3 \text{DWPS} + b_4 \text{CG} + \mu$$

Where,

a = Regression intercept, which indicates MPS does not go below this point even if other variables have zero value.

b's = Multiple regression coefficient

μ = Unexplained error, which indicates that the estimation of MPS may vary by this amount.

e) Standard error :

The standard deviation of the sampling distribution is called the standard error. It is also called because it measures the sampling variability due to chance or random forces. Hence to clarify the term standard error it is necessary to describe a sampling distribution. If we select a number of independent random samples of a definite size from a given population and calculate some statistic (like the mean, standard

deviation etc) from each sample we shall get a series of values of these statistics or functions. These values obtain from the different samples can be put in the form of a frequency distribution. The distribution sp formed of all possible values of statistics is called the sampling distribution or the probability distribution of the statistic

f) Application of computer software:

This study has covered seven years data of five commercial banks, three development banks and five finance companies. To carry out multivariate correlation analysis and multiple regressions with four independent variables, the most statistical software-SPSS has been used. Data will be presented in tabular form, after plotting the tabulated data in graph, correlation coefficient will be calculate by this software and finally these variables shall be inserted. It is too difficult to carry out such calculations manually therefore this software is used to arrive at concrete conclusion.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4. Introduction

The purpose of the study is to analyze the determinants of equity price of selected Commercial Banks, Development Banks and Finance Companies and to show the pricing behavior of common stock among the selected samples companies. Is also an attempt to find the required are of return using CAPM and beta of selected samples companies. After collecting the necessary data this section of study attempts to present analyze and interpret of data so that some conclusions can be drawn for the objective of this study.

This chapter deals with data presentation analysis and interpretation following the research methodology presented in the third chapter in order to meet the objective. Required data are collected and processed to arrive at concrete conclusion. Thus, in this course of analysis, data gathered from various sources have been presented in the tabular form. By using financial and statistical tools, the data have been analyzed. The results of the computation have also been summarized in appropriate tables.

4.1 Analysis of Secondary Data

4.1.1 Analysis of Market Risk-Return, and Risk-free Rate of Return

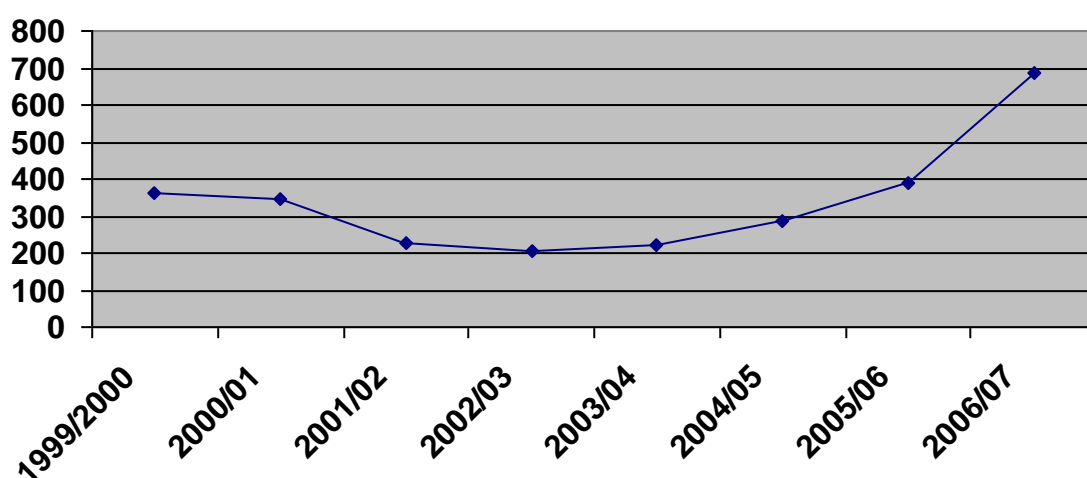
Usually, the index of a stock market is taken for the true reflector of market risk and return. Unlike a developed economy, Nepal has only one small size and immature stock market which is yet to cross its fourteenth year of operation. But it, nevertheless, regularly publishes the level and movement of index of stock market. The following figure shows the movement of index from the beginning of its establishment to the period of this study. The indices are taken at the end of fiscal year of B.S., i.e. 31 Asad or 17 July.

Table 4.1
The Movement of NEPSE Index

Year	NEPSE Index	Market Return (RM)%
1999/2000	360.7	
2000/01	348.4	-3.41
2001/02	227.54	-34.69
2002/03	204.9	-9.94
2003/04	222.0	8.34
2004/05	286.7	29.14
2005/06	386.8	34.91
2006/07	683.9	76.80
Total		101.15
Average		14.45
S.D.		36.26
Variance		1314.64

Source: *Quarterly Economic Bulletin Mid July 2007 Nepal Rastra Bank*

Figure 4.1
Yearly Movement of NEPSE Index



The risk-free rate of return is the return of a risk-free asset. All corporate securities in principle have some chance of default: the risk-free asset cannot be issued by a

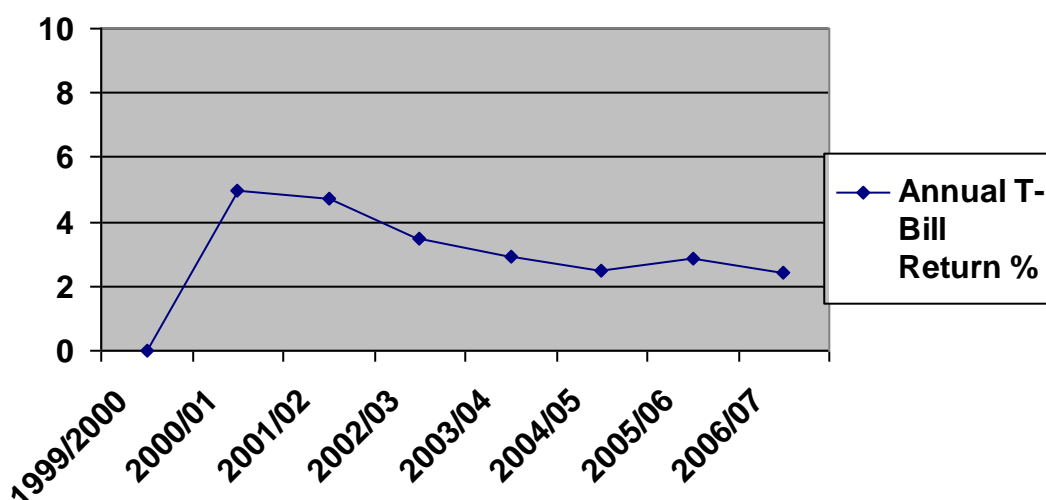
corporation. The risk free return should be free interest rate risk, default risk, reinvestment risk and marketability risk. A typical short-term security issued by government has almost free of any risk. To calculate the risk-free rate of return for the period of this study, the Treasury Bill (91- days) issued by Nepal Rastra Bank on the behalf of government is taken into consideration. A-191 days T-Bills is free of default risk, interest-rater risk, reinvestment risk, marketability risk and also from inflation risk because of very short period of maturity. The risk-free rate of return is calculated by finding the arithmetic mean of risk-free rate of the period of study. The following figure shows the movement of rate of return of Treasury Bills (91-days).

Table 4.2
The T-Bills Returns

Year	Annual T-Bill Return %
1999/2000	
2000/01	4.96
2001/02	4.71
2002/03	3.48
2003/04	2.93
2004/05	2.46
2005/06	2.84
2006/07	2.42
Total	23.8
Average	3.4
S.D.	1.04
Variance	1.089

Source: *Quarterly Economic Bulletin Mid July 2007 Nepal Rastra Bank*

Figure 4.2
Annual T-Bill return



The following table shows the NEPSE Index, T-Bills rate of return and risk and return of market with risk-free rate of return.

It can be observed that the NEPSE index was decreasing in its initial phase. The lowest point was recorded in 2002/03 when the index went down to 204.9 point. After the lowest point, it began to increase sharply. An increase of 8.34% in 2002/04 and 29.14% in 2004/05. Likewise the NEPSE index increased up to 683.9 points (Increased by 76.80%). The trend of increment goes on up to 2006/07 and still (i.e. 2006/07, 2007/08). At a month of 2008 NEPSE index crossed the four digit number (i.e. 1000 points and reached 1128.13 lat 6th August, 2008). More precisely, it may say that increasing and decreasing trend occurs in share market due to political instability and other vital factors.

Based on the calculation during these periods, the average market return is found to be 14.45% while the variation return found 1314.64. The standard deviation found to be 36.26%.

Decreasing trend of T-Bill return can be observed in each year. In 2001/02 the return is 4.96 and 2.46 at the year 2004/05. It clearly shows the decrease trend. At the last it related at 2.42 at (200/07). The arithmetic mean of T-Bills rate of found to be 3.4 for

the period of study. The 3.4 is taken as risk free rate of return for the period of this study for further calculation.

4.1.2 Analysis of Financial Indicators of Commercial Banks

In Nepal, there are altogether 20 commercial banks. The banking sector is dominant sector in stock market. Investor wants to invest in bank's stock more than order sector. It is said that almost 80% of a transaction in stock market accounts for banking sector. Their market price of share is far higher than other sector. They regularly pay dividend to investors. People believe in their services and the jobs of these private and joint venture commercial banks are perceived as better than other jobs.

This study mainly focuses on the determinants of equity price of selected commercial banks, their pricing behaviors, correlation and regression among them. It is also attempts to find the risk of their stock in items of market i.e. beta. Finally, a comparison between the required rate of return and expected rate of return of each of selected bank is done.

4.1.3 Analysis of Himalayan Bank Ltd.

Data Presentation and Analysis

Following table shows the year-wise closing price (MPS), earning per share (EPS), dividend per share (DPS), net worth per share (NWPS) and capital gain from 2000/01 to 2006/07

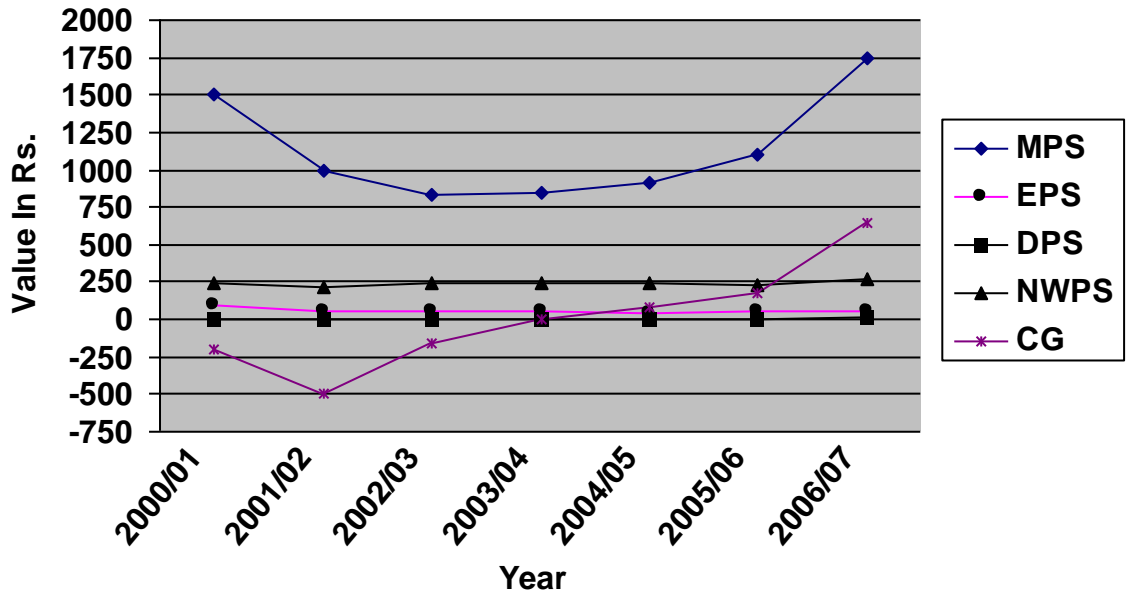
Table 4.3
MPS, EPS, NWPS and Capital Gain of HBL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	1500	93.56	27.5%	240.2	-200
2001/02	1000	60.26	25%	220.03	-500
2002/03	836	49.54	1.32%	247.82	-164
2003/04	840	49.05	0%	246.93	4
2004/05	920	47.91	11.58%	239.59	80
2005/06	1100	59.24	30%	228.72	180
2006/07	1740	60.66	15	264.74	640

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators.

Figure 4.3
Movement of MPS of HBL



By the above figure it can be seen that MPS starts from highest point then decreases and gradually increases. The movement of CG also some EPS is more or less constant. Similarly DSP and NWPS have same trend as EPS.

Correlation of Analysis

Table 4.4

Correlation coefficient between MPS and selected indicators of HBL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.749	.806*	.782*	.964**
	Sig. (2-tailed)	.	.053	.029	.038	.000
	N	7	7	7	7	7
EPS	Pearson Correlation	.749	1	.986**	.986**	.832*
	Sig. (2-tailed)	.053	.1	.000	.000	.020
	N	7	7	7	7	7
DPS	Pearson Correlation	.806*	.986**	1	.896**	.890**
	Sig. (2-tailed)	.029	.000	.	.000	.007
	N	7	7	7	7	7
NWPS	Pearson Correlation	.782*	.986**	.979**	1	.843*
	Sig. (2-tailed)	.038	.000	.000	.	.017
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.964**	.832*	.890**	.843*	1
	Sig. (2-tailed)	.000	.020	.007	.017	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

The above correlation coefficient matrix of Himalayan Bank shows that Correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.647, 0.462, 0.457, 0.539 respectively. It further signifies that MPS of Himalayan driving study period was positively influenced by EPS, DPS, NWPS and CG. There is also moderate relationship with EPS and DPS of MPS. Likewise NWPS and capital gain have positive correlation with MPS which means increasing or decreasing in these two indicators directly affects in MPS further MPS also increase or decrease due to the change in such indicators. It can be concluded that all selected financial indicators have positive correlation with MPS. They have some type of movement.

Regression Analysis

Table 4.5

Regression coefficient of HBL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	-8229.365	3145.736		.969	107.49721
EPS	-4.104	8.382	-.185		
DPS	39.373	14.812	1.373		
NWPS	37.284	13.987	1.524		
CG/CL	-.443	.432	-.450		

The above table clearly visualizes the combined effect of EPS, DPS, NWPS and CG on MPS. In theory these variables strongly market. It may be opposite in case of least developed security market like Nepal. EPS measures the performance if the firm DPS is the direct benefit to the investors. NWPS is the real value of common stock and capital gain is the final benefit if investors sold higher holdings. The regression constant -8229.36, which signifies that value of all does not go below then this model are equal to variables, Considered in this model are equal to zero. The value of standard error corresponding to is 3145.736 which mean the value deviate by this amount. The coefficient b_1 -4.104 which indicate that one rupee increase in EPS leads to an average decrease in MPS. The value may deviate by Rs.8.382 indicated in standard error. Likewise, the regression coefficient b_2 means the DPS on MPS. The value of b_2 39.373 shows that the incensement in DPS by rupee 1 leads to increase by Rs. 6.281 if other variable remained constant. However, the projection may fluctuate by Rs. 9.220 Rs. indicated in standard error. The regression coefficient b_3 clarifies the fact that increase in NWPS by Rs. 1 results an average increase in MPS by Rs. 3.142 through this value may vary by Rs. 9.298. In the same way the regression coefficient by is 0.102 which means one rupee increase in capital gain supports is increase in MPS by Rs. 0.102 and may this value deviate by Rs. 0.991 as explained by its corresponding standard error.

4.1.4 Analysis of Nabil Bank Ltd.

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of NABIL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the [ww.nepalstock.com](http://www.nepalstock.com)

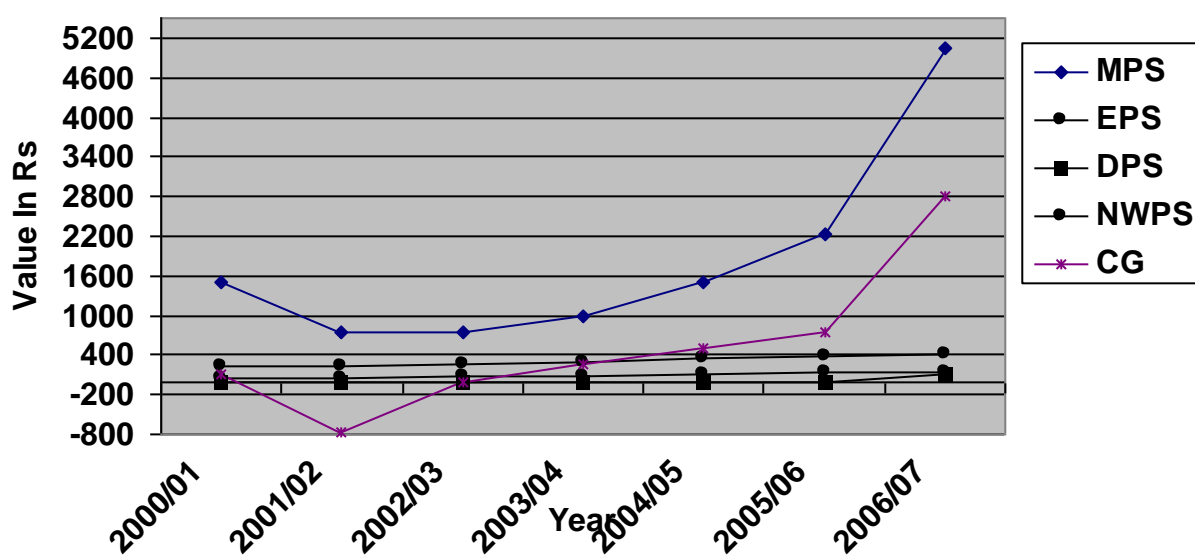
Table 4.6
MPS, EPS, DPS, NWPS and capital Gain of NABIL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	1500	59.26	40%	216.18	100
2001/02	735	55.25	30%	233.18	-765
2002/03	735	84.66	50%	267.3	0
2003/04	1000	92.61	65%	301.37	265
2004/05	1505	103.45	70%	337.16	505
2005/06	2240	129.21	85%	381.36	735
2006/07	5050	137.08	100	418	2810

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators.

Figure 4.4
Movement of MPS of NABIL



The above figure clearly shows that the movement of MPs and CG at the same direction\). More precisely the MPS has followed the same direction, which CG lives, has followed. EPS and DPS of also followed the same trend EPS starts from 59.26 at first year and 55.25 in second years and then gradually increase up to last year NWPS seems in rising trend get 381.36 at 2005/06.

Correlation of Analysis

Table 4.7

Correlation coefficient between MPS and selected indicators of HBL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.749	.806*	.782*	.964**
	Sig. (2-tailed)	.	.053	.029	.038	.000
	N	7	7	7	7	7
EPS	Pearson Correlation	.749	1	.986**	.986**	.832*
	Sig. (2-tailed)	.053	.	.000	.000	.020
	N	7	7	7	7	7
DPS	Pearson Correlation	.806*	.986**	1	.979**	.890**
	Sig. (2-tailed)	.029	.000	.	.000	.007
	N	7	7	7	7	7
NWPS	Pearson Correlation	.782*	.986*	.979**	1	.843*
	Sig. (2-tailed)	.038	.000	.000	.	.017
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.964**	.832*	.890**	.843*	1
	Sig. (2-tailed)	.000	.020	.007	.017	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient matrix of Nabil shows that correlation coefficient between MPS and FPS, MPS and DPS, MPS and NWPS, and MPS and CG are 0.749, 0.806, 0.782 and 0.964 respectively. The correlation coefficient between MPS and EPS are positive. It means when EPS grows MPS also grows and vice-versa. Likewise movement of MPs and DPS is same as indicated by correlation coefficient

between than. The relation between NWPS and MPS is also same of Nabil bank CG and MPS also moves in same direction. More, it can be said that all positive indicators signifies that they more in same way. In other words, when EPS, DPS, NWPS and CG increase MPS also increases and when these indicators decreases MPS also falls or decreases.

In this way, correlation coefficient matrix reveals that all four financial indicators are positively related with MPS. Therefore, they are assumed as the determinant of equity price.

Regression Analysis

Table 4.8
Regression coefficients NABIL

Model	Unstandardized	Std. Error	Standardized	R Square	SEE
	Coefficients		Coefficient		
	B		Beta	.964	500.83847
(Constant)	291.148	1912.064			
EPS	-10.102	56.879	-.210		
DPS	-55.746	73.608	-.911		
NWPS	16.564	17.082	.822		
CG/CL	1.712	.498	1.257		

Multiple regression analysis of NABIL clearly visualizes the combined effect of EPS, DPS, NWPS and capital gain on MPS during the seven years study period. The regression constant a_1 is 291.148 which indicates that MPS does not get below that level even EPS, DPS, NWPS and capital gain loss (CG/CL) are omitted from the model. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average decrease in MPS by Rs. 10.102 if other three variable DPS, NWPS and CL are kept constant. However, the value of b_1 may vary by Rs. 56.879 as indicated by its corresponding standard error. Similarly, the regression coefficient b_2 measures the average effect of DPS on MPS. The value of b_2 being -55.746 indicators that on erupee increase in DPS leads to average decrease by Rs.55.746 on MPS. The

corresponding standard error is 158.031 indicates the value may vary by this amount Rs.73.608. Likewise regression coefficient b_3 which is 16.564 means when on rupee it leads to average increment on MPS by Rs.16.564. This value may vary by Rs. 37.274. Like this, the coefficient measures the average effects of capital gain loss on MPS. The regression coefficient CG/CL is 1.712 which is negatives. It narrates that one rupee increase in CG leads to an average increase MPS by Rs. 1.712 if other variable keep constant. The value may deviate by Rs. 0.498 as explained by its standard error.

The coefficient of determination r^2 explain that 71.1% variable in MPS is accounted by the variation in EPS, DPS, NWPS and

4.1.5 Nepal Investment Bank

Data Presentation

The following table shows the year wise closing price, EPS, DOPS, NWPS and CG of NABIL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the [ww.nepalstock.com](http://www.nepalstock.com)

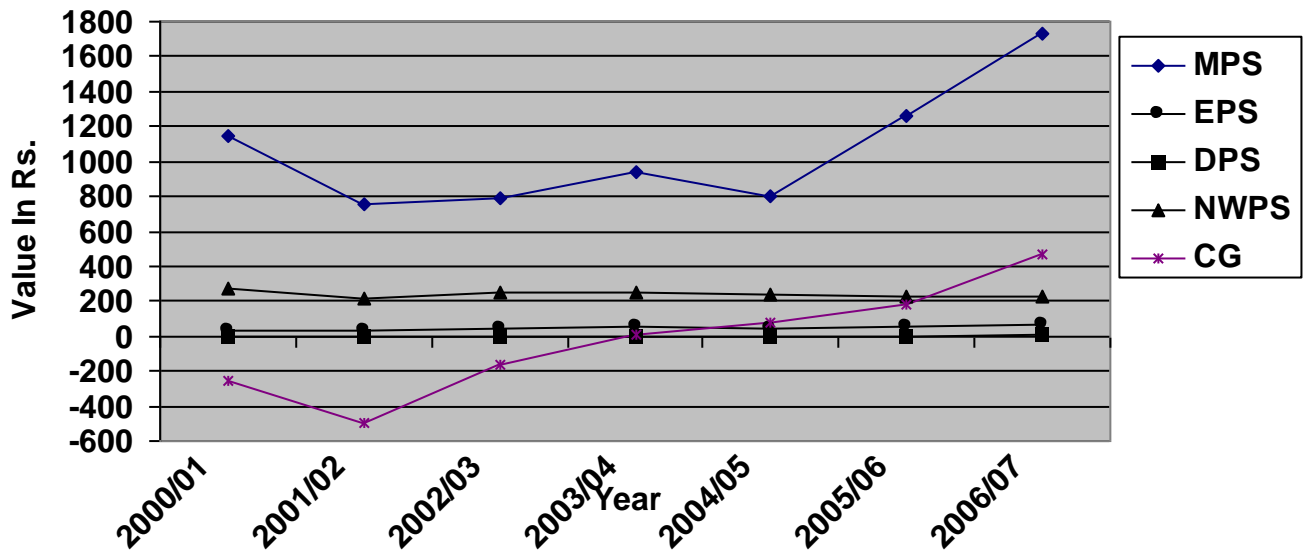
Table 4.9
MPS, EPS, DPS, NWPS and capital Gain of NIBL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	1150	33.17	0%	275.96	-251
2001/02	760	33.59	0%	220.03	-500
2002/03	795	39.56	20%	247.82	-164
2003/04	940	51.70	15%	246.93	4
2004/05	800	39.31	12.5%	239.59	80
2005/06	1260	59.35	20%	228.72	180
2006/07	1729	62.57	5	221.89	469

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.5
Movement of MPS of NIBL



According to above figure it seemed that MPS and CG follow the same trend of movement MPS crosses 1200 and reach up to 1260. Likewise EPS and DPS movement also going on same way. These lines seems constant NWPS starts from highest point at first year and up to and down at following years.

Table 4.10**Correlation coefficient between MPS and selected indicators of HBL**

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.745	-.172	-.172	.723
	Sig. (2-tailed)	.	.054	.713	.713	.067
	N	7	7	7	7	7
EPS	Pearson Correlation	.745	1	.395	-.417	.966**
	Sig. (2-tailed)	.054	.	.380	.352	.000
	N	7	7	7	7	7
DPS	Pearson Correlation	-.172	.395	1	-.649	.530
	Sig. (2-tailed)	.713	.380	.	.115	.221
	N	7	7	7	7	7
NWPS	Pearson Correlation	-.172	-.417	-.649	1	-.530
	Sig. (2-tailed)	.713	.352	.115	.	.221
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.723	.966**	.530	-.530	1
	Sig. (2-tailed)	.067	.000	.221	.221	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Above correlation matrix of Investment shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS, MPS and capital gain are 0.745, -0.172, -0.172, 0.723 respectively. There is positive correlation of EPS with MPS which signifies that they have similar movement. More clearly, when EPS rises MPS also rises and vice-versa. Likewise capital gain has a positive relationship. It also follows the same pattern of relationship as MPS and EPS. Negative correlation coefficient of DPS and NWPS is square value. The value is -0.172. It means there is little negative correlation when DPS and NWPS falls MPS starts to increase and vice-versa.

Regression Analysis

Table 4.11
Regression coefficients NIBL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	2656.131	422.023		.992	55.67399
EPS	-24.292	8.798	-.843		
DPS	-38.224	3.915	-.650		
NWPS	-.772	.857	-.082		
CG/CL	2.091	0.352	1.997		

The above summarized table results of multiple regression analysis produced by SPSS software for assessing the combined effect of EPS, DPS, NWP and CG on MPS of NIBL for the seven years study period. The regression constant as of NIBL 2656.131 which means that MPs does not go below than this level even if EPS, DPS, NWPS and CG are omitted from the model. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average decrease in EPS by Rs.24.292 if other three variables keep constant. However the value may vary by Rs.8.798. Likewise the represents coefficient b_2 represents the average effects of DPS on MPs. The value of b_2 being -38.224 indicates that on rupee increase in DPS leads to a decrease in MPS by Rs.38.224 holding the three variables constant. The value may deviate by Rs. 0.843 which indicates by standard error. Similarly on rupee increase in NWPS leads to decrease by Rs.-0.772 if EPS, DPS and CG is omitted although the value may fluctuate by Rs.0.857 which can be seen at standard error of corresponding b_3 . The regression coefficient b_4 measures the effects of capital gain on market increase in capital gain leads to average increase by Rs.2.091 it if other variables are kept constant. However the value may variable by Rs.0.352 as explained by its standard error.

4.1.6 Nepal SBI Bank

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of SBI from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

Table 4.12

MPS, EPS, DPS, NWPS and capital Gain of SBI Bank

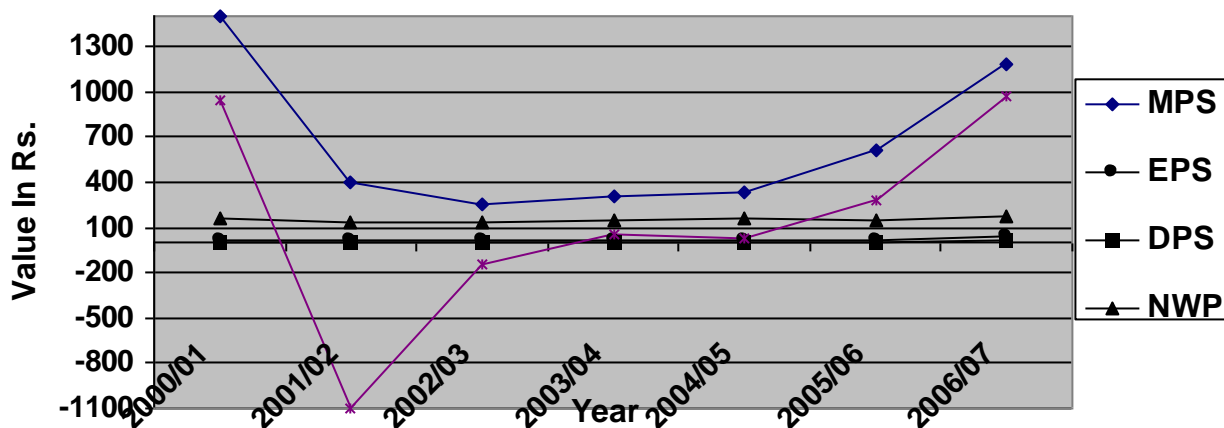
Year	MPS	EPS	DPS	NWPS	CG
2000/01	1500	8.69	0%	165.73	938
2001/02	401	9.61	0%	131.88	-1099
2002/03	255	11.47	8%	134.05	-146
2003/04	307	14.25	0	146.80	52
2004/05	335	13.29	0	159.54	28
2005/06	612	18.27	5%	153.44	277
2006/07	1176	39.35	12.59	178.04	964

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.6

Showing Movement of MPS of SBI



It can be viewed that lives of MPS and CG more in same direction where as MPS didn't show any reaction, as there were change in other variables NWPS during the study period not more then 1675.73 NWPS live seems almost constant. DPS and EPS seems at 0-20 range in this figure.

Table 4.13
Correlation coefficient between MPS and selected indicators of SBI

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	.1	.347	.211	.750	.738
	Sig. (2-tailed)	.	.445	.649	.052	.058
	N	7	7	7	7	7
EPS	Pearson Correlation	.347	1	.802*	.665	.349
	Sig. (2-tailed)	.445	.	.030	.103	.443
	N	7	7	7	7	7
DPS	Pearson Correlation	.211	.802*	1	.338	.261
	Sig. (2-tailed)	.649	.030	.	.459	.572
	N	7	7	7	7	7
NWPS	Pearson Correlation	.750	.665	.338	1	.814*
	Sig. (2-tailed)	.052	.103	.459	.	.026
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.738	.349	.261	.814*	1
	Sig. (2-tailed)	.058	.443	.572	.026	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Above correlation coefficient table demonstrates the coefficient between MPS and EPS MPS and DPS, MPS and NWPS and MPS and capital gain loss are 0.347, 0.211, 0.750 and 0.738 respectively. The negative correlation coefficient signifies that MPS has taken opposite movement with respect to EPS and DPS. More theory, when EPS, DPS of SBI Bank more up, MPS gives down. This is quite opposite to the theory says that EPs DPS have positive impact on MPS. The advice results is due to the short study period, Underdeveloped capital market, insufficient number of participants in security market underdeveloped capital market that there is high degree of signing

influence without having any true information. The positive correlation between NWPS and CG on MPs are in same direction which signifies that the increasing trend of CG and NWPS are in the indicators of increasing MPs. Higher the NWPS CG more will be the MPs. Decreasing trend of CG and NWPS tells us that MPs shall go down,

Regression Analysis

Table 4.14
Regression coefficients SBI Bank Limited

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	-3736.613	5941.908			
EPS	-31.509	67.433	-.683		
DPS	38.399	100.393	.398		
NWPS	31.210	43.748	1.066		
CG/CL	.004	.819	.005		

The above table shows the summarized results of multiple regression analysis produced by SPSS, software for analyzing the combined effect of EPS, DPS, NWPS and CG on MPS of NSBIL for the Seven years study period. The regression constant a_1 is -3736.613 of which implies that MPS does not go below than this level. The regression coefficient b_1 represents that one rupee increase in EPS leads to on average decrease by Rs. 31.509 on MPs if other three variable keep constant. The value of b_1 may vary by Rs.67.433 as explained by its standard error. Likewise, b_2 measures the effects of DPS on MPs. The value if is 38.399 which indicates on rupee increase on DPS leads ton on average increase in MPS by Rs.38.399 if other variables in this model remained constant.

The value may deviate by Rs.100.393 similarly, the value of b_3 is 31.210 which implies that one rupee increase in NWPS leads to average increase in MPS by Rs.31.210 if other three variable are omitted. Although the value may change by Rs.43.748 as maintained in standard error. The regression coefficient b_4 measures the average effect of capital. The CG/CL value is 0.004. That means one rupee increase in

CGr leads to increase by Rs.0.004 in MPS if three variables EPS, DPS, NWPS are remained constant. The value may vary by Rs.0.819 as indicated in standard error.

4.1.7 Standard Chartered Bank

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of SCBNL from 2000 to 2007. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

Table 4.15

MPS, EPS, DPS, NWPS and capital Gain of Standard Chartered Bank

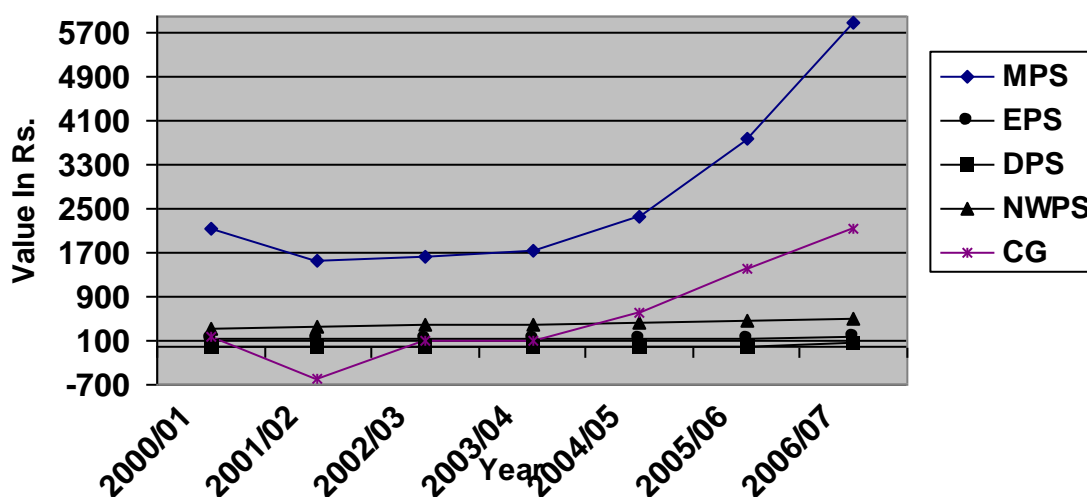
Year	MPS	EPS	DPS	NWPS	CG
2000/01	2144	126.88	100%	327.5	159
2001/02	1550	141.13	100%	363.86	-594
2002/03	1640	149.3	110%	403.16	90
2003/04	1745	143.55	110%	399.24	105
2004/05	2345	143.55	120%	422.37	600
2005/06	3775	143.55	130%	468.22	1430
2006/07	5900	167.37	80	512.118	2125

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.7

Movement of MPS of SCBNL



By the above figure it is seen that the movement MPS and CG is some. It it due to the return that higher MPS more will be the CG. Through the short study period is extremely short, it shows the trend of MPs with regard to the movement of selected variables during the study period. EPS, DPS and NWPS seem more or less constant during the sampled years of study period.

Correlation Analysis

Table 4.16

Correlation coefficient between MPS and selected indicators of SCBNL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.713	-.395	.848*	.953**
	Sig. (2-tailed)	.	.072	.381	.016	.001
	N	7	7	7	7	7
EPS	Pearson Correlation	.713	1	-.427	.860*	.660
	Sig. (2-tailed)	.072	.	.340	.013	.107
	N	7	7	7	7	7
DPS	Pearson Correlation	-.395	-.427	1	-.069	-.153
	Sig. (2-tailed)	.381	.340	.	.882	.743
	N	7	7	7	7	7
NWPS	Pearson Correlation	.848*	.860	-.069	1	.890**
	Sig. (2-tailed)	.016	.013	.882	.	.007
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.953**	.660	-.153	.890**	1
	Sig. (2-tailed)	.001	.107	.743	.007	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient maintains of SCBN shows that the correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.713, -0.395, 0.848, 0.953 respectively. The negative correlation between MPS and DPS signifies that MPS moves adversely in relation to the EPS. That is when EPS grows MPs goes down and vice-versa. However, movement of MPs and EPs is same

as indicators by the correlation coefficient between them likewise, the correlation coefficient of MPS with NWPS also significantly and positive. This signifies when NWPS of SCBN is increasing correlation coefficients which mean not so, high and not so low. The SCBN has very strong capital gain (CG) with MPS as indicated by its correlation coefficient of 0.953. It signifies that higher the possibility of capital gain, higher will be the equity price. In general practice, investor primary analyzed the historical capital gain pattern and if they notice any symptoms regarding the price appreciation demand of stock in stock market mounts up resulting the higher closing price.

Regression Analysis

Table 4.17
Regression coefficients Standard Chartered Bank

Model	Unstandardized	Std. Error	Standardized	R Square	SEE
	Coefficients		Coefficient		
	B		Beta	.992	248.03678
(Constant)	10991.205	3670.122			
EPS	-104.829	49.271	-.793		
DPS	-59.827	17.236	-.603		
NWPS	31.593	14.337	1.229		
CG/CL	.501	.508	.291		

As above table clearly visualize the combined effect of EPS, DPS, NWPS and CG on MPS during Seven years study period. The regression constant a_1 is 10991.205 which indicate that MPS of SCBN does not go below than Rs. -104.829 if entrees variables considered in this model equal to zero. The regression coefficient b_1 is -105.843 which means one rupee increase may leads to average decrease by Rs. 104.829 on MPS if other there variable remain constant. There the value may vary by Rs.49.271 likewise; the regression coefficient b_2 measures the average effects of DPS on MPS. The value is -59.827 indicates the one rupee increase in DPS leads to average decrease by Rs. 59.827 in MPS. It can change by Rs.27.236 as explained by its standard error. Similarly, the value of NWPS 31.593 which signifies that one rupee increase is NWPS leads to average increase by Rs.31.593 in MPS if three variables

kept constant. The value may deviate by Rs.14.337. Its corresponding standard error explained so. The regression coefficient b_4 explains the effect of CG on MPS. There the value is 0.501 means Re.1 increase in capital gain leads to average increase in MPs. by Rs. 0.501 keeping entire variables (i.e. EPS, DPS and NWPS constant). The CG value may vary by Rs. 1.168 which can be seen in corresponding b_4 (i.e. Standard error)

4.1.8 Summary Results of Commercial Banking Sector

Data Presentation

The following data is average of five commercial banks, this table is attempting to present banking sector as a whole. The source of this data is the annual report of concerned commercial banks down loaded from www.nepalstock.com. This table sharply presents the year wise closing price (MPS), EPS, DPS, NWPS and capital gain during study period.

Table 4.18

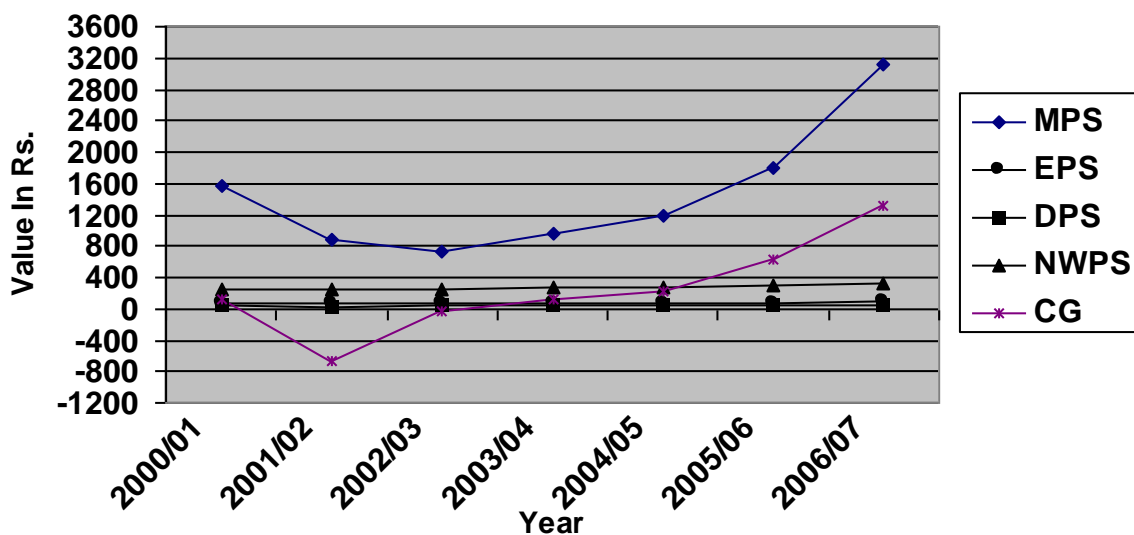
MPS, EPS, DPS, NWPS and capital Gain of Commercial Banking Sector

Year	MPS	EPS	DPS	NWPS	CG
2000/01	1558.8	64.335	33.5	251.63	121.4
2001/02	889.2	59.968	31	251.38	-669.6
2002/03	732.2	68.96	37.864	253.712	-37
2003/04	966.4	70.322	38	268.244	114.2
2004/05	1181	69.502	42.816	271.698	214.1
2005/06	1797.4	81.924	54	294.282	616.4
2006/07	3119	93.41	42.52	318.95	1321.6

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.8
Movement of MPS of Commercial Bank



Plotting the above data in the graph, following figure is obtained which technically present the movement of MPS with respect to the selected financial indicators. More precisely, the figure attempts to show the path of MPS, which has seen during the study period. The line of MPS starts from high point and decrease once and seem gradually increase. The CG line has followed the same trend as MPS NWPS line seems in upper position then EPS and DPS line. However, these three lines seem more is less constant during the study period of commercial Banks.

Correlations Analysis

Table 4.19
Correlation coefficient between MPS and selected indicators of
Commercial Banks

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.868*	.407	.880**	.895**
	Sig. (2-tailed)	.	.011	.365	.009	.007
	N	7	7	7	7	7
EPS	Pearson Correlation	.868*	1	.687	.973**	.955**
	Sig. (2-tailed)	.011	.	.088	.000	.001
	N	7	7	7	7	1
DPS	Pearson Correlation	.407	.687	1	.689	.639
	Sig. (2-tailed)	.365	.088	.	.087	.122
	N	7	7	7	7	7
NWPS	Pearson Correlation	.880**	.973**	.689	1	.919**
	Sig. (2-tailed)	.009	.000	.087	.	.003
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.895**	.955**	.639	.919**	1
	Sig. (2-tailed)	.007	.001	.122	.003	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Above correlation matrix of commercial banking sector shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG/CL are 0.868, 0.407, 0.880 and 0.895 respectively. All calculated financial indicators are positive which means the movement of selected indicators with MPS is in same direction. The MPS moves as accordance to selected financial indicators however the degree may as the coefficient vary. The correlation coefficient of MPS with capital gain is 0.895 which is relatively higher than others. This suggests that MPS and CG moves in the same way to this extent. Further more, correlation coefficient between MPS and CG is positive which signifies that the increasing trend of CG is the indication of increased MPs i.e. MPs and CG moves in the same

direction higher the CG more will be the MPS. Declining trend of CG tells us that MPS shall go down in coming year. The relation of MPS with EPs is 0.868 implies that when EPS follows increasing trend MPs also starts to rise. The correlation coefficient of overall commercial banking sectors DPS and NWPS with MPs is positive. The values are 0.407 and 0.880 respectively. The movement is in same direction of DPS and NWPS with MPS.

By interpreting the above results, correlation coefficient matrix reveals that all four financial indicators are positively related with MPS. Therefore they are assumed as life determinant of equity price.

Regression Analysis

Table 4.20
Regression coefficients Commercial Banking Sector

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	10991.205	3670.122		.992	248.03678
EPS	-104.829	49.271	-.793		
DPS	-59.827	17.236	-.603		
NWPS	31.593	14.337	1.229		
CG/CL	.501	.508	.291		

The above table clearly visualizes the combined effect of EPS, DPS, NWPS and capital gain (CG) on MPS. In theory, these variable strongly influenced equity price in developed security market (But it may be changed in case of very least developed security market) EPS measures the performance of the firm. DPS is the direct benefit to the investors. NWPS is the real value of common stock. Therefore, increase in NWPS always beings increment in MPS. Higher capital gain is the output of higher MPS. Capital gain is also final benefit if investors sold their holdings. Therefore analysis must take capital gain pattern into consideration that they can predict the effect of capital gain more precisely. Capital gain shapes equity price by pushing and pulling the demand of stock in security market.

Above computed results is the multiple regression analysis for banking sectors commercial banks. The regression coefficient b_1 is negative (i.e. -38.521) which implies that one rupee change in FPS leads to average decrease in MPs by Rs.38.521 of the whole banking sectors if other variable keep constant. However the standard error is 90.66 which mean the value may deviate by this amount similarly, the value of b_2 is -40.37 which measure the effect of DPS on MPS one rupee decrease in DPS leads to average increase in MPS by Rs.40.37 explains that one rupee change in NWPS May leads the average increase by Rs.30.36. The value may fluctuate br Rs.30.592 as explained in it corresponding standard error. The regression coefficient b_4 is 1.014 signifies that one rupee increase in CG may leads to average increase in MPs by Rs. 1.014. The value may change by some extent by 1.297 computed in corresponding standard error.

The regression constant a_1 with the value of -2660.328 signifies that MPS of banking industry does not go below this amount even if EPS, DPS, NWPS and capital gain have value equal to zero Rs. But the standard error of the model reveals that the estimation of MPS may vary by Rs. 4677.257

4.1.9 Analysis of Financial Indicators of Development Banking Sector

Development Banks are also financial institutions which are categorized as 'B' grade institution by Nepal Rastra Bank. There are 22 listed banks (up to Nov. 07) in stock exchange. The first development banks Nepal Industrial Development Corporation (NIDC) which established at 1959 (AD). This study concentrates in only three banks. To find the determinants and pricing behaviour share price of these selected three banks, correlation, regression among them are the main objectives of this study, furthermore, market related risk, i.e. beta coefficient of these companies required rate of return on stock suggested by CAPM and expected rate of return of each of the selected companies is also tried to analyze and present.

4.1.10 Development Credit Bank

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of DCBL from 2000 to 2007. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

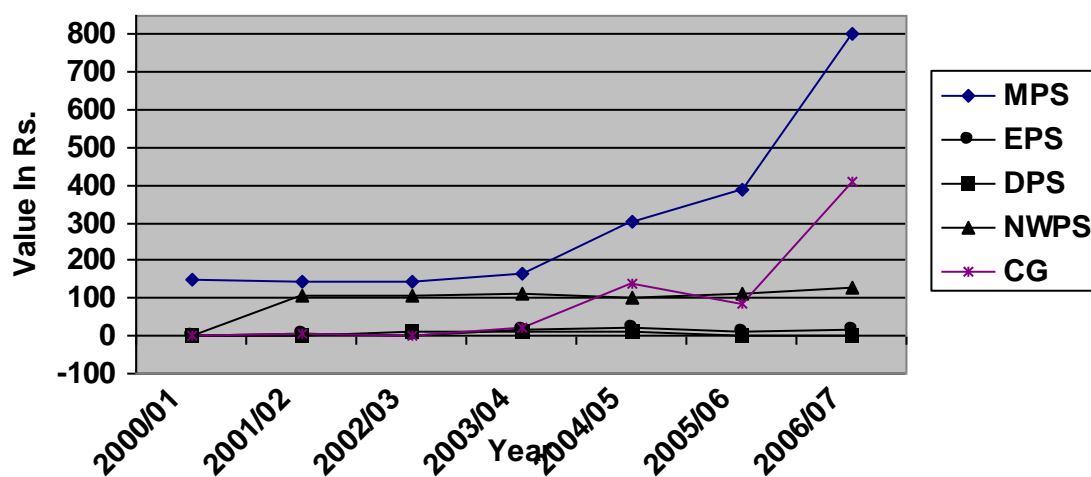
Table 4.21
MPS, EPS, DPS, NWPS and capital Gain of DCBL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	152	0.11	0	0.1	0
2001/02	145	5.85	0	105.93	7
2002/03	145	1.41	10.53	105.27	0
2003/04	165	19.22	10.53	112.72	20
2004/05	305	22.27	12.63	102.48	138
2005/06	390	13.68	0.63	113.29	85
2006/07	800	16.78	0.63	129.25	410

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.9
Movement of MPS of DCBL



As per the above figure it clearly seems that MPS at initial stage does not more than 150-160 range. But last two years, it gets more point and reaches around 400 ranges. Similarly types of trend has followed by capital gain line. Net worth per share (NWPS) seems at uniform position and point is around 100 range EPS and DPS are in bottom level.

Correlation Analysis

Table 4.22

Correlation coefficient between MPS and selected indicators of DCBL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.467	-.310	.438	.977**
	Sig. (2-tailed)	.	.290	.499	.325	.000
	N	7	7	7	7	7
EPS	Pearson Correlation	.467	1	.389	.592	.514
	Sig. (2-tailed)	.290	.	.389	.162	.238
	N	7	7	7	7	7
DPS	Pearson Correlation	-.10	.389	1	.265	-.196
	Sig. (2-tailed)	.499	.389	.	.566	.673
	N	7	7	7	7	7
NWPS	Pearson Correlation	.438	.592	.265	1	.435
	Sig. (2-tailed)	.325	.162	.566	.	.330
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.977**	.238	.673	.330	.
	Sig. (2-tailed)	.000	.238	.673	.330	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient matrix of Development Credit Bank shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.467, -0.310, 0.438, 0.977 respectively. The correlation coefficient between EPS and MPS is positive. It means when MP's grows EP's also grows. But there is negatively correlated with DPS which signifies when MPS increases DPS decreases and vice versa. Likewise, NWPS and capital gain move same direction with

MPS indicates when MPs grows both indicators grows and when it decreases both decrease. In conclusion correlation coefficient analysis throws the fact that must be some kind of relationship between equity price and selected financial indicators either of negative and positive value.

Regression Analysis

Table 4.23
Regression coefficients DCBL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	148.453	66.672		.974	66.95154
EPS	.623	4.682	.023		
DPS	-6.638	5.911	-.163		
NWPS	.426	.814	.076		
CG/CL	1.455	.255	.900		

The above summarized the results of multiple regression analysis produced SPSS software for assigning the combined effect of EPS, DPS, NWPS and capital gain on MPS of DCBL for the seven years study period. The regression constant a_1 to DCBL is 148.453 which implies that MPS does not go below than that level even EPS, DPS, NWPS, and CG are omitted from the model. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average increase MPs by Rs 1 if other three variable DPS, NWPS and CG keep constant. However the value may vary by Rs.4.682 Similarly the regression coefficient b_2 measures the average effects of DPS on MPS. The value of b_2 being -6.638 indicates that one rupee increase in DPS leads average decrease in MPS by Rs.6.638 The value may vary by Rs.5.911 which can be seen in corresponding standard error. In the same way, the regression coefficient b_3 which is equal to 0.426, signifies that one rupee increase in NWPS leads to average MPS by Rs.0.426 if other three variable remain constant. The value may vary by Rs.0.814. Likewise, the regression coefficient b_4 explains the average effects of capital gains loss on MPs b_4 is 1.455 means one rupee increase in CG leads to average increase on MPS Rs.1.455. The value may fluctuate by Rs.0.255 as explained in its standard error.

4.1.11 Nepal Development Bank

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of NDBL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

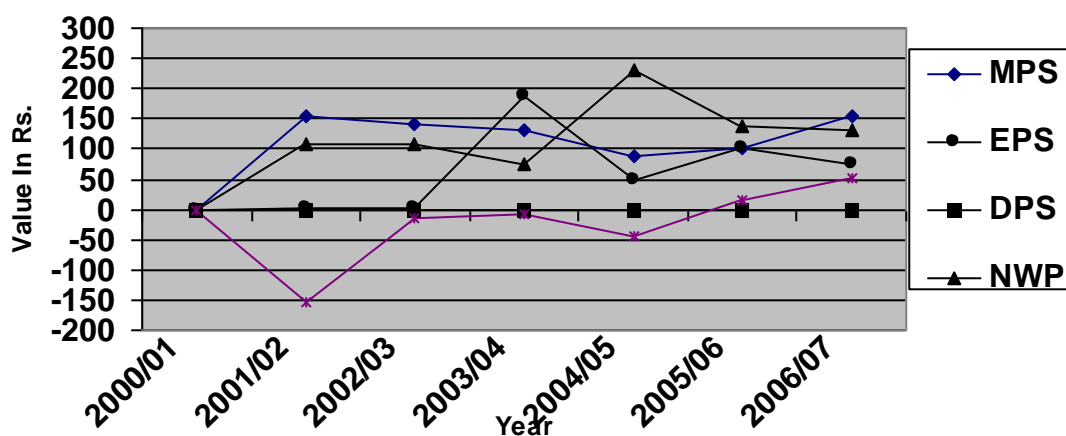
Table 4.24
MPS, EPS, DPS, NWPS and capital Gain of NDBL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	0	0	0	0	0
2001/02	155	2.52	0	107.25	-155
2002/03	140	0.75	0	108.00	-15
2003/04	132	188.76	0	74.69	-8
2004/05	88	49.25	0	230	-44
2005/06	102	101.03	0	138.22	14
2006/07	153	74.38	0	131.77	51

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.10
Movement of MPS of NDBL



It seems that MPS of NDBL starts from '0' and reached at 150 point and also decreases at following year fluctuating trend seems in CG as per figure EPS and DPS have uniform or constant trend. Some fluctuation can be visualized as per the line of NWPS. It starts from '0' and get 150-200 ranges.

Correlation Analysis

Table 4.25

Correlation coefficient between MPS and selected indicators of HBL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.246	.a	.404	-.213
	Sig. (2-tailed)	.	.596	.	.368	.647
	N	7	7	7	7	7
EPS	Pearson Correlation	.246	1	.a	.087	.385
	Sig. (2-tailed)	.596	.	.	.8/53	.394
	N	7	7	7	7	7
DPS	Pearson Correlation	.a	.a	.a	.a	.a
	Sig. (2-tailed)
	N	7	7	7	7	7
NWPS	Pearson Correlation	.404	.087	.a	1	-.095
	Sig. (2-tailed)	.368	.853	.	.	.839
	N	7	7	7	7	7
CG/CL	Pearson Correlation	-.213	.385	.a	-.095	1
	Sig. (2-tailed)	.647	.394	.	.839	.
	N	7	7	7	7	7

a. Cannot be computed because at least one of the variables must be constant.

The presented correlation coefficient matrix of NDBL shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.246 0, 0.404 and -0.213 respectively. There is positive correlation between MPS and EPS. It implies that when MPs grows EPS also rise and vice versa. No concrete results can be seen in DPS column. Because of the no divided distribution in any study period. To get result at least one of the variables should not be constant. No relation can also be interpreted means when NWPS of NDB is increasing, MPS also

tends to increase calculated price appreciation value is negative means both indicators move adversely. One increase other decreases and vice--versa.

At last, it may be said that if we take the data of developed security market more than 10 years and get reliable results. However correlation coefficient throws the lights the fact that there must be some kind of relationship between MPS and selected financial indicators.

Regression Analysis

Table 4.26
Regression coefficients of NDBL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	44.990	55.212		.483	63.802550
EPS	.329	.414	.445		
DPS			.247		
NWPS	.184	.389			
CG/CL	-.546	.513	-.603		

The above table clearly visualizes the combined effects of EPS, DPS, NWPS and CG on MPS. In theory these variables strongly influence equity price in developed security market (It may be opposite in base of least developed security market like Nepal.) EPS measures the performance of the firm DPS is the direct profit to the investors. NWPS is the real value of common stock and capital gain is the final benefit if investors sold their holding. The regression constant a_1 is 44.000, which considers that MPS doesnot go below this level if other variables, considered in this model are equal to zero. The standard error of constant a_1 is 55.212 means the value may increase or decrease by this amount. Likewise, the coefficient leads to an average increase in MPS by Rs. 0.329 and the value may go up and down by Rs. 0.414 can be seen in its corresponding standard error. Similarly, the coefficient value of b_2 is 0.184 means that one rupee increase in NWPS results an average increase in MPs by R_1 0.184. Through this value may vary by Rs.0.389. In the same way, the negative

regression coefficients b_4 signifies that one rupee increase in capital gain supports to decrease in MPS by Rs.0.546 and this value may vary by Rs.0.513 as explained in its standard error.

(No any results found about DPS through SPSS software).

4.1.12 Nirdhan Utthan Bank

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of NUBL from 2000 to 2007. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

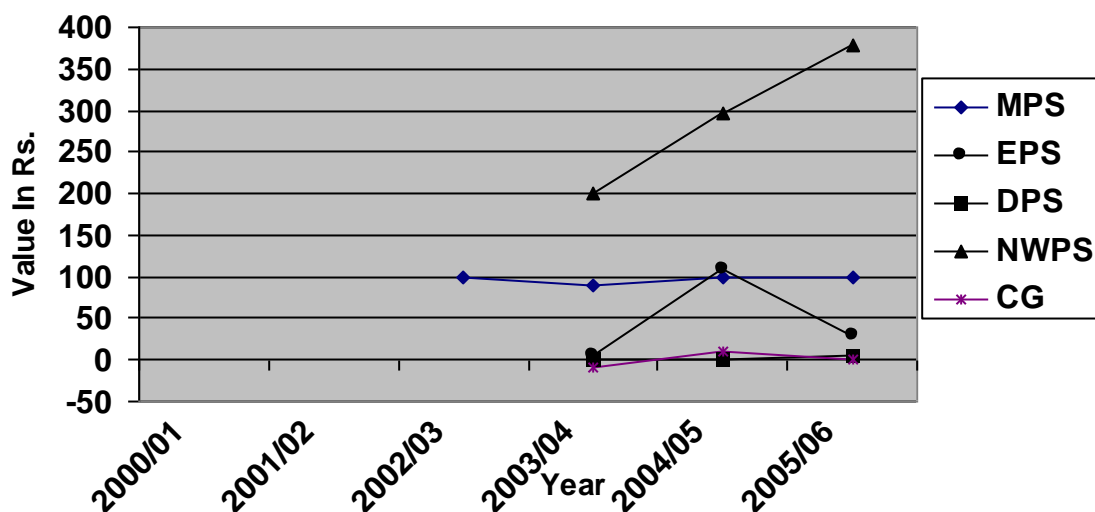
Table 4.27
MPS, EPS, DPS, NWPS and capital Gain of Nirthan Utthan Bank

Year	MPS	EPS	DPS	NWPS	CG
2000/01	0	0	0	0	0
2001/02	0	0	0	0	0
2002/03	100	0	0	0	0
2003/04	90	4.9	0	200.28	-10
2004/05	100	109.63	0	297.28	10
2005/06	100	30.57	5	377.87	0
2006/07	110	41.84	16.9	332.30	10

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.11
Movement of MPS of NUBL



In the case of NWBL, it can be clearly seen that there is no MPS and other indicators line in the previous year. This happened due to the unavailability of data.

At figure, NWPS line seems in top. It starts from Rs.200 and increase and get 350-400 range similarly MPS line starts from Rs.100 and reached below the 100 CG have same trend of MPS, NUBL did not distribute the dividend to its shareholders during the study did not period.

Correlation Analysis

Table 4.28

Correlation coefficient between MPS and selected indicators of NUBL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.495	.424	.715	.239
	Sig. (2-tailed)	.	.259	.343	.071	.606
	N	7	7	7	7	7
EPS	Pearson Correlation	.495	1	.210	.673	.727
	Sig. (2-tailed)	.259	.	.652	.098	.064
	N	7	7	7	7	7
DPS	Pearson Correlation	.424	.210	1	.575	.524
	Sig. (2-tailed)	.343	.652	.	.177	.228
	N	7	7	7	7	7
NWPS	Pearson Correlation	.715	.673	.575	1	.365
	Sig. (2-tailed)	.071	.098	.177	.	.421
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.239	.727	.524	.365	1
	Sig. (2-tailed)	.606	.064	.228	.421	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Above correlation coefficient matrix of Nirdhan Utthan Bank shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and capital gain loss are 0.4495, 0.424, 0.715 and 0.239 respectively. These figures of correlation coefficient importantly underline the facts that during seven years study period of MPS this bank are positively influenced by the selected financial indicators. More precisely, correlation coefficient between MPS and NWPS is same high rather than other indicators. The relation of MPS with EPS is positive and average there is moderate relation with EPS of MPs. The correlation coefficient between DPS and MPS is 0.424. This signifies when DPS increases MPS also follows the same way. Similarly MPS and NWPS move in same direction. MPs and price appreciation has also positive impact on MPs as indicated by this positive correlation coefficient.

Therefore, for this bank investors, such financial indicators are in real sense, the best indicators. In the same way the very idea about the movement of MPS can be materialized by analyzing the correlation, coefficient between dependent and independent variables. In conclusion, this analysis proves the fact that there moderate degree positive correlation between MPS and DPS, MPS and EPS, MPS and capital gain have very low degree & relationship with MPS.

Regression Analysis

Table 4.29
Regression coefficients NUBL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	33.333	33.333		.540	-.381
EPS	.900	2.619	.688		
DPS	3.662	10.995	.473		
NWPS	.055	.467	.191		
CG/CL	-4.121	11.881	-.579		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing the combined effect of EPS, DPS, NWPS and CG on MPS of this development bank for six years study period, the regression coefficient as zero. The regression model b_2 represents that one rupee increase in DPS leads to average decrease in MPS by Rs.5.400. The value may vary by Rs.17.295. In the same way the value of b_3 is 0.248 signifies that one rupee increase in NWPS leads to average increase in MPs by Rs.0.248. If other variable remained constant the corresponding standard error if b_3 is 0.212 that the value may deviate by Rs.0.212. Likewise, the regression coefficient b_4 is -0.702. It represents that one rupee increase in capital gain leads to an average decrease in MPs by Rs.0.702. This value may deviate by Rs.4.210 as explained in its corresponding standard error.
(NO any results found about EPs through SPSS software)

4.1.13 Summary Results of Development Banking Sector

Data Presentation

The following data is average of five development banks, this table is attempting to present development banking sector as a whole. The source of this data is the annual report of concerned development banks down loaded from www.nepalstock.com. This table sharply presents the year wise closing price (MPS), EPS, DPS, NWPS and capital gain during study period.

Table 4.30

MPS, EPS, DPS, NWPS and capital Gain of Development Banking Sector

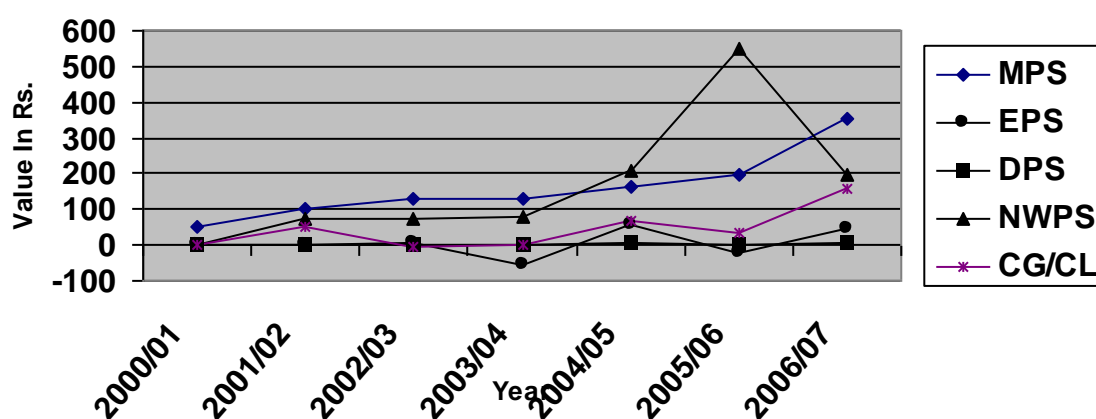
Year	MPS	EPS	DPS	NWPS	CG/CL
2000/01	50.67	0.036	0	0.03	0
2001/02	100	2.79	0	71.06	54
2002/03	128.33	3.72	3.51	71.09	-5
2003/04	129	-54.88	3.51	79.44	0.67
2004/05	164.33	57.71	4.21	209.92	68
2005/06	197.33	-18.92	1.879	549.15	33
2006/07	354.33	44.33	5.84	197.77	157

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.12

Movement of MPS of Development Banking Sector



In figure it seems the movement of MPS and CG almost in some direction. The overall MPS of developing banking sector is maximum at Rs.354.33 CG follows the

similar trend as EPS DPS have no significant change. It means there is no dividend distribution EPS has fallen from '0' range and becomes negative once and again rise. However NWPS gradually increases in every year and reached 209.79 and again decreased up to 197.77.

Correlation Analysis

Table 4.31
Correlation coefficient between MPS and selected indicators average
Summary of Development Banking Sector

	Description	MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.460	.778*	.749	.859*
	Sig. (2-tailed)	.	.299	.039	.053	.013
	N	7	7	7	7	7
EPS	Pearson Correlation	.460	1	.614	.801*	.262
	Sig. (2-tailed)	.299	.	.143	.031	.571
	N	7	7	7	7	7
DPS	Pearson Correlation	.778*	.614	1	.672	.554
	Sig. (2-tailed)	.039	.143	.	.098	.0197
	N	7	7	7	7	7
NWPS	Pearson Correlation	.749	.801*	.672	1	.587
	Sig. (2-tailed)	.053	.031	.098	.	.166
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.859*	.262	.554	.587	1
	Sig. (2-tailed)	.013	.571	.197	.166	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Above Correlation coefficient matrix of sampled three developments banking sector shows that correlation coefficient between MPS and EPS, MPS and DPS and NWPS, MPS and CG are 0.460, 0.778, 0.749 and 0.859 respectively. These figure of correlation coefficient important by underline the fact that during seven years study period MPS of three development banks are positively influenced by selected financial indicators. More precisely, correlation coefficient of MPS with EPS is less and positive which indicates both indicators moves in same direction calculated DPS value is 0.778 which is positive too. It means when DPS increases, MPS also tends to increase and vice versa. Similarly, Summary, NWPS of all companies have 0.749 which is positive and significantly higher. This signifies that when NWPS increases, MPS also tends to increases. Likewise, the correlation coefficient of CG is also positive, which implies that they are more in same direction. More clearly, increment in capital gain also leads to increase in MPS and when price appreciation goes down

make price per share (MPS) also starts to fall. Therefore, the summary results of correlation coefficient for the investors, such financial indicators are in real sense, the best indicators. In the somewhat the very idea about the movement of MPS can be materialized by analyzing the correlation coefficient between dependent and independent variables. In conclusion, this analysis of development bank sector proves the fact that there is positive and moderate degree of correlation between MPs and EPS, MPS and DPS, MPs and NWPS where capital gain have higher degree of relationship with MPS.

Regression Analysis

Table 4.32

Regression coefficients Summary of Development Banking Sector

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	45.220	41.716		.897	.690
EPS	-.601	1.440	-.186		
DPS	14.148	14.977	.386		
NWPS	.413	.590	.352		
CG/CL	.825	.570	.487		

The above table clearly visualizes the combined effect of EPS, DPS, NWPS and CG on MPS. In theory, these variables strongly influence equity price in developed security market. EPS measures the performance of the firm DPS is the direct benefit to the investors NWPS is the real value of common stock and capital gain is the final benefit to investor sold their holding. The regression constant a_1 is 45.22, which indicates that MPS does not go below than this level even if other variables, considered in this model are equal to zero. The standard error of constant a_1 is 41.716 which signifies that the value may vary by this amount. The coefficient b_1 is -0.601 which indicates that one rupee increase in EPS leads to average decrease but Rs. 0.601. The value may fluctuate by Rs.1.44 as explained in its corresponding standard error. Similarly regression coefficient b_2 is 17.148 shows that one rupees increase in DPS leads to average increase by Rs.17.148 if other variables keep constant. However

this projection may differ from 14.977 as indicates in its standard error. Regression coefficient b_3 which clarifies the fact that increase in NWPS by Rs.1 results an average increase by Rs. 0.413 in MPS. It differs from 0.590. Likewise, the regression coefficient b_4 signifies that one rupee increase in capital gain supports to increase in MPs by Rs.0.825 and again this value may vary by Rs.0.570 by its corresponding standard error.

4.1.14 Analysis of Financial Indicators of Finance Companies

Most of the finance companies were established under the company Act 1964 with an objective of mobilizing the scattered saving through various schemes deploy there different sectors of the economy for the economic development of the country.

There are 74 finance companies (up to July 2007) in Nepal the oldest finance company is the Nepal industrial development corporation. The numbers of finance companies are increasing day by day. There are 55 finance companies listed in stock market. one the basis of transaction finance companies occurs second position after commercial and development banking sector in stock market.

This study study concentrates only five finance companies. It attempts to find pricing behavior and the determinants of common stock of these selected finance companies. Further more, calculation of beta, comparison between required rate of return suggested by CAPM and expected rate of return of each of selected companies is also tried to analyze.

4.1.15 Citizen Investment Trust

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of CIT from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

Table 4.33

MPS, EPS, DPS, NWPS and capital Gain of CIT

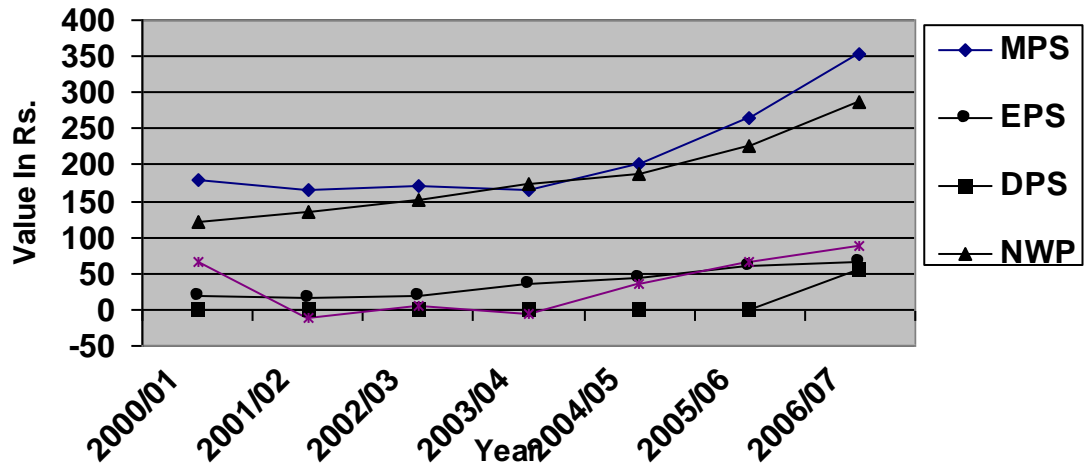
Year	MPS	EPS	DPS	NWPS	CG
2000/01	180	18.11	0%	122.33	65
2001/02	165	15.08	14.35%	135.58	-10
2002/03	170	18.83	14%	152.83	5
2003/04	165	36.7	15%	174.4	-5
2004/05	200	43.93	15.78%	187.07	35
2005/06	265	61.62	68.42%	226.22	65
2006/07	352	67.02	54.64	286.05	87

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.13

Movement of MPS of CIT



The line of MPS is quite responsive to the line of capital gain as shows by the graph MPS line reached at 352 where CG line 87. No. dividend distribution at initial years the study which shows the DPS line in graph being 0-50 EPS seems rise in every year. Net worth per share of CIT increases year by and reached 286.05 from 122.33.

Correlation Analysis

Table 4.34

Correlation coefficient between MPS and selected indicators of CIT

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	14	.871*	.812*	.937**	.804*
	Sig. (2-tailed)	.	.011	.027	.002	.029
	N	7	7	7	7	7
EPS	Pearson Correlation	.871*	1	.865*	.952**	.661
	Sig. (2-tailed)	.011	.	.012	.001	.106
	N	7	7	7	7	7
DPS	Pearson Correlation	.812*	.865*	1	.842*	.555
	Sig. (2-tailed)	.027	.012	.	.018	.196
	N	7	7	7	7	7
NWPS	Pearson Correlation	.937**	.952**	.842*	1	.621
	Sig. (2-tailed)	.002	.001	.018	.	.137
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.804*	.661	.555	.621	1
	Sig. (2-tailed)	.029	.106	.196	.137	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Above correlation coefficient matrix (Shows that Correlation coefficient MPS and EPS MPS and DPS, MPS and NWPS, MPS and CG are 0.871, 0.812, 0.937 respectively. These coefficient shows the selected financial indicators positively influence MPS whereas NWPS has significant higher relationship with MPS as indicated by its correlation coefficient. It has also highly significant EPS and DPS. This indicate that the movement of EPS, DPS, NWPS and CG are in same direction when MPS increases other variable tends to increase and vice-versa there is also strong relationship with CG of MPS. When CG is high market price also follows the same. Price appreciation really affect to rational investors / Stock holders. In conclusion more reliable results can be drawn if we take data from developed security market where information plays a vital role.

Regression Analysis

Table 4.35
Regression for CIT

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	-6.039	27.118		.991	11.68498
EPS	-2.207	.828	-.668		
DPS	.510	.387	.180		
NWPS	1.429	.276	1.155		
CG/CL	.778	.164	.429		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing combined effect of EPS, DPS, NWPS and capital gain on MPS of CIT for the seven years study period. The regression constant a_1 of CIT is -6.039, which indicates that MPS does not go below than this level even if EPS, DPS, NWPS and CG are omitted from the model. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average decrease in MPS by Rs.2.207 if these three variable DPS, NWPS and CG kept constant. However the value of b_1 may vary by Rs.0.825 as explained by its corresponding standard error. Similarly, the regression coefficient b_2 measures the average effects of DPS on MPS. The value of b_2 being 0.510, which specific that one rupee increase in DPS leads to an average increase in MPS by Rs.0.510 holding other variables is kept constant. The standard error of b_2 reveals that this estimation may be inaccurate by Rs.0.387. The third major determinant of equity price is NWPS, which has regression coefficient of 1.429 as indicated by b_3 . This shows that one rupee increase in NWPS lads to an average increment in MPS by Rs. 1.429 if other variables in this model are kept constant. However value of b_3 may vary by Rs.0.278 as indicated by its corresponding standard error. Likewise value of b_4 signifies that change in capital gain by Rs.1 could bring change in MPS by Rs.0.778 if other variable remains constant. The standard error of b_4 is 0.164, which signifies that value of b_4 may fluctuate by this amount.

4.1.16 Nepal Housing and Merchant Finance Limited

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of NH&MFL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

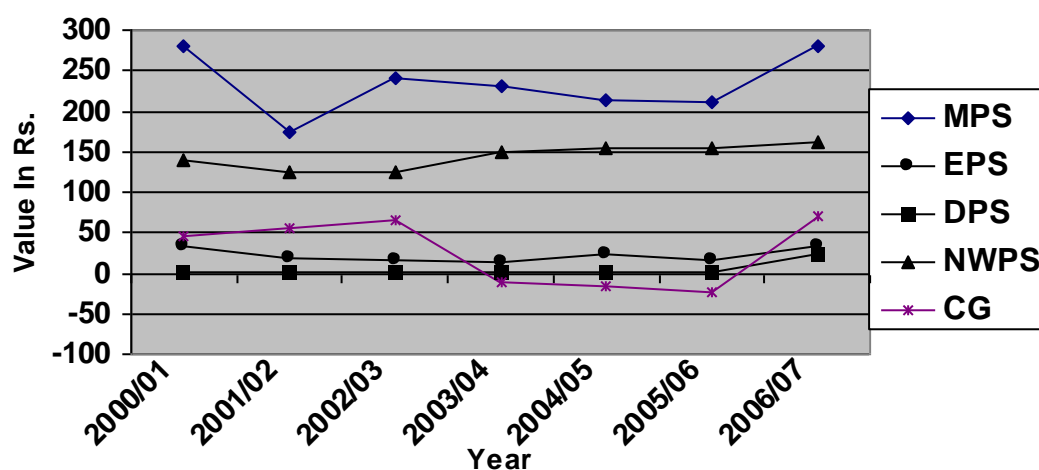
Table 4.36
MPS, EPS, DPS, NWPS and capital Gain of Nepal Housing and Merchant Finance

Year	MPS	EPS	DPS	NWPS	CG
2000/01	280	33.93	15%	139.5	45
2001/02	175	17.80	15%	125.36	55
2002/03	240	16.33	10%	125.36	65
2003/04	230	12.49	10.53%	149.64	-10
2004/05	214	24.20	15.79%	154.00	-16
2005/06	210	15.86	21.05%	154.82	-24
2006/07	280	33.99	24.21	161.8	70

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.14
Movement of MPS of NH&NFL



The MPS line starts from highest point by 280 at 2000 and ends again at same point 280 at 2007. At initial phase CG line seems in increasing trend and decreasing subsequently in last years. The DPS line seems constant EPS line

seems consistent during the study period. NWPS line follows the same trend EPS.

Correlation Analysis

Table 4.37

Correlation coefficient between MPS and selected indicators of NH&MFL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.720	.219	.499	.382
	Sig. (2-tailed)	.	.068	.638	.255	.398
	N	7	7	7	7	7
EPS	Pearson Correlation	.720	1	.529	.344	.442
	Sig. (2-tailed)	.068	.	.222	.451	.320
	N	7	7	7	7	7
DPS	Pearson Correlation	.219	.529	1	.640	.025
	Sig. (2-tailed)	.638	.222	.	.121	.957
	N	7	7	7	7	7
NWPS	Pearson Correlation	.499	.344	.640	1	-.223
	Sig. (2-tailed)	.255	.451	.121	.	.631
	N	7	7	7	7	7
CGL	Pearson Correlation	.382	.442	.025	-.233	1
	Sig. (2-tailed)	.398	.320	.957	.631	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

Above correlation coefficient matrix of NH & MFL shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.720, 0.219, 0.499 and 0.382 respectively. These figures of correlation coefficient importantly under line the facts that during seven years study period MPS of NH & MFL are positively influenced by the selected financial indicators. Capital gain rise MPS also tends to increase. When EPS, DPS, NWPS and Capital again increases MPS also gets height or rises more clearly they have same type of movements. More precisely EPS, NWPS and CG has also positive impact on MPS as indicated by positive correlation coefficient.

By interpreting the above results it may say that there must be some kinds of relationship between equity price and selected financial indicators either of negative or positive values.

Regression Analysis

Table 4.38
Regression for NH&MFL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	-48.846	145.535		.809	28.88634
EPS	2.955	1.860	.685		
DPS	-4.429	3.283	-.601		
NWPS	1.902	1.168	.704		
CG/CL	.232	.356	.252		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing combined effect of EPS, DPS, NWPS and capital gain on MPS of NH&MFL for the seven years study period. The regression constant a_1 of NH&MFL is -48.846, which indicates that MPS does not go below than that level even if EPS, DPS, NWPS and CG are omitted from the model. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average increase in MPS by Rs.2.955 if these three variable DPS, NWPS and CG are kept constant. However the value of b_1 may vary by Rs.1.86 as explained by its corresponding standard error. Similarly, the regression coefficient b_2 measures the average effects of DPS on MPS. The value of b_2 being -4.429, which specific that one rupee increase in DPS leads to an average decrease in MPS by Rs.4.429, holding other variables is kept constant. The standard error of b_2 is 3.283, which explains that the value of b_2 may vary by this amount. In the same way, the regression coefficient b_3 , which is equal to 1.902, signifies that one rupee increasing in NWPS leads to average increase in MPS by Rs.1.902 if other variable remained constant. The corresponding standard error of b_3 explains that the value of b_3 may deviate by

Rs.1.168. Likewise; the coefficient of CG is 0.232. It represents that one rupee increase in capital gain leads to an average increase in MPS by Rs.0.232 other variables are kept constant. The standard error of b_4 0.356 indicates that b_4 may vary by this amount

The coefficient of determination r^2 explains that 0.762 variations in MPS is due to the variation in EPS, DPS, DWPS and CG and negligible amount of variation is accounted for other irrelevant factor. The estimation of MPS might be in accurate by Rs.38.188 as explained by SEE.

4.1.17 Nepal Share Market & Finance Company Limited

Data Presentation

The following table shows the year wise closing price, EPS, DOPS, NWPS and CG of NABIL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

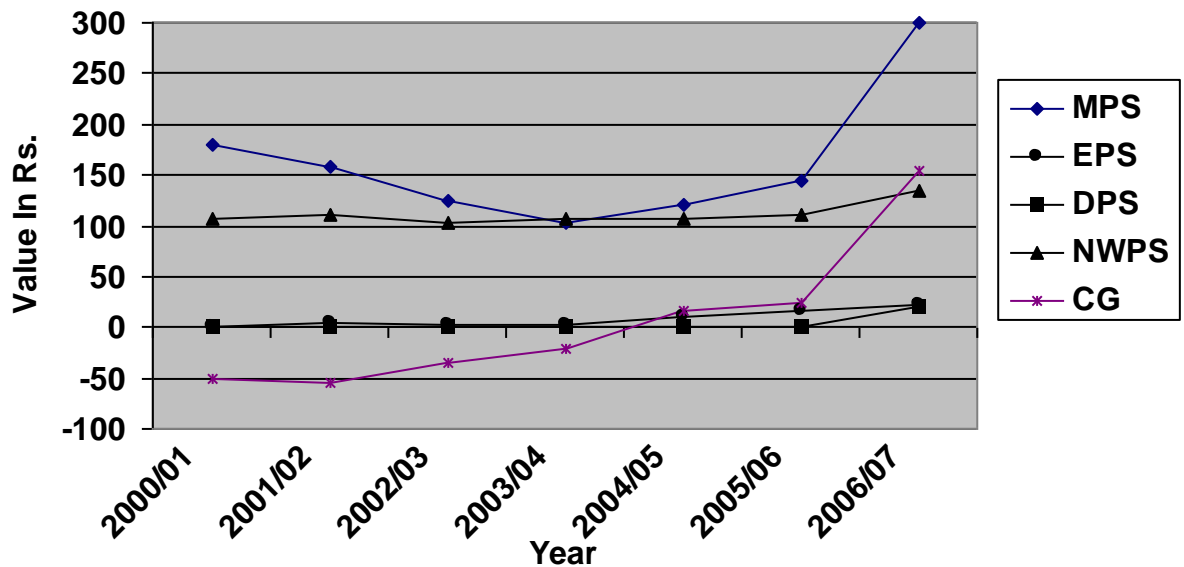
Table 4.39
MPS, EPS, DPS, NWPS and capital Gain of NSM&FL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	180	0.14	0%	106.77	-50
2001/02	159	4.18	0%	110.72	-55
2002/03	125	2.32	0	103.04	-34
2003/04	103	2.9	0%	105.94	-22
2004/05	120	10.94	10%	106.88	17
2005/06	145	16.92	10.53%	111.55	25
2006/07	300	22.11	20	133.66	155

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.15
Shows movement of MPS of NSM&FCL



Above figure clearly depicts that the line of MPS also starts from maximum points at first years and decreases year by up to 2003 and again gradually increases and reached at 300 from 180. The CG line gets negative and increases every year. DPS line always at down level means some distribution of dividend. No. significant change in NWPS It is 100 – 150 range.

Table 4.40**Correlation coefficient between MPS and selected indicators of NSM&FL**

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.616	.691	.931**	.762*
	Sig. (2-tailed)	.	.141	.086	.002	.046
	N	7	7	7	7	7
EPS	Pearson Correlation	.616	1	.954**	.809*	.888**
	Sig. (2-tailed)	.141	.	.001	.027	.008
	N	7	7	7	7	7
DPS	Pearson Correlation	.691	.954**	1	.835*	.959**
	Sig. (2-tailed)	.086	.001	.	.019	.001
	N	7	7	7	7	7
NWPS	Pearson Correlation	.931**	.808*	.835*	1	.899**
	Sig. (2-tailed)	.002	.027	.019	.	.006
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.762*	.888**	.959**	.899**	1
	Sig. (2-tailed)	.046	.008	.001	.006	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient matrix of NSMFL shows that correlation coefficient between MPS and EPs, MPS and DPS, MPS and NWPS and MPS and CG/CL are - 0.616, 0.691, 0.931 and 0.762 respectively. The positive correlation coefficient importantly underline the fact that during the seven years study period. It signifies that MPS and EPS, MPS and DPS, MPS and NWPS and NPS and CG have same type of movement. They move in same direction. When one indicator rise MPS also rises and vice versa. Rest positive indicators have same relationship with MPS.

Regression Analysis

Table 4.41
Regression for NSM&FL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	.937.963	247.777		.965	21.51922
EPS	-7.329	3.701	-1.007		
DPS	11.122	7.123	1.131		
NWPS	9.867	2.178	1.537		
CG/CL	-.910	.634	-1.003		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing combined effect of EPS, DPS, NWPS and capital gain on MPS of NSM&FL for the seven years study period. The regression constant a_1 of NSM&FL is -937.963, which reveals that the value of MPS does not go below than that level even if all the independent variables in this model are omitted. This value may be inaccurate by 247.77, as explained by its corresponding standard error. The regression coefficient b_1 describes that on rupee increase in EPS leads to an average decrease in MPS by Rs.-7.329 if other three independent variables are kept constant. This value may deviate by Rs.3.706 as indicated by the standard error of b_1 . Similarly represents coefficient b_2 indicates that one rupee increase in DPS leads to an average increment in MPS by Rs.11.122 three independent variables are remained constant. However, this estimation may be inaccurate by Rs.7.123 regression coefficient b_3 measures the average effect of NWPS on MPS. The value of b_3 is 9.867 means one rupee increment in EPS leads to average increase in MPS by Rs.9.867 if other variables kept constant. The value may fluctuate by Rs.2.178 as its standard error. In the same way b_4 is -0.910. Which signifies that one rupee increase in CG leads to an average decrease in MPS by Rs.0.910. It may change by Rs.0.634 as presented in its correspondent standard error.

4.1.18 Peoples Finance Limited

Data Presentation

The following table shows the year wise closing price, EPS, DPS, NWPS and CG of PFL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

Table 4.42

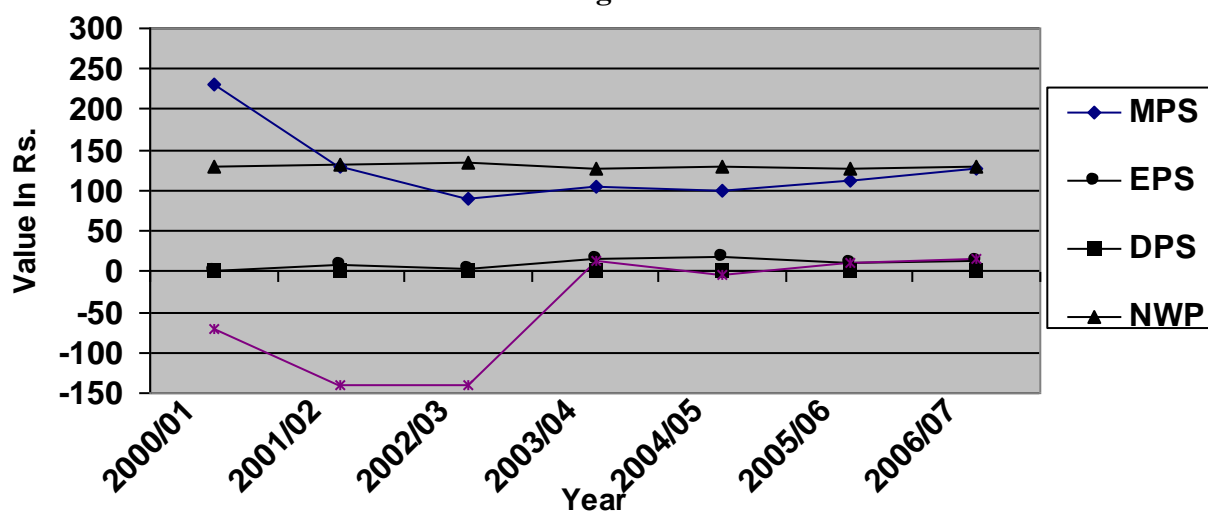
MPS, EPS, DPS, NWPS and capital Gain of PFL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	230	0	0	129.35	-70
2001/02	130	8.44	0%	131.05	-140
2002/03	90	3.87	0%	134.7	-140
2003/04	104	14.88	10%	127.08	14
2004/05	100	17.62	10%	128.8	-4
2005/06	111	9.72	0%	128.00	11
2006/07	127	13.14	0	130.014	16

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.16



The above picture clearly shows that the movement of MPS and CG is the same direction MPS starts from 230 point and ends at 127. The CG line is negative zero up to 2003/04 from 2000/01 and seems positive lest at last years EPS line goes up slightly during the period. NWPS line seems more or less constants.

Table 4.43
Correlation coefficient between MPS and selected indicators of PFL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	-.634	-.366	-.141	-.133
	Sig. (2-tailed)	.	.126	.419	.763	.776
	N	7	7	7	7	7
EPS	Pearson Correlation	-.634	1	.725	-.507	.660
	Sig. (2-tailed)	.126	.	.065	.246	.107
	N	7	7	7	7	7
DPS	Pearson Correlation	-.366	.725	.	.220	.282
	Sig. (2-tailed)	.419	.065	.	.220	.282
	N	7	7	7	7	7
NWPS	Pearson Correlation	-.141	-.507	-.531	1	-.808*
	Sig. (2-tailed)	.763	.246	.220	.	.028
	N	7	7	7	7	7
CG/CL	Pearson Correlation	-.133	.660	.475	-.808*	1
	Sig. (2-tailed)	.776	.107	.282	.028	.
	N	7	7	7	7	7

*. Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient matrix of PFL shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are -0.634, 0.366, 0, 0.141 and -0.133 respectively. The negative correlation coefficient during seven year study period, the financial indicators negatively influence market price of equity of PFL. No one indicators have positive correlation with MPS. It signifies that EPS, DPS, NWPS and CG moves adversely way. More clearly it may say that when MPS rises all indicators goes down and vice versa.

By above computing result, it can be seen that all indicators are negative. In general it is not true study. The correlation coefficient of NWPS with MPS is -0.141 which almost is never to zero. This recalls that MPS does not show any reaction in relation to the function in NWPS.

In conclusion reliable results can be achieved if it takes data from developed security market for more than 10 years period. Nevertheless correlation coefficient analysis throws light the fact that there must be some kind of relationship between MPS and selected financial indicators.

Regression Analysis

Table 4.44
Regression for PFL

Model	Unstandardized	Std. Error	Standardized	R	SEE
	Coefficients		Coefficient		
	B		Beta	.691	0.72
(Constant)	1867.529	1836.189			
EPS	-7.001	5.381	-.916		
DPS	-.290	6.081	-.030		
NWPS	-12.887	14.349	-.659		
CG/CL	-.031	.536	-.047		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing combined effect of EPS, DPS, NWPS and capital gain on MPS of PFL for the seven years study period. The regression constant a_1 of is 1867.529, which reveals that the value of MPS does not go below than that level even if all the independent variables in this model are omitted. The regression coefficient b_1 describes that on rupee increase in EPS by leads to decrease in MPS by Rs.7.001 if other variables in this model kept constant. However this value may be inaccurate by Rs.5.381 as explained by the corresponding standard error of b_1 . Similarly, DPS also affects MPS negatively as shown by regression coefficient b_2 which is -0.290 This indicates that if DPS increase by Rs.1, MPS will decrease by Rs.0.290 if other

independent variables are kept constant. However this value may vary by Rs.6.081 as indicated by its corresponding standard error. NWPS has negative regression coefficient of -12.887. This again conveys the same meaning that if NWPS increase by Rs.1, this will bring decrease in MPS by Rs.12.887. This figure may deviate by Rs.14.342 as declared by its standard error. Likewise regression coefficient b_4 is 0.031 represents that one rupee increase in capital gain leads by an average 0.031. The projection may be inaccurate by Rs.0.536 as pointed by its corresponding standard error.

4.1.19 Universal Finance & Company Limited

Data Presentation

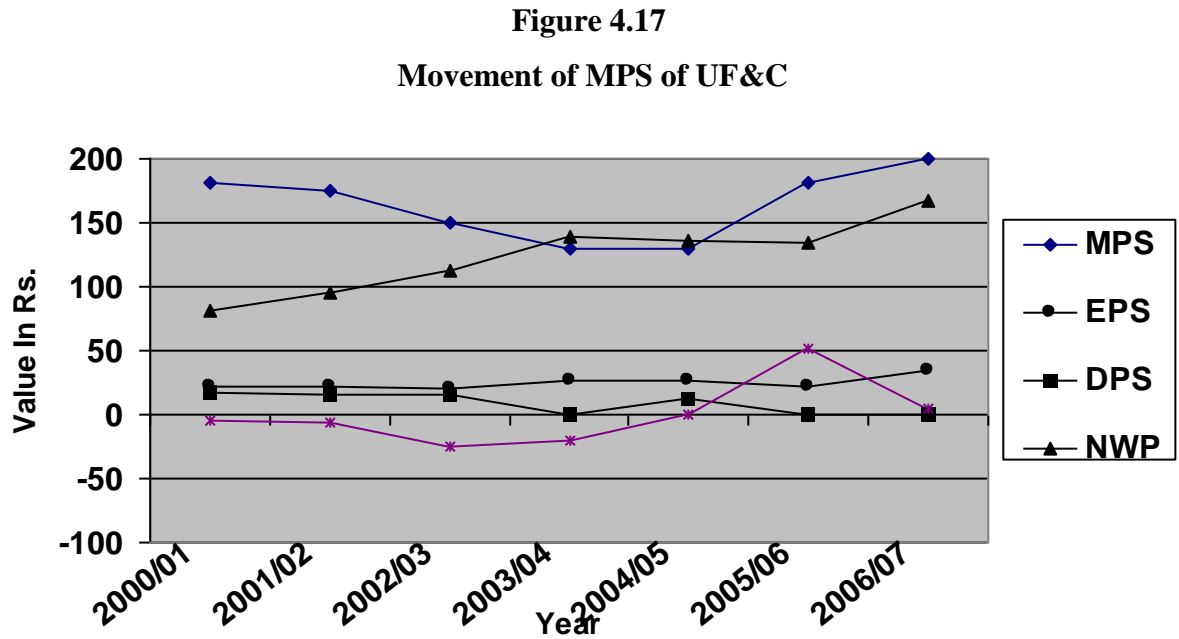
The following table shows the year wise closing price, EPS, DPS, NWPS and CG of UF&CL from 2000 to 2006. All the calculations, followed here by, are totally based on this table. This table is extracted from the www.nepalstock.com

Table 4.45
MPS, EPS, DPS, NWPS and capital Gain of UF&CL

Year	MPS	EPS	DPS	NWPS	CG
2000/01	181	21.79	16.51	81.95	-4
2001/02	175	21.40	16	95.36	-6
2002/03	150	19.76	15	112.53	-25
2003/04	130	26.72	0	139.25	-20
2004/05	130	25.79	12.53	136.39	0
2005/06	181	21.21	0	134.41	51
2006/07	200	34.24	0	167.51	5

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators



At the above figure MPS and CG moves in the same direction as per graph. MPS starts from highest point and falls in each year reach at the highest point. Same types of movement can be reach at the highest point. Same types of movements can be seen in CG. Some fluctuation also be observed in EPS and DPS. Net worth per share of this finance company increasing every year and gets 179.21 at last 2nd year and ends with point 167.51.

Correlation Analysis

Table 4.46

Correlation coefficient between MPS and selected indicators of UF&CL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.368	-.204	.219	.587
	Sig. (2-tailed)	.	.0417	.661	.637	.166
	N	7	7	7	7	7
EPS	Pearson Correlation	.368	1	-.843*	.835*	.432
	Sig. (2-tailed)	.417	.	.017	.019	.333
	N	7	7	7	7	7
DPS	Pearson Correlation	-.204	-.843*	1	-.883**	-.460
	Sig. (2-tailed)	.661	.017	.	.008	.299
	N	7	7	7	7	7
NWPS	Pearson Correlation	.219	.835*	-.883**	1	.629
	Sig. (2-tailed)	.637	.019	.008	.	.130
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.587	.432	-.460	.629	1
	Sig. (2-tailed)	.166	.333	.299	.130	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Above correlation coefficient matrix table shows that the correlation coefficient of MPS with EPS, DPS, NWPS and capital gain are 0.368, -0.204, 0.219 and 0.587 respectively. These coefficients technically present that the selected financial indicators positively influenced the MPS during the study period except dividend per share (DPS). DPS has a negative relationship with MPS.

Positive correlation of EPS, NWPS and CG with MPS means the movement is in the same direction of all indicators. It means when earnings per share increase, MPS shows the positive effect. More clearly when EPS grows, MPS also grows and the other indicators have the same type of relation.

In conclusion correlation coefficient analysis throws the fact that there must be some kinds of relationship between the equity price and selected financial indicators.

Regression Analysis

Table 4.47

Regression for UF&CL

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficient	R Square	SEE
	B		Beta		
(Constant)	146.401			.604	-.188
EPS	5.155	176.550	.877		
DPS	-.014	3.828	-.004		
NWPS	-.870	.982	-1.068		
CG/CL	.865	.589	.877		

The above table summarized the results of multiple regression analysis produced by SPSS software for assessing combined effect of EPS, DPS, NWPS and capital gain on MPS of UF&CML for the seven years study period. The correlation analysis suggests about the movement, regression analysis tells about the amount of MPS. The regression constant a_1 of UF&CML is 146.401, which reveals us that MPS of UF&CML does not go below than this level even if all the variables are omitted from the model. However corresponding standard error of a_1 indicates that this value may vary by Rs.176.55. The regression coefficient b_1 represents that one rupee increase in EPS leads to an average increase in MPS by 5.155 if other three variables are kept constant. Similarly, DPS has negative impact upon MPS. The regression coefficient b_2 showed this fact. The value of b_2 is -0.014. This means that MPS is negatively influenced by DPS. That is one rupee increased in DPS leads to an average decrease in MPS by Rs.0.014 if other three variables are kept constant. However this estimate may be inaccurate by 3.828 as explained by its corresponding standard error. Likewise, MPS is negatively influenced by NWPS, as the regression coefficient b_3 is 0.87. This states that one rupee increase in NWPS, leads to an average decrease in MPS by Rs.0.870, if EPS, DPS and CG are kept constant. The standard error of b_3 explains that this projection may vary by Rs.0.982. Finally, the regression coefficient

b₄ signifies that one rupee increase in capital gain leads to increase in MPS by Rs.0.865, if other three variables are remained constant. This value may vary by 0.589 as explained by its corresponding standard error.

4.1.20 Summary Results of Finance Companies

Data Presentation

The following data is average of five Finance companies, this table is attempting to present Finance Companies as a whole. The source of this data is the annual report of concerned Finance Companies down loaded from www.nepalstock.com. This table sharply presents the year wise closing price (MPS), EPS, DPS, NWPS and capital gain during study period.

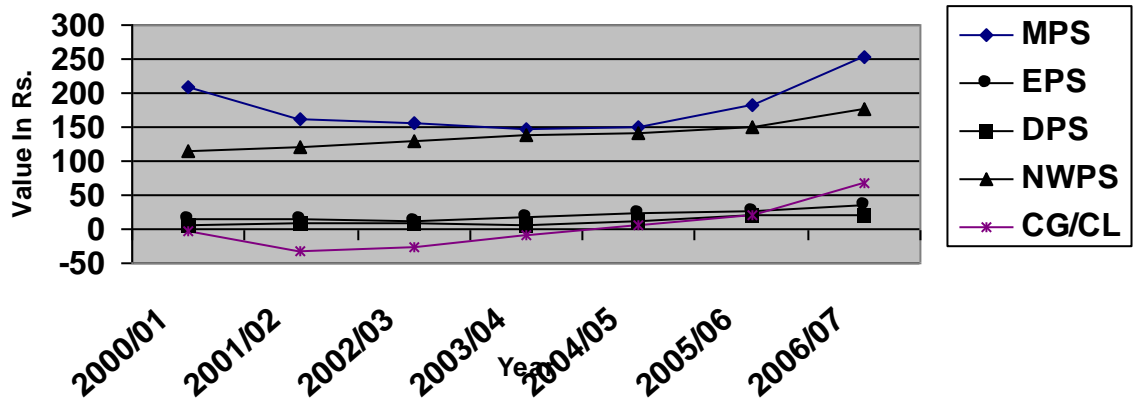
Table 4.48
MPS, EPS, DPS, NWPS and capital Gain of Finance Companies

Year	MPS	EPS	DPS	NWPS	CG/CL
2000/01	210.2	14.794	6.302	115.99	-2.8
2001/02	160.8	13.28	9.07	119.614	-31.02
2002/03	155	11.112	7.8	128.748	-25
2003/04	146.4	18.738	7.106	139.166	-8.6
2004/05	150.8	24.506	12.822	141.388	6.4
2005/06	182.4	25.066	20	151	20.5
2006/07	251.8	34.1	19.37	175.81	66.6

Graphical Presentation

Plotting the above data in the graph, the following line graph can be drawn which shows the movement of MPS in connection to the selected financial indicators

Figure 4.18
Movement of MPS of Finance Sector



By the figure summary results of finance companies MPS at the initial phase can be observed some constant and increases gradually. Almost same trend has followed by capital gain (CG). Special changes have not observed as per EPs and DPS line. Significant increment occurs by NWPS line in each of the year and reached upto 175.81.

Correlation Analysis

Table 4.49

Correlation coefficient between MPS and selected indicators of UF&CL

Description		MPS	EPS	DPS	NWPS	CG/CL
MPS	Pearson Correlation	1	.596	.502	.530	.795*
	Sig. (2-tailed)	.	.158	.251	.221	.033
	N	7	7	7	7	7
EPS	Pearson Correlation	.596	1	.853*	.932**	.949**
	Sig. (2-tailed)	.158	.	.015	.002	.001
	N	7	7	7	7	7
DPS	Pearson Correlation	.502	.853*	1	.842*	.806*
	Sig. (2-tailed)	.251	.015	.	.017	.029
	N	7	7	7	7	7
NWPS	Pearson Correlation	.530	.932**	.842*	1	.902**
	Sig. (2-tailed)	.221	.002	.017	.	.005
	N	7	7	7	7	7
CG/CL	Pearson Correlation	.795*	.959**	.806*	.902**	1
	Sig. (2-tailed)	.033	.001	.029	.005	.
	N	7	7	7	7	7

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The above correlation coefficient matrix of overall five finance companies shows that correlation coefficient between MPS and EPS, MPS and DPS, MPS and NWPS and MPS and CG are 0.596, 0.502, 0.530 and 0.795 respectively. There is positive correlation of EPS, DPS, NWPS and CG with MPS. The positive correlation coefficient significantly indicates that the selected financial indicators positively influence the MPS. That is MPS moves as accordance to selected the selected finance indicators however the degree may vary as coefficient vary. EPS, DPS NWPS have modred correlation with MPS therefore it can be concluded that movement of MPS is similar to the movement of EPS, DPS and NWPS to a significant extent. correlation of MPS with capital gain is also positive. However the degree is higher in comparision to other variables. Increasing trend of EPS, DPS, NWPS and capital gain of overall financial companies indicates that MPS shall follow same trend but it doesnt shall the amount by which MPS shall increase. Higher the capital gain more will be the MPS. The standing problem in this regard is without assigning the amount of MPS, capital gain can not be fixed. Therefore analysis perfectives investors should look after the trend of historical capital gain pattern and MPS.

Multiple Regressions for Finance Sector

Table 4.50

Regression for Finance companies

Model	Unstandardized	Std. Error	Standardized	R Square	SEE
	Coefficients B		Coefficient Beta		
(Constant)	427.659	123.711		.921	18.89258
EPS	-6.112	3.818	-1.281		
DPS	.713	2.642	.106		
NWPS	-1.033	1.089	-.545		
CG/CL	2.858	.758	2.416		

The above summarized the results of multiple regression analysis produced by SPSS software for assessing the combined effect of EPS, DPS, NWPS, and capital gain

(CG) on MPs of finance companies for the seven years study period. In theory, these variable strongly influenced the share price in developed security market.

The regression constant a_1 is 427.659 which indicators that MPS of financial companies does not go below than this level even if all the independent variables are omitted from the model. However the standard error of the model reveals that the estimation of MPS may deviate by RS. 123.711.

The regression coefficient b_1 explains that one rupee increase in EPs leads to decrease in MPs by Rs.6.112. This value may vary by Rs.3.818 as explained in its standard error. In the same way, the regression coefficient b_2 indicates that one rupee increase in DPS leads to an average increase by Rs.0.713 the value may inaccurate by Rs.2.642. Likewise, b_3 measures the average effects of NWPS on MPS. The value of b_3 is -1.033 which means that 1 rupee increase in NWPS leads to average decreased is MPS by rupee 1.33 increase if other three variables kept constant. This value may rise and fall by 1.08 as explained in its corresponding standard error. Positively capital gain influences the MPS as indicated by regression coefficient b_4 where the vale is 2.158. It means one rupee increase in capital gain may leads to an average increase in MPS by Rs.2.858. However the value may go up and down by Rs.0.758.

4.2 Pricing Status

Under this topic, it examines the pricing status of common stock whether common stock are overpriced or under priced or equilibrium priced. The pricing status of stocks of particular firm is evaluated by comparing the required rate of return with actual realized rate of return. This chapter presents calculations of actual rate of return that a particular security has provided during the study period and its corresponding required rate of return. Comparison between the actual realized rate of return and required rate of return gives the way by which classification of stocks whether overpriced or under priced is possible.

Table 4.51**Pricing status of listed companies**

S.N.	Sector	Name of the Company	Beta Coefficient		Actual Return (RJ)	Required Return (RJ)	Pricing Status
1	Commercial Banks	HBL	0.79	D	5.08	12.13	Overpriced
2		NABIL	0.52	D	19.07	9	Underpriced
3		NIBL	0.67	D	7.78	10.80	Overpriced
4		NSBL	0.34	A	51.70	29.26	Underpriced
5		SCBNL	0.78	D	26.89	12.02	Underpriced
6	Finance Companies	CIT	0.59	D	30	9.92	Underpriced
7		NHMFL	0.38	D	12.5	7.6	Underpriced
8		NSMFL	1.16	A	7.49	16.22	Overpriced
9		PFL	0.49	D	-5.78	8.81	Overpriced
10		UF & LML	0.15	D	6.65	5.1	Underpriced
11	Development Banks	DCBL	1.09	A	34.79	15.44	Underpriced
12		NDBL	0.45	D	11.83	8.37	Underpriced
13		NUBL	0.27	D	4.5	6.38	Overpriced

A = Aggressive, D = Defensive

From the above summarized table, it can be found that the actual realized rate of return is 5.08 which is significantly smaller than corresponding required rate of return where required rate of return is 12.13 and Beta coefficient is 0.79 by calculated value it may be said that the price of HBL is overpriced and beta coefficient is less than 1 it means stock of HBL is defensive, Defensive in the sense that beta coefficient 0.79. Likewise, in the same ground the required rate of return of NABIL is 9 and actual return is 19.07. So required rate of return is less than actual return and under priced. Beta coefficient is 0.52 which is less than market beta coefficient which suggests that stock of NABIL is defensive. Similarly, actual return of NIBL is 7.78 and required return is 10.80 during the study period and beta coefficient is 0.67. Comparing actual return with required rate of return is higher. It is clearly viewed tat stock of NIBL is overvalued beta coefficient is also less than 1 thus the stock of NIBL can be classified as defensive. In the same manner, actual rate of return of NSBIL is 51.70 and required rate of return is 29.26 which is for below than actual rate of return. Therefore the stock of NSBL is undervalued or under priced. Beta coefficient of NSBL stock is 2.34 which is more than 1 thus this stock can be classified as aggressive stock..Likewise,

beta coefficient, actual return and required rate of return are 0.78, 26.89 and 12.02 respectively. Here beta coefficient is lesser than 1 and suggests that stock of SCBNL is defensive comparing actual return with required return actual return is higher. So the stock of SCBNL is under priced during the seven years study period.

In the finance sector actual realized rate of return of CIT is 26.95. The corresponding required return during the same period is 3.85. Actual realized rate of return is higher than required return. Therefore, stock of CIT can be classified as under price stock. Beta coefficient is 0.58 which is less than 1 means this stock can be classified as defensive stock. Similarly, stock of NH & MFL also under price because actual realized rate of return is greater than its required rate return (i.e. $7.64 > 3.66$). Beta coefficient is 0.19 which suggests that the stock price is defensive. In the same manner stock of NCM & FL is over priced and defensive. Because of the calculated actual realized rate of return smaller than required rate of return beta coefficient is smaller than market beta coefficient 1 where actual realized rate of return is -10.18, required rate of return is 3.716 and beta coefficient is 0.31. Likewise, actual realized rate of return is -9.15 and realized rate of return is 3.99 which is remarkably below than realized. Rate of return. Thus it can be concluded that the stock is overpriced. Beta coefficient of PFL is 0.87 which is smaller than market beta coefficient and classified as defensive stock. In the case of UF & CML beta coefficient is 0.32. Actual realized rate of return is 7.34 and realized rate of return is 3.72 which suggest that stock of UF & CML is under price due to less required rate of return than actual realized rate of return. It can be classified as defensive stock in the sense that less beta coefficient than market beta coefficient 1.

In the development bank, actual realized rate of return 23.14 during the study period where as required rate of return during the study period is 3.94. Here return is significantly higher than required rate of return. Hence stock of DCBL is under priced beta coefficient is smaller than 1. i.e. A shows that stock of DCBL is defensive. Likewise, stock of NDBL is overpriced and defensive, because actual realize rate of return is smaller than required rate of return, where actual realize rate iof return is -5.47 and required return is 3.73 beta coefficient is less than market beta coefficient 1. (i.e. .035). In the same way actual realized rate of return of NUBL is 1.01% where as required rate of return during the study period is 3.62% which is required rate of

return. So, stock of NUBL is over priced. Beta coefficient 0.12 suggests the defensive stock of NUBL comparing less than 1 with market beta coefficient.

Thus is conclusion, it was found that the five commercial banks taken as sample, three banks have under priced stock and rest two have overpriced during the study period. Similarly among the five finance companies there have under priced stock and other two have over priced stock in the same way 3 sampled development banks, two banks have overpriced and one have under priced stock.

Among the 13 sampled companies only four companies have aggressive price stock. They are NABIL, NABIL, NSBL and SCBNL. Other nine companies have defensive price stock.

The main reason behind the under valuation of stocks of 7 companies is that the price of the stock had approach the highest point without having any concrete financial causes remarkable price appreciation during the study period. However, NEPSE index did not follow the same pattern and also the rate on Treasury bill issued by NRB rapidly decrease forcing it to limit within a lower level. In this way, capital gain in one hand is maximum market risk premium in the other hand is minimum. Therefore, actual returns of 7 companies are significantly higher than required return and the price of these 7 companies become under price. On the contrary, the main reason behind the over valuation of the stocks of remaining 6 companies had approach the highest point with out having any concrete finance causes yielding remarkable price appreciation during the study period. NEPSE also follow the same trend of pattern. The Treasury bill issued by NRB also follows the increasing trend. These all results made the required rate of return higher than actual return so the price of share became higher or over of such 6 companies during the study period.

4.3 Analysis of primary Data

In order to meet the objectives of the study various questions were developed and distributed to various individuals and organization, officer level staffs of concerned financial in institution and that are directly and indirectly related with Nepal's Stock Market. Altogether 100 questionnaires were distributed to the respondents but only 80 responses were received.

4.3.1 Types of Respondents

Respondents were categorized into four groups. They were:

Table 4.52
Categorization of the respondents

S.N.	Respondents	No of Respondents
1	Share analysis experts	09
2	General Investors	27
3	Staffs of commercial bank development bank and finance companies	16
4	Others (Lecturers, Student, Brokers)	28
	Total	80

Table 4.53
Analysis of Security is essential rather than random Decision

Variables	No. of Respondents	% of Respondents
Strongly agree	8	10
Agree	72	90
Disagree	-	-
Don't know	-	-
Total	80	100

Out of collected responses, 10% vote has fallen towards strong agree and rest 90% to agree. Nobody found in Disagree and Don't know.

Table 4.54
Decision to Purchase share of a certain company

Variables	No. of Respondents	% of Respondents
Fundamental Analysis	69	82.5
Technical Analysis	5	6.25
Consulting with Expert	6	7.5
Media	3	3.75
Others	-	-
Total	80	100

Respondents were asked how would you make a decision to purchase share of certain company. Most of the respondents show fundamental analysis. It means they believe in earning, dividend and future prospect of company rather, than other alternatives. 82.25 respondents were favor in fundamental analysis, 7.5% respondents stood up towards consulting with brokers and experts. And rest 6.25 respondents gave vote to technical analysis. It means nominal respondents understands and apply the technical analysis. They don't analyze the past price and trade volume. Three respondents gave vote to electronic media, paper media and others.

Table No. 4.55
Current share price in NEPSE

Variables	No. of Respondents	% of Respondents
Overpriced	53	66.25
Equilibrium	15	18.75
Under priced	-	-
Don't know	12	15
Total	80	100

Researchers also tried to know whether the existence share price is over under a equilibrium. Out of 80, 66.25% respondents were found in over priced. Similarly 18.75% vote had fallen to equilibrium price. And rest 15% had no idea about share price and said don't know; No body found in favor of under price.

Table 4.56
The crucial factors to determine share price

Variables	No. of Respondents	% of Respondents
Earning, dividends	14	17.5
Right Share & Bonus share	55	68.75
Net worth per share	11	13.75
Historical returns	-	-
Buying & selling pressure	-	-
Media	-	-
Total	80	100

This was different question to the respondents. Most of them did not know how to answer to this query. Actually, answer would be in ranking basis. A little effort had been applied to make understand to the respondents. This question had been set to know which factors mainly determines share price. 68.75% respondents gave first priority to the rights share. They have great hope of getting right share. Second priority was earning and dividends and percentage was 17.5%. Out of 80 respondents only 11 had the belief that net worth per share (NWPS) also affect share. It was third priority and vote was 13.75% no body found in historical returns, buying and selling pressure of share and electronic and paper media at first and second priority.

Table 4.57

Comments about present scenario of Nepal stock market

Variables	Yes		No		Don't Know		Total	
	No.	%	No.	%	No.	%	No.	%
Humor Driven ...	42	52.5	23	28.75	15	18.75	80	100
Overheated (Bubble)	41	51.25	39	48.75	-	-	80	100
Few no. of investor ...	52	65	24	30	4	5	80	100
Unaware	61	76.25	19	23.75	-	-	80	100

This question had been set to check the knowledge of investors about Nepal's Stock Market. Four statements had been presented. All they were yes/No/Don't know type.

- First was current Nepal's stock Market is humor driven 52.5% respondents reply was 'yes' 28.75% said 'No'. and reaming 18.75 respondents response was 'Don't know'.
- As per the theme of second statement there is not permanent existence of Nepal's stock market. For this, respondents seemed in almost of fifty fifty vote had fallen to yes. The Percentage was 51.25 and rest 48.75 vote went to 'No.' Nobody respondents said 'don't know'. The vote was 0.
- Third question, few under of number of investor (along with the insider traders) are ruling over the Nepal's Secondary market most of voters seemed in favor of this statement and said yes. The vote was 65% out of 80 respondents 24 respondents out of 80 were not ready to accept the statement and vote was

30% and respondent (i.e. 5%) had no concrete idea. They had not knowledge about this.

- It is sure that numerous, investors don't know to analyze the financial techniques and tools properly. As per the collected vote 76.25% votes agreed with the statement, few numbers of voters (i.e. 23.75) or 19 out of 80 said No. It means investors are aware about analyzing techniques. They follow any sorts of techniques before investing.
6. The researcher other objective was to find out investors' knowledge about the "Beta Coefficient". 42.5% respondent did not know that the function of Beta Coefficient 28.75% said "yes". It means beta coefficient measures risk of share and rest 28.75 said it does not measure risks.

Table 4.58

The theoretical knowledge about beta coefficient

Variables	Yes		No		Don't Know		Total	
	No.	%	No.	%	No.	%	No.	%
Beta Coefficient measures the risk	23	28.75	23	28.75	34	42.75	80	100

4.3.2 Responses from open end question

- i. Nepal's stock market is running in humor basis.
- ii. Nepal's stock market is basically driven by superficial factors.
- iii. No. of brokers should be increased.
- iv. Concerned authority should give attention for controlling share price.
- v. Strong rules and regulations have been set and followed.
- vi. Correct and proper information should provide regarding share
- vii. Original citizenship card should be provided while issuing share for general public.
- viii. Ownership transfer system should be quick.
- ix. No. of branches of NEPSE should be added as regional basis.
- x. Number of secondary market should increase i.e. NEPSE is not sufficient.

- Distributed total 100 forms only 80 responses received. 19 respondents gave responses to this comprehensive type question. Their vision towards current scenario of stock market found mixed. Some responses found long which have not included in this portion But important points presented according to their answers.

4.4 Major Findings

4.4.1 Major Findings from Secondary Data Analysis

1. As per the above correlation coefficient results between MPS and other financial indicators of NABIL, HBL, NSBIL, NH&MFL, NS&MFL, CIT, NUBL are all positives. EPS, DPS, NWPS and CG all are positive. It can be seen significantly higher moderate and low results of such sampled companies.
2. Except NABIL, HBL, NSBIL, NH&MFL, NS&MFL, CIT, NUBL any one indicators among four are negatively correlated in rest sampled companies.
3. NABIL, HBL, NIBL, NSBIL, CIT, SCBNL, NH&MFL, NS&NFL, UF&CLK, NDBL, DCBL, NUBL have positive learning for share. The values are 0.749, 0.647, 0.745, 0.347, 0.713, 0.871, 0.720, 0.616, 0.368, 0.467, 0.246 and 0.495 respectively and rests five have negative EPS.
4. Similarly, NABIL, HBL, NSBIL, CIT, NH&MFL NS&MFL have positive dividend per share (DPS). Calculated correlation results are 0.806, 0.462, 0.211, 0.821, 0.219, 0.691 and 0.424 respectively.
5. Positive calculation correlation NWPS values are 0.782, 0.457, 0.750, 0.848, 0.931, 0.937, 0.499, 0.438, 0.404 and 0.715 of NABIL, HBL, NSBIL, SCBNL, NS&MFL, CIT, NH&MFL, DCBL, NDBL and NUBL respectively.
6. Price appreciation are positively correlated by 0.944, 0.539, 0.723, 0.738, 0.953, 0.382, 0.762, 0.587, 0.977 and 0.239 in case of NABIL, HBL, NIBL, NSBIL, SCBNL, NH&MFL, NS&MFL, UF&CLK, DCBL, NUBL. Respectively and remain have negative correlation value.
7. According to multiple regression analysis in case of NABIL effect of EPS and DPS on MPS as negative. On the contrary, NWPS and CG positively influenced due to the fluctuation in selected financial indicators.

8. Multiple regression analysis of HBL concluded that all financial indicators have positive effect on MPS excluding EPS. This analysis primarily focuses the combined effect of DPS, NWPS and CG on MPS. Coefficient of determine r^2 has shown that 96.9% variation in MPS is due to identified financial indicators value.
9. In case of NIBL it is seen , that among four indicators only CG have positive effect on MPS, EPS, DPS and NWPS have negative effect on MPS. Approximately cent percent variation in MPS is due to the change in above considered financial indicators.
10. In multiple regression analysis of NSBIL the effect of EPS on MPS is negative. That means increase in EPS leads to decrease in MPS where and CG positively influenced MPS of SBIL. Regression model has concluded that selected financial indicators causes 65.1% variation is MPS. More precisely, EPS of SBIL fluctuated due to the change in above identified variation.
11. Multiple regression analysis of SCBNL has suggested that EPS and DPS negatively influenced MPS where as NWPS and CG positively shaped the equity price of SCBNL. Further, the selected variables sufficiently influenced MPS as described by coefficient of determination (i.e. 0.992).
12. Calculated regression analysis of NSMFL has shown that MPs of its was negatively influenced by EPS and CG. That is increase in EPS leads to decrease in MPS where as other variables DPS and NWPS positively influenced MPS. Regression model has concluded that selected financial indicators causes' 96.5% variation in MPS. More clearly MPS fluctuated due to the change in above identified variables.
13. In case of NH&MFL, regression analysis has justified that MPs of NHMF was negatively influenced by DPS. However EPS, NWPS and capital gain have positive on equity price formation. This model underlines the fact that, 80.9% variation in MPS due to the change in selected financial indicators.
14. Regression analysis model has justified that MPS of CIT was negatively influenced by EPS during study period. Though it is irrelevant in practice, the reason may be the short study period and underdeveloped capital market. However DPS, NWPS and capital gain have positive impact on equity price formation. This model significantly underlines the fact that 99.1% variation in MPS is due to the fluctuation in selected financial indicators.

15. According to multiple regressions, effect of EPS, DPS, NWPS and capital gain are all negative. 61.90% variation in MPS is caused due to the fluctuation in selected financial indicators.
16. Multiple regression analysis of UFLK has suggested that DPS and NWPS negatively influenced MPS. Where as, EPS and capital gain positively shaped the equity price further the selected variables sufficiently influenced MPS as described by coefficient of determinant r^2 .
17. In case of DCBL, it is seen that among four financial indicators DPS influenced negatively MPS where as other three indicators brought positive change in MPS. 97.4% variation in MPS is due to the change in above considered factors because coefficient of determination is 0.974.
18. Multiple regression analysis of NDBL has shown that price appreciation has negative impact on MPS. Similarly other three variables EPS and NWPS positively influenced equity price of 48.3% variation in MPS of NDBL is caused by the changes in selected financial indicators. Therefore these indicators are the core determinants of equity price of NDBL. (NO results found about DPS through SPSS software).
19. In the same way, multiple regression analysis of NUBL has shown that MPS, EPS, DPS NWPS was negatively influenced. Price appreciation was negatively influenced MPS. This model has concluded that selected financial indicators causes' 54% variation in MPS.
20. Sector-wise correlation analysis has shown that financial indicators of commercial banking sectors were positively correlated. It clearly underlines the fact that the movement of MPS was similar to the movement of selected financial indicators. More precisely MPS shall react in the same manner. Which financial indicators follow. Therefore it is realistic and practical. The same is revealed by daily NEPSE reporting where financial indicators actual play role.
21. Sector-wise correlation analysis has shown that financial indicators of finance companies sectors were positively correlated. It clearly underlines the fact that the movement of MPS was similar to the movement of selected financial indicators. More precisely MPS shall react in the same manner. Which financial indicators follow. Therefore it is realistic and practical. The same is revealed by daily NEPSE reporting where financial indicators actual play role.

22. Likewise, correlation analyses for developing banking sector were also positive. It means the movement of MPS was similar to the movement of EPS, DPS, NWPS and CG obviously, when MPS rose other indicator went up and vice versa. Hence it is too realistic and practical. The same is revealed by daily NEPSE reperi where financial indicators actually play role.
23. Multiple regression analysis has shown that MPS of commercial banking sector has influenced negative by EPS and DPS. and rest of the indicators. Positive variation in the MPS of banking sectors is due to the fluctuation in these selected financial indicators.
24. In the same manner, while analyzing the regression equation of finance sector it is found that EPS and NWPS of this sector negative influenced to the MPS. That is changes in these two factors surely brought change but in adverse direction . However, DPS and CG positively affected the MPS. Whatever the results it is true that some financial indicators influence MPS. Somewhere, the result of multiple regression analysis is irrelevant due to the short study period and under developed security market. Regression analysis of finance sector that 92.1% variation in MPS is caused by the variation in the above selected financial indicators.
25. It has been observed that EPS negatively influenced the MPS of development banking sector where DPS, NWPS and CG is positively. The multiple regression analysis concluded that selected financial indicators causes' 89.7% variation in MPs. Thus it can be concluded that these indicators are the core ingredients of equity price, which is eventually fixes price.
26. Pricing status analysis of the stocks of sampled companies has shown that some have overpriced and some of them have under priced. Overpriced companies are HBL, NIBL, NS&MFL, PFL, and NUBL. Similarly under priced companies are NABIL, NSBL, SCBNL, CIT, NH&MFL, UF&CLK, DCBL and NDBL. Overprice in the sense that required return is greater than actual return.
We categorized equity price as under price because of required return is smaller than actual return.
27. Beta coefficient are calculated to assign required return. This coefficient tell the nature or behavior of stocks whether individual stock is aggressive or defensive. The stock of DCBL and NS&MFL are aggressive because

calculated beta coefficient value is higher than market beta coefficient And rest eleven companies have defensive stock price. They are HBL, NABIL, NIBL, NSBIL, SCBNL, CIT, NH&MFL, PFL, UF&CLK, NDBL, NUBL are defensive as less beta coefficient comparing with market beta coefficient.

Defensive stock indicates that they are less volatile in the market where as aggressive stock are more volatile than that of market return.

Among the 13 sampled companies only two companies have aggressive stock price and rest eleven have defensive stock price.

4.4.2 Major finding from Primary Data Analysis

An empirical investigation has been conducted to find out the investors and market behaviours in Nepal's stock market from real life experiences. For this, questionnaire were developed and distributed, and responses were collected from respondents. Respondents were general investors, share analysts/experts, brokers and shareholders. Through questionnaire and informal interviews with such mentioned groups which have been presented below:

1. It has found that 90% Investors are agree with the statement of depth analysis of security is essential rather than random decision before investment. They told Analysis should be conducted, before investing.
2. In the view of respondents, they chose fundamental analysis to purchase share of certain company rather than other alternatives. Among the total portion 86.25% respondents were in depended with this analysis. 7.5 deepened upon consulting with be and rest were in others were favor in technical analysis.
3. 64% respondents said that existing share price in NEPSE is overpriced 12% said equilibrium 8% said don't know and 16% were favorer in under priced.
4. According to the respondent, it seemed that they have great hope of getting right share and bonus of certain company. Distributing of these types of share is the main alternative on investment on share. Almost all respondents are favour with this right share. Very few investors chose the earning and divided and Net worth of company no body had belief in other options.

5. 52.5% respondents were agreed that current stock market is humor driven. Among the survey group 328.75% were not agree with the statement and 18.75% had no knowledge about it.
6. Current stock market is overheated (i.e. water bubble) It means there is no concrete existence of stock market. It seems and lose again and again 51.25% respondents said yes 48.75% no. and.
7. 65% vote had fallen supporting this statement. As per this statement, there is no sufficient player to play the game. They seemed aggressive about this system of Nepal stock market.
8. As per the essence of the given statement investors doesn't know the theoretical aspect of share statement investors does not to the result there is controversy with this statement. This is the age of information and communications so, every investor are aware to analyze the techniques. Different types of electronic media and paper media are providing information and knowledge. Almost all investor fully aware about investment and they follow any sorts of techniques and tools.
9. This question had been set to find investors' knowledge about beta coefficient it measures the risk. But 36% investors didn't had the knowledge regarding the function of beta coefficient and answer was "don't know" only 29% know, about it.
10. Very low number of respondents found to fill this question's answer. Their interest was not in such comprehensive question because of time factors. Most of them did not want to give the comments about present scenario stock market of Nepal.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary:

This study has covered most of the aspects of equity price. The prime objectives of this study is to put full efforts to identify the core factors upon which equity price built. So to achieve set targets, behavioral techniques of determination, function of security market, fundamental analysis, technical analysis, efficient market hypothesis etc are dealt. Basically, four popular financial indicators are selected because stocks market generally report these four indicators as measuring rod of economy. Thus the combined effect of these variables upon MPS has been tested by means of correlation analysis and regression analysis. This study has shown that MPS of sampled companies were heavily influenced by the fluctuations in these selected financial indicators. Related theories have argued that EPS, DPS, NWPS and price appreciation are the fundamental factors that shape the equity price to a significant extent

To arrive at concrete conclusion, pricing status of sampled companies has also been tested which strongly concluded that no any stocks were at equilibrium price. More precisely some companies have under priced and some have overpriced during the study period. If stocks are under priced their demand in stock market heavily mounts up. Oppositely, if stocks are overpriced their supply in stock market goes at rise. Theoretically insufficient supply of stocks caused price to rise. But window dressing and hope of getting dividend, bonus and right share of banking sectors have approached to maximum point.

Along with above reasons some qualitative factors influence the share price. They are:

Management of company, Earning status of company, Cash flow of company, Investment sector of company, Distribution of dividend Market share of company, Change in technology, Character of board member, Past performance of company, International situation, Change of law, rules and regulations, Earning per share, Net worth per share, Change in rate of interest on capital, Vision of investor towards

company, Price of petroleum material and gold, Electronic and paper Medias, Employment status of nation, Per capita income

Though this study could not cover this fact numerically, it is true that such factors hugely shape equity price, because ,in Nepalese context also, frequent Banda causes NEPSE index to go below yielding capital loss.

Thus it can be summarized that four financial indicators-EPS, DPS, NWPS, and capital gain, heavily affects or determines share price. Obviously, other extraneous factors also caused equity price to fluctuate. Investor must look after all factors, which explicitly or implicitly affect the share price so that they can arrive at rational decision.

Investment I share both in IPO and Secondary market amazingly increasing these days. Investors by in primary market at low prise and sell it at high price in secondary market. Likewise, they have great hope of getting right and bonus share from issuing company. Investors apply any sorts of tools to purchase share of certain company. Level of analysis and awareness regarding in share investment found increasing

5.2 Conclusion

Various factors heavily influenced the pricing of equity. It is still mysterious that which factors to extent shape equity price? Nevertheless, this study has tried to show that popular financial indicators shaped equity price. In fact, price of security is the outcome of investors' psychology. The psychology of investors is affected by various factors. In Nepalese context dividend streams and price appreciation of stock is a major factor for investors to decide about purchasing of shares. Along with the DPS and price appreciation, EPS, NWPS, market rumors, political and economic environment etc are the major factors which ultimately affect the buying and selling behavior of the investors. Stock exchange is the trading mechanism, which is the fixed engine to report at daily closing price at every day end. In our context, NEPSE plays such roles. However, one must look financial status of organization before making investment. If the organization is not financial strong, then there is a great probability to loose one's investment one day or other.

The first objective of this study is to find out the relationship of MPS with various financial indicators like EPS, DPS, NWPS and price appreciation. The fourth chapter of this study has presented multivariate correlation analysis, which concluded that the positive relationship of MPS with EPS is 0.871 of CIT. The least positive relationship of MPS with EPS is 0.246 of NDBL. The correlation coefficient MPS with EPS of all commercial banks are positive. Similarly, in case of DPS, MPS of CIT was most positively and highly correlated with DPS. No dividend had distributed by NDB during the study period. The least relationship of MPS with DPS is -0.395 of SCBNL. While analyzing, the relationship of MPS with DPS of finance sector, it has been observed that DPS was negatively correlated with MPS of PFL, UFL. DPS of CIT, NH&MFL, and NH&MFL only have positive correlation with MPS. In developing banking sectors DPS was positively correlated with MPS except DCBL. Likewise, while analyzing the relationship between MPS and NWPS, it has been found that correlation coefficient of commercial banking sectors was 0.880. It means that NWPS is positively correlated with MPS in banking sectors during the study period. However, in finance sectors, it has been observed that NWPS was positively correlated with MPS. The correlation coefficient of developing banking sectors of MPS with NWPS 0.530 during the study period. And all companies have positive figures during the study period. This indicated that MPS of developing banking sectors react positively with NWPS. Similarly, relationship of MPS with price appreciation or capital gain was positive in all sampled companies (i.e. sector wise.). Higher the MPS more will be the capital gain. The linear relationship gives the very idea that demand of stock increase due to the expectation of getting higher instant cash benefit.

Similarly, to assess the combined effect of EPS, DPS, NWPS and capital gain on MPS, the most popular statistical tool, multiple regression analysis has been applied with the help of statistical software SPSS. Under this analysis, coefficient of determination r^2 has been calculated which denotes the combined effect of selected financial indicators on MPS. As per the calculation, the highest coefficient of determination of NIBL and SCBNL is 0.992 which means that the MPS of these companies is mostly influenced by combined effect of EPS, DPS, NWPS and capital gain among all the selected listed companies during the study period. Similarly, the

lowest coefficient of determination of NDBL is 0.483 which indicates that MPS of the NDBL is least influenced by the combined effect of EPS, DPS, NWPS and capital gain among all selected listed companies. The coefficient of determination of commercial banking sectors, finance sector and development banking sector is 0.908, 0.897, 0.921 0.621 respectively during the study period. These all jointly, signifies that the variation in MPS is heavily caused by the fluctuation in the selected financial indicators.

In this way, to analyze the effects of financial indicators upon MPS regression analysis has been applied.. Coefficient of determination has concluded that market price of equity of Nepalese corporation has been heavily fluctuated due to the variation in EPS,DPS,NWPS and price appreciation. After, calculating their relationship with MPS, these variables are inserted in regression model, as independent variables, which have eventually provided the amount of variation in MPS. Sector wise regression analysis has shown that in commercial banking sector increase in EPS lead to decrease in MPS if other three variable DPS, NWPS and, CG is kept constant in each case. On the contrary, increase in DPS, NWPS, and CG lead to increase in MPS. Likewise, at finance sector, it has been observed that increase in EPS and NWPS lead to decrease in MPS if other three variables is kept constant in each case. However, DPS and capital gain have positively affected MPS of finance sector because increase in these variables lead to increase in MPS as indicted by their regression coefficient. Similarly, in case of development banking sector, increase in EPS lead to decrease in MPS if other three variable is kept constant. But DPS,NWPS and CG have positive impact on MPS as represented by their regression coefficient.

The next objective of this study is to identify whether the stocks of sampled companies are overpriced, under priced or equilibrium priced. To find out the pricing status of stocks, actual rate of return and required rate of return were calculated. Comparison of actual return with required return says that a particular stock is under price, overprice or equilibrium priced. The fourth chapter of this study has provided the details of the pricing status of stocks of sampled companies. By principle, if actual returns exceed required return then such stocks are classified under price stocks. Similarly, if actual returns are below than required return, then these stocks are called overpriced stocks, if they are equal to each other, such stocks are called equilibrium

priced stocks. Generally, the trend is that the MPS of public quoted companies is above than their book value. The market value is determined by the demand and supply function. However, in an efficient market, MPS fully reflects all the historical information publicly available. Demand of stocks in total is pushed or pulled by pricing status. According to the conclusion of chapter fourth, the highest required rate of return is 4.29 of NSBL and lowest required return is 3.62 of NUBL. Similarly the lowest actual rate of return -10.18 of PFL.

From the comparison, it has been observed that stocks of some sampled companies are overpriced and some have under priced during the study period. The main reasons of under valuation of stocks of the sampled companies is that the pricing of stocks reached at the highest point during the study period, but the NEPSE index did not follow the same speed and the rate of treasury bill issued by NRB gradually decrease during the study period. It makes the actual rate of return of the some sampled companies high and required rate of return low. So the pricing status of some companies became under price. For the over priced stocks, the reason is just opposite as mentioned above where required return exceeds actual returns. Furthermore, stocks of sampled companies, NEPSE index and treasury bill follow the same trend of speed. All of this make the price of stock more or overpriced.

Beta coefficients have indicated that stocks of NABIL, NIBL, NSBL, SCBNL, were more volatile during the study period. It means their stock is aggressive. On the contrary, remain companies stock were defensive, which means beta coefficient was less than one. More clearly, stocks of HBL, DCBL, NDBL, NUBL CIT, NH&MFL, NS&MFL, PFL, UF&MFL were less volatile in comparison to market.

To meet the last objective of this study, the researcher had depended upon primary sources of data. For this, hundred questionnaires were distributed to the respondents but only eighty responses could be collected. As per results the level of awareness and taking information regarding stocks is increasing. They invest in stocks by analyzing any sorts of techniques. It also found that investors are attracted by stock market to invest in share. All investors are attracted by right share and bonus share distributed by the company.

Thus, this study has begun with the basic definition of common stocks, capital market trading of stocks in security market and role of security in the countries like Nepal. More precisely, in chapter one, this study has explained the background, the objective, limitations and relevance of this study. Chapter two has presented the theoretical aspects of equity, its valuations of techniques, the basic determinant of equity and related studies of Nepalese context. Chapter three dealt with the basic methodology that this study primarily followed. The fourth chapter is the most crucial chapter, which has brought required calculations to arrive at the target. Correlation analysis, multiple regression analysis graphical presentation and pricing status were examined to achieve the set targets. To know the investors behaviours some questionnaire had been developed, distributed and collected. In this way, this study has taken a shape, which shall fulfill the requirements of Master in Business Studies (MBS) along with the future researchers.

5.3 Recommendations

The findings of this study may be important information for those who concern directly or indirectly with the stock market activities. Thus, the following recommendations can be outlined for the concerned.

- (1) From the study, it seems that Nepalese investors have limited knowledge about security market it lacks of professional investors. So the concerned authority is recommended to make aware about the security market to the general public so that they are interested to invest in security market and previous investors could change as professional investors.
- (2) Concerned authority are requested to look after the data manipulation, fabrication and other such window dressing as Nepalese commercial are doing to show the huge amount of net profit. Corporations are violating the standards norms due to which evil practices are taking places rapidly.
- (3) This study has shown that most of the stocks of commercial banks, development banks and finance companies listed in NEPSE are under priced in the stock market. So investors are recommended to buy these under valued stocks by selling other overvalued stocks.

- (4) As per the study, it has been found that EPS, DPS, NWPS, and price appreciation are the foundation upon equity price built. So investors are recommended for the detail study of the financial indicators before investing and trading stocks of any companies.
- (5) Rumors and bidding are playing vital role in Nepalese stock markets due to which hypothetical value is assigned for the equity as shown by this study, so investors and brokers are recommended to leave such practices and adopt standard financial norms with honesty so that actual position shall be visualized.
- (6) The price fluctuating trend is not predictable by general investors. So, investors are recommended to get the consultancy service from the investment experts, while making the investment.
- (7) Signaling factors should be analyzed on regular basis by the concerned authority so that the future movements of price can be predicted from the side of analysts and investors.
- (8) Now Nepal have changed in its political situation and become **federal democratic republic** country abandoning royal dynasty of monarchy system. More, new political force has come in supreme power. Certainly, the policy, rules and regulation issued by this political force really affects Nepalese capital market. Thus investors should analyze and aware of new developing situation.
- (9) More or less, investors have known and understand about Nepal stock market the degree of knowledge regarding with this market gradually increasing. So full knowledge and information should be provided to the investors and stakeholders.
- (10) It is also recommended to apply any tools or analyze rationally before investment either in primary market (i.e. IPO) or secondary market.

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ANNEX-I
QUESTIONNAIRE ANALYSIS

Dear sir/Madam,

First of all, I would like to introduce myself as a student of Shankerdev campus. In order to fulfill my practical requirement of Master's Degree in Faculty of management I am preparing a dissertation entitled " **Share Price Determinants and Investors' Behaviour in Nepal** ".

I would really appreciate if you could kindly a few minutes of your valuable time in filling this questionnaire enclosing with your valuable suggestions.

I assure you that the information provided by you will be kept strictly confidential.

Thanks for your cooperation.

Respondents Name:- Occupation:- Organization:-

Researchers
Rajan Bhandari
Shankerdev Campus
Cell no 9841496918

To know the investor's and market behaviour in Nepal stock market

- 1) In depth analysis of security is essential rather than random decision before investment. To what extent do you agree with this statement relating with Nepal's stock market?
a. Strongly agree [] b. Agree [] c. Disagree [] d. Don't know []

- 2) How would you make a decision to purchase a share of certain company in the Nepal's stock market?
a. Fundamental analysis (i.e. earning, dividend and future prospect of the company) []
b. Technical analysis (i.e. past price and trade volume) []
c. Consulting with brokers or share analysts. []
d. Based on newspaper, magazine and electronic media []
e. Others if, please specify.....

- 3) In general, what do you think about current share price in NEPSE?
a. Overpriced [] b. Equilibrium priced []
c. Underpriced [] d. Don't know []

- 4) In your opinion, which of the following factors mainly determines the share price in NEPSE? (please rank in order of these effectiveness by assigning 1,2,3....most important one and so on.)
a. Earnings and dividends []
b. Right share and bonus share []
c. Net worth of a company []
d. Historical returns []
e. Buying and selling pressures of shares. []
f. Electronic and paper media. []
e. Others if, please specify.....

- 5) Do you agree with the following statements about Nepal's stock market?
- a. current nepal's stock market is humor driven.
 Yes [] No [] Don't know []
- b. Current Nepal's stock market is overheated(i.e. water bubble)
 Yes [] No [] Don't know []
- c. Few number of investors(along with the insider traders) are rulling over the
 Nepal's secondary market
 Yes [] No [] Don't know []
- e. Most of the investors are unaware about analyzing techniques.
 Yes No [] Don't know []
- 6) To know the riskiness of the share, rational investors is used beta coefficient?
 Yes [] No [] Don't know []
- 7) Do you have any comments about present scenario of Nepal's stock market?
 please explains if.....

ANNEX-II

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

HIMALAYAN BANK

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	1700						
2000/01	1500	-11.76	1.83	-9.93	-17.86	-15.01	268.1
2001/02	1000	-33.33	2.5	-30.83	-49.14	-35.91	1764.61
2002/03	836	-16.4	0.16	-16.24	-24.39	-21.32	520
2003/04	840	0.478	0	0.478	-22.79	4.602	-104.87
2004/05	920	9.52	1.26	10.78	14.69	5.7	83.73
2005/06	1100	19.56	2.72	22.28	20.46	17.2	351.91
2006/07	1740	58.18	0.86	59.07	62.35	54.0	3366.9
Sum Rj = 35.578							Sum = 6250.38

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{35.578}{7} = 5.081 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{6250.38}{7 - 1} \\ &= 1041.73 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{1041.73}{1314.64} \\ &= 0.79 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.79 \\ &= 12.13\% \end{aligned}$$

NABIL BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	1400						
2000/01	1500	6.67	2.67	9.34	-17.86	-9.73	173.78
2001/02	735	-51.00	4.308	-46.92	-49.14	-66.0	3243.24
2002/03	735	0	6.80	6.80	-24.39	-12.27	299.26
2003/04	1000	36.05	6.5	42.55	-22.79	23.48	-535.10
2004/05	1505	50.5	4.65	55.15	14.69	36.08	530.01
2005/06	2240	48.83	3.79	52.62	20.46	33.55	686.43
2006/07	5050	125	1.98	14.48	62.35	-4.59	-286.18
Sum Rj = 133.52							Sum = 4110.91

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{133.52}{7} = 19.07 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{4110.91}{7 - 1} \\ &= 685.15 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{685.15}{1314.64} \\ &= 0.52 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.52 \\ &= 9.146\% \end{aligned}$$

NEPAL INVESTMENT BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	1401						
2000/01	1150	-21.82	0.1	-21.82	-17.86	-29.6	528.65
2001/02	760	-33.91	0	-33.91	-49.14	-41.69	2048.64
2002/03	795	4.60	2.5	7.1	-24.39	-0.68	16.58
2003/04	940	18.23	1.59	19.82	-22.79	12.04	-274.39
2004/05	800	-14.89	1.56	13.33	14.69	5.55	81.52
2005/06	1260	57.5	7.58	59.08	20.46	51.3	1049.6
2006/07	1729	37.22	0.29	37.51	62.35	29.33	1866
Sum Rj = 54.45							Sum = 5316.6

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{54.45}{7} = 7.78 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{5316.6}{7 - 1} \\ &= 886.1 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{886.1}{1314.64} \\ &= 0.67 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.67 \\ &= 0.67\% \end{aligned}$$

NEPAL SBI BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	562						
2000/01	1500	.116	0	.166	-17.86	-51.866	926.32
2001/02	401	-73.26	0	-73.26	-49.14	-124.26	6140.5
2002/03	255	-36.41	3.13	-33.27	-24.39	-84.97	2072.41
2003/04	307	20.39	0	20.39	-22.79	-31.31	713.55
2004/05	335	8.35	0	8.35	14.69	-43.35	-636.81
2005/06	612	82.68	0.816	83.496	20.46	31.8	650.628
2006/07	1776	190.2	0.007	190.21	62.35	138.3	8623.0
Sum Rj = 361.91							18487.6

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{361.91}{7} = 51.70 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{18487.6}{7 - 1} \\ &= 3081.27 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{3081.27}{1314.64} \\ &= 2.34 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 2.34 \\ &= 29.26\% \end{aligned}$$

STANDARD CHARTED BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	1985						
2000/01	2144	8.01	4.66	12.76	-17.86	-14.14	252.54
2001/02	1550	-27.70	6.45	-21.25	-49.14	-48.15	2366.1
2002/03	1640	5.81	6.70	12.51	-24.39	-14.39	350.97
2003/04	1745	6.4	6.30	12.7	-22.79	-14.2	323.6
2004/05	2345	34.38	5.11	39.49	14.69	12.59	184.94
2005/06	3775	60.98	3.44	64.42	20.46	37.5	767.25
2006/07	5900	56.29	1.365	57.655	62.35	30.755	1917.26
Sum Rj = 188.2							Sum = 6162.63

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{188.2}{7} = 26.89 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{6162.63}{7 - 1} \\ &= 1027.11 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{1027.11}{1314.64} \\ &= 0.78 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (41.45 - 3.4) \times 0.78 \\ &= 12.02\% \end{aligned}$$

CITIZEN INVESTMENT TRUST

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	115						
2000/01	180	56.52	0	56.50	-17.86	-26.5	473.29
2001/02	165	-8.33	8.69	0.36	-49.14	-29.64	1456.51
2002/03	170	3.03	8.23	11.26	-24.39	-18.74	457.06
2003/04	165	-2.94	9.09	6.15	-22.79	-23.85	543.54
2004/05	200	21.21	7.89	29.1	14.69	-0.9	-13.221
2005/06	265	32.5	25.81	58.31	20.46	28.31	579.22
2006/07	352	32.83	16.09	48.92	62.35	18.92	1179.66
Sum Rj = 210.06							Sum = 4676.5

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{210.06}{7} = 30 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{4675.5}{7 - 1} \\ &= 779.41 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{779.41}{1314.64} \\ &= 0.59 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.59 \\ &= 9.92\% \end{aligned}$$

NEPAL HOUSING MERCHANT FINANCE LIMITED

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	235						
2000/01	280	19.15	5.35	24.5	-17.86	12	-214.32
2001/02	175	-37.15	8.57	-28.93	-49.14	-41.43	2035.87
2002/03	240	37.14	4.16	41.23	-24.39	28.73	-700
2003/04	230	-4.17	4.578	0.408	-22.79	-12.09	275.53
2004/05	214	-6.96	7.37	0.41	14.69	-12.09	-177.60
2005/06	210	-1.87	10.02	8.15	20.46	-4.35	-89.00
2006/07	280	33.33	8.64	41.97	62.35	29.47	1837.45
Sum Rj = 87.8							Sum = 2967.93

$$\text{Average actual rate of returns} = \frac{\sum R_j}{N}$$

$$= \frac{87.8}{7} = 12.5$$

$$\text{Co-variance, Cov (Rm, Rj)} = \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1}$$

$$= \frac{2967.93}{7 - 1}$$

$$= 494.65$$

$$\text{Beta Coefficient (B)} = \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)}$$

$$= \frac{494.65}{1314.64}$$

$$= 0.38$$

There fore,

$$\text{Required Rate of Return, E(R)} = R_f + (R_m - R_f) \times B$$

$$= 3.4 + (14.45 - 3.4) \times 0.38$$

$$= 7.6\%$$

NEPAL SHARE MARKET & FINANCE CO. LTD.

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	230						
2000/01	180	-27.73	0	-21.73	-17.86	-29.23	522.04
2001/02	159	-11.67	0	-11.67	-49.14	-19.18	942.50
2002/03	125	-21.38	0	-21.38	-24.39	-28.88	704.38
2003/04	103	-17.6	0	-17.6	-22.79	-25.1	572.02
2004/05	120	16.50	8.33	24.83	14.69	17.33	254.57
2005/06	145	-20.83	7.26	-13.57	20.46	-21.07	-431.09
2006/07	300	106.9	6.67	113.57	62.35	106.07	6613.46
Sum Rj = 52.48							Sum = 9177.88

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{52.45}{7} = 7.49 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{9177.65}{7 - 1} \\ &= 1529.65 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(RM)} \\ &= \frac{1529.65}{1342.64} \\ &= 1.16 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 1.16 \\ &= 16.22\% \end{aligned}$$

PEOPLE FINANCE LIMITED

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	300						
2000/01	230	-23.33	0	-23.33	-17.86	-17.55	313.44
2001/02	130	-43.48	0	-43.48	-49.14	-37.55	1845.02
2002/03	90	-3.76	0	-30.76	-24.39	-24.98	609.26
2003/04	104	15.55	9.61	25.16	-22.79	30.94	-705.12
2004/05	100	-3.846	10	6.52	14.69	12.3	180.68
2005/06	111	11	0	11	20.46	16.78	343.31
2006/07	127	14.41	0	14.41	62.35	20.19	1258.84
Sum Rj = -40.48							Sum = 3845.43

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{-40.48}{7} = -5.78 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{3845.43}{7 - 1} \\ &= 640.91 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{640.91}{1314.64} \\ &= 0.49 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.49 \\ &= 8.81\% \end{aligned}$$

UNIVERSAL FINANCE AND CAPITAL MARKET LIMITED

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	185						
2000/01	181	-2.76	9.12	6.96	-17.86	0.31	
2001/02	175	-3.31	9.14	5.83	-49.14	-0.82	-5.53
2002/03	150	-14.28	10	-4.28	-24.39	-10.93	40.29
2003/04	130	-13.33	0	-13.33	-22.79	-19.98	266.58
2004/05	130	0	9.63	9.63	14.69	2.98	455.34
2005/06	181	39.23	0	39.23	20.46	32.58	665.58
2006/07	200	2.56	0	2.56	62.35	-4.09	-255.01
Sum Rj = 46.58							Sum = 1211.03

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{46.58}{7} = 6.65 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{1211.03}{7 - 1} \\ &= 201.83 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(RM)} \\ &= \frac{201.83}{1314.64} \\ &= 0.15 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.15 \\ &= 1.5\% \end{aligned}$$

DEVELOPMENT CREDIT BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000							
2000/01	152	0	0	0	-17.86	-34.79	621.34
2001/02	145	-4.60	0	-4.60	-49.14	-39.04	1936.11
2002/03	145	0	7.26	7.26	-24.39	-27.54	671.70
2003/04	165	13.79	6.38	20.17	-22.79	-14.63	33.41
2004/05	305	83.84	4.14	87.98	14.69	53.18	781.21
2005/06	390	27.86	0.16	28.02	20.46	-6.78	-138.7
2006/07	800	105.13	0.079	105.21	62.35	70.41	4390.06
Sum Rj = 243.57							Sum = 8595.13

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{243.57}{7} = 34.79 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{8595.13}{7 - 1} \\ &= 1432.52 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{1432.52}{1314.64} \\ &= 1.09 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 1.09 \\ &= 15.44\% \end{aligned}$$

NEPAL DEVELOPMENT BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000							
2000/01	0	0	0	0	-17.86	-11.83	211.28
2001/02	155	0	0	0	-49.14	-11.83	581.32
2002/03	140	-9.67	0	-9.67	-24.39	-21.5	524.38
2003/04	132	-5.71	0	-5.71	-22.79	-17.54	399.73
2004/05	88	-33.33	0	-33.33	14.69	-45.16	-663.40
2005/06	102	15.90	0	15.90	20.46	4.07	83.27
2006/07	153	50	0	50	62.35	38.17	2411.07
Sum Rj = 82.81							Sum = 3547.65

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{82.81}{7} = 11.83 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N-1} \\ &= \frac{3547.65}{7-1} \\ &= 591.28 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{591.28}{1314.64} \\ &= 0.45 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.45 \\ &= 8.37\% \end{aligned}$$

NIRDHAN UTTHAN BANK

Calculation of Actual Rate of Return (\bar{R}_m) & Required Rate of Return E (R)

Year	Closing Price	CGY%	DY%	Annual (RJ)%	Rm- \bar{R}_m	$R_j - \bar{R}_j$	$(R_m - \bar{R}_m)(R_j - \bar{R}_j)$
1999/2000	0						
2000/01	0	0	0	0	-17.86	-4.5	80.37
2001/02	0	0	0	0	-49.14	-4.5	221.13
2002/03	100	0	0	0	-24.39	-4.5	109.75
2003/04	90	-10	0	-10	-22.79	-14.5	324.65
2004/05	100	11.11	0	11.11	14.69	6.61	97.1
2005/06	100	0	5	5	20.46	0.5	10.23
2006/07	110	10	15.36	25.36	62.35	20.86	1300.6
Sum Rj = 31.47							Sum = 2143.86

$$\begin{aligned} \text{Average actual rate of returns} &= \frac{\sum R_j}{N} \\ &= \frac{31.47}{7} = 4.5 \end{aligned}$$

$$\begin{aligned} \text{Co-variance, Cov (Rm, Rj)} &= \frac{\sum (R_m - \bar{R}_m)(R_j - \bar{R}_j)}{N - 1} \\ &= \frac{2143.86}{7 - 1} \\ &= 357.31 \end{aligned}$$

$$\begin{aligned} \text{Beta Coefficient (B)} &= \frac{\text{Cov}(R_m, R_j)}{\text{Var}(R_M)} \\ &= \frac{357.31}{1314.64} \\ &= 0.27 \end{aligned}$$

There fore,

$$\begin{aligned} \text{Required Rate of Return, E(R)} &= R_f + (R_m - R_f) \times B \\ &= 3.4 + (14.45 - 3.4) \times 0.27 \\ &= 6.38\% \end{aligned}$$

ANNEX-III

SOME TERMINOLOGY

Bear	: A person who believes stock price or stock market will decline or might be described as having a "bearish" outlook.
Bear Market	: A long period of time when prices in the market are generally declining.
Beta	: A measures of security's systematic or market risk.
Blue chip stock	: A well known public company that is thought to be in a good financial Shape and have sound fundamentals (profitability earnings).
Bottom	: A succession of price to a low point, and then rise from the low for at least several years.
Break out	: Price of a security emerging from a previous trading pattern.
Bull	: A person who believes stock price or stock market will advance and might be described as having "bullish" outlook.
Bull market	: A long period of time when prices in the market are generally increasing.
Buy signal	: A condition that indicates a good time to buy a stock.
Channel	: Technical range between support and resistance level where trading of a certain share take place.
Correction	: A market decline which occurs during a bull primary trend.
Divergence	: A term used to describe the market indicators which are giving opposing signal.
Down trend line	: A line drawn through two or more descending tops.

Falling knife	: Price of certain stock decrease drastically in a short period.
Momentum	: Rate of change in trading volume and stock price of certain company.
Overbought	: A technical condition that occurs when price are considered too high and susceptible to decline.
Oversold	: A technical condition that occurs when price are considered too low and ripe for a rally.
Penny stock	: High speculative, low period issue of common stock.
Recovery	: An advance in the stock market after correction or down trend.
Rumor	: This is a favorable or unfavorable statement about a company that has not been verified by an authorized official of the company.
Sell signal	: A condition that indicates a good time to sell a stock.
Support	: A level at which the price of a stock or index stops falling; the level is then being " Supported" by buyers.
Technical correction	: Increase in the prices without significant peaks generation only for a very short span.
Technically rally	: Process of rising in continuous declining price in shares.
Trader	: One who buys and sells stock or other securities on a regular basis.
Trades	: Order to buy or sell stocks and other securities.
Trend	: Directions of shares prices.
Typical price	: The typical price is the average of the high, low and close price