DIVIDEND POLICY AND ITS EFFECT ON STOCK PRICE (WITH REFERENCE TO COMMERCIAL BANKS)

By: NITIN NIROULA POST GRADUATE CAMPUS, BIRATNAGAR T.U. Registration No: 7-1-350-121-2000

A Thesis Submitted to: Office of the Dean Faculty of Management Tribhuvan University

In partial fulfillment of the requirements of the degree of Masters of Business Studies (M.B.S.)

> Biratnagar, Nepal. March, 2009



Tel. 021-526327, 522204

Ref. No.....

RECOMMENDATION

This is to certify that the thesis:

Submitted by

Mr. NITIN NIROULA

Entitled

DIVIDEND POLICY AND ITS EFFECT ON STOCK PRICE (WITH REFERECE TO COMMERCIAL BANKS)

has been prepared as approved by this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

 Thesis Supervisor
 Head of Research Department

 Dr. Shyam Bahadur Katuwal
 Dr. Madhav Bahadur Shrestha

 Campus Chief

 Date:



Tel. 021-526327, 522204

Ref. No.....

VIVA VOICE SHEET

We have conducted the viva-voice examination of the thesis presented by

NITIN NIROULA

entitled

DIVIDEND POLICY AND ITS EFFECT ON STOCK PRICE (WITH REFERENCE TO COMMERCIAL BANKS)

and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for Master's Degree in Business Studies (M.B.S.)

VIVA-VOICE COMMITTEE

Chair person, Research committee	
Member (Thesis Supervisor) (Dr. Shyam Bahadur Katuwal)	
Member (External Expert)	
Date:	

DECLARATION

I hereby declare that the thesis entitled "Dividend Policy and Its Effect on Stock **Price (With Reference to Commercial Banks)**" submitted to office of the Dean, Faculty of Management, Tribhuvan University, is my own work which is prepared in partial fulfillment for the requirements of the degree of Masters of Business Studies (M.B.S.) under guidance and supervision of Dr. Shyam Bahadur Katuwal, Post Graduate Campus, Biratnagar.

NITIN NIROULA

(Researcher) T.U. Regd. No. 7-1-350-121-2000

Date:

ACKNOWLEDGEMENTS

This dissertation work entitled "Dividend Policy and Its Effect on Stock Price (With Reference to Commercial Banks)" is prepared in partial fulfillment for the requirements of the degree of Masters of Business Studies (MBS).

I am highly indebted to the thesis supervisor Dr. Shyam Bahadur. Katuwal, Post Graduate Campus, Tribhuvan University, Biratnagar, for providing guidance, encouragement, valuable supervision and meticulous care during the preparation of this thesis.

I would also like to extend my special thanks to Dr. Madhav Bahadur Shrestha, Chairperson, Research Committee, and Campus Chief Mr. Harihar Bhandari. I am also grateful to Mr. Gopal Prasad Ghimire, and all my teachers and administrative staffs at Post Graduate Campus, whose suggestions have also been fruitful to me for the completion of this thesis.

I am especially indebted to my tutor Mr. Durgahari Bhattarai, and I would like to thank my friends Abin, Bishnu, Gokul, L.B., Rajendra, Roshan, Suman, and Tulsi, for their encouragement to complete this thesis. It is my pity that I cannot thank all of my friends here who gave me their direct and indirect help during the preparation of this thesis.

Finally, I feel indebted to all the authors whose works were cited during the study. I am also thankful to the librarians of Post Graduate Campus, Tribuhuvan University, Biratnagar, for providing necessary information for the thesis.

Date: Biratnagar NitinNiroula

LIST OF TABLES

4.1.1: Comparative Earnings per Share of banks under study	32
4.1.2: Comparative Dividend per Share of banks under study	34
4.1.3: Comparative Dividend Payout Ratio of banks under study	35
4.1.4: Comparative MPS of banks under study	37
4.1.5: Comparative P/E of banks under study	38
4.1.6: Comparative Dividend Yield of banks under study	40
4.1.7: Comparative Analysis of NWPS Share of banks under study	41
4.2.1.1: Correlation Coefficient of SCBNL	43
4.2.1.2: Correlation coefficient of NSBL	44
4.2.1.3: Correlation coefficient of Nabil Bank Ltd.	44
4.2.1.4: Correlation coefficient of HBL	44
4.2.1.5: Correlation coefficient of NIBL	45
4.2.2.1: Regression analysis between MPS on EPS	46
4.2.2.2: Regression analysis between MPS on DPS	47
4.2.2.3: Regression analysis between MPS on DPR	48
4.2.2.4: Regression analysis between MPS on D.Y.	49
4.2.2.5: Regression analysis between DPS on EPS	50
4.2.2.6: Regression analysis between DPS on NWPS	51
4.2.2.7: Regression analysis of MPS on P/E Ratio and DPS	52
4.2.2.8: Regression analysis of MPS on EPS and DPR	53

LIST OF FIGURES

Page

Figure 4.1.1 Earnings per Share of Banks under study	32
Figure 4.1.2 Comparative Dividend per Share of banks under study	34
Figure 4.1.3 Comparative Dividend Payout Ratio of banks under study	36
Figure 4.1.4 Comparative MPS of banks under study	37
Figure 4.1.5 Comparative P/E of banks under study	39
Figure 4.1.6 Comparative Dividend Yield of banks under study	40
Figure 4.1.7 Comparative Analysis of NWPS of banks under study	42

LIST OF ABBREVIATIONS

a	:	Regression Constant
AD	:	Anno Domini
ATM	:	Automated Teller Machine
b	:	Regression Coefficient
BS	:	Bikram Sambat
CV	:	Coefficient of Variation
DPR	:	Dividend Payout Ratio
DPS	:	Dividend Per Share
DY	:	Dividend Yield
EPS	:	Earning Per Share
FY	:	Fiscal Year
Govt.	:	Government
HBL	:	Himalayan Bank Limited
JVB	:	Joint Venture Bank
MPS	:	Market Price of Share
NABIL	:	Nabil Bank Limited
NEPSE	:	Nepal Stock Exchange
NIBL	:	Nepal Investment Bank Limited
NRB	:	Nepal Rastra Bank
NSBL	:	Nepal SBI Bank Limited
No.	:	Number
NWPS	:	Net Worth Per Share
P/E	:	Price-Earning Ratio
R	:	Correlation Coefficient
\mathbb{R}^2	:	Coefficient of Multiple Determination
SBI	:	State Bank of India
SCBNL	:	Standard & Chartered Bank Nepal Ltd.
SD	:	Standard Deviation
Vol	:	Volume

TABLE OF CONTENTS

Acknowledg List of Table List of Figur List of Abbre	ements es es eviations	Page
Chapter I:	INTRODUCTION 1.1 Background 1.2 Focus of the Study 1.3 Statement of the Problem 1.4 Objectives of the Study 1.5 Significance of the Study 1.6 Limitation of the Study 1.8 Organization of the Study	1 2 3 4 4 5 6
Chapter II:	REVIEW OF LITERATURE 2.1 Conceptual Review 2.2 Review of Related Studies	7 15
Chapter III:	 RESEARCH METHODOLOGY 3.1 Research Design 3.2 Population and Sample 3.3 Nature and sources of data 3.4 Data Collection Technique 3.5 Data Analysis Tools 3.6 Financial Variables 3.7 Statistical Tools 	20 21 22 22 22 22 22 24
Chapter IV:	DATA PRESENTATION AND ANALYSIS4.1 Presentation of Financial Variables4.2 Statistical Analysis4.3 Major Findings of the Study	32 43 54
Chapter V:	SUMMARY, CONCLUSIONS & RECOMMENDAT 5.1 Summary 5.2 Conclusions 5.3 Recommendation	FION 57 58 59

BIBLIOGRAPHY APPENDICES

9

<u>CHAPTER-I</u> INTRODUCTION

1.1 Background

One of the major reasons, people invest their hard money on the shares of any company is for divided. The amount, which is distributed as dividend, should be adequate to meet the normal expectations of shareholders. The main controversy and agency problem between the shareholders and the management is the rate of dividend because shareholders want more dividends and the management wants more amounts to retain in the company. Dividend Policy decision is the major financial decision of the firm, which may affect the areas such as financial structure, flow of funds, stock prices, growth of firm etc.

The Policy of a company on the division of its profit between distribution to shareholders as dividend and retention for its investment is known as dividend policy. Firstly, the company should decide whether the dividend should be paid or not, secondly they should determine how much should be paid. All aspects and question related to the payment of dividend are contained in a dividend policy.

Earning is that amount which remains after deducting or submitting all operational and non-operational expenses. The earning of a firm is divided into two parts (a) dividend to the shareholders (b) the retention for internal financing. How much a firm should retain the earnings basically depends upon the profitable investment opportunities available for firm's growth expansion and modernization. Retention is insignificant if the company fails to increase the growth rate of the firm.

In the theory of finance, dividend decision plays a very crucial role. The firm has to choose between distribution of profits to shareholders or plowing them back into the business. The decision depends upon the ability to achieve the objectives of wealth maximization. The firm will use the net profit for reinvestment, if the reinvestment leads to maximization of the wealth of shareholders. If not, it is wise to distribute them to the shareholders. Thus the relationship between dividend and value of firm is considered as the criterion for decision-making.

The scholars have not been able to define simple and conclusive relationship between dividend and the market price of the share. Some expert believes to have a positive relationship whereas others believe to have negative relationship between stock price, and dividend. In the secondary market the declaration of the dividend or the dividend policy of the firm changes the market price of the shares. Therefore, it is expected that there is some impact of dividend policy over the market price of the stock.

In the context of Nepal, people are interested in investing with the views and expectations of more capital appreciation and dividend on stocks. But there is not any consistency and regular practice of dividend announcement in different firms. Most of public enterprises are operating in loss. Such enterprises mainly focus on minimizing their loss. In such situation it is not possible to distribute dividend. Recently commercial banks and some other public limited companies have shown new trend of paying dividend to the shareholders.

1.2 Focus of the Study

Security prices play a vital role in channeling the flow of capital into various industries. The behavior of price of securities has been a controversial subject matter among the academics of financial and economic circles. To some extent, in fairly competitive and well-advanced economy, the pricing of securities is very satisfactory in capital market. The market prices of the securities are competitive and determined by market forces. There ought not to be any difference between present value and market value of share. In other words, securities prices are set by the demand and supply of securities. Market makers try to quote an equilibrium price that equates the supply with the demand. This study primarily focuses the behavioral responses of equity price when there do exist changes in the relevant financial indicators. That is, this study is trying to test the impact of dividend policy upon stock price. More specifically, the focus of this study is to identify the relationship between dividend policy and stock price. In this way, this study focuses on the issue that "whether the successive price changes of the securities are dependent or independent." There are various approaches that handle and describe what kind of law governs the security price and how they behave over period. However, dividend policy is also one of the best approaches to predict the successive price movement of stocks.

11

1.3 Statement of the Problem

Dividend decision is the very important part of managerial finance. In the absence of dividend payment investors may require to rethink about investing in shares, so dividend decision occupies an important place in the theory of business finance.

The effect of dividend policy on a corporation's market value is a subject of long standing argument. There is still no single conclusive result regarding the relationship between the dividend payment and market price of the share. Because stock price depends upon other factors as well, such as, general economic environment of the economy, demand and supply of the particular stock, taste and preference of the investors, etc.

However, many experimental studies have been carried out in the developed capital market to analyze the relationship between dividend and stock prices by Linter (1956), Modigliani and Miller (1961), Gordon (1962), Friend and Puckett (1964), Walter (1966), Van Horne and McDonald (1971), and Chawala and Shrinivasan (1987). However no conclusive relationship was concretely found between the amount paid out as dividend and the market price of share.

But dividend is the most stimulating factor for the investment on shares of the company, and thus it is very desirable from the stockholder's point of view. On one hand, the payment of dividend makes the investors happy, but on the other hand the payment of dividend decreases the internal financing required for making investment in profitable ventures and hampers the growth of the firm.

In Nepal, it has been found that especially commercial banks and even some insurance, finance, and manufacturing concerns have been distributing regular dividend. But not a single clear and convincing dividend policy that is being followed is known yet. It is partly due to the various government rules and regulations acting and reacting in the financing operation. There is no limit to the identification of the problem about dividend practices that are visible in Nepalese Financial Institutions.

Nepalese investors have largely made investment on newly established companies, especially in the financial sector. Nepalese shareholders also seem not so aware enough to maximize their wealth. Due to lack of knowledge, people are

12

investing hit or miss on shares, and the stakeholders are exploiting the shareholders by taking the advantage of market imperfection.

In Nepal, there are more than hundred companies and enterprises listed in stock exchange limited. These companies are not seen serious regarding dividend decision. Even the profit generating companies do not have any consistent and clearcut policy on dividend distribution. In spite of earning good income and paying attractive dividends, the dividend payout ratios are not consistent over the years. Sometimes, they pay high dividends while earning is not so high, and at other times, they pay low dividends even when earning is high. There is common trend that company's management, instead of shareholders' meeting, declares the dividend. Thus, this study seeks to answer the following problems:

- a) What are the implications of dividend on stock price?
- b) Is there consistency between dividend policies followed by commercial banks?
- c) What are the relationships between dividends, earnings, stock price, and net worth of the selected commercial banks?
- d) What are the factors that affect the dividend and valuation of the firms?

1.4 Objectives of the Study

For the management of any organization, examination of the relationship between dividend and stock price may become an important guideline in setting suitable dividend policy. The main objective of this study is to analyze the effect of dividend policy adopted by commercial banks, on its market price of the stock, as well as the overall value of commercial banks. The other specific objectives of the study are as follows:

- a) To compare the various aspects of dividend policy of the selected commercial banks.
- b) To analyze the dividend policy and its effect on stock price changes.
- c) To find out the relationship between the dividends with earnings, stock price and net worth.
- d) To provide applicable suggestion on the basis of findings.

1.5 Significance of the Study

The dividend is most sensitive element in the area of investment in the common stock. If the market does not receive its expected dividend, stock price will suffer. Dividend Payout, of course, reduces the amount of earnings retained in the firm and affects the total amount of internal financing.

In recent years, people are attracted to invest in shares for the purpose of getting more return as well as to maximize their wealth. So the dividend policy has become an effective way to attract new investors and to maintain goodwill of the company in the market. When a new company flats shares in the capital market, very big congregation gathers to apply for owner's certificate or stock. One can clearly see the consequent impacts of dividend policy on stock price. The study may deliver crucial information for those respective commercial banks taken as sample since the study in dividend policy decision of these commercial banks are made. The importance of the study is as follows:

- a) This study will be helpful for the further researchers in this field.
- b) This study will be a matter of interest for academicians, students and investors.
- c) This study will be beneficial to the stockholders, brokers, management and policy makers.
- d) This study helps to formulate dividend policy to the policy makers while making their policy.
- e) This study covers the partial fulfillment of the requirements of MBS, T.U.
- f) This study will be beneficial also to those parties who are directly or indirectly related to the financial institutions.

1.6 Limitations of the Study

This study has been carried out within certain limitations, which are as follows:

- a) This study is based specially on secondary data like annual reports of selected companies, website of Nepal Stock Exchange, other related Journals, magazines, books etc. So the reliability of the conclusion of the study depends upon the accuracy of secondary data.
- b) The analysis has been done covering five years data only from F.Y. 2059/60 (2002/03) to F.Y. 2063/64 (2006/07).

- c) Due to time and resource factors, only 5 listed commercial banks are taken under this study.
- d) The study considers cash dividend only and exclude the stock dividend as bonus.
- e) Mostly, the factors like cash dividend, earnings and the stock price will considered under this study.
- f) This study is in partial fulfillment of the Master's Degree of Business studies (MBS); so the time and cost constraints limit the study.

1.8 Organization of the Study

This study has been organized into six chapters, each devoted to some aspect of the study of dividend policy followed by commercial banks in Nepal. The contents of each of these chapters are as follows:

CHAPTER I	:	Introduction
CHAPTER II	:	Literature Review
CHAPTER III	:	Research Methodology
CHAPTER IV	:	Presentation and Analysis of Secondary Data
CHAPTER V	:	Summary, Conclusions & Recommendations

CHAPTER I: This chapter includes the introductory part of the study. As already mentioned, this chapter describes the general background of the study, limitation of the study, organization of the study and profile of selected samples of commercial banks.

CHAPTER II: This chapter describes theoretical analysis and brief review of related and pertinent literature available. It includes a discussion on the conceptual framework and review of the major studies. The types of dividend, payment procedure, factors affecting dividend policy, stability of dividend, forms of dividend etc.

CHAPTER III: This chapter describes the research methodology employed with the matter and sources of data, population and sample of the model analysis, meaning and definition of statistical tools.

CHAPTER IV: This chapter deals with the presentation and analysis of secondary data by using various tools. Finally,

CHAPTER V: This chapter states summary, conclusions and major findings of the study.

The bibliography and annexes are incorporated at the end of the study.

<u>CHAPTER-II</u> REVIEW OF LITERATURE

2.1 Conceptual Review:

This segment mainly focuses the theoretical aspect of dividend, its effect on stock price along with the concept of dividend relevancy. In other words, this segment is the book review of this chapter.

Meaning of Dividend

Once a company makes a profit, it must decide on what to do with those profits. There are two options, which the company has while utilizing its profit earned after tax: either distribute the profit to the shareholders or plow back the same by retaining it with the company. But in practice, companies do not go for the extreme options stated i.e. they neither retain the whole of profit earned with the company nor pay the whole profit fully to its shareholders but distribute a certain percentage of the profit as dividend. Thus dividend is the portion of earnings, which is distributed among the shareholders. More specifically, any direct payment by the corporation to the shareholders or stockholders may be considered as Dividend.

The term dividend refers to distribution of earnings to the stockholders of the firm in return to their investment. In other words, dividend is a periodic payment made to the stockholders to compensate them for the use of and risk to their investment. "Dividend refers to that portion of a firm's net earning, which are paid out to the shareholders." (Khan and Jain, 1992:543)

Dividend may be paid in cash, stock or merchandise. Generally, it is viewed as cash dividend. Therefore it reduces cash balance of the company as well as the amount of retained earning. Retained earnings are the earnings of a corporation, which are retained in the business for meeting the financial need of the company for its growth, expansion and development. Retained earnings are on of the most important sources of internal funds. A higher dividend rate means less retained earnings, and vice versa. High dividend rate means increased cash flows to investors,

17

which is good for them, but it leads to lower future growth for firms, which is bad. Thus how much of dividend is to be paid to the stockholders is the controversial and unresolved problem.

The payment of corporate dividend is at the discretion of the board of directors. Before dividend is paid to common stockholders the claims of creditors, the government and preferred stockholders must be satisfied. Stockholders wealth includes not only market price of stocks quoted in stock market but also current dividends. Thus dividends are more than just a means of distributing unused funds.

Meaning and Significance of Dividend Policy

The decision to keep some portion of earnings or pay some portion of earnings as dividend is known as Dividend Policy. It involves the decision to pay out earnings versus retaining them for reinvestment in the firm. The dividend policy includes all aspects related to the payment of dividend. Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. The questions which relate to the dividend policy of a firm are: (Pandey, 1995:697)

- 1) What are the preferences of shareholders? Do they want dividend income or capital gains?
- 2) What are the financial needs of the company?
- 3) How much should be paid out as dividends? What are the constraints on paying dividends?
- 4) Should the company follow a stable dividend Policy?
- 5) What should be the form of dividends?

It is not easy to answer these questions. A number of factors will have to be evaluated to analyze each of these questions to evolve a long-term dividend policy for the firm. Broadly speaking to develop a long-term dividend policy, the directors should aim at bringing a balance between the desires of stockholders and the needs of the company.

There is inverse relationship between cash dividend and amount retained. "Dividend Policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders."(Weston & Copeland, 1990:657) The dividend policy adopted by the firm should be such that it strikes a proper balance between the financing decision and investment decision. The dividend policy should be optimal which balances the opposing forces and maximizes stock price.

Dividend Policy may have a critical influence on the value of the firm. If the value of the firm is a function of its dividend payment ratio, the dividend policy will directly affect the firm's cost of capital. A company which wants to pay dividends and also needs funds to finance its investment opportunities will have to depend on external source of finance such as issuing debentures and equity shares. Dividend Policy thus affects both long-term financing and the wealth of stockholders.

Dividend Policy and Market Price of Share (MPS)

MPS or stock price is that value of stock, which can be obtained by a firm from the market. Market value of stock is one of the variables, which is affected by the dividend per share and earning per share of the firm. If the earning per share and dividend per share is high, the market price of stock will also be high. Market values of the share may be high or low than the book values. If the firm is growing concern and its earning power is greater than the cost of capital, the market value of the stock will be higher than the book value. If the firm's earning capacity is lower than the cost of capital, then its MPS will also be lower. MPS is determined by the capital market.

Market Price of the stock is usually influenced by the information. No one can earn more in the inefficient market, and inefficiency is legally prohibited in order to regulate the security market in every country. But the focus of this study is dividend policy and its effect on stock price. On market price of stock, there should be discussion on different models and practices, which have significant effects on MPS or not. So MPS and security valuation are integral parts. Without valuation no one can quote the price and without price there is no chance of trading.

Payment Procedure of Dividend

Firms usually pay dividends on a quarterly basis in accordance with the following payment procedure:

- a) **Declaration Date:** This is the date on which the board of directors declares the dividend. At this time they set the amount of the dividend to be paid.
- **b)** Holder-of record Date: This is the date the company opens the ownership books to determine who will receive the dividend. The stockholders of record on this date only are entitled to dividend.
- c) **Ex-dividend Date:** This date is four days prior to the record date. Share purchased after the ex-dividend date are not entitled to the dividend.
- **d) Payment Date:** This is the day when dividend checks are actually mailed to the stockholder of record.

Major Forms of Dividend

The firm can give various type of dividend to the stockholders in the view of the objectives and policies, which they implement. Before adopting any dividend, the firm must ensure the smooth growth of the firm as well satisfy the expectation of the shareholders. Some of the major forms of dividends the firms can pay are discussed below:

- a) Cash Dividend: Most firms pay dividends in cash. The portion of earning paid in the form of cash to investors in proportion to their share holdings is known as cash dividend. When cash dividend is paid, both the total assets and net worth of the firm decreases and the market price of the share drops in most cases by amount of the cash dividend paid. For the payment of cash dividend, firm should have adequate balance of cash. In Nepal, cash dividend is the most popular form of dividend and is mostly adopted by many firms.
- b) Stock Dividend and Stock Split: A sock dividend is the distribution of additional shares of stock to existing shareholders. When a stock dividend is paid, instead of paying cash, a company simply pays additional shares of stock, and it simply involves a book-keeping transfer from retained earnings to the capital stock account. When firms need to retain high percentage of earnings, they issue stock dividend so that the shareholders of the firm are not disgruntled. A stock split is also essentially the same. In stock split, the number of share is increased through a proportional reduction in the par value of the stock. A 10% Stock Dividend means that one share of stock for every ten shares already owned are given to each stockholder. In case of 2 for 1 stock split, each stockholder

would be given one additional share of stock for every share already owned by each of the shareholder. The stock split does not involve any cash payment, but only additional certificates representing new shares.

- c) Reverse Split: It is a method that is used to raise the market price of a firm's stock by exchanging certain number of outstanding share for one new share of stock. The effect of reverse split is a decrease in the number of shares outstanding and an increase in the par value or stated value of the stocks.
- d) Bond Dividend: Companies can give dividend in the form of bonds also. Bond dividend helps to postpone the payment of cash. These are given when the firms are unable take the burden of interest on loans. In other words, firms declare dividend in the form of its won bond which helps to avoid cash outflow
- e) Scrip Dividend: A dividend paid in promissory notes is called scrip dividend. When earnings of the firms justify dividend but the company's cash position is temporarily weak and does not permit cash dividend, it may declare dividend in the form of scrip. This type of dividends may bear a definite maturity date or it may be left to the directors. Such dividends may be interest bearing or noninterest bearing.
- f) Share Repurchase: It is a method in which a firm buys back its own stocks in case of some surplus cash. Share repurchase is often viewed as an alternative to paying dividends. A company can reduce the number of shares by repurchasing the shares. The stock price must rise after the stock repurchase if the Price-Earnings ratio remains unchanged. When there is excess cash in the firm and insufficient investment opportunities to justify the use of these funds, then it is wise to distribute the funds either by stock repurchase or increasing the dividend. Share Price for the repurchase or the equilibrium price is calculated from the following equation:

Repurchase Price $(P^x) = \frac{S \times Pc}{s-n}$

Where,

S = Total number of shares outstanding.

Pc = Current market price per share.

n = Number of shares to be repurchased.

- g) Interim Dividend: Generally dividend is declared in the last of financial year. This is called regular dividend. But sometimes directors can declare the dividend before the end of the financial year. This is called interim dividend.
- h) Property Dividend: Instead of cash, dividend can be given in the form of property. This method of paying dividend is rarely used. This form of dividend may be given whenever there are assets that are no longer necessary in the operation of the business.
- i) **Composite Dividend:** If dividend is paid partly in the form of property and partly in the form of cash, then the dividend is said to be composite dividend.
- **j**) **Optional Dividend:** Instead of giving composite dividend, company can give option to its stockholders to take the dividend in cash or in property. It is called optional dividend.
- k) Special Dividend: When directors of the company do not want to change the dividend separately when the companies have good cash and reserves. This dividend is given with the regular dividend but separately.

Dividend Payout Scheme

Dividend Stability refers to the consistency or lack of variability in stream of dividend. In other words, stability of dividend means regularity in paying dividend even though the amount of dividend may fluctuate from year to year. Stability or regularity of dividends is considered as a desirable policy by management in most of the firms. It refers to the amount of dividend paid out regularly. All other things remaining the same, stable dividend may have a positive effect on the stock price. The major types of dividend policies established under dividend stability are:

- a) **Constant Dividend per Share:** According to this form of divided policy, the fixed amount is paid per share as dividend. The fixed dividend amount would be paid year after year, irrespective of the fluctuation in the earnings. When a company follows such dividend policy it will pay dividends to the stockholders even when it suffers losses. But, the amount of dividend is increased when the firms maintain higher levels of earnings and expects to maintain it.
- b) Constant Payout Ratio: The ratio of dividend to earnings is known as payout ratio. When fixed percentage of earnings is paid as dividend in every period, the policy is called constant payout ratio. Thus, amount of dividend will fluctuate in

direct proportion to earnings and are likely to be highly volatile in the wake of wide fluctuations in the earnings of the company. This policy is related to a company's ability to pay dividends. If the company incurs losses, no dividends are paid. Internal financing with retained earnings is automatic when this policy is followed. At any given payout ratio, the amount of dividends and the additions to retained earnings will increase with increase in earnings and vice versa. This policy ensures that dividends are paid when profits are earned, and avoided when it incurs losses.

c) Stable Rupee Dividend plus Extra Dividend (or Low Regular Dividend plus Extras): The policy of paying a low regular dividend plus extras is a compromise between a stable dividend and a constant payout ratio. Under this policy, a sum of amount is paid regularly as dividend to the stockholders and in the prosperity period, extra dividend is paid over and above the regular dividend. As soon as normal conditions return, the firm cuts the extra dividend and pays the normal dividend per share.

Factors Influencing Dividend Policy

Many considerations may affect a firm's decision about its dividend policy. Dividend is that decision which is influenced by may internal as well as external factors. Management has to consider both economic and non-economic factors before establishing any dividend policy. Some of them are unique to that company and some are more general considerations. In practice, the financial executives consider the following factors when approaching a dividend decision:

- a) Desire of the Stockholders: Stockholders may be interested either in dividend income or capital gains. Wealthy stockholders in a high income tax bracket may be interested in capital gains as against current dividends. A retired and oldaged person may prefer regular dividend.
- b) Stability of Earnings: A firm that has a stable earnings trend will generally pay a larger portion of its earnings in dividends. If earnings fluctuate significantly, a larger amount of the profits may be retained to ensure that enough money is available for investment projects when needed. Therefore a firm, which has a stable earnings more like to pay out a higher earnings ore likely to pay out a higher percentage of its earnings than a firm with fluctuating earnings.

- c) Liquidity Position: The cash or liquidity position of the firm influences its ability to pay dividends. A firm may have sufficient retained earnings but if they are invested in fixed assists cash may not be available to make dividend payment. Thus even if a firm has a record of earnings, it may not be able to pay cash dividend because of liquidity position. Therefore, the firm must have adequate cash available as well as retained earnings to pay dividends.
- d) Past Dividends: A firm with record of past dividend payments strive to maintain the same n the future. Dividends are habit forming. If the market does not receive its expected dosage, the stock price will suffer.
- e) Need to Repay Debt: It decreases cash flow to pay dividend. In such a case also the dividend decision will be affected.
- **f) Profit Rate:** A higher rate of profit on net worth makes it desirable to retain earnings rather than to pay them out if the investors will earn less on them.
- g) Rate of Asset Expansion: There is need of more financing if a firm is growing rapidly. A high rate of asset expansion creates a need to retain funds rather than to pay dividends.
- h) Restrictions in Debt Contracts: Debt contracts, especially when long-term debt is involved, often confine a firm's ability to pay cash dividends. Similarly preferred stock agreements generally state that no cash dividends can be paid on the common stock until all accrued preferred dividends have been paid.
- i) Tax Position of Stockholders: The tax position of stockholders also affects dividend policy. Corporations owned by large taxpayers in high income tax brackets tend toward lower dividend payout whereas corporations owned by small investors ten toward higher dividend payout.
- **j**) Access to Capital Market: A firm's access to capital market will be influenced by the age and size of the firm. A large and well-established firm with a record of profitability and stability of earnings has easy access to capital markets and other forms of external financing. In contrast, a small and new firm's ability to raise equity or debt fund from capital market is restricted. So a small and new firm must retain more earning to finance its operation. Therefore, a wellestablished firm is likely to have a higher payout ratio than a smaller newer firm.
- k) Concern about Market Price: If a firm is concerned about maintaining or increasing stock prices, it may choose to pay dividends.

- Legal Rules: The legal rules constrain dividend payment on certain conditions as follows:
 - **1.** Capital impairment rule states that dividend should not be paid out of paidup capital, which causes adverse effect on security of creditors and preference stockholders.
 - **2.** The new profit rule states that dividend must be paid from present profit and or past-retained earnings.
 - **3.** The insolvency rule states that when liabilities exceed assets, no dividend can be paid.
- m) Control: For many small firms and certain large ones maintaining the controlling vote is very important. These stockholders would prefer the use of debt and retained profits to finance new investments rather than issue new stock. If the current stockholders cannot or do not subscribe the new shares, new stockholders can dilute their controlling interest in the firm. Thus stockholders who are very sensitive to a potential loss of control prefer a low dividend payout policy.
- n) Inflation: In an indirect way, inflation also plays decisive role in dividend decision. Our accounting system is based on historical cost. Depreciation is charged on the basis of original cost at which assets were acquired. As a result, when a price rises, funds saved on account of depreciation would not be adequate to replace assets or to maintain the capital intact. Consequently, the company may have to retain high percentage of earning to maintain the capital intact or replace equipment.
- o) Investment Opportunities: Dividend Policy is greatly influenced by the financial needs of the company. A growing firm gives precedence to the retention of earnings over the payment of dividends in order to finance its expanding activities. Thus investment opportunities of firm also influence dividend policy.
- p) Dividend Policy of Competitive Concerns: Another important factor, which influences, is the dividend policy of other competitive concerns in the market. If the other competing concerns are paying higher rate of dividend that this concern, the stockholders may prefer to invest their money in those concerns rather than in this concern. Hence, every company will have to decide its

dividend policy by keeping in view the dividend policy of other competitive concerns in the market.

2.2 Review of Related Studies

The division of equity earnings between dividends and retained earning is a major financial decision. Since the principal objective of corporate financial management is to maximize the market value of equity shares, we may ask here, what is the relationship between dividend policy and market price of equity shares or stocks? This is one of the most controversial and unsolved questions in corporate finance. Various studies have been made concerning the dividends and stock prices. Some to the major international studies on subject relating to dividend are stated as below:

Graham and Dodd's Study

According to the traditional position expounded eloquently by Graham and Dodd, the stock market places considerably more weight on dividends than on retained earnings. According to them:

".....the stock market is overwhelmingly in favor of liberal dividends as against niggardly dividends."(Graham & Dodd, 1951:432)

According to them, in the valuation of stocks the weight attached to dividends is equal to four times the weight attached to retained earnings.

This weight provided by Graham and Dodd are based on their subjective judgments and derived from objective, empirical analysis. Notwithstanding the subjectivity of these weights, the major contention of the traditional position is that a liberal payout policy has a favorable impact on stock price.

Linter's Study

John Linter made an important study on corporate dividend policy in the American context. He investigated a partial adjustment model as he tested the dividend patters of 28 companies. According to J. Linter, dividend is a function of earnings of that year, existing dividend rate, target payout ratio and speed of adjustment.

Modigliani and Miller's Study

In their 1961 article, Modigliani and Miller, for the first time in the history of finance, advocated that Dividend Policy does not affect the value of firm i.e. dividend policy has no effect on the share price of the firm. They argued that the value of firm depends on the firm's earnings which depend on its investment policy. Therefore, as per MM Theory, a firm's value is independent of Dividend Policy.

They conclude that dividend policy is irrelevant and dividend policy has no effect in the value of the firm. A firm that pays dividends will have to raise funds externally to finance its investment plans. MM hold that when the firm pays dividends, external financing offsets its advantage.

It does not seem so relevant to apply MM approach in Nepalese context because when we apply this approach, the assumptions supposed by MM are significantly deviated.

Walter's Study

Professor James E.Walter conducted a study on divided and stock prices in 1966. He proposed a model for share valuation. According to him, the dividend policy of the firm affects the value of the shares. Therefore, dividend policy is relevant. He argues that the choice of dividend policies always affect the value of enterprise. His argument is just the opposite of what Modigliani and Miller said.

The relationship between firm's internal rate of return and cost of capital is determining factors to retain profit or distribute dividends. As long as the internal rate is greater than cost of capital, the stock price will be enhanced by retention and will vary inversely with dividend payout.

Gordon's Study

Gordon (1962:262) has developed another popular and important model relating to stock valuation using dividend capitalization approach. Gordon concludes that dividend policy does affect the value of shares even when the return on investment and required rate of return are equal. He explains that investors are not indifferent between current dividend and retention of earnings with the prospect of future dividends, capital gain and both. The conclusion of this is that investors have a strong preference for present dividends to future capital gains under the condition of uncertainly. It is assumed that current dividend is less risky than the expected capital gain. "This argument insisted that an increase in dividend payout ratio leads to increase in stock prices for the reason that investors consider the dividend yield is less risky than the expected capital gain."(Pradhan, 1992:383)

Gordon's model is also described as "a bird in hand argument." It supports the argument, which is popularly known as a bird in hand is worth two in the bush. What is available at present is preferable than what may be available in the future. That is to say current dividends are considered certain and risk-less. So it is preferred by rational investors as compared to deferred dividend in future. The future is uncertain. The investors would naturally like to avoid uncertainty. So the current dividends are given more weight than expected future dividend by the investors. So, the value per share increases if dividend payout ratio increases. This means there is positive relationship between the amount of dividend and stock prices.

Review of Previous Masters' Thesis

In the last few years, prior to this thesis, some students of M.B.A. and M.B.S. program have conducted research about the dividend and its relation with stock prices in various sectors. Some of them, which are supposed to be relevant for this study have been reviewed and presented in this section.

Bishnu Hari Bhattarai's Study

The study of dividend decision and its impact on the stock valuation was carried out by Bishnuhari Bhattarai (1996), using 10 companies of various sectors. The basic objective of the study was to identify the relationship between dividend and the stock price.

The major findings of this study were as follows:

- i The companies while paying dividend generally neglect shareholder's expectation.
- ii Dividends were paid only in profitable years.
- iii In aggregate, there was no stable dividend paid by the companies i.e. instability of dividend.
- iv There were no criteria to adopt a certain payout ratio. There is haphazard payout ratio in the companies under study.
- v Cash balance and dividend payment were positively correlated.
- vi Mostly the joint venture companies were paying dividend.
- vii There was positive impact of dividend on valuation of shares.

- viii Dividend paid was inadequate to cover the required rate of return of the investors.
- ix Market price considerably higher than actual net worth.

Nabaraj Adhikari's Study

The study (1999) has covered the period from 1990 to 1996 with total observations of 47 in financial sector and 30 non-financial sectors. This study has used both primary and secondary data. The major objective of this study was to assess corporate dividend practices in Nepal.

The major conclusion of this research study was as follows:

- i The price of common stock was induced by dividend payout ratio.
- ii Nepalese shareholders were not really indifferent towards payment or nonpayment of dividend.
- iii The majority of the respondents feel that the major motives to pay cash dividend was to convey information to shareholders that the company is in good position.
- iv As regards dividend as a residual decision, the majority of the respondents fel that it was not a residual decision.

With respect to factors affecting corporate dividend policy, the majority of the respondents gave the first priority to 'earnings,' the second priority to 'availability of cash,' the third priority to 'past dividends' & fourth priority to 'concern about maintaining or increasing stock price.'

Sadakar Timilsena's Study

Using the data of 16 enterprises from 1990 to 1994, Sadakar Timilsena (1997) carried out this study on dividend and stock prices.

To explain the price behavior, the study used simultaneous equation model as developed by Friend and Puckett (1964). The findings drawn by the study are as follows:

- i The relationship between dividend per share and stock price was positive in the sample companies.
- ii Dividend per share affected the share price variedly in different sectors.
- iii Changing the dividend policy or dividend per share might help to increase the market price of share.

- iv The relationship between stock price and retained earning per share was not prominent.
- v The relationship between stock price and lagged earning price ratio was negative.

<u>CHAPTER-III</u> RESEARCH METHODOLOGY

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 the plan, structure and strategy of investigation conceived so as to obtain answer to research question and to control variances." [Kothari, 1991:24] Research design helps researcher to enable him to keep track of action and to know whether he is moving in the right direction to achieve his goal or not.

The research design of this study basically follows dividend policy and its effect on stock price. In other words, this research is designed so as to find out the effect of dividend policy on the price of common stock of a company when dividend is paid to the stockholders, and also how the market price responds when dividend is not paid to the stockholders. Various analytical and descriptive approaches are used to determine the effect of dividend policy on stock price. For example, correlation coefficient measures the relationship whereas multiple regression analysis measures the degree of influences of each identified variables upon observed market price. In this connection, historical data will be used. Hence it is the historical research design. Data required for this study will be extracted from <u>www.nepalstock.com</u>. Therefore, secondary sources of data collection shall be applied in this study.

The major activities of this study are the collection of data, tabulation and compilation of data, computation of complied 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 stock price. 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 cannot be measured discretely. So their impact on MPS has been quantified in descriptive manner in chapter-II of this study. The research design is thus an integrated frame that guides the researcher in planning and executing the research works.

3.2 Population and Sample

There were 22 commercial banks in the country as of January 2009, including government owned, private and joint ventures, but only 17 commercial banks were listed on NEPSE. Due to time and resource factors, it is not possible to study all of them regarding the topic of this study. Therefore, sampling will be done selecting form population. The population is as follows:

S.N.	Name	Estd (BS)	Head office
1	Nepal Bank Ltd	1994	Kathmandu
2	Rastriya Banijya Bank	2022	Kathmandu
3	Nabil Bank Ltd.	2041	Kathmandu
4	Nepal Investment Bank Ltd.	2042	Kathmandu
5	Standard & Chartered Bank Ltd.	2043	Kathmandu
6	Himalayan Bank Ltd.	2049	Kathmandu
7	Nepal SBI Bank Ltd.	2050	Kathmandu
8	Nepal Bangladesh Bank Ltd.	2051	Kathmandu
9	Everest Bank Ltd	2051	Kathmandu
10	Bank of Kathmandu Ltd.	2051	Kathmandu
11	Nepal Credit & Commerce Bank Ltd.	2053	Siddhartha Nagar
12	Nepal Industrial & Commercial Bank	2055	Biratnagar
	Ltd.		
13	Lumbini Bank Ltd.	2055	Narayangadh
14	Machhapuchhre Bank Ltd.	2057	Pokhara
15	Kumari Bank Ltd.	2056	Kathmandu
16	Laxmi Bank Ltd.	2058	Birgunj
17	Siddhartha Bank Ltd.	2058	Kathmandu.
) IE		t th the second	°

Table No.3.1: List of Licensed Commercial Banks as on Mid-January 2009

NEPSE (<u>www.nepalstock.com</u>), Listed as on 15th January 2009

For the research work, only 5 commercial banks were taken as sample banks out of total population. They are as follows:

- 1. Standard Chartered Bank Nepal Ltd.
- 2. Nepal SBI Bank Ltd.
- 3. Nabil Bank Ltd.
- 4. Nepal Investment Bank Ltd.
- 5. Himalayan Bank Ltd.

3.3 Nature and sources of data

The study is primarily based on secondary sources of data. The required data have been collected from financial statements of listed companies which were located at <u>www.nepalstock.com</u>, an official website of Nepal Stock Exchange Ltd.

Different books from library, periodicals, newspaper cuttings, company's magazines will also be used whenever required. Needless to say that this study is associated with past phenomena, therefore, only the secondary data will be used to carry out the whole calculations.

3.4 Data Collection Technique

After the identification of sources the required data for the study have been gathered. The study is based solely on 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 (<u>www.nepalstock.com</u>) and then relevant data is collected from financial statement of listed companies in the web page.

3.5 Data Analysis Tools

Collected data, relevant facts and figures are systematically tabulated under different headings for the purpose of analysis. So far as computation is concerned; it has been done with the help of scientific calculator and computer software called 'SPSS 12' for Windows.

3.6 Financial Variables

The analysis of this study is based on certain financial variables, which are discussed below:

3.6.1 Earning Per Share (EPS)

Earning per share refers the rupee amount earned per share of common stock outstanding. It measures the profitableness of the stockholders' investment. In other words, the earning per share indicates the strength and weakness of the bank.

Earning per share is computed to know the earning capacity and to make comparison between concerned banks. This ratio can be computed by dividing the earning available to common stockholders by the total number of common stocks outstanding. Thus,

 $EPS = \frac{Earning Available to Common Stockholders}{Number of Common Stock Outstandin g}$

3.6.2 Dividend per share (DPS)

Dividend is the portion of profit that is ready to be available for shareholders. Dividend per share shows the portion of earning distribution to the shareholders on per share basis. Generally, the higher DPS creates positive attitude of the stockholders toward the bank, which consequently helps to increase the market value of the shares. And it also works as the indicator of better performance of the bank management. Dividend per share would be calculated after deducting retained earnings from the total value of earnings. Symbolically,

$$DPS = \frac{\text{Total Amount of Dividend Paid to Ordinary Shareholde rs}}{\text{Number of Ordinary Shares Outstandin g}}$$

3.6.3 Dividend Payout Ratio (DPR)

It is the proportion of earning paid in the form of dividend. This ratio shows what percentage of profit is distributed as dividend and what percentage is retained as reserve and surplus for the growth of the banks. Higher earning enhances the ability to pay more dividends and vice versa.

It is calculated as the percentage of the profit that is distributed as dividend. This ratio is calculated by dividing dividend per share by the earning per share. Thus,

 $DPR = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$ And, Retention Ratio = (1- Dividend Payout ratio) = (1- DPR)

3.6.4 Market Price of Share (MPS)

MPS is that value of stock, which can be obtained by a firm from the market. Market value of stock is one of the variables, which is affected by the dividend per share and earning per share of the firm. If the earnings per share and dividend per share is high, the market value of share will also be high. Market value of share may be lower or higher than the book value. If the firm is growing its earning power will be greater than cost of capital. For such firms, market value of share will be higher than the book value. If the firm's earning capacity is lower than the cost of capital then MPS will be lower than the book value.

3.6.5 Price Earning Ratio (P/E) Multiplier

Price earning ratio is also called the earning multiplier. It is the ratio between market price per share and earning per share. In other words, this represents the amount which investors are willing to pay for each rupee of the firm's earnings.

Price earning ratio = $\frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$

3.6.6 Dividend Yield (DY)

Dividend yield is a percentage of dividends per share on market price per share. It measures the dividend in relation to market value of share. So, dividend yield is the dividend received by the investors as a percentage of market price per share in the stock market.

The share with higher dividend yield is worth buying. Thus the price of higher dividend yields increase sharply in the market. This ratio is calculated by dividing dividend per share by market price of the stock. Thus,

 $DY Ratio = \frac{Dividend Per Share}{Market Price Per Share}$

3.6.7 Net Worth Per Share

It is a rupee per share. It is calculated by dividing Book Value of Net Worth (or Net Worth) by total number of shares outstanding. Thus,

Net Worth Per Share = $\frac{\text{Net Worth}}{\text{Number of Shares}}$

3.7 Statistical Tools

Besides the financial tools, various statistical tools have been used to conduct this study. The result of analysis has been properly tabulated, compared, analyzed and interpreted. In this study, the following statistical tools are used to analyze the relationship between dividend and other variables.

3.7.1 Arithmetic Mean or Average (\overline{X})

An average is the value, which represents a group of values. It depicts the characteristic of the whole group. Generally the average value lies somewhere in between the two extremes, i.e. the largest and the smallest items. Average of a given set of observation is their sum divided by the number of observations. In general, if X1, X2 Xn are the given 'n' observations then their arithmetic mean, usually denoted by \overline{X} is given by,

$$\overline{X} = \frac{\sum X}{N}$$

Where,
$$\sum X = \text{Sum of Observation}$$

N = No. of observation

3.7.2 Standard Deviation (σ)

Karl Pearson first introduced the concept of standard deviation in 1983. Standard deviation is the positive square root of the arithmetic average of the squares of all the deviations measured from the arithmetic average of the series. The standard deviation measures the absolute dispersion of a distribution. The greater the amount of dispersion the greater the standard deviation, i.e. greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. Standard Deviation (S.D) is denoted by a Greek letter ' σ ' (Sigma) and is calculated as follows:

S.D.
$$(\sigma) = \sqrt{\frac{\sum (X - \overline{X})^2}{N}}$$

Where,

N = Number of items in the series.

$$\overline{\mathbf{X}}$$
 = Mean.
X = Variable.

3.7.3 Coefficient of Correlation (C.V.)
It is the measurement of the relative dispersion developed by Karl Pearson. It is used to compare the variability of two or more series. "The coefficient of variation is the relative measure of dispersion, comparable across distribution which is defined as the ratio of the standard deviation to mean expressed in percent." (Levin & Rubin, 1994, p.114)

The series with higher coefficient of variation is said to be more variable, less consistent, less uniform, less stable and less homogeneous. On the contrary, the series with less coefficient of variation is said to be less variable, more consistent, more uniform, more stable and more homogeneous. It is denoted by C.V. and is obtained by dividing the standard deviation by arithmetic mean. Thus,

Coefficient of Variation (C.V) = $\frac{S.D. \times 100}{Mean} = \frac{\sigma \times 100}{\overline{X}}$

Where,

 σ = Standard Deviation.

 $\overline{\mathbf{X}} = \mathbf{M}\mathbf{e}\mathbf{a}\mathbf{n}.$

3.7.4 Coefficient of Correlation (r)

The correlation analysis is the technique used to measure the closeness of the relationship between the variables. It helps us in determining the degree of relationship between two or more variables. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number, which indicates to what extent two variables are related with each other and to what extent variations in one leads to variations in the other.

The value of coefficient of correlation always lies between ± 1 . A value -1 indicates a perfect negative relationship between the variables and a value of +1 indicates a perfect positive relationship. A value of zero indicates that there is no relation between the variables. Thus, in this study, the degree of relationship between market price and other relevant financial indicators such as dividend per share, earning per share, dividend payout ratio etc is measured by the correlation coefficient. The correlation coefficient can be calculated as:

$$r = \frac{Cov(XY)}{\sigma_x \sigma_v}$$

$$r = \frac{\sum (X - \overline{X})(Y - \overline{Y})}{(N - 1)\sigma_x \sigma_y}$$

Or,

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

Where,

 $\sigma_x,\,\sigma_y$ are the standard deviation of the distribution of X and Y

values respectively.

Cov(X, Y) = Covariance of X, Y value

$$=\frac{\sum(X-\overline{X})(Y-\overline{Y})}{N-1}$$

Under this study, the correlations between the following variables are analyzed:

- a. Market Price per Share and Earning per Share
- b. Market Price per Share and Dividend per Share.
- c. Market Price per Share and Dividend Payout Ratio.
- d. Market Price per Share and Price Earning Ratio.
- e. Market Price per Share and Dividend Yield.
- f. Market Price per Share and net Worth per Share.
- g. Earnings per Share and Dividend per Share.
- h. Earning per Share and Dividend payout Ratio.
- i. Dividend per Share and Dividend payout Ratio.
- j. Dividend per Share and Net Worth per Share.

3.7.5 Coefficient of Determination (R²)

The coefficient of determination is the primary way to measure the extent or strength of the association that exists between two variables, x and y. It refers to a measure of the total variance in a dependent variable that is explained by its linear relationship to an independent variable. The coefficient of determination is denoted by R^2 and the value lies between zero and unity. The closer its value to unity the greater will be the explanatory power. A value of one can only occur if the unexplained variation is zero, which simply means that all the data points in the scatter diagram fall exactly on the regression line. The R^2 is always a positive number. It can't tell whether the relationship between the two variables is positive or negative. If R^2 is

equal to 0.85 it indicates that the independent variables used in the regression model explains 85% of total variation. The R^2 is defined as the ratio of explained variance to the total variance. Thus,

Coefficient of determination $(R^2) = \frac{\text{Explained Variance}}{\text{Total Variance}}$ Or, $R^2 = 1 - \frac{\text{Un explained Variance}}{\text{Total Variance}}$

3.7.6 Regression Analysis

Francis Galton was the first person to introduce the concept of regression. Regression refers to an analysis, which involves the fitting of an equation to a set of data points, generally by the method of least square. In other words, the regression is a statistical method for determining relationships between the variables by the establishment of an approximate functional relationship between them. It is used to determine that whether the dependent variable is influenced by the given independent variable or not. It is considered as a useful tool for determining the strength or relationship between two (Simple Regression) or more (Multiple regression) variables. It is also used to predict value of one variable given the value of other variables.

In this study, the following simpler regressions have been analyzed:

(a) Market price per Share on Earning per Share

$$\mathbf{Y} = \mathbf{a} + \mathbf{b}\mathbf{X}$$

Where,

Y = Market Price per Share.

a = Regression Constant.

b = Regression Coefficient.

X = Earning per Share

This model has been constructed to examine the relationship between market price per share (dependent variable) and earning per share (independent variable).

(b) Market Price per Share on Dividend per Share

Y = a + bX

Where,

Y = Market Price per Share

- A = Regression Constant.
- B = Regression Coefficient.

X = Dividend per Share.

This model has been constructed to examine the relationship between market price per share (dependent variable) and dividend per share (independent variable).

(c) Market Price per Share on Dividend Payout Ratio

Y = a + bX

Where,

Y = Market Price per Share

A = Regression Constant.

B = Regression Coefficient.

X = Dividend Payout Ratio.

This model has been constructed to examine the relationship between market price per share (dependent variable) and dividend payout ratio (independent variable).

(d) Market Price per Share on Dividend Yield

Y = a + bX

Where,

Y = Market Price per Share.

a = Regression Constant.

b = Regression Coefficient.

X = Dividend Yield.

This model has been constructed to examine the relationship between market price per share (dependent variable) and dividend yield (independent variable).

(e) Dividend per Share on Earning per Share

Y = a + bX

Where,

Y = Market Price per Share.

a = Regression Constant.

b = Regression Coefficient.

X = Earning per Share.

The relationship between dividend per share (dependent variable) and earning per share (independent variable) can be explained through this model.

(f) Dividend per Share on Net Worth per Share

Y = a + bX

Where,

Y = Dividend per Share.

a = Regression Constant.

b = Regression Coefficient.

X = Net Worth per Share.

This model has been constructed to examine the relationship between dividend per share (dependent variable) and net worth per share (independent variable).

In order to obtain the value of 'a' and 'b', we have the following two normal equations:

 $\Sigma Y = na + bX$ $\Sigma XY = a \Sigma X + b \Sigma X^{2}$ Where, 'a' and 'b' are unknown. n = Number of observations in the sample.

In multiple regression analysis, two or more independent variables are used to estimate the values of dependent variable. It is the extension of simple regression technique. In this study, the following multiple regression analysis has been analyzed:

(a) Market Price per share on Earning per Share and Dividend Payout Ratio

$$\mathbf{Y} = \mathbf{a} + \mathbf{b}_1 \mathbf{X}_1 + \mathbf{b}_2 \mathbf{X}_2$$

Where,

Y = Market price per share

a = Regression constant.

 b_1 , b_2 = Regression coefficient of 1^{st} and 2^{nd} variables respectively.

 $X_1 = Earning per share.$

 $X_2 = Dividend payout ratio.$

It helps to predict the market price per share on earning per share and dividend payout ratio.

(b) Market Price per Share on Price Earning Ratio and Dividend Per Share

 $Y=a+b_1X_1+b_2X_2$

Where,

 $\mathbf{Y} = \mathbf{Market}$ price per share

a = Regression constant.

 b_1 , b_2 = Regression coefficient of 1^{st} and 2^{nd} variables respectively.

 X_1 = Price Earning Ratio.

 $X_2 = Dividend per Share.$

This model helps to predict the market price per share on price earning ratio and dividend per share.

a. Regression Constant (a)

The value of constant is the intercept of the model, when the independent variable(s) is zero; it indicates the average level of dependent variable. In other word, it is better to understand that 'a' (constant) indicates the mean or average effect on dependent variable if all the variables are omitted from the model.

b. Regression Coefficients (b₁, b₂, b₃...)

The regression coefficient of each independent variable shows the relationship between that variable and value of dependent variable, holding the effects of all other independent variables of the regression model constant. In other words, these coefficients explain how changes in independent variables affect the values of dependent variables estimate.

c. Standard Error of Estimate (S.E.E.)

Practically, the perfect prediction is not possible with the help of regression equation. Standard Error of Estimate is used to measure the reliability of the estimating equation. It measures the variability, or scatter of the observed values around the regression line. It also measures the reliability of the estimating equation, indicating the variability of the observed values differ from their predicted values on the regression line.

The larger the value of S.E.E., the greater the scattering or dispersion of points around the regression line, conversely, if S.E.E. is equal to zero, then, there is no variation about the line and correlation will be perfect. So, we expect the estimating equation to be a 'perfect' estimator of the dependent variable. In that case, all the data points would lie directly on the regression line and no points would be scattered around it. Similarly, the smaller the S.E.E., the closer will be the dots to the regression line and better the estimates based on the equation for this line. Thus, with the help of standard error of estimate, it is possible for ascertaining how well and representative the regression line is as a description of the average relationship between two series.

<u>CHAPTER – IV</u>

DATA PRESENTATION AND ANALYSIS

In this chapter, to achieve the objectives, which are set in introduction chapter, the relevant data and information on dividend policy and its effect on stock price of commercial banks are presented. Presentation and analysis of data is the major part o this research study. So, we analyze the data to achieve our objective of this study, using the various financial variables and statistical tools discussed in 'Research Methodology.'

4.1 Presentation of Financial Variables

4.1.1 Analysis of EPS of the sample banks

Donk	2002/02	2002/04	2004/05	2005/06	2006/07	Moon	۶D	C V
Dalik	2002/03	2003/04	2004/03	2003/00	2000/07	Mean	S.D.	C. V.
								%
SCBNL	149.30	143.55	143.14	175.84	167.37	155.84	14.90	9.56
NSBL	11.47	14.26	13.29	18.27	39.35	19.33	11.47	59.32
NABIL	84.66	92.61	105.79	129.21	137.08	109.87	22.72	20.68
HBL	49.45	49.05	47.91	59.24	60.66	53.26	6.15	11.55
NIBL	39.56	51.70	39.50	59.35	62.57	50.54	10.79	21.36

The earnings per share of the banks under study are tabulated as follows:

 Table 4.1.1: Comparative Earnings per Share of banks under study.

The earnings per share of the banks under study are presented in graphical form as below:



Figure 4.1.1 Earnings per Share of Banks under study

The EPS of SCBNL ranges between Rs. 175.84 to 143.14 during the period of study. During this period, the average EPS is Rs. 155.84. The S.D of the EPS under the period of study is 14.9. The C.V of the bank is 9.56%, which indicates that there is a moderate level of fluctuation in the EPS of SCBNL during the period of study.

Nepal SBI Bank Ltd. (NSBL) has an average EPS of Rs. 19.33 during the period of study, with S.D. of 11.47. The EPS range between Rs. 39.35 to Rs. 11.47. The C.V. of 59.32% shows that there is a high level of fluctuation in the EPS during the period of study.

The average EPS of Nabil Bank Ltd. is Rs 109.87 during the period of study. It stayed within the range of Rs 137.08 to Rs. 84.66. The S.D. of EPS is 22.72, and its C.V. is 20.68%, which is moderate during the period of study.

The Himalayan Bank Ltd. (HBL) has an average EPS of Rs. 53.26 during the period of study. It ranges from Rs. 60.66 to Rs. 49.05. The S.D. of EPS during the study is 6.15, which is the lowest among other banks under study. Its C.V. of EPS is 11.55%, which is only slightly higher than that of SCBNL, and it can be considered as low.

Nepal Investment Bank Ltd. (NIBL) has an average EPS of Rs. 50.54, during the period of study. It ranges from Rs. 62.57 to Rs. 39.50. The S.D is 10.79 and the fluctuation of 21.36% in the EPS is seen during this study period.

From the above analysis, it can be seen that the average EPS of SCBNL is the highest and that of NSBL is the lowest under the study period. NSBL also has the highest C.V. among other sample banks, and its average EPS is also lowest among other sample banks. It can be seen that HBL and SCBNL have the most consistent EPS among all sample banks. And the EPS of Nabil bank is second highest, whereas HBL and NIBL have almost equal average EPS during the period of study.

4.1.2 Analysis of DPS of sample banks.

The dividend per share of the sample banks under study are tabulated as under:

Bank	2002/0	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
	3							
SCBN	110.00	110.00	120.00	120.00	80.00	108.0	16.4	15.21
L						0	3	
NSBL	8.00	0.00	0.00	5.00	12.59	5.12	5.40	105.46
NABIL	50.00	65.00	0.00	5.00	12.59	26.52	29.1	109.82
							2	
HBL	1.32	0.00	11.58	30.00	15.00	11.58	12.1	104.91
							5	
NIBL	20.00	12.50	20.00	5.00	62.57	24.01	22.4	93.41
							3	
							1	

Table 4.1.2 Comparative Dividend per Share of banks under study

The dividends per share of banks under study are presented in graphical form as below:





The average DPS of SCBNL is Rs. 108 with the S.D. of 16.43. The highest ad lowest DPS during the period of study are Rs. 120 and Rs. 80 respectively. The C.V. is 15.21%, which shows that there is more consistency in their dividend payment, during the period of study.

Nepal SBI Bank Ltd. (NSBL) had an average DPS of Rs. 5.12. The S.D. is 5.40 with C.V. of 105.46%, which means there is high degree of fluctuation in their dividend payment.

The average DPS of Nabil Bank Ltd. is Rs. 26.52. It is within the range of Rs. 65 and Rs. 12.59. The S.D. of DPS is 29.12 whereas the C.V. is 109.82. This indicates that there is a high degree of fluctuation in dividend payment during the period of study.

During the period of study, the Himalayan Bank Ltd. (HBL) had an average of DPS of Rs. 11.58. Its S.D. is 12.15 and C.V. is 104.91%, which means it has high degree of fluctuation in its dividend payment.

Nepal Investment Bank Ltd. (NIBL) has an average DPS of Rs. 24.01 during the period of study. The S.D. is 22.43 and C.V. is 93.41%, which also indicates high level of fluctuation.

From the above analysis, we can say that SCBNL has the highest average DPS among all sample banks during the period of study. The C.V. indicates that among the sample banks during the study period, SCBNL has the highest consistency in paying dividend, whereas DPS of other banks are highly fluctuating. Nevertheless, Nabil bank comes second in terms of amount of dividend paid.

4.1.3 Analysis of Dividend Payout Ratio (DPR)

The dividend payout ratio of the sample banks are presented below:

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mea	S.D.	C.V.
						n		%
SCBNL	73.68	76.63	83.83	68.24	47.80	70.0	13.6	19.48
						4	5	
NSBL	69.75	0.00	0.00	27.37	31.99	25.8	28.7	111.2
						2	4	9
NABIL	59.06	70.19	0.00	3.87	9.18	28.4	33.4	117.3
						6	1	8
HBL	2.67	0.00	24.17	50.64	24.73	20.4	20.4	100.2
						4	8	0
NIBL	50.56	24.18	50.63	8.42	100.00	46.7	34.8	74.42
						6	0	

Table 4.1.3 Comparative Dividend Payout Ratio of banks under study



The DPR of the banks under study are presented in the figure as follows:



An average DPR of SCBNL is 70.04% during the period of study. It shows that SCBNL generally pays 70.04% of its total earning as dividend to its stockholders. The S.D. of DPR is 13.65, and the C.V. is 19.48%, which shows that there is moderate variation in dividend payout.

NSBL has average DPR of 25.82%, which means, it pays out 25.82% of its total earning as dividend to its stockholders. The S.D. is 28.74 and C.V. is 111.29%. The C.V. indicates that the DPR of NSBL is highly fluctuating during the period of study.

The average DPR of Nabil Bank Ltd. is 28.46%, which means, it generally pays out 28.46% of its total earnings as dividend to its stockholders. The S.D. is 33.41 and C.V. is 117.38%, which shows the high fluctuation in the DPR during the period of study.

HBL has an average DPR of 20.44%. The S.D. of DPR is 20.48, whereas its C.V. is 100.20%. The coefficient of variation of HBL shows that there is high degree of fluctuation in the DPR during the period of study. All the banks under study have high level of C.V and their dividend payment is also inconsistent. NIBL has second highest mean DPR, after SCBNL.

Nepal Investment Bank Ltd (NIBL) has an average DPR of 46.76%. It means NIBL is generally paying 46.76% of its earning as dividend to its stockholders. The S.D. of DPR is 34.80. The C.V. of 74.42% shows that there is a high level of inconsistency in dividend payment behavior.

The above calculations show that SCBNL has high average DPR among all the banks under study, and its C.V. is also lowest among all the banks under study. It shows that SCBNL has consistent dividend payment.

If analysis is done taking the mean DPR of the sample banks, the average dividend payout ratio of the sample banks comes out to be 38.30% with a standard deviation of 20.31 and C.V. of 53.03%. It indicates that, in average, out of the total earnings made 38.30% is distributed as dividend to the stockholders with a fluctuation of 53.03%, which is quite high than moderate level.

4.1.4 Analysis of Market Price of Share (Stock Price)

MPS is the price of stock on which stocks are treated in the secondary market. The closing stock price of the banks under study is presented in table as follows:

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	1640.00	1745.00	2345.00	3775.00	5900.00	3081.00	1791.05	58.13
NSBL	656.00	307.00	335.00	612.00	1176.00	617.20	349.88	56.69
NABIL	740.00	1000.00	1505.00	2240.00	5050.00	2107.00	1741.80	82.67
HBL	836.00	840.00	920.00	1100.00	1740.00	1087.20	380.29	34.98
NIBL	795.00	940.00	800.00	1260.00	1729.00	1104.80	396.78	35.91

Table 4.1.4 Comparative MPS of banks under study

The Closing Market Price per share of the banks under study is also presented in the graphical form as below:



Figure 4.1.4 Comparative MPS of banks under study

The closing MPS of SCBNL ranges between Rs. 5900 to Rs. 1640 during the period of study. The average of closing MPS of Standard Chartered Bank Nepal Ltd.

is Rs. 3081 with a S.D. of 1791 and a C.V. of 58.13%, which means its MPS has fluctuated quite a lot, but in increasing way, during the period of study.

During the period of study, NSBL has an average of closing MPS of Rs. 617.20 with a S.D. of 349.88. The C.V. shows that there is a fluctuation of 56.69% in closing MPS of NSBL during the period of study, which is quite high. The highest and lowest prices are Rs. 1176 and Rs. 307 respectively.

The average of closing MPS of Nabil Bank Ltd. is Rs. 2107 during the period of study. The highest and lowest closing MPS of Nabil Bank Ltd. during the period of study are Rs. 5050 and Rs. 740 respectively. The S.D. of closing MPS is 1741 with a C.V. of 82.67%. However, its MPS has also increased over the periods of study.

The average of closing MPS of HBL is Rs. 1087.20 with a S.D. of 380.29 and a C.V. of 34.98%. The C.V. indicates moderate fluctuation in the closing MPS of the bank. The highest and lowest closing MPS during the period of study are Rs. 1740 and Rs. 836 respectively.

The average closing MPS of NIBL within the period of study is Rs. 1104.80, and it ranges between Rs. 1729 to Rs. 795. The S.D. is 396.78 and the fluctuation of 35.91% is seen in the closing MPS during the period of study, which shows that there is moderate fluctuation; however, its MPS has increased over the periods of study.

From the above data and calculations, it can be seen the average closing MPS of SCBNL is the highest, followed by that of Nabli Bank Ltd. Also the C.V. of Nabil is highest among the banks under study. HBL and NIBL have relatively low C.V. The MPS of SCBNL in the year 2006/07 is Rs. 5900, which is highest among all the sample banks during the period of study.

4.1.5 Analysis of Price-Earning Ratio (P/E) of the sample banks

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								%
								, -
SCBN	10.98	12.16	16.38	21.47	35.25	19.25	9.85	51.16
2021	10120		10.00		00120	17.20	2100	01110
L								
-								
NSBI	22.24	21 54	25.21	33.49	29.89	26.47	5 1 2	19 33
TIDDE	22.21	21.31	23.21	55.17	27.07	20.17	5.12	17.55
NARI	8 74	10.80	14.23	17 34	36.84	17 59	11 25	63.96
117101	0.74	10.00	17.23	17.54	50.04	17.57	11.23	05.70
Т								
L								
		1	1				1	1

The price-earning ratios of the banks under study are presented in the table as follows:

HBL	16.91	17.12	19.20	18.57	28.69	20.10	4.90	24.37
NIBL	20.10	18.18	20.25	21.23	27.63	21.48	3.61	16.82

Table 4.1.5 Comparative P/E of banks under study

The Price-Earning Ratios of the banks under study are also presented in graphical form as follows:



Figure 4.1.5 Comparative P/E of banks under study

The average P/E ratio of SCBNL during the period of study is 19.25. It is within the range of 21.47 to 10.98. The S.D. of P/E ratio is 9.85 whereas the C.V. is 51.16%, which means the bank has high level of fluctuation in P/E ratio during the periods of study.

Nepal SBI bank Ltd. (NSBL) has an average P/E ratio of 26.47, ranging from 33.49 to 21.54. The S.D. of P/E ratio is 5.12 and C.V. is 19.33%, which is moderate.

Nabil Bank Ltd. has an average P/E ratio of 17.59. The S.D. is 11.25 and coefficient of variation is 63.96%. It indicates that P/E ratio of Nabil Bank Ltd. is somewhat high.

The average P/E ratio of HBL is 20.10, with standard deviation of 4.90. The coefficient of variation is 24.37%, which indicates that P/E ratio of HBL is moderately fluctuating.

Nepal Investment Bank Ltd. has an average P/E ratio of 21.48, with standard deviation of 3.61. The coefficient of variation of NIBL is 16.82%, and it is the lowest among other banks under study.

From the above calculations, NSBL has the highest average P/E ratio and Nabil has the lowest. The C.V. indicates that among the banks in the study period,

NIBL has the highest consistency in P/E ratio whereas the P/E ratio of Nabil is highly fluctuating. P/E ratio of Nabil Bank Ltd. in F.Y. 2006/07 is highest among the sample banks.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	6.71	6.30	5.12	3.18	1.36	4.53	2.24	49.50
NSBL	1.22	0.00	0.00	0.82	1.07	0.62	0.59	94.18
NABIL	6.76	6.50	0.00	0.22	0.25	2.75	3.55	129.17
HBL	0.16	0.00	1.26	2.73	0.86	1.00	1.09	109.17
NIBL	2.52	1.33	2.50	0.40	3.62	2.07	1.24	59.74

4.1.6 Analysis of Dividend Yield (D.Y) of the sample banks

The dividend yields of the banks under study are presented in the table as below:

Table 4.1.6 Comparative Dividend Yield of banks under study

The dividend yields of the banks under study are presented in the graph as below:



Figure 4.1.6 Comparative Dividend Yield of banks under study

The D.Y. of SCBNL ranges from 6.71% to 1.36% during the period of study. During this period, the average D.Y. is 4.53%. The standard deviation of the D.Y. is 2.24 and its C.V. is 49.50%, which indicates there is low fluctuation as compared to other sample banks.

During the period of study, Nepal SBI Bank Ltd. (NSBL) has an average D.Y. of 0.62%, with a S.D. of 0.59. The D.Y. ranges from 1.22 to 0. The C.V. of 94.18% shows there is high level of fluctuation in dividend yield.

The average D.Y. of Nabil Bank Ltd. During this period of study is 2.75%. It stayed within the range of 6.76% to 0%. The S.D. of D.Y. is 3.55 whereas the coefficient of variation is 129.17%, which is very high.

HBL has an average D.Y. of 1% during the period of study. It ranges from 2.73% to 0.40%. The S.D. of dividend yield is 1.09 and its C.V. is 109.17%, which is quite high.

NIBL has an average D.Y. of 2.07% during the period of study, ranging between 3.62% and 0.40%. The S.D. is 1.24, whereas the C.V. is 59.74%, somewhat more than that of SCBNL.

From the above data and calculations, it can be seen that the average D.Y. of SCBNL is the highest and that of NSBL is the lowest. The D.Y. range of the banks under study during the period is between 6.71% and 0%. The C.V. of these banks shows a high level of fluctuation in dividend yield. If compared, SCBNL has the most consistent D.Y. among the sample banks.

4.1.7. Analysis of NWPS of the sample banks

The Net worth per share of the banks under study is stated in the table as follows:

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	403.15	399.25	422.38	468.22	512.12	441.02	48.27	10.95
NSBL	134.03	146.80	159.54	153.44	179.58	154.68	16.84	10.88
NABIL	267.30	301.00	337.16	381.36	418.39	341.04	60.55	17.75
HBL	444.26	427.40	239.59	228.72	264.74	320.94	105.86	32.98
NIBL	216.24	246.89	200.80	239.67	234.37	227.59	18.78	8.25

Table 4.1.7 Comparative Analysis of Net worth per Share of banks under study

The net worth per share of the banks under study is presented in the graphical form as below:



Figure 4.1.7 Comparative Analysis of NWPS of banks under study

The above calculation shows that SCBNL has the highest average NWPS among all sample banks i.e. Rs. 441.02. The S.D. is 48.27 and C.V. is 10.95%. The C.V. indicates that there is less fluctuation in net worth of SCBNL during the period of study.

The average net worth per share of NSBL is Rs. 154.68, with S.D. of 16.84 and C.V. of 10.88%. The C.V. indicates that there is less fluctuation in net worth of NSBL during the period of study.

Nabil has an average NWPS of Rs. 341.04, with S. D. of 60.55. The C.V. is 17.75%, which means there is moderate level of fluctuation in NWPS of Nabil Bank Ltd. during the period of study.

The average NWPS of HBL is Rs. 320.94, with S.D. of 105.86. The C.V. is 32.98%, which means there is somewhat high degree of fluctuation in NWPS of Himalayan Bank Ltd., during the period of study.

The average NWPS of NIBL is Rs. 227.59, with S.D. of 18.78. The C.V. is 8.25%, which indicates that there is less variation in the NWPS of Nepal Investment Bank Ltd., during the period of study.

The above analysis shows that SCBNL has the highest average net worth per share, and that of NSBL is the lowest. The NWPS of the banks under study during the period ranges from Rs. 468.22 to Rs. 134.03. Similarly, the S.D. of HBL is the highest, and that of NSBL is the lowest. The C.V. of these banks shows that there is

moderate level of fluctuation in net worth per share, among them NIBL has the most consistent level of NWPS.

4.2 Statistical Analysis

4.2.1 Correlation Analysis

The correlation analysis is generally used to describe the degree to which one variable is related to another. It helps to determine whether a positive or a negative relationship exists. The positive correlation indicates that increase in value of one variable leads to increase in value of other variable, and the negative correlation indicates that increase in value of one variable leads to decrease in value of the other variable. The correlation coefficient lies between +1 and -1. The +1 coefficient indicates that the variables are perfectly positively correlated and -1 coefficient indicates that the variables are perfectly negatively correlated. And if the correlation coefficient is 0, it means that the variables are not related to each other. The number indicates the degree of correlation between the variables.

The table given below shows the correlation coefficient (r) between the financial variables of banks under study.

	EPS	DPS	DPR	P/E	D.Y.	NWPS
MPS	0.764	- 0.722	-0.902	0.994	-0.985	0.993
EPS	-	-0.279	-0.704	-	-	-
DPS	-	-	0.878	-	-	0.537

Table 4.2.1.1: Correlation Coefficient of SCBNL

The above table depicts that the MPS of SCBNL has negative correlation with its DPS and DPR. It is because of the reason that it is paying dividend regularly, and with the payment of dividend, the MPS has been increasing with high degree of fluctuation. In the same way, MPS of SCBNL is positively correlated with its P/E ratio. On the other hand, MPS is negatively correlated with D.Y, but positively correlated with NWPS. Also, the DPS of SCBNL is positively correlated with DPR and NWPS.

	EPS	DPS	DPR	P/E	D.Y.	NWPS
MPS	0.883	0.969	0.508	0.502	0.782	0.602
EPS		0.743	0.048			
DPS			0.704			0.391

4.2.1.2 Correlation between financial variables of NSBL

Table 4.2.1.2: Correlation coefficient of NSBL

The above table indicates that MPS of NSBL is positively correlated with its EPS, DPS, DPR, P/E ratio, D.Y. and NWPS. Similarly, the EPS is positively correlated with its DPS and DPR. It is because of the reason that the DPS and DPR are decreased with the decrease in the EPS. Also the DPS of NSBL has positive correlation with the DPR and NWPS.

	r	-	1		r	
	EPS	DPS	DPR	P/E	D.Y.	NWPS
MPS	0.876	- 0.506	- 0.562	0.998	- 0.634	0.902
EPS	-	- 0.734	- 0.783	-	-	-
DPS	-	-	0.996	-	-	- 0.725

4.2.1.3 Correlation between financial variables of Nabil Bank Ltd.

Table 4.2.1.3 Correlation coefficient of Nabil Bank Ltd.

From the above table it can be seen that the MPS of Nabil has positive correlation with its EPS, P/E ratio, and NWPS. But it has negative correlation with its DPS and DPR. This is because of irregularity in paying dividend. The EPS of Nabil is negatively correlated with DPS and DPR, because with they are decreasing with the increase in EPS. Also, the DPS is positively correlated with DPR, but negatively correlated with NWPS.

	EPS	DPS	DPR	P/E	D.Y.	NWPS
MPS	0.833	0.428	0.388	0.976	0.208	- 0.507
EPS	-	0.747	0.687	-	-	-
DPS	-	-	0.995	-	-	- 0.853

4.2.1.4 Correlation between financial variables of HBL

Table 4.2.1.4 Correlation coefficient of HBL

The above table reveals that the MPS of HBL is positively correlated with its EPS, DPS, DPR, P/E ratio, and D.Y., but negatively correlated with NWPS. Its EPS is positively correlated with DPS and DPR, whereas the DPS of HBL is positively correlated with DPR, but negatively correlated with NWPS.

	EPS	DPS	DPR	P/E	D.Y.	NWPS
MPS	0.902	0.716	0.519	0.898	0.285	0.490
EPS	-	0.383	0.128	-	-	-
DPS	-	-	0.964	-	-	- 0.022

4.2.1.5 Correlation between financial variables of NIBL

Table 4.2.1.5 Correlation coefficient of NIBL

The above table shows that the MPS of NIBL has positive correlation with its EPS, DPS, DPR, P/E ratio, D.Y., and NWPS. It is because its MPS is increasing with increase in EPS and vice versa. In the same way, the EPS of NIBL is positively correlated with its DPS and DPR. Also, its DPS is positively correlated with DPR, but negatively correlated with NWPS.

From the above analysis, the MPS of SCBNL and Nabil is negatively correlated with their dividend components i.e., DPS and DPR despite the fact that SCBNL has been paying dividend regularly, but Nabil didn't pay dividend in F.Y. 2003/04. Their dividends also show high degree of fluctuation. It also shows that MPS is not solely dependent upon dividend. For these two banks, the M.M. Model holds good to some point. However, the MPS of all the banks are positively correlated with their EPS, which means that with the increase in EPS, there is increase in stock price.

The MPS of NSBL, HBL, and NIBL is positively correlated with their DPS and DPR, which points to the fact that dividend policy is not irrelevant. Even though, their EPS is not as high as that of SCBNL and Nabil, nevertheless, the dividends of these banks have had positive effect on their stock price. Also, we can see from the above analysis that the MPS of sample banks is positively correlated with their P/E ratio. The MPS of SCBNL and Nabil is negatively correlated with their dividend yield, which is because of their high stock price and low dividend yield, and their stock prices has increased with decrease in D.Y, and vice versa, over the period of study.

Analyzing the relation between EPS-DPS and EPS-DPR, there is positive correlation for all the banks except for SCBNL and Nabil. It indicates that with the increase in EPS, both DPS and DPR will increase and vice versa. But in the case of SCBNL and Nabil, the EPS is negatively correlated with DPR. It is due to the fact that DPR has not increased with the increase in EPS.

Regarding the correlation of DPS with DPR and NWPS, only the DPS of SCBNL and NSBL are positively correlated with their DPR and NWPS. The DPS of Nabil, HBL, and NIBL is positively correlated with their DPR, but negatively correlated with their NWPS.

4.2.2 Regression Analysis

The regression analysis is used to determine the statistical relationship between two or more variables and to make prediction of one variable on the basis of the others.

Bank	Variables	b	Std. error	Т	Sig.	\mathbb{R}^2
			of b	Value	Т	
	Constant (a)	-11234.09	-	-1.6	0.21	
SCBNL	EPS	91.89	44.76	2.05	0.13	0.58
	Constant (a)	96.56	-	0.53	0.63	
NSBL	EPS	26.94	8.28	3.25	0.05	0.78
	Constant (a)	-5273.11	-	-2.21	0.11	
NABIL	EPS	67.17	21.34	3.15	0.05	0.77
	Constant (a)	-1656.97	-	-1.57	0.22	
HBL	EPS	51.52	19.72	2.61	0.08	0.70
	Constant (a)	-570.45	-	-1.21	0.31	
NIBL	EPS	33.15	9.17	3.62	0.04	0.81

4.2.2.1 Regression analysis between MPS on EPS

Table 4.2.2.1: Regression Analysis of MPS on EPS

The above table of regression analysis shows that all the banks under study have positive relation between MPS and EPS. The regression relation between MPS and EPS of SCBNL indicates that with an increase of Rs. 1 in EPS, the MPS will increase by Rs. 91.89. Similarly, there will be increase in MPS of NSBL, NABIL, HBL, and NIBL by Rs 26.94, Rs. 67.17, Rs. 51.52, Rs. 33.15 respectively with an increase in EPS by Rs. 1, with other variables remaining constant.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 44.76, 8.28, 21.34, 19.72, and 9.17 respectively. These values indicate the probable error in the predicted value for the respective banks. Here, S.E.E is lowest in NSBL, which shows that estimation of EPS can be predicted nearer to accuracy.

The coefficient of multiple determination (\mathbb{R}^2) is lowest for SCBNL (0.58), which indicates that only 58% in MPS is explained by EPS i.e 58% variation in MPS of the bank is explained due to change in the value of EPS of the bank. The value of \mathbb{R}^2 of NSBL, NABIL, HBL, and NIBL are 0.78, 0.77, 0.70, and 0.81 respectively, which indicates that 78%, 77%, 70%, and 81% variation in the MPS of these banks are explained by the change in EPS of the respective banks.

Bank	Variables	b	Std. error	Т	Sig.	\mathbf{R}^2
			of b	Value	Т	
	Constant (a)	11580.000	-	2.440	.093	
SCBNL	DPS	-78.694	43.544	-1.807	.168	.521
	Constant (a)	295.742	-	4.545	.020	
NSBL	DPS	62.809	9.249	6.791	.007	.939
	Constant (a)	2908.895	-	2.627	.079	
NABIL	DPS	-30.240	29.792	-1.015	.385	.256
	Constant (a)	932.078	-	3.593	.037	
HBL	DPS	13.396	16.334	.820	.472	.183
	Constant (a)	800.819	-	7.133	.037	
NIBL	DPS	12.658	7.133	1.775	.174	.512

4.2.2.2 Regression analysis between MPS on DPS

Table 4.2.2.2: Regression Analysis of MPS on DPS

The above table of regression analysis of MPS on DPS shows that among the banks under study, NSBL, HBL, and NIBL have positive regression relation between MPS and DPS, whereas SCBNL and NABIL have negative relation between MPS and DPS. With Rs. 1 increase in DPS of NSBL, HBL, and NIBL, their MPS will increase by Rs. 62.81, Rs. 13.40, and Rs. 12.66 respectively.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 43.54, 9.25, 29.79, 16.33, and 7.133 respectively. These values indicate the probable error in the predicted value for the respective banks. Here, S.E.E is lowest in NIBL, which means that estimation of DPS can be predicted nearer to accuracy. The coefficient of multiple determination is lowest for NIBL (0.18), which indicates that only 18% variance in the MPS, is explained by DPS, i.e. 18% variation in MPS of the bank is explained due to the change in value of DPS of the bank.

Bank	Variables	b	Std. error	Т	Sig.	\mathbb{R}^2
			of b	Value	Т	
	Constant (a)	11370.467	-	4.881	.016	
SCBNL	DPR	-118.360	32.768	-3.612	.036	.813
	Constant (a)	457.437	-	2.074	.130	
NSBL	DPR	6.187	6.054	1.022	.382	.258
	Constant (a)	2941.550	-	2.864	.064	
NABIL	DPR	-29.324	24.890	-1.178	.324	.316
	Constant (a)	940.030	-	3.466	.040	
HBL	DPR	7.199	9.881	.729	.519	.388
	Constant (a)	828.267	-	2.620	.079	
NIBL	DPR	5.914	5.628	1.051	.371	.269

4.2.2.3 Regression analysis between MPS on DPR

Table 4.2.2.3: Regression Analysis of MPS on DPR

The regression analysis between MPS and DPR shows positive relation for NSBL, HBL, and NIBL, i.e. with an 1% increase in DPR, the MPS will increase by Rs. 6.19, Rs. 7.20, and Rs. 5.91 respectively, assuming that other variables remain constant. The regression analysis between MPS and DPR of SCBNL and NABIL is negative, which means that the price of their stock increased considerably despite their low DPR.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 32.77, 6.05, 24.89, 9.88, and 5.63 respectively. These values indicate the probable error in the predicted value for the respective banks. Here, S.E.E is lowest in NIBL, which shows that the estimation of DPR can be predicted to nearer to accuracy.

The coefficient of multiple determination (\mathbb{R}^2) is lowest for NSBL (0.26), which indicates that only 26% in MPS is explained by DPR i.e. 26% variation in MPS of the bank is explained due to change in the value of DPR of the bank. The DPR is highest in case of SCBNL (0.81), which means 81% change in value of MPS is due to change in the DPR. The value of \mathbb{R}^2 for NABIL, HBL, and NIBL are 0.32, 0.39, and 0.27 respectively, which indicates that 32%, 39%, and 27% variation in the MPS of these banks are explained due to change in DPR of the respective banks.

Bank	Variables	b	Std. error	Т	Sig.	\mathbb{R}^2
			of b	Value	Т	
	Constant (a)	6647.241	-	16.604	.000	
SCBNL	D.Y.	-786.555	80.752	-9.740	.002	.969
	Constant (a)	326.454	-	1.868	.159	
NSBL	D.Y.	467.438	214.925	2.175	.118	.612
	Constant (a)	2961.591	-	3.220	.049	
NABIL	D.Y.	-311.213	219.196	-1.420	.251	.402
	Constant (a)	1014.864	-	3.691	.034	
HBL	D.Y.	72.192	196.354	.368	.738	.043
	Constant (a)	915.284	-	2.194	.116	
NIBL	D.Y.	91.377	177.430	.515	.642	.081

4.2.2.4 Regression analysis between MPS on D.Y.

Table 4.2.2.4: Regression Analysis of MPS on D.Y.

The above table of regression analysis shows that all the banks have positive regression relation between MPS and D.Y. except that of SCBNL and NABIL. In case of NSBL, HBL, and NIBL their MPS will increase by Rs. 467.44, Rs. 72.19, Rs. 91.38 respectively with a 1 % increase in D.Y, assuming other variables are constant.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 80.75, 214.93, 219.20, 196.35, and 177.43 respectively. These values indicate the probable error in the predicted value for the respective banks. Here, S.E.E. is lowest in SCBNL, which shows the estimation of D.Y. can be predicted nearer to accuracy.

The coefficient of multiple determination (R^2) is lowest for HBL (0.04), which indicates that only 4% in MPS is explained by D.Y. i.e. 4 % variation in MPS of the bank is explained due to change in the value of D.Y. of the bank. The value of R^2 of SCBNL, NSBL, NABIL, and NIBL are 0.97, 0.61, 0.40, 0.08 respectively, which indicate that 97%, 61%, 40% variation in the MPS of these banks are explained due to change in D.Y. of the respective banks.

Bank	Variables	b	Std. error	Т	Sig.	\mathbb{R}^2
			of b	Value	Т	
	Constant (a)	155.890		1.630	.202	
SCBNL	EPS	307	.611	503	.650	.078
	Constant (a)	-1.642		412	.708	
NSBL	EPS	.350	.182	1.922	.150	.552
	Constant (a)	129.928		2.314	.104	
NABIL	EPS	941	.502	-1.873	.158	.539
	Constant (a)	-66.986		-1.650	.197	
HBL	EPS	1.475	.758	1.946	.147	.558
	Constant (a)	-16.247		285	.794	
NIBL	EPS	.797	1.108	.719	.524	.147

4.2.2.5 Regression analysis between DPS on EPS

Table 4.2.2.5: Regression Analysis of DPS on EPS

The regression analysis between DPS and EPS shows a positive relation for all banks except SCBNL and NABIL. The regression relation between DPS and EPS indicates that with an increase of Rs. 1 in EPS, there will be increase in DPS of NSBL, HBL, and NIBL by Rs. 0.35, Rs. 1.48, and Rs. 0.80 respectively assuming that other variables remain the same.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 0.61, 0.18, 0.50, 0.76, and 1.11 respectively. These values indicate the probable error in the predicted value for the respective banks. Here S.E.E. is loves for NSBL, which shows that the estimation of EPS can be predicted to nearer to accuracy.

The coefficient of multiple determination (\mathbb{R}^2) is lowest for SCBNL (0.08), which indicates that only 8% in DPS is explained by EPS i.e. 8% variation in DPS of the bank is explained due to change in the value of EPS of the bank. The value of \mathbb{R}^2 for NSBL, NABIL, HBL, and NIBL are 0.55, 0.54, 0.56, and 0.14 respectively, which indicates that 55%, 54%, 56%, and 14% variation in DPS of these banks are explained due to change in the EPS of the respective banks.

Bank	Variables	b	Std. error	Т	Sig.	\mathbb{R}^2
			of b	Value	Т	
	Constant (a)	204.867	-	3.079	.054	
SCBNL	NWPS	220	.150	-1.463	.240	.416
	Constant (a)	-14.276	-	539	.627	
NSBL	NWPS	.125	.170	.736	.515	.153
	Constant (a)	145.460	-	2.203	.115	
NABIL	NWPS	349	.191	-1.824	.166	.526
	Constant (a)	43.006	-	3.719	.034	
HBL	NWPS	098	.035	-2.833	.066	.728
	Constant (a)	30.048	-	.191	.861	
NIBL	NWPS	027	.689	038	.972	. 000

4.2.2.6 Regression analysis between DPS on NWPS

Table 4.2.2.6: Regression Analysis of DPS on NWPS

The above table of regression analysis shows that, among the banks under study, only NSBL has positive regression relation between DPS and NWPS, and remaining banks have negative regression relation between DPS and NWPS. In case of NSBL, with an increase of Rs. 1 in NWPS the DPS will increase by Rs. 0.13, assuming other variables remain constant. In contrast, with an increase of Rs. 1 in NWPS of SCBNL, NABIL, HBL, and NIBL, the DPS will decline by Rs. 0.22, Rs. 0.35, 0.01, and 0.03 respectively, assuming other variables remain constant.

The standard error of estimate of SCBNL, NSBL, NABIL, HBL, and NIBL are 0.15, 0.17, 0.19, 0.04, and 0.69 respectively. These values indicate the probable error in the predicted value for the respective banks. Here, S.E.E. is lowest in HBL, which shows the estimation of NWPS can be predicted nearer to accuracy.

The coefficient of multiple determination (\mathbb{R}^2) is highest for HBL (0.73), which indicates that 73% variation in DPS is explained by NWPS of the bank. The value of \mathbb{R}^2 of SCBNL, NSBL, NABIL, HBL, and NIBL are 0.42, 0.15, 0.53, and 0.00 respectively, which indicate that 42%, 15%, 53%, and 0% variation in the DPS of these banks are explained due to the change in NWPS of the respective banks.

Bank	Variables	b	Std.	Т	Sig.	\mathbb{R}^2
			error of	Value	Т	
			b			
	Constant (a)	-1246.466	-	806	.505	
SCBNL	P/E Ratio	188.902	19.237	9.820	.010	.990
	DPS	6.403	11.528	.555	.634	
	Constant (a)	67.617	-	.238	.834	
NSBL	P/E Ratio	9.299	11.257	.826	.496	.954
	DPS	59.281	10.673	5.554	.031	
	Constant (a)	-549.986	-	-3.087	.091	
NABIL	P/E Ratio	152.952	6.894	22.188	.002	.997
	DPS	-1.261	2.663	474	.682	
	Constant (a)	-422.419	-	-2.468	.132	
HBL	P/E Ratio	72.218	8.675	8.325	.014	.977
	DPS	5.024	3.498	1.436	.287	
	Constant (a)	-1768.824	-	-1.418	.292	
NIBL	P/E Ratio	142.646	68.716	2.076	.174	.845
	DPS	-7.917	11.065	716	.549	

4.2.2.7 Regression analysis of MPS on P/E Ratio and DPS

4.2.2.7: Regression Analysis of MPS on P/E Ratio and DPS

The Multiple Regression Analysis shows that with an increase of 1% in P/E ratio, the MPS of SCBNL, NSBL, NABIL, HBL, and NIBL will increase by Rs. 188.90, Rs. 9.30, Rs. 152.95, Rs. 72.22, and Rs. 142.65 respectively, keeping DPS constant, and with an increase of Rs. 1 in DPS, the MPS of SCBNL, NSBL, and HBL will increase by Rs. 6.40, Rs. 59.28, and Rs. 5.02 respectively, keeping P/E ratio constant. Whereas, in case of NABIL and NIBL, with an increase of Rs. 1 in DPS, the MPS will decline by Rs. 1.26 and Rs. 7.92 respectively.

The value of coefficient of multiple determination (R^2) of SCBNL, NSBL, NABIL, HBL, and NIBL are 0.99, 0.95, 0.99, 0.97, and 0.85 respectively, which indicate that 99%, 95%, 99%, 97%, and 85% variation in the MPS of these banks are explained due to change in P/E ratio and DPS of the respective banks.

Bank	Variables	b	Std.	Т	Sig.	R ²
			error of	Value	Т	
			b			
	Constant (a)	4900.211	-	.482	.677	
SCBNL	EPS	30.860	46.907	.658	.578	
	DPR	-94.642	51.223	-1.848	.206	.846
	Constant (a)	-36.894	-	-1.230	.344	
NSBL	EPS	26.249	1.262	20.806	.002	
	DPR	5.683	.503	11.290	.008	.997
	Constant (a)	-7840.451	-	-1.623	.246	
NABIL	EPS	86.245	38.280	2.253	.153	
	DPR	16.575	26.032	.637	.589	.807
	Constant (a)	-2314.786	-	-1.588	.253	
HBL	EPS	66.364	29.508	2.249	.153	
	DPR	-6.491	8.863	732	.540	.759
	Constant (a)	-691.727	-	-3.510	.072	
NIBL	EPS	31.223	3.815	8.185	.015	.979
	DPR	4.676	1.183	3.951	.058	

4.2.2.8 Regression analysis of MPS on EPS and DPR

4.2.2.7: Regression Analysis of MPS on EPS and DPR

The above table of multiple regression analysis shows that among the banks under study, NSBL, NABIL and NIBL have positive relation between MPS on EPS and DPR. All the banks also have positive relation between MPS on EPS, but SCBNL and HBL have negative relation between MPS on DPR. With an increase of Rs. 1 in EPS of SCBNL, NSBL, NABIL, HBL, and NIBL, the MPS will increase by Rs. 30.86, Rs. 26.25, Rs. 86.25, Rs. 66.36, and 31.22 respectively, keeping DPR constant. Similarly, with an increase of 1% in DPR of NSBL, NABIL, and NIBL, the MPS will increase by Rs. 5.68, Rs. 16.56, and Rs. 4.68 respectively, whereas, it will cause to decline the MPS of SCBNL and HBL by Rs. 94.64 and Rs. 6.49 respectively, keeping EPS constant.

The value of coefficient of multiple determination (R^2) of SCBNL, NSBL, NABIL, HBL and NIBL are 0.85, 0.99, 0.81, 0.76, and 0.98 respectively, which

means that 85%, 99%, 81%, 76%, and 98% variation in the MPS of these banks are explained due to change in EPS and DPR of the respective banks.

4.3 Major Findings of the Study

The study covered only five commercial banks and only for the last five fiscal years from 2002/03 to 2006/07. The available secondary data had been analyzed using various financial and statistical tools. So, the reliability of the conclusions of this study is dependent upon the accuracy of secondary data.

The major findings of this study can be summarized as follows:

- The average earning per share of banks did not seem satisfactory except for SCBNL and NABIL. The coefficient of variation indicates that except for NSBL, other banks' EPS seem satisfactory. The C.V. ranges from 59.32% to 9.56%. Among the banks under study, SCBNL had highest average EPS and lowest C.V. NSBL had lowest average EPS with highest degree of fluctuation.
- The average DPS showed that there was no consistency in payment of dividend. The C.V. ranged from 109.82% to 15.21%. Among the banks under study, SCBNL had the highest average DPS, and NSBL had the lowest. Except for SCBNL, other banks had high degree of fluctuation in dividend payment.
- The analysis of DPR also showed high degree of fluctuation for other banks except for SCBNL. The fluctuation ranged from 117.38% to 19.48%. The study shows that, HBL has the lowest DPR.
- The analysis of MPS also showed that the average MPS of the MPS had quite high level of fluctuation. SCBNL had the highest average MPS followed by NABIL. Among the banks under study, NABIL had highest level of fluctuation whereas HBL and NIBL had low level of fluctuation.
- The average dividend yields of the banks ranged from 4.53% to 0.62%. Among the banks SCBNL had the highest dividend yield with low level of fluctuation. The fluctuation of dividend yield ranged from 129.17% to 49.50%.
- The analysis of net worth per share showed that SCBNL has the highest average NWPS and NSBL had the lowest. The C.V. indicated that there was a moderate level of fluctuation in NWPS of the banks under study.

Upon using the major statistical tools i.e. correlation and regression, the findings were as follows:

- The MPS of SCBNL had positive correlation with its EPS but negative correlation with its DPS, DPR and D.Y. This was due to high degree of fluctuation in MPS; even when DPS, DPR, and D.Y. were decreased, the MPS was high.
- The MPS of NSBL had positive correlation with EPS, DPS, DPR, and D.Y. This was due to the fact that MPS of NSBL had low level of fluctuation and there was no extreme value of MPS.
- ➤ The MPS of NABIL also had positive correlation with its EPS but negative correlation with its DPS, DPR and D.Y. This was also due to high level of fluctuation in MPS, and it could also be that the M.M. model holds good in the case of SCBNL and NABIL, which says that stock price depends upon earning and not dividend. The EPS of these two banks were higher than other sample banks under study.
- The MPS of HBL had positive correlation with its EPS, DPS, DPR, and D.Y. There was also positive correlation between DPS and EPS.
- The MPS of NIBL was also positively correlated with its EPS, DPS, and DPR, D.Y, P/E ratio and NWPS.
- The regression analysis of MPS on DPS indicated that the regression coefficient (b) is negative for SCBNL and NABIL, whereas it was positive for NSBL, HBL, and NIBL. The coefficient of multiple determination for the regression analysis of MPS on DPS of NSBL was highest among sample banks, followed by that of SCBNL.
- The regression analysis of MPS on DPR showed that the regression coefficient (b) is negative for SCBNL and NABIL, but it was positive for other sample banks under study. The coefficient of multiple determination (R²) of SCBNL was highest among the sample banks.
- ➤ The regression coefficient (b) of the regression analysis between MPS and D.Y. showed that all banks have positive relation except SCBNL and NABIL. The coefficient of multiple determination (R²) of SCBNL was highest among the sample banks.
- > The regression coefficient (b) for the analysis between DPS on EPS is positive for all sample banks except SCBNL and NABIL. The coefficient of multiple determination (\mathbb{R}^2) was high for HBL and NSBL than other banks under study.
- The regression coefficient (b) for the analysis between DPS and NWPS was positive for NSBL but it was negative for other sample banks under study. The

coefficient of multiple determination (R^2) of HBL was highest among sample banks.

The multiple regression analysis of MPS on P/E ratio and DPS showed that the regression coefficient (b) is positive for both P/E ratio and DPS in case of SCBNL, NSBL, and HBL. For NABIL and NIBL, it was negative for DPS.

The multiple regression analysis of MPS on EPS and DPR showed that NABIL, NSBL, and NIBL have positive regression coefficients (b) for both EPS and DPR. The coefficient was negative for DPR in case of HBL and SCBNL, but it is positive for EPS.

CHAPTER-V

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Summary

Dividends play important role in the valuation of stocks. Of course, earning is important for commercial banks, but stockholders also expect regular dividends. So earning and dividend are closely related. They should be viewed as complementary. Those commercial banks that have high earnings command high market price, but earnings alone will not increase stock price if it does not pay dividends. Therefore it is essential to pay regular dividends because it serves as a simple and comprehensive signal of management's interpretation of the firm's recent performance and its future prospects. Dividend Policy constitutes one of the most critical issues of the public limited companies. Dividend Policy decision is one of the three major decisions of financial management. The dividend policy decision affects on the operation and prosperity of the organization because it has the power to influence other two decision of the organization i.e. capital structure decision and investment decision.

Theories of dividend policy do differ; some prefer residual theory that conveys passive residual earning available for payment whereas M.M. Hypothesis insists on dividend irrelevance in the sense that dividend does not affect the stock price. There are others who argue that dividend policy does affect value due to the factors of uncertainty. Many factors affect the dividend payment depending upon investors need and preference on one hand and the financing needs of the financial institutions and potential investment opportunities on the other hand. Dividend Policy involves many aspects such as selecting the types of dividend and other forms as well as selecting stable or fluctuating or extra dividend payment.

The stockholders have a high desire and expectation that market price of share will be higher than net worth and getting high percent of dividend from earnings. So distributing dividend to the shareholders is effective to achieve the trust of investors and encourage them to invest in shares. Besides this dividend paying ability reflects the financial position of the organization in the market. So the funds that could not be used due to the lack of investment opportunities would be better as dividend, since stockholders have investment opportunities elsewhere. Dividend paying banks have been selected for the study, so the references can be made about implication of dividend policy they have adopted in their market price per share. Even if market price is governed by various other factors, this study is made to analyze one of the important factors i.e. dividend.

5.2 Conclusions

From the analysis of financial and statistical indicators of all the sample banks, following conclusions are drawn:

- 1. The market price per share i.e. stock price is affected by the dividend related financial variables such as DPS and DPR either positively or negatively. The changes in DPS affect the stock price differently in different banks. In case of some banks, there exists positive relation between dividend and stock price, while for others, there is negative relation. Besides this the stock price largely depends upon dividend. The stock price of SCBNL and NABIL is shown to be dependent on EPS rather than DPS. However, SCBNL has been paying dividend regularly.
- 2. The stock price is also affected by other factors such as earning per share, price-earning ratio, net worth per share etc. Their effect is also different for different banks.
- 3. The dividend per share is affected by earning per share, retention ratio, net profit and net worth per share differently in different banks.
- 4. An analysis of the average DPR of the banks shows that out of the total income generated, about 38.30% is distributed as dividend in general. If the individual DPR of the banks are compared to this figure, SCBNL and NIBL has the average DPR of 70.04% and 46.76% respectively, which is above the average DPR of all banks. NSBL, NABIL, HBL have below average DPR.
- 5. The coefficient of variation of the average DPR of the banks indicates that the fluctuation in the payment of dividend is 84.55%, which is above moderate level. Thus it can be concluded that Dividend Policy of the banks are not stable. There is no strategy of calculating growth in the dividends paid by banks, which shows that the dividend policy of the commercial banks is not uniform and consistent. There is fluctuation in the dividend payment even if the banks are making profit regularly. The dividend payout ratio also does not show any stability and coordination with other variables.

- 6. There is large fluctuation in dividend in each year. There is not certain criterion for paying dividend. Dividends are distributed at an ad hoc basis. From this, the researcher of this study concludes hat there is no long-term vision regarding the dividend policy.
- 7. Stock price or market price of the listed commercial banks under study is higher than net worth per share. There exists vast difference between MPS and NWPS. This situation clearly indicates that the investors are not comparing book value and market value of shares. They are investing in stocks to gain advantage from capital appreciation rather than dividends.

5.3 Recommendations

Based on the major finding of this study, some recommendations have been made so as to overcome some shortfalls regarding the issue of dividend of the banking sector. These recommendations may also have some repercussions, but there is no doubt of the measures to improve the existing conditions.

a) The legal rule for treatment of dividend is must for the smooth growth of the banks as well as growth of national economy, but there is lack of proper legal provisions regarding the dividend payment. The government as well as the central bank of Nepal, Nepal Rastra Bank should pay their attention in this matter for prescribing certain provisions and rules regarding the percentage of earning as payment of dividend.

b) The commercial banks are paying dividend without adopting any appropriate policy. It seems impossible to increase shareholders wealth. The commercial banks management is advised to adopt the long-run dividend policy also. It is a stable dividend policy, constant payout ratio or low regular plus extra dividend policy, which helps to boost up the wealth of shareholder.

c) Dividend payment of commercial banks is neither stable nor constantly growing. Due to the uncertainty and high degree of risk, the market price per share may be adversely affected. So the commercial banks should follow either stable or constantly growing dividend payment policy.

d) Nepalese investors are investing their funds on commercial banks haphazardly, randomly and without consulting capital market analyst. So, they are suggested to analyze the capital market situation before pouring their fund.

e) While making dividend decision, a minor mistake may lead the bank to serious crisis. Due to this reason, it is advised to adopt optimum dividend decision based on the following criteria:

- Optimum retention for excellent expansion and modernization of bank.
- Stable or consistency in dividend payment.

• Optimum dividend so that market value per share will increase rapidly i.e. net present value or shareholders wealth maximization.

Finally, after making this study, it is realized that dividend payment practices of the commercial banks are not regular in Nepal. Banks are organizations established to run for a long period in the small economy of Nepal. There are already over a dozen and half banks and neck to neck competition. So, even a small wrong decision can lead to bankruptcy. So there is a necessity of legal provisions and rules for prescribing certain policy regarding the dividend payment in the banking sector. For this purpose the concerned authority i.e. Nepal Government, Nepal Rastra Bank, Security Board and Nepal Stock Exchange should be conscious about formulation and implementation of rule regarding dividend payment. This will help to regularize the dividend policy of financial sector in Nepal.

BIBLIOGRAPHY

A. Books

- Bierman, Jr, H. & Schmidt, S. (1986), *Financial Management for Decision Making*, McMillan Publishing Company, New York.
- Brigham, E.F. & Weston, J.F. (1981), Managerial Finance, The Dryden Press, New York.
- Brigham, E.F. (1980), *Fundamentals of Financial Management*, the Dryden Press, New York.
- Christy, G.A. & Clendenin, J.C. (1985), *Introduction to Investment*, McGraw Hill Book Inc., Singapore.
- Dobbins, R. (1986), Investment Decisions & Financial Strategy, Heritage Publishers, New Delhi.
- Fischer, D.E. & Jordan, R.J. (1974) *Security Analysis & Portfolio Management*, Prentice-Hall of India Pvt. Ltd., New Delhi.
- Francis, J.C. (1983), Management of Investment, McGraw-Hill Book Inc., Singapore.
- Gitman, L.J. (2001) Principles of Managerial Finance, Harper & Row Publishes, New York.
- Haugen, R.A. (1998), *Modern Investment Theory*, Prentice Hall of India Pvt. Ltd., New Delhi.
- Joshi, P.R. (2001), *Research Methodology*, Buddha Academic Publishers and Distributors Pvt. Ltd. Kathmandu.
- Khan, M.Y. & Jain, P.K. (1988), *Financial Management*, Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Lewis, C.W. & Peterson C. (1983) *Managerial Economics*, Prentice Hall of India Pvt. Ltd., New Delhi.
- Pandey, I.M. (1997), Financial Management, Vikas Publishing House Pvt. Ltd., New Delhi.
- Pradhan, Surendra (1992), *Dividend Management*, Kathmandu Educational Enterprises Pvt. Ltd., Kathmandu.
- Sharpe, W.F., Alexander, J.V. & Bailey, J.V. (1998), *Investment*, Prentice-Hall of India Private Limited, New Delhi.
- Shrestha, M.K., Poudel, Rajan B., Bhandari, Dipak B. (2003), *Fundamentals of Investment*, Buddha Academic Publishers & Distributors Pvt. Ltd., Kathmandu.
- Van Horne, J.C. (2000), *Financial Management & Policy*, Prentice-Hall of India Private Limited, New Delhi.
Van Horne, J.C. & Wachowicz Jr., J.M. (2000), *Fundamentals of Financial Management*, Prentice-Hall of India Private Limited, New Delhi.

B. Journals

- Chawala, Deepak and Srinivasan G. "Impact of Dividend and Retention on Share Price," An *Econometric Study Decision*, Vol. 14, No. 3, 1987, PP.137-140.
- Friend, Irwin and Puckett Marshall, "Dividend and Stock Prices," *The American Review*, Vol. IV, No. 5, September 1964, PP.656-682.
- Jensen, Gerald R. and Johnson, James M, "The Dynamics of Corporate Dividend Reductions" *Financial Management*, Winter 1995, P.32.
- Linter, J., "Distribution of Income of Corporation among Dividends, Retained Earning and Taxes," *American Economic Review*, Vol. 46, May 1956, PP.97-113.
- Modigliani, F. and Miller, M.H., "Dividend Policy Growth and Valuation of Share," *Journal* of Finance, Oct.1961, PP.411-433.
- Ross, S., "The Determinant of Financial Structure: The incentive signaling approach," *Bell Journal of Economics*, Spring, 1977, PP.23-40.
- Van Horne, James C. and John G. McDonald, "Dividend Policy and New Equity Financing" *Journal of Finance*, May 1971, PP.507-519.
- Walter, James E., "Dividend Policy and Common Stock Prices" *Journal of Finance*, Vol. II, March 1966, PP.29-42.

C. Thesis

- Adhikari, Nabaraj, *Corporate Dividend Practices in Nepal*, Unpublished Master's Thesis, Tribhuvan University, Central Department of Management, Kathmandu, 1999.
- Bhattarai, Bishnu Hari, *Dividend Decision and It's Impact on Stock Valuation*, Unpublished Master's Thesis, Tribhuvan University, Shankar Dev Campus, Kathmandu, 1966.
- Timilsena, Sadakar, *Dividend and Stock Prices: An Empirical Study*, Unpublished Master's Thesis, Tribhuvan University, Central Department of Management, Kathmandu, 1997.

APPENDIX –A FINANCIAL INDICATORS

EPS of banks under study.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	149.30	143.55	143.14	175.84	167.37	155.84	14.90	9.56
NSBL	11.47	14.26	13.29	18.27	39.35	19.33	11.47	59.32
NABIL	84.66	92.61	105.79	129.21	137.08	109.87	22.72	20.68
HBL	49.45	49.05	47.91	59.24	60.66	53.26	6.15	11.55
NIBL	39.56	51.70	39.50	59.35	62.57	50.54	10.79	21.36

DPS of banks under study.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	110.00	110.00	120.00	120.00	80.00	108.00	16.43	15.21
NSBL	8.00	0.00	0.00	5.00	12.59	5.12	5.40	105.46
NABIL	50.00	65.00	0.00	5.00	12.59	26.52	29.12	109.82
HBL	1.32	0.00	11.58	30.00	15.00	11.58	12.15	104.91
NIBL	20.00	12.50	20.00	5.00	62.57	24.01	22.43	93.41

DPR of banks under study.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	73.68	76.63	83.83	68.24	47.80	70.04	13.65	19.48
NSBL	69.75	0.00	0.00	27.37	31.99	25.82	28.74	111.29
NABIL	59.06	70.19	0.00	3.87	9.18	28.46	33.41	117.38
HBL	2.67	0.00	24.17	50.64	24.73	20.44	20.48	100.20
NIBL	50.56	24.18	50.63	8.42	100.00	46.76	34.80	74.42

MPS of banks under study.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	1640.00	1745.00	2345.00	3775.00	5900.00	3081.00	1791.05	58.13
NSBL	656.00	307.00	335.00	612.00	1176.00	617.20	349.88	56.69
NABIL	740.00	1000.00	1505.00	2240.00	5050.00	2107.00	1741.80	82.67
HBL	836.00	840.00	920.00	1100.00	1740.00	1087.20	380.29	34.98
NIBL	795.00	940.00	800.00	1260.00	1729.00	1104.80	396.78	35.91

P/E ratio of banks under study.

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	10.98	12.16	16.38	21.47	35.25	19.25	9.85	51.16
NSBL	22.24	21.54	25.21	33.49	29.89	26.47	5.12	19.33
NABIL	8.74	10.80	14.23	17.34	36.84	17.59	11.25	63.96
HBL	16.91	17.12	19.20	18.57	28.69	20.10	4.90	24.37
NIBL	20.10	18.18	20.25	21.23	27.63	21.48	3.61	16.82

Dividend Yield of banks under study

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	6.71	6.30	5.12	3.18	1.36	4.53	2.24	49.50
NSBL	1.22	0.00	0.00	0.82	1.07	0.62	0.59	94.18
NABIL	6.76	6.50	0.00	0.22	0.25	2.75	3.55	129.17
HBL	0.16	0.00	1.26	2.73	0.86	1.00	1.09	109.17
NIBL	2.52	1.33	2.50	0.40	3.62	2.07	1.24	59.74

Net worth per share of banks under study

Bank	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.%
SCBNL	403.15	399.25	422.38	468.22	512.12	441.02	48.27	10.95

NSBL	134.03	146.80	159.54	153.44	179.58	154.68	16.84	10.88
NABIL	267.30	301.00	337.16	381.36	418.39	341.04	60.55	17.75
HBL	444.26	427.40	239.59	228.72	264.74	320.94	105.86	32.98
NIBL	216.24	246.89	200.80	239.67	234.37	227.59	18.78	8.25

APPENDIX – B CORRELATION ANALYSIS

Standard Chartered Bank Nepal Ltd. (SCBNL)

	EPS	DPS	DPR	MPS	P/E Ratio	D.Y.	NWPS
EPS	1.000	-0.279	-0.704	0.693	-0.801	0.821	0.764
DPS	-0.279	1.000	0.878	-0.752	0.594	-0.645	-0.722
DPR	-0.704	0.878	1.000	-0.886	0.823	-0.873	-0.902
MPS	0.693	-0.752	-0.886	1.000	-0.974	0.979	0.994
P/E Ratio	-0.801	0.594	0.823	-0.974	1.000	-0.992	-0.985
D.Y.	0.821	-0.645	-0.873	0.979	-0.992	1.000	0.993
NWPS	0.764	-0.722	-0.902	0.994	-0.985	0.993	1.000

Nepal SBI Bank Ltd. (NSBL)

	EPS	DPS	DPR	MPS	P/E Ratio	D.Y.	NWPS
EPS	1.000	0.743	0.048	0.541	0.408	0.871	0.883
DPS	0.743	1.000	0.704	0.400	0.903	0.391	0.969
DPR	0.048	0.704	1.000	0.010	0.913	-0.350	0.508
MPS	0.541	0.400	0.010	1.000	0.354	0.570	0.502
P/E Ratio	0.408	0.903	0.913	0.354	1.000	0.011	0.782
D.Y.	0.871	0.391	-0.350	0.570	0.011	1.000	0.602
NWPS	0.883	0.969	0.508	0.502	0.782	0.602	1.000

Nabil Bank Ltd. (NABIL)

	EPS	DPS	DPR	MPS	P/E Ratio	D.Y.	NWPS
EPS	1.000	-0.734	-0.783	0.854	-0.842	0.991	0.876
DPS	-0.734	1.000	0.996	-0.490	0.969	-0.725	-0.506
DPR	-0.783	0.996	1.000	-0.548	0.987	-0.779	-0.562
MPS	0.854	-0.490	-0.548	1.000	-0.621	0.887	0.998
P/E Ratio	-0.842	0.969	0.987	-0.621	1.000	-0.850	-0.634
D.Y.	0.991	-0.725	-0.779	0.887	-0.850	1.000	0.902
NWPS	0.876	-0.506	-0.562	0.998	-0.634	0.902	1.000

Himalayan Bank Ltd. (HBL)

	EPS	DPS	DPR	MPS	P/E Ratio	D.Y.	NWPS
EPS	1.000	0.747	0.687	0.696	0.570	-0.557	0.833
DPS	0.747	1.000	0.995	0.287	0.971	-0.853	0.428
DPR	0.687	0.995	1.000	0.261	0.982	-0.888	0.388
MPS	0.696	0.287	0.261	1.000	0.074	-0.472	0.976
P/E Ratio	0.570	0.971	0.982	0.074	1.000	-0.827	0.208
D.Y.	-0.557	-0.853	-0.888	-0.472	-0.827	1.000	-0.507
NWPS	0.833	0.428	0.388	0.976	0.208	-0.507	1.000

Nepal Investment Bank Ltd. (NIBL)

	EPS	DPS	DPR	MPS	P/E Ratio	D.Y.	NWPS
EPS	1.000	0.383	0.128	0.620	-0.124	0.778	0.902
DPS	0.383	1.000	0.964	0.896	0.869	-0.022	0.716
DPR	0.128	0.964	1.000	0.799	0.967	-0.262	0.519
MPS	0.620	0.896	0.799	1.000	0.629	0.087	0.898
P/E Ratio	-0.124	0.869	0.967	0.629	1.000	-0.436	0.285
D.Y.	0.778	-0.022	-0.262	0.087	-0.436	1.000	0.490

NWPS	0.902	0.716	0.519	0.898	0.285	0.490	1.000
------	-------	-------	-------	-------	-------	-------	-------

APPENDIX – C

REGRESSION ANALYSIS

Standard Chartered Bank Nepal Ltd. (SCBNL)

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764(a)	.584	.445	1333.95278

Predictors: (Constant), EPS

Coefficients (a)

		Unstand Coeffi	Unstandardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-11234.092	7001.382		-1.605	.207
	EPS	91.858	44.763	.764	2.052	.133

Dependent Variable: MPS

2. MPS on DPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722(a)	.521	.362	1430.99373

Predictors: (Constant), DPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	11580.000	4746.069		2.440	.093
	DPS	-78.694	43.544	722	-1.807	.168

Dependent Variable: MPS

3. MPS on DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902(a)	.813	.751	894.22113

Predictors: (Constant), DPR

Coefficients (a)

		Unstanc Coeffi	dardized cients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	11370.467	2329.546		4.881	.016
	DPR	-118.360	32.768	902	-3.612	.036

Dependent Variable: MPS Nepal SBI Bank Ltd. (NSBL)

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883(a)	.779	.706	189.83911

Predictors: (Constant), EPS

Coefficients (a)

		Unstand Coeffi	Unstandardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	96.598	181.131		.533	.631
	EPS	26.935	8.278	.883	3.254	.047

Dependent Variable: MPS

2. MPS on DPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969(a)	.939	.919	99.84420

Predictors: (Constant), DPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	295.742	65.073		4.545	.020
	DPS	62.809	9.249	.969	6.791	.007

Dependent Variable: MPS

3. MPS on DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508(a)	.258	.011	347.94019

Predictors: (Constant), DPR

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	457.437	220.559		2.074	.130
	DPR	6.187	6.054	.508	1.022	.382

Dependent Variable: MPS

Nabil Bank Ltd. (NABIL)

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876(a)	.768	.690	969.60742

Predictors: (Constant), EPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	-5273.108	2384.345		-2.212	.114	
	EPS	67.171	21.340	.876	3.148	.051	

Dependent Variable: MPS

2. MPS on DPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.506(a)	.256	.008	1735.24880

Predictors: (Constant), DPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2908.895	1107.414		2.627	.079
	DPS	-30.240	29.792	506	-1.015	.385

Dependent Variable: MPS

3. MPS on DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562(a)	.316	.088	1663.01971

Predictors: (Constant), DPR

Coefficients (a)

	Unstandardized	Standardized		
Model	Coefficients	Coefficients	t	Sig.

		В	Std. Error	Beta		
1	(Constant)	2941.550	1027.096		2.864	.064
	DPR	-29.324	24.890	562	-1.178	.324

Dependent Variable: MPS

Himalayan Bank Ltd. (HBL)

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833(a)	.695	.593	242.64308

Predictors: (Constant), EPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-1656.968	1055.971		-1.569	.215
	EPS	51.522	19.721	.833	2.613	.080

Dependent Variable: MPS

2. MPS on DPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428(a)	.183	089	396.87967

Predictors: (Constant), DPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	932.078	259.386		3.593	.037
	DPS	13.396	16.334	.428	.820	.472

Dependent Variable: MPS

3. MPS on DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388(a)	.150	133	404.76670

Predictors: (Constant), DPR

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	940.030	271.237		3.466	.040
	DPR	7.199	9.881	.388	.729	.519

Dependent Variable: MPS Nepal Investment Bank Ltd. (NIBL)

1. MPS on EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902(a)	.813	.751	197.92828

Predictors: (Constant), EPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-570.451	471.675		-1.209	.313
	EPS	33.150	9.168	.902	3.616	.036

Dependent Variable: MPS

2. MPS on DPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716(a)	.512	.350	320.00524

Predictors: (Constant), DPS

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	800.819	223.200		3.588	.037
	DPS	12.658	7.133	.716	1.775	.174

Dependent Variable: MPS

3. MPS on DPR

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519(a)	.269	.025	391.71943

Predictors: (Constant), DPR

Coefficients (a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	828.267	316.147		2.620	.079
	DPR	5.914	5.628	.519	1.051	.371

Dependent Variable: MPS