

**DIVIDEND POLICY AND IMPACT ON MARKET PRICE  
OF SHARE OF SELECTED COMMERCIAL BANKS**

**By**

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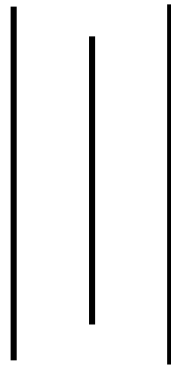
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***In partial fulfillment of the requirement for the degree of  
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## **RECOMMENDATION**

This is to certify that the thesis

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## VIVA-VOCE SHEET

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## **DECLARATION**

I hereby declare that the work reported in this thesis entitled “**Dividend Policy and Impact on Market Price of Share of Selected Commercial Banks**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Shashi Kanta Mainali** and **Rabindra Bhattarai** of Shanker Dev Campus, T.U.

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## ABBREVIATIONS

BOK	Bank of Kathmandu Limited
BVPS	Book Value Per Share
CBB	Cash and Bank Balance to Current Assets Ratio
Cov	Co-Variance
Cr	Current Ratio
CV	Coefficient Of Variance
DP	Dividend Percentage
DPR	Dividend Payout Ratio
DPS	Dividend Per Share
DY	Dividend Yield
EBL	Everest Bank Limited
EPS	Earning Per Share
EY	Earning Yield
F/Y	Fiscal Year
HBL Ltd.	Himalayan Bank Limited Limited
MM	Modigliani and Miller
MPS	Market Price Per Share
NABIL	Nepal Arab Bank Limited
NEPSE	Nepal Stock Exchange
NIC	Nepal Industrial and Commercial Bank Limited
P.E	Probable Error
S.D.	Standard Deviation
S.E.E.	Standard Error of Estimation
SBI	State Bank of India
SCBNL	Standard Chartered Bank Nepal Limited

# CHAPTER - I

## INTRODUCTION

### **1.1 Background of the Study**

Dividend policies are the regulations and guidelines that companies develop and implement as the means of arranging to make dividend payments to shareholders. Establishing a specific dividend policy is to the advantage of both the company and the shareholder. In order to make sure the policy is workable, a company should develop a viable policy through a number of test scenarios in order to determine what impact the dividend policy have on the of the business. In fact, corporate dividend decision is not an easy, straight forward and simple task as many people conceive it. Dividend is the earning or profit distributed to shareholders by a company. It may be in cash, shares and securities or a combination of these. Generally there are two types of shares; preference shares and equity shares. Dividend paid on preference share is called preference dividend which is generally fixed and payable before payment of equity dividend. There is no choice to management for the preference dividend. But there is full choice about the rate of equity dividend. The policy of a company on the division of its profits between distribution to shareholders as dividend and retention for its investment is known as dividend policy. The dividend should be paid; secondly it has to determine how much it should be. All aspects and questions related to payment of dividend are contained in a dividend policy.

Bank has always been the most important and the largest of financial intermediaries, almost everywhere. Nepal is enlisted in the list of the least developed countries of the world. Majority people here are engaged in their day to day survival various factors like landlocked situation, poor resource mobilization, lack of education as well as entrepreneurship, irrational government policy political instability are responsible for the regarding pace of development in Nepal. Nepal is a country trying to develop its economy through global trend and of course with country suited economic liberalization. Development in the financial terms is the efficient flow and generation of the funds in the most productive sectors (*Bhattraï; 2002:1*). Although the actual owners of the company are shareholders, they are paid low dividend in some companies the dividend is not announced. But recently the payment of dividend is

increasing (*Adhikari, 1999:10*). It affects the financial structure, the flow of funds, corporate liquidity and investors' attitude. By a dividend policy we mean some kind of coexistent approach to the distribution versus retention decision rather than making the decision on the purely and hoc basis from period to period (*William & Gordon, 1972*). So what and how much it is desirable to pay dividend is always controversial topic because shareholders always expect higher dividend, but management wants more amounts to retain to the company for investment purpose. Dividend policy decision is the major financial decision of the firm, which determines the further capital structure and the growth of the firm because retained earning is the internal source of financing which is the key factor to determine the amount if external financing. Retained earning is used for making investment in favorable investment opportunities which helps to increase the growth of the firm. Hence there should be an optimal dividend policy that can attract potential investors and finance for its growth and expansion.

As a result of the liberalization policy of Government of Nepal, foreign investors and internal investors were attracted to invest in Nepal in joint venture especially in banking business. Establishment of commercial banks contributes significantly in the formation and mobilization internal capital and development efforts. They furnish necessary capital needed for trade and commerce of mobilization the dispersed saving of the individuals and institutions. They perform the function in different ways like accepting deposits, providing interest, granting loan etc that helps to remove the deficiency of capital. The main objective of joint venture bank is to earn profit by proper mobilization of resources. The decision regarding how much profit to distribute to the shareholders as a dividend and how much to keep in the organization is the crucial decision of the managers.

Higher the value of dividend higher will be the market value of the share. Market price of the stock (MPS) is the trading price of the stock listed in authorized or legal stock exchange. In context of Nepal, MPS is the price that is coated for purchasing or selling under Nepal Stock Exchange Act or related laws and regulations, on the stock exchange floor. MPS is the value of stock, which can be obtained by a firm from the market. Market value of a share 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 value per share will also be high. Market value of the share may be high or low than the book values. If the firm is growing concern and it's earning power is greater than cost of capital, the market value of the share will be higher than the book value. If the firm's earning capacity is lower than cost of capital MPS will also be lower. MPS is determined by capital market.

Market price of the stock usually fluctuates by the adequate information. No one can earn more in the inefficiency and inefficiency is legally prohibited in order to regulate the security market in every nation. But being focused in this study, dividend policy and its impact on market price of stock, there should be discussed different models and practices which have significant effects in MPS or not. So MPS and security valuation are integral parts in it. With out valuation no one can coat the price there is no chance of trading.

## **1.2 Statement of the Problem**

Corporate dividend policy is not clearly understood by a large segment of the financial community. Dividend is the most inspiring factor for the investment on the shares of the company and similar to the commercial banks. Dividend policy is not straight forward and simple aspect of the corporate finance. It is more technical area of finance in the sense that is a complex one having numerous implications for the firm. But Nepalese commercial banks have not satisfactory result about dividend decision. Different government rules and regulations are the main factors that act and react in the banking operations. But there is no limit to the identification of the problem about dividend policy that is visible in Nepalese commercial bank. While keeping this in mind selected problem of the commercial banks with regard to dividend policy are taken.

In Nepal, only a small number of companies are paying regular dividend and other companies are not stable in the payment of dividend Retained earning doesn't match with the dividend policy. It has been found that especially, the joint venture banks have been distributing regular dividend. But however, not a single, clear and convincing dividend policy that being followed is known yet. The expectation of shareholders has yet to be met by paying regular dividend. Dividend decision is

crucial as well as controversial area of financial management. Besides it is not clearly understood by a larger segment of the financial community. No matter how many studies have been conducted in this regard the effect of dividend policy on a corporation's market value has remained a subject of long standing controversy. The main focus of the study is to deal with the following problems;

- 1) What are the major factors affecting dividend policy of a firm?
- 2) Is DPS proportionate to the firm's EPS?
- 3) What is the impact of dividend policy on market price of stock?
- 4) Is there any consistency in EPS, DPS, MPS and DPR of the sample firms?
- 5) What is the stock price behavior after the announcement of dividend?

### **1.3 Objectives of the Study**

The major objective of the study is to obtain the depth knowledge about the impact of dividend policy adopted by the firms to its market price of share as well as the overall valuation of the firm. The following are the specific objectives of this study.

- a. To find out the impact of divided policy on market price of stock
- b. To explain the prevailing policies and practices regarding dividend in the Nepalese firms with reference to the sample firm.
- c. To examine various aspects of dividend policies and practices in Nepal carried outlay the banking sector.
- d. To analyze if there is any uniformity in DPS EPS MPS and DPR of the sample firms.

### **1.4 Significance of the Study**

Now a day's 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 as effective way to attract new investors, to keep present investors happy and to maintain goodwill of the company. The important aspect of the dividend policy is to determine the amount of earnings to distribute to the shareholders and the amount to be retained in the firm. The financial manager must very carefully decide the allocation of earnings between dividends and retain earnings as this decision affects the value of firm. The objective in choosing dividend policy should be to maximize the value of the firm to its shareholders.

The dividend is most sensitive element in the area of investment in the common stock. If the market doesn't receive its expected dosage, stock price will suffer. Dividend payout of course reduce the amount of earning retain in the firm and affect the total amount of internal financing. The study may deliver crucial information for those respective commercial banks are made.

The finding of this research will be worth to the shareholders to see the dividend policy of the seven banks in comparison. So, this may be helpful for them in identifying the productivity of their investment and justify the rational of their investment decisions. Then it will also benefited by the management to point out the appropriate dividend policy.

Similarly, this research will also be beneficial to the policy makers from the comparative study of dividend policy. They can get important findings which are useful in policy making about dividend policy formulation.

Finally, the dividend policies of the banks are of great interest to the several outsiders. They are customers, financial agencies, stock brokers, interested person. I believe that except above, those banks will be benefited more since the study is conduct on their dividend policy.

### **1.5 Limitations of the Study**

A research is a vast study investigating the subject matter for solving perceived research problems. Each and every study has its own limitations. No study can be free from constraints, such as economic resources, time etc. And this study too is not an exception. Therefore, the following are the main limitations of the study.

- a) This study is based on especially on secondary data like annual reports of the Banks under review, journals unpublished as well as published thesis works Other published articles and reports and related materials from various Websites.
- b) The study covers a six-year period i.e. 2003/04 to 2008/09.
- c) The study covers only seven commercial banks.
- d) The study only concentrate on dividend policy, it doesn't cover several other



aspects of the commercial banks.

e) Lack of research experience, lack of recent information, time and sources

Constraints are other limitations.

The above limitation, no doubts have some impact on quality of the study but some impacts do not affect the usefulness of the study.

## **1.6 Organization of the Study**

The study has been organized into five chapters; each chapter deals some important factors of dividend behavior. The titles of each of these chapters are listed below:

### **Chapter - I: Introduction**

This chapter deals with the general idea about the study consisting background of the study, Statement of problem, Objective of the study, significance of the study, Limitation of the study and organization of the study.

### **Chapter – II: Review of Literature**

This chapter deals with review of the different literature of the study field, therefore it includes conceptual framework along with the review of major books, journals, research works and thesis etc.

### **Chapter - III: Research Methodology**

This chapter describes the research methodology with the matter and source of data population and sample of the model analysis, meaning and definition of statistical tools.

### **Chapter - IV: Data Presentation and Analysis**

Analytical framework starts from this chapter. It contains presentation and analysis of the data using financial and statistical tools. Similarly this chapter also includes the major finding of the study so it is main part study.

### **Chapter - V: Summary conclusion and Recommendation**

This chapter deals with suggestive framework, which is evocated to summary conclusion and recommendations.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

This chapter deals with the reviewing of the different sources of dividend policy literature such as books, journals research works and unpublished thesis. Similarly this chapter includes two main heading like conceptual framework and review of related studies that will absolutely help to this research.

#### **2.1 Conceptual Framework**

##### **2.1.1 Commercial Banks**

An institution which aspects deposits, makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings and time deposit. These institutions are run to make a profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to business.

##### **2.1.2 Meaning of Dividend**

Companies that earn a profit can decide either of three ways: pay the profit out to shareholders, reinvest it in the business through expansion debt reduction or share repurchase or both. When a portion of the profit is paid out to the shareholders the payment is known as dividend. Dividend is paid in cash or stock. There is an ongoing debate about whether a company should payout its earnings as dividend or returns them for firm growth. "There is further debate about which policy investors prefers. Firms that are growing generally pay low or no dividends matures firms that are no longer in growth phase often pay high and increasing dividends"(Gautam and Thapa; 2008:336).

The dividend decision is regarded as a financing decision any cash dividend paid reduces the amount of cash available for investment by the firm. Dividend is periodic cash payments by the company to its shareholders. The dividend payable to the preference shareholders is usually filed by the terms of the issue of preference shares. But the dividend on equity share is payable at the discretion of the board of director of

company. For payment of dividends a company must earn distributable profit from which the actual payment of dividend will be made. "A company in general meeting may declare dividends, but no dividend shall exceed the amount of recommended by the board. The shareholders have no right to declare more dividend than what has been recommended by the board of director" (*Gautam and Thapa; 2008:336*).

"Dividend refers to that portion of firm's net earning, which are paid to the shareholders" (*Bhattra; 2002:12*). In theory of finance, dividend decision plays a very crucial role. Dividend decision however is still a crucial as well as controversial area of managerial finance. It is more technical area of finance in the it is complex on having numerous implications for the firm.

In the other words dividend is a periodical payment made to shareholders to compensate them for the use of and risk to their investment. Higher the dividend means higher the immediate cash flows to investors, which is good but lower future growth for firms, which is bad. Thus how much of dividend is to be paid corporate dividend is at the directors of the board of directors. Before dividend is paid to common stockholders must be satisfied. Shareholders wealth includes not only market price of shares quoted in stock market but also current dividends. Thus dividend are more than just a means of distributing unused funds and dividend is the part of earning which distributed to the shareholders.

"Dividend refers to a part of net earning which is given to its shareholders either in cash or bonus share in return of their investment in share capital. Dividend refers to that portion of a firms net earning, which are paid out to the shareholders" (*Khan and Jain; 1992:118*). Dividend is generally paid in the form of cash. The payment of dividend reduces the cash balance of the company as well as the amount of retained earnings. There a reciprocal relationship between retained earnings and cash dividend. Dividend decision is one of the three major decisions of managerial finance. The policy of a company on the division of its profits between distribution to shareholders as dividend and retention for its investment is known as dividend policy. It may affect the financial structure of the firm flow of funds, corporate liquidity, stock prices, investor's satisfaction, growth of the firms etc. which helps in the maximization of the shareholders wealth.

"The objectives of a dividend policy should be to maximize the shareholders' return so that value of his investment is maximized" (*Pandey; 1995:28*). Return consists of two components: dividend and capital gains. Dividend policy has a direct influence on these components of return. The impact of dividend policy on future capital gain is however complex. Capital gains occur in distant future, and therefore, are uncertain. Normally, it is said that the low payout policy accelerates earnings growth; investors of growth companies will realize their return mostly in the form of capital gains. But, it is not certain that low payout policy will lead to higher prices in reality. It is quite difficult to clearly identify the effect of payout on share price. Share price is a reflection of so many factors that the long-run effect of payout is quite difficult to isolate.

"Since dividend would be more attractive to shareholders one might think that there would be a tendency for corporation to increase distribution of dividend. But one might equally pressure that gross dividend would be reduced somewhat with an increase in net after tax dividend still available to stock holders and increase in retained earnings for the corporation" (*Thorpe; 1997:237*). What and how much percentage of earnings is to pay dividend is always a matter of dispute. Retention of earnings is desirable for the growth of firm and dividends are desirable from the shareholders point of view, as it tends to increase their current wealth. These two objectives of dividend policy are always in conflict.

Thus, dividend decision is one of the central and major decision areas related to the policies seeking to maximize the value of firms common stock as well as the wealth of the shareholders.

### **2.1.3 Meaning and Significance of Dividend Policy**

Dividend policy is the policy of any firm regarding the division of its profit between shareholders as dividend and retention for the profit making investment. "Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings corporate growth, but dividends constitute the cash flows that accrue to stockholders" (*Western & Copeland; 1990:657*). Management may decide retaining earnings as opposed to paid out as dividends. The process of paying at "what's left" to shareholders is called dividend policy. Dividend

policy involves the decision the decision to pay out earning versus retaining them for investment in the firm. Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividends mean higher the immediate cash flows to investors, which are good but lower future growth, which is bad. The dividend policy should be optimal which balances the opposing forces and maximizes stock price.

The decision to keep some portion of earning of pay some portion of earning as dividend is dividend policy. Dividend policy involves the decision to payout earning versus, retaining them, for reinvestment in the firm. The policy of company on the decision about the allocation of its profit between distributions of its profit between distributions to shareholders as dividend policy. "The dividend policy includes all aspects related to the payment of dividend. There is inverse relationship between cash dividend and amount retained. In other words, if retained earning is kept more by the company less will be dividend and vice versa. The dividend policy adopted by the firm should be such that it strikes a proper balance the financing decision and investment decision. The dividend policy should be optimal which balances the opposing forces and maximizes stocks 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 affect directing the firm's cost of capital" (*Gautam and Thapa; 2008:339*).

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 of the firm they affects both long-term financing and the wealth of shareholders. Dividend policy which involves returning of earning is a long term financing decision related to management of capital structure of the firm. In view of this management should decide policy carefully. So that the net earning are dividend between dividend and retained earnings in an optimum way to achieve the objective of maximization the wealth of shareholders. Thus a firm's decision regarding the size of dividends it will pay to its shareholders is called dividend policy" (*Gautam and Thapa; 2008:340*).

#### 2.1.4 Dividend Policy and Market Price of Share (MPS)

MPS is that value which can be obtained by a firm from the market. Market value is one of the variables which are affected by the dividend per shareholders earning per share of the firm. If the earning per share and the dividend value is high the market per share will also be high market value of share may be high or low than book value. If the firm is growing concern and its earning power is greater than the cost of capital the market value of share the share will be higher than the book value. If the firm's earning capacity is lower than cost of capital MPS will also be lower MPS is determined by capital market. Market price of stock usually fluctuated by the adequate information. No one can earn more in the inefficiency and in efficiency is legally prohibited in order to regulate the security in every nation. But being focused is this study, dividend policy and its impact on market price of stock there should be discussion on different models and practices, which have significant effects in 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. Market price of the stock (MPS) is the trading price of the stock listed in authorized of legal stock exchanges. Dividend policy and MPS has always correlation, if the company pays dividend and the MPS increases and vice versa. But in some cases out of this interrelation, the price may remain constant or decrease too. Therefore the information lack or flow is also vital in the analysis of MPS. In the context of Nepal, MPS is the price is quoted for purchasing or selling under Nepal stock exchange Act or related laws and regulation on the stock exchange floor" (*Adhikari; 2008:16*).

Greater the perfection aviating in the stock market the highest will be relevancy of dividend policy over the market price. The cash dividend of the normal firm will have significant effect on the market price since the company is viewed as a firm of the future prospect and growth. The following framework will clear the relationship between the variable:

<b>Independent Variable</b>	<b>Dependent Variable</b>
Cash dividend Stock divided Earning per share Net worth	Market price of share

“Share variable is an economic process which generates rational securities prices. Although the price fluctuation may appear to be chaotic, they are random arrival the new information” (*Francis; 1990:207*).

### **2.1.5 Theories of Dividend**

There are two fundamental of theories of dividend;

#### **A. Residual Theory of Dividend**

“Residual theory of dividend suggest that the first priority should be given to the profitable investment opportunities, if there are any profitable opportunities the firm invites in those and the only the residual (remaining) amount of earnings ( if any) would be distributed to the shareholders. Under this theory the firm first determines the optimum level of investment opportunity schedule (IOS) and weighted average cost of capital (WAAC). Using the optimum capital structure proportion, the firm estimates the investment opportunities. Since the cost of internal equity (retained earning is less than the cost of new common stock to meet the equity financing requirement. If retained earning are not sufficient to meet the requirement, new common stock are to be sold. Any retained earnings left this would be distributed as dividend” (*Bhattarai; 2002:19-20*).

#### **B. Wealth Maximization Theory**

“Larger dividend is announced and distributed to shareholders under this theory in order to maximize their wealth this theory is generally adopted by the newly established and declining companies to up keep its image and retain the shareholders’ positive attitude towards the company stock” (*Bhattarai; 2002:20*).

### **2.1.6. Forms of Dividend**

“Though the most popular form of dividend is cash dividend, the firms need to follow various types of dividend in view of the firms’ objectives and policies, which they implement. In Nepalese context, the types of dividend that corporations follow is partly a matter of attitude of financial directors and partly a matter of various circumstances and other financial constraints that bound corporate plans and policies” (*Shrestha; 1980:12*). “Considering the changing needs of institution, dividend is being distributed in several forms i.e. cash dividend, stock dividend, script dividend,

property dividend, bond dividend etc. But, in Nepal, only cash and stock dividend are in practice. The usual practice is to pay dividend in cash” (*Pandey; 1988:27*).

### **A. Cash Dividend**

The portion of earnings paid as cash to the investors in proportion to their shares of the company is known as cash dividend. Public companies usually pay regular cash dividend. Sometimes firm will pay a regular cash dividend and extra cash dividend. Thus cash account and the reserves account of a company will be reduced when the cash dividend is paid. Thus, both the total assets and the net worth the company are reduced when the cash dividend is distributed. The market price of the share drops in most cases by the amount of the cash dividend distributed. The firm has to maintain adequate balance of cash for the payment of cash dividend otherwise funds to be borrowed for this purpose may be difficult.

### **B. Stock Dividend and Stock Splits**

Stock dividend is the payment of dividend in the form of additional share of stock instead of cash dividend. “The payment of stock dividend increases the number of outstanding share and reduces the reserve and surplus of the company. It is a recapitalization of the owner’s equity position with the stock split the number of share is increased through a proportional reduction in the par value of stock” (*Van Horne; 1988:154*). It is also a kind of stock dividend where company breaks shares through splitting the par value of the share. “Stock split take place in two ways, they are straight split and reverse split. Stock dividend does not affect to the proportional claim of the existing shareholders or total value and total shareholders' equity amount but market price of each share of stock should decline in proportion to the number of new shares issued” (*Bhattarai; 2006:22*). Stock splits are similar to stock dividend. As a result of stock split the common stock, paid in capital and retained earning accounts remained unchanged. Shareholders' equity remains unchanged; the change is seen only in the par value of stock. In recent years some of the commercial banks and companies have adopted the policy of paying cash along with stock dividend.



### **C. Reverse Split**

A method that is used to raise the market price of a firm's stock by exchanging certain number of outstanding shares for one new share of stock. The effect of a reverse split is a decrease in the number of shares outstanding and an increase in the par, or stated, value of shares. The total net worth of the firm remains unchanged. The reverse split does not involve any cash payment, only additional certificates representing new shares. Reverse split is used to stop the market price per share below a certain level.

### **D. Scrip Dividend**

The company may declare dividend in the form of scrips when earnings justify dividend but the company's cash position is temporarily weak and doesn't permit cash dividend. Scrip is a form of promissory note promising to pay the holder at specified later date. When the company has really earned profit and has only to wait for the conversion of other's current assets into cash in the course of operation, the company only justifies the scrip dividend.

### **E. Bond Dividend**

It is that kind of dividend at which bond of the same company is distributed to the shareholders. Generally, this type of dividend is declared to avoid the cash outflows. The shareholders easily accept the bond dividend because they get regular interest in fixed time period. If dividend is paid in the form of bond, promising that it will mature in the future date. Similar to the scrip dividend the intention and purpose of bond dividend is to postpone the dividend payment for some time but it has more obligations. Bond dividend carries relatively larger maturity period than that of scrip dividend.

### **F. Repurchase of Stock**

When a company wants to pay cash to its stockholders it usually declares a cash dividend. But an alternative method is for the firm to repurchase its own stock. In a stock repurchase, the company pays cash to repurchase shares from its shareholders. These shares are usually kept in the company's treasury and then resold if or when the company needs money. Stock repurchase is a method, in which a firm buys back shares of its own stock, thereby decreasing shares outstanding, increasing EPS, and often, increasing the price of the stock. Stock repurchases are an alternative to cash

dividends for transmitting cash to stockholders. Share price for repurchase or the equilibrium price is calculated from the following equation;

$$\text{Repurchase price (p}^*) = \frac{S \times P_c}{S - n}$$

Where,

S = Total number of shares outstanding

P<sub>c</sub> = 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 a regular dividend. Many times directors can declare the dividend the before the end of the financial year. This called interim dividend (*Gautam and Thapa; 2008:344*).

#### **2.1.7 Payment Procedure of Dividend**

Company makes dividend decision with considering number factors. Now, how does the company distribute such dividend? Dividend includes a systematic process and every company follows it. The process includes different dates and such are declaration date, holder (Shareholder) of record date, ex-dividend date and payment date.

##### **a) Declaration Date**

Managers manage the company. However, the crucial decision is made by the representative of the shareholder and those are called board of directors. Board of directors controls the firm. Board of directors meet and with the help of the management, declares dividend what the company is going to distribute. Thus this is the date on which the board of directors declares the dividend. At this time they set the amount payment of the dividend of paid.

##### **b) Holder of Record Date**

It is a date until which a person who has bought shares before ex-dividend date, must register his/her name in the company. Holder of record date is a final date to transfer

the title, meaning that the sellers' name should be replaced by the buyer's name in the company's register till this date.

**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**

It is the date on which company starts to pay dividend (*Gautam and Thapa; 2008:336*).

**2.1.8 Dividend Payout Schemes**

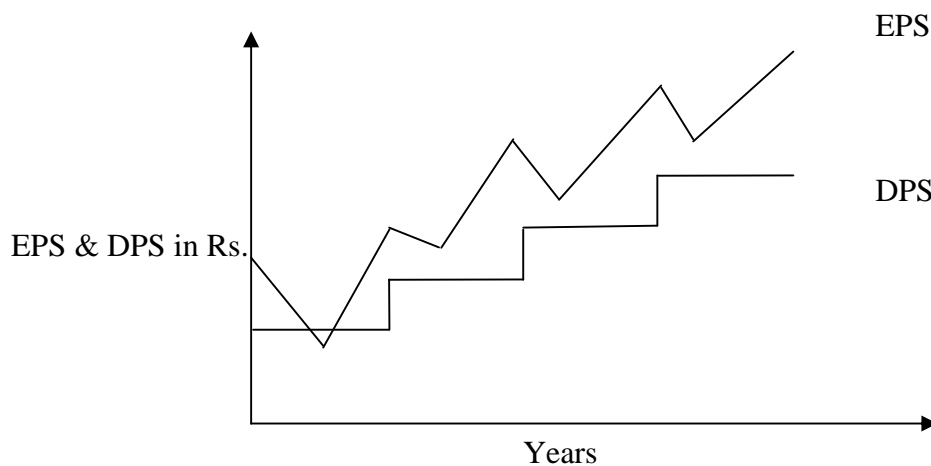
Stability of regular of dividends is considered as a describe policy by the management of companies. Most of the shareholders also prefer stable dividend because all other things being the same, stable dividends have a positive impact on the market price of the share. By stability preferable one that is upward sloping. Three of the commonly used dividend policies are;

**a) Constant Dividend per Share**

Constant dividend policy is based on the payment of a fixed rupee dividend in each period. A number of companies follow the policy of paying fixed amount per share as dividend every period, without considering the fluctuation in the earning of the company. This policy does not imply that the dividend per share or dividend rate will never be increased. When the company reaches new level of earning and expects to maintain it the annual dividend per share may be increased. Investors who have dividends as the only source of their income prefer the constant dividend policy.

**Figure: 2.1**

**Constant Dividend per Share**



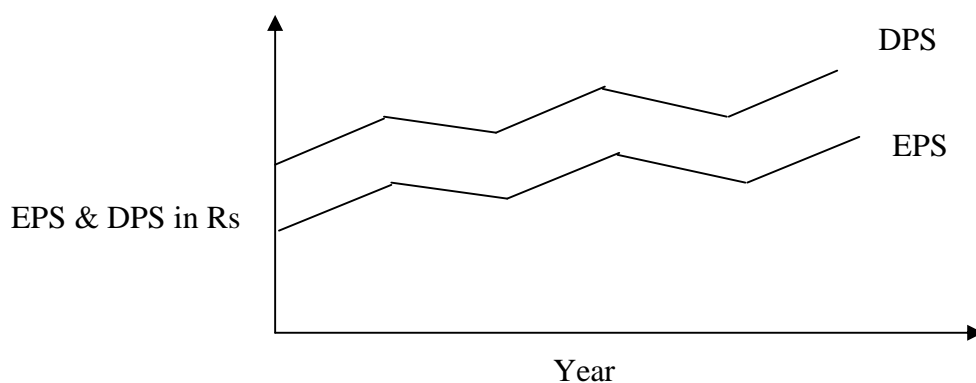
(Source: *Gautam and Thapa; 2008:337*)

Above figure shows that earnings may fluctuate from year to year but dividend per share remains relatively stable over the years and it increases along with the increase in earnings.

### b) Constant Payout Ratio

The ratio of the dividend to earnings is known as the dividend payout ratio. When a fixed percentage of earnings is paid as a dividend in every period, the policy is called a constant payout ratio. For example, if the dividend payout ratio is 50 percent, the firm always pays 50 percent of its annual earnings as a dividend. Since earnings fluctuate, following this policy necessarily means that the rupee amount of the dividend will fluctuate. It ensures that dividends are paid when profits are earned and avoided when the firm incurs losses.

**Figure: 2.2**  
**Constant Payout Ratio**



(Source: Gautam and Thapa; 2008:337)

### c. Low Regular Dividend Plus Extras

The policy of paying a low regular dividend plus extras is a compromise between a stable dividend (or stable growth rate) and a constant payout rate. Such a policy gives the firm flexibility, yet investors can count on receiving at least a minimum dividend. It is often followed by firms with relatively volatile earnings from year to year. The low regular dividend can usually be maintained even when excess funds are available (Gautam and Thapa; 2008:339).

#### 2.1.9 Factors Affecting Dividend Policy

Dividend policy is concerned with deciding the part of profit to be distributed to the shareholder. Many considerations may affect a firm's decision about its dividends, some of them are unique to that company and some of the more general considerations are given subsequently, they are as follows;

**a) Size of the Earnings**

A firm that has high level of earning will generally pays a larger portion of its earnings in dividends. If the size of earning is small a smaller amount of the profit may be distributed to shareholders. Thus, size of earnings affects the dividend policy of the firm.

**b) Investment Opportunity**

The available profitable investment opportunities of firm affect the dividend decision. If the company has lot of such opportunities, it needs excess fund to finance. So, the company retains more profit paying fewer amounts as dividend.

**c) Liquidity Position**

The cash or liquidity position of the firm influences its ability to pay dividend. A firm may have sufficient retained earnings, but if they are invested in fixed assets, cash may not be available to make dividend payment. Thus the company must have adequate cash available as well as retained earning to pay dividends.

**d) Legal Rules**

Certain legal rules may limit the amount of dividends a firm may pay. These legal constraints fall into two categories, first, statutory restrictions may prevent a company from paying dividend. While specific limitations vary by state, generally a corporation may not pay a dividend (i) If the firm's liabilities exceed its assets, this provision is known as 'the insolvency Rule' (ii) if the amount of the dividend exceeds the accumulated profit (retained earning). This legal provision is known as the Net Profit Rule" (iii) if the dividend is proposed from capital invested. In the firm this provision is also known as 'The capital impairment rule.' The second type of legal restrictions is unique to each firm and results from restriction debt and preferred stock contracts.

#### **e) Desire of Shareholders**

Shareholders may be interested either in dividend incomes or capital gains. A wealthy shareholder in a high income tax bracket may be interested in capital gains as against current dividends. A retired and old person, whose source of income is dividend, would like to get regular dividend.

In a closely held company, management usually knows the desires of shareholders. So they can easily adopt a dividend policy that satisfied all customers. But in widely held company, number of shareholders is very large and they have diverse desires, regarding dividends and capital gains some shareholders want cash dividends, while other prefer bonus share.

#### **f) Growth Prospects**

A rapidly growing firm usually has a substantial need of funds to finance the abundance of attractive investment opportunities. Instead of paying large dividends and then attempting to sell new shares to raise the equity investment capital it need. This type of firm usually retains larger portions of its earnings and avoids the expense and in convenience of public stock offerings.

#### **g) Need to Repay Debt**

The need to repay debt also influences the availability of cash flow to pay dividend. If the company has to repay the debt in the current year. It needs more fund and retains more profit paying fewer amounts as dividend.

#### **h) Restriction in Debt Contracts**

Restriction in debt contract may specify that dividends may be paid only out of earnings generated after. Signing the loan agreement and only when net working capital is above a specified amount. Also, preferred dividends take precedence to common stock dividends.

#### **i) Rate of Assets Expansion**

A high rate of asset expansion creates a need to retain funds rather than to pay dividends.

### **j) Stability of Earning**

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 available for investment projects when needed.

### **k)Control**

For many small firms and certain large ones, maintaining the controlling vote is very important. These owners would prefer the use of debt and retained profit to finance new investments than issue new stock. As a result dividend payout will be reduced.

### **l)Access to the Capital Markets**

A firm's access to capital markets will be influenced by the age and size of the firm, therefore a well-established firm is likely to have a higher payout ratio than a smaller, newer firm (*Bhattarai; 2008:337*).

## **2.1.10 Review of Major International Studies**

There have been so many studies made by the different persons and institutions for dividend policy and stock price. There are two opinions regarding dividend payout and market price of stocks. One point of view is that dividends are irrelevant and the amount of dividend payout does not affect the market value and the amount of stocks. Always a critical and confused question has arisen, whether dividend policy affects the market value of the shares or not. To put light on these matters different studies made by different international scholars and researchers are going to be discussed below.

### **Linter's Study (1956)**

During the period of 1956, Linter made an important study of the behavior aspect of dividend policy in the American context. He investigated a partial adjustment model as he tested the dividend pattern of 28 companies. He concludes that a major portion of the dividend of a firm could be expressed in the following way.

$$\begin{aligned} \text{Div}^*_t &= P^{EPS}_t && \text{-----(i)} \\ \text{And, } \text{Div}_t - \text{Div}_{t-1} &= a + b (\text{Div}^*_t - \text{Div}_{t-1}) + e_t && \text{-----(ii)} \\ \text{or, } \text{Div}_t &= a + b \text{Div}^*_t + (1-b) \text{Div}^*_{t-1} + e_t && \text{----- (iii)} \end{aligned}$$

Where,

$Div_t^*$  = firm's desired payment.

$Eps_t$  = earning (P) is targeted payout ratio, (a) is constant relating to dividend growth and (b) is the adjustment factor relating to the previous periods dividend and new desired level of dividend where  $b < 1$ .

The major findings of this study where as follows.

- ) Firm generally think in term of proportion of earning to be paid out.
- ) Investment requirements are not considered for modifying the pattern of dividend behavior.
- ) Firms generally have target payout ratio in view while determining change in dividend per share.

### **Modigliani and Millers Study (1961)**

Modigliani and Millers provides the most comprehensive argument for irrelevance of dividend in 1961. Dividend policy of firm is irrelevant as it does not affect the value of the firm or the value of equity according to M.M. They propounded the "Irrelevance Theory of Dividend" which theory argue that the value of firm depends on the earning power of the firm asset or investment policy. Thus when the investment decision of the firm is given, a firm's value is independent of dividend policy.

The M.M. approach of irrelevance dividend is based on the following critical assumptions.

- ) Perfect capital market in which all investors are rational.
- ) Taxes do not exist.
- ) The firm has no flotation costs.
- ) Risk of uncertainty does not exist.
- ) Information are available at free of cost.
- ) No transaction cost and infinitely divisible securities.



M.M. provides the proof in support to their argument in the following manner.

### Step-One

The market price of share of the firm in the beginning of the period is equal to the present value of dividend paid at the end of the period plus the market price of the share at the end of the period.

Symbolically,

$$P_0 = \frac{d_1 + P_1}{1 + k_e}$$

Where,

$P_0$  = Current market price of a beginning

$k_e$  = Cost of equity capital (assumed constant)

$d_1$  = The dividend per share to be received at the end of the period 1.

$P_1$  = The market price of the share at the end of the period 1.

### Step-Two

Multiply both sides of equation one by the number of shares outstanding to obtain the total value of the firm if no new financing exists.

$$NP_0 = \frac{n(d_1 + P_1)}{1 + k_e}$$

Where,

$n$  = Numbers of outstanding shares at zero period.

$NP_0$  = Total value of equity

### Step-Three

If the firms has internal source of financing, its investment opportunities fall short of funds required and  $\zeta n$  is the number of new share issued at the end of year 1 at price  $P_1$  then,

$$NP_0 = \frac{nd_1 + P_1(n - \zeta n) + \zeta nP_1}{1 + k_e}$$

Where,

$\zeta_n =$  No. of new share issued at the end of the period.

#### Step-Four

If the firms were to finance all investment proposals, the total amount of new shares issued will be,

$$\zeta_n P_1 = I - (E - nd_1)$$

Or,  $\zeta_n P_1 = I - E + nd_1$

Where,

I = Investment needs

E = Earning available

$\zeta_n P_1$  = Additional or new equity

$nd_1$  = Total dividend paid during the period

#### Step-Five

By substituting the value of  $\zeta_n P_1$  from the equation of step 4 to equation 3, we get,

$$n P_0 X \frac{nd_1 + P_1 (n - 1) Z I + E + nd_1}{1 + ke}$$

Or,  $n P_0 X \frac{nd_1 + n P_1 + P_1 Z I + E + nd_1}{1 + ke}$

Or,  $n P_0 X \frac{P_1 (n - 1) Z I + E}{1 + ke}$

#### Conclusions

##### Step-Six

From above, there is no role of dividend in equation, so Modigliani and Miller concluded that dividend policy has no effect on the share price or value of the firm. A firm that pays dividend will have to raise funds externally to finance its investment plans. M.M. holds that when the firm pays dividend, its advantage is offset by external finance. Thus dividend payment is irrelevant regarding the valuation of equity and firm. Hence, it seems that dividend policy may have no influence on the market price of share under several assumptions. Thus, the several assumptions may be the debated issue to apply this model in case of Nepal.

### **Gordon Study (1962)**

The popular model was developed by Myron J. Gordon (1962) which concluded that dividend policy of a firm affects its value even in a situation where the return on investment and required rate of return are equal. This study explains that investors are not indifferent between current dividend and retention of earnings with the prospects of future dividend and capital gain. The conclusion of this study is that investors give more emphasis to the present dividend more than future capital gain. According to this study, an increase in dividend pay out ratio leads to increase in the stock price for the reason that the investor considers the dividend yield is less risky than the expected capital gain.

The concerning assumptions adopted in this model are as follows:

- ) No external financing is available in the market.
- ) The firm is an all equity-financing firm i.e. neither debt and nor preferred stock is issued.
- ) The cost of capital (k) and internal rate of return (r) are constant.
- ) The corporate tax does not exist.
- ) Cost of equity (Ke) must be greater than growth rate (g).
- ) The retention ratio (br), once decided upon, is constant therefore the growth rate (g) = (br) is constant forever.
- ) The firm and its stream of earning are perpetual.

Based on the above assumptions, Gordon provided the following formula for finding out the market value per share.

$$P_o \times \frac{EPS(1 - Zb)}{K_e - Zbr} \times \frac{EPS(1 - Zb)}{K_e - Zg}$$

Where,

P <sub>o</sub>	=	Price of Share
EPS	=	Earning per Share
b	=	Retention Ratio
K <sub>e</sub>	=	capitalization rate
g	=	growth rate

$$(1-b) = \text{dividend pay out ratio}$$

Based on this study, we can get the following fact:

**In case of Growth Firm ( $r > k$ )**

Share price tends to enhance with increase in retention ratio (b) or decrease in payout ratio (1-b). So dividend and stocks prices are negatively correlated with growth.

**In case of Normal Firm ( $r = k$ )**

Share price firm remains constant regardless of changes in dividend policies. It means dividend and stock price are free from each other.

**In case of Declining Firms ( $r < k$ )**

Share price tends to enhance with increase in payout ratio (1-b) or decrease in retention ratio (b). So dividend and stock prices are positively correlated with each other in declining firm.

**Friend and Puckett's Study (1964)**

Friend and Puckett (1964) have conducted a study about the relationship between dividend and stock price through the regression analysis on the data of 110 firms from five industries in the year 1956 to 1958. These five industries were chemicals, electric utilities, electronics, food and steel. These industries were selected to permit a distinction made between the result for growth and non growth industries and to prove a basic for comparison with result by other author for earlier years. They also considered cyclical and non-cyclical industries which they covered. The study period covered a boom year for the economy when stock prices leveled off after substantial rise (1956) and some what depressed year for the economy when stock prices, however, rose strongly (1958).

They used dividend, retained earnings and price earning ratio as independent variable in their regression model of price function. They used supply function i.e. dividend function also. In their dividend function, earnings, last year's dividend price earning ratio are independent variables.

Symbolically, their price function and dividend supply function can be written as

Price function:

$$P_t = a + bD_t + cR_t + d (E/P)_{t-1}$$

Where,

$P_t$  = Per share price at time t.

$D_t$  = Dividend at time t.

$R_t$  = Retained earning at time t.

$(E/p)_{t-1}$  = Lagged earnings price ratio.

### **Dividend Supply Function**

$$D_t = e + fE_t + gD_{t-1} + h (E/P)_{t-1}$$

Where,

$E_t$  = Earning per share at time t

$D_{t-1}$  = Last year dividend

The study was based on the following assumptions

- ) Dividend does not react to year to year fluctuation in earnings.
- ) Price does not contain speculative in earnings.
- ) Earnings fluctuations may not sum zero over the sample

These regression result based on the equation of  $P_t = a + b D_t + c R_t$  showed the customary strong dividend and relatively weak retained earning affect in three of the five industries i.e. chemicals, foods and steel. Again they tested other regression equations by adding lagged earning price ratio to the above equation and result the following equation.  $P_t = a + b D_t + c R_t + d (E/P)_{t-1}$  they found the following result: they found that more than 80% of the variation and stock prices can be explained by three independent variables. Dividend have a predominant influence on the stock prices in the same three out of five industries but they found the differences between dividend and retained earning coefficient are not quite so marked as in the first set of regressions. They also found that the dividend and retained earning coefficient are closer to each other for all industries in both years except for steels in 1956 and correlation are higher again except for steel.

They also calculated dividend supply equations i.e.  $D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$  and the dividend price equation for four industries groups in 1958. In their derived

price equation it seems that there was no significant changes from those obtained from the single equation approach as explained above. They argued that the stock prices or more accurately the price earning ratio does not have a significant effect.

On the other hand, they noted that the retained earning effect is increased relatively in three of the four cases tested. Further, they argued that their result suggests price effect on the dividend supply are not a serious source of bias is the customary derivation of the dividend and retained earnings effects on the marked if the disturbing effect of short run income movements are sufficiently great.

Further, they lagged price as a variable instead of lagged earning price ratio and showed that more than 90% of variation in stock prices can be explained by the three independent variables and retained earnings received greater relative weight than dividend in most of the cases. The only exception was steels and foods in 1958. They considered chemicals, electronics and utilities as growth industries, in these groups and the retained earnings effect was larger than the dividend effect for both years covered. For the other two industries, namely foods and steels, there were no significant systematic differences between coefficients.

Similarly, they tested the regression equation  $P_t = a + bD_t + cR_t$  by using normalized retained earnings by subtracting dividend from normalized earnings. The normalized procedure was based on the period 1950 – 1962. Again they added prior years normalized earning price variable and they compared the result.

Comparing the result they found that there was significant role of normalized earnings and retained earnings but effects of normalized price earning ratio was constant. When they examined the later equation, they found that the difference between dividend and retained earnings coefficients disappeared.

Finally they concluded that management might be able to increase prices somewhat by raising dividend in food and steel industries. They conducted more detailed examination of the chemical samples that examination disclosed that the result obtained largely reflected the undue regression weighting given the three firms with

price deviating most from the average price in the sample of 20 firms and retained earning as price determinant.

Friend and Puckett concluded that, it is possible that management might be able, at least in some measure, to increase stock prices in the non growth industries by raising dividend and in growth industries by greater retention, in low dividend.

### **Van Horne and Mc Donald's Study (1971)**

Van Horne and Mc Donald Conducted a comparative study on dividend policy and new equity financing. The purpose of this study was to investigate the combined effect of dividend policy and new equity financing decision the market value of the firm's common stocks.

Empirical tests were preferred with tear end cross. Section for two industries, using a well known valuation model. For there investigation, they employed two samples of firms Viz. the 86 electric utilizes in the continental U.S., which were included on the COMUSTAT utility data, tape; and 39 companies if the electronics and electronic component industries as listed on the COMUSTAT industrial data tape in 1968.

#### **The first model was**

$$Po/Eo = a_0 + a_1 (g) + a_2 (Do/Eo) + a_3 (Lev) + U$$

Where,

Po/Eo = Closing market price in 1968 dividend by the compound annual rate of growth in assets per share for 1960 through 1968.

Do/Eo = Dividend payout, measured by the cash dividend in 1968 dividend by earning in 1968.

Lev = Financial risk, measured by interest charge dividend by the different of operating revenues and operating expenses.

U = error term

#### **The second model was**

$$Po/Eo = a_0 + a_1 (g) + a_2 (Do/Eo) + a_3 (Lev) + a_4 (fa) + a_5 (fb) + a_6 (fc) + a_7 (fd) + U$$

Where,

Fa, fb, fc and fd are dummy variables corresponding to new issue ratio (NIR) group A through D.

It is noted that had grouped the firms in five categories; A, B, C, D and E by NIR. For each firm the value of dummy variables representation its NIR group is one and the values of remaining dummy variables are zero.

Again they tested the following regression equation for electronics- electronic components industry.

$$P_0/E_0 = a_0 + a_1 (g) + a_2 (Do/E_0) + a_3 (lev) + a_4 (OR) + U$$

Where,

Lev = financial risk, measured by long term debt plus preferred stock dividend by net worth as of 1968. Or operating risk, measured by the standard error for the regression of operating earning per share on time for 1960 through 1968, and rest are as in first model above.

By using these models they compared the result obtained for the firms which both pay dividend and engage in new equity financing with other firms in an industries sample. they concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends, except for those firms in the highest new issue group and it made new equity amore costly form of financing than remain of earnings. They also indicated that the payment of dividend through excessive equity financing reduces share prices. For forms in the electronics electronic component industry, a significant relationship between new equity financing and value was not demonstrated (Adhikari;2008:46).

### **Walter's Study (1996)**

The argument advanced by Professor Walter is of considerable interest in the literature of finance. He holds that the choices of dividend policies almost always affect the value of the enterprise. The main point which he emphasized is that there is significant relationship between the internal rates of return on investment project and market rate demand by the investors. As the market rate, the stock price will be



enhance by retention of earning and will vary with dividend payout. This approach is based on that dividend policy can be used to maximize the wealth position of shareholder.

**Basic Assumption**

- ) The firm finance all investment through retained earning that is debt or new equity is not issued.
- ) The firm’s internal rate of return, (r) and its cost of capital, (k) are constant.
- ) All earning are in either distributed as dividend or reinvested internally.
- ) There is no change in values of earning per share and dividend per share.
- ) The firm has a very long infinite life.

Based on above assumption, Walter has suggested the following formula.

$$P \times \frac{DPS}{K} + \frac{r(EPS - Z DPS)}{K}$$

or  $P \times \frac{DPS + r/k(EPS - Z DPS)}{K}$

Where,

- P = Market price per share
- r = Internal rate of return
- k = Cost of capital
- DPS = Dividend per share
- EPS = Earning per share.

Walter has suggested different dividend policy for different firm based on their growth stage. They are:

**Growth Firm (r>k)**

Firms having r>k are referred as growth firm. Growth firms are assumed to have simple profitable opportunities. These firms re invest earning because they have higher rate of return than the rate of return expected by the shareholders. It is more beneficial to retain all earning for investment to maximize the value of growth firm.

**Normal Firm (r=k)**

If internal rate of return is equal to cost of capital, the dividend payout does not affect the value of share i.e. dividend policy is irrelevant whether the earnings are retained or distributed as dividend, the market value per share is not affected. Thus, there are no unique optimum payout ratio for a normal firm.

### **Declining Firm ( $r < k$ )**

There is a positive relation between dividend and stock price if the internal rate of return is less than cost of capital. By distributing the entire earning as dividend, the value of share will be at optimum value. Thus, the optimum payout ratio for declining firm has to be loose.

## **2.2 Review of Journal & Articles**

**Shrestha**, (1992), presented a paper on “ *Shareholder’s Democracy and Annual General Meeting Feedback*” on fifth annual general meeting of Nepal Arab Bank limited, Which has been presented here.

In this view the common problems and constraints of the shareholders are as follows;

- ) The cost-push inflation at exorbitant rate has made the shareholders to expect higher return form their investment.
- ) Multiple decrease in the purchasing power of the Nepalese currency to the extent that higher return by way of dividend is just a natural economic consequence of it.
- ) Erosion in the purchasing power of the income has made it clear that dividend payment. Must be directed to enhance shareholder’s purchasing power by raising dividend payout ratio on the basis of both earnings and cost theory.
- ) Indo-Nepal trade and transit deadlock has become a sort of economic welfare putting rise in the cost of living index to a considerable extent. This is the reason, which made shareholders to expect higher demand for satisfactory dividend.
- ) The waiting of 5 years with payment of dividend in previous years in equally a strong enforceable reason at the bank’s share holders’ to expect handsome dividend already assumed and committed In various reports of the earlier annual general meeting.

- )] One way to encourage risk taking ability and preference is to have proper risk return trade off by bank's management board is a way that higher return must be the investment rue for higher risk taker's that comprise bank's shareholders.

**Pradhan** (1993), conducted a land mark study in the field of "*Dividend policy in Nepal*". He studies stock market behavior of 17 firms converting, the period 1986 to 1990 with the following objectives:

- )] To access the stock market behavior in Nepal.
- )] To examine the relationship of market equity market value, price earning and dividend with liquidity profitability, leverage assets turnover and interest turnover.

Finding of his study are as follows:

- )] Higher earning in the stock leads to the larger the ratio of dividend per share.
- )] Stock with larger ratio of dividend per share to market price have lower leverage ratio.
- )] Stock with larger ratio of dividend per share and market price has higher liquidity.
- )] Positive relationship between the ratio of dividend per share to market price and interest courage ratio.
- )] Dividend per share and market price per share are positively correlated.
- )] Positive relationship of dividend payout with liquidity profitability assets turnover and interest coverage ratio.

**Manandhar** (2000), conducted a study o n "*Bonus Share and Dividend Charge Empirical, Analysis in Nepalese Context.*" To test the lagged structure of dividend payout and other financial features were tested. He carried out his study based on the data taken from 17 Nepalese corporate firms and covered the period of 1987 to 1998.

The conclusions of this study are as follows;

- )] There is significant relationship between changed in dividend policy in terms of dividend per share and change in lagged earning.
- )] There is relationship between distributed lagged profit and dividends.

- )] In overall there is a positive relationship between in lagged consecutive earning and dividend share.
- )] When change in lagged consecutive earning is greater than zero in 65% cases change in dividend per share.

### **2.3 Review of Thesis**

Prior to this thesis several thesis works has been conducted by some students relevant for this study are presented below:

**Bhattra**i, (2002), conducted a research on “*Dividend Policy and Its Impact on Market Price of Stork*” with data taken from two commercial banks and two insurance companies in 2002. He analyzed the data multiple regression equations.

#### **Main Objective are:**

- )] To study the prevailing practices and efforts made in the dividend policy in the Nepalese firms with the help of sample firms.
- )] To find out the impact of dividend policy on market price of stock.
- )] To analyze if there is any uniformity among DPS, MPS and DPR in the sample firms.

#### **Major Findings are:**

- )] There is not any consistency in dividend policy in the sample firms. It has indicated the need of dividend strategy as well as the need of proper analysis of the respective sector of the firms.
- )] The MPS is affected by the financial position and the dividend paid by the firms in this regard, the MPS of the sample firms is seemed to be fluctuated. It denotes that Nepalese investors are not treated fairly.
- )] Most of the Nepalese firms from the very past did not have profit planning and investment strategy, which has imbalanced the whole position of the firms, if means there is no consistency even in the earnings.
- )] The lack of financial knowledge and the market inefficiency has affected the market price of the share in all the firms.

**Dhungel** (2004), conducted a thesis on “*Dividend Policy of the Commercial Banks in*

Nepal” on September 2004.

**Main Objective are:**

- ) To study whether the commercial banks are following the suitable dividend policy or not.
- ) To study whether the dividend policy affects the value of the firm or not.
- ) To compare the dividend policy followed by different commercial banks chosen.
- ) To study the relationship of dividend policy with various financial indicators like EPS, DPS, MPS, DPR, Net worth, Net profit and book value of share.

**Major findings are:**

- ) None of the sample banks are following suitable dividend policy except SCBNL.
- ) The regression analysis of DPS on MPS shows that increase in MPS leads to decrease in DPS in all the sample banks except SCBNL.
- ) There is positive relationship between EPS and MPS in all the banks except in case of SBI. Change in dividend per share affects the value of share differently in different banks.

**Kharel**, (2005), conducted a studies on “*Dividend Policy of Commercial Banks with respect to Nepal Arab Bank Ltd., Himalayan Bank Ltd and Bank of Kathmandu. Ltd.*” Based on the data collected for the years from 2000/01 to 2004/05.

**Main Objective are:**

- ) To analyze the prevailing dividend practices of sample banks.
- ) To analyze and evaluate the application of dividend decision in the selected banks.
- ) To analyze the relationship of dividend with earning per share, net worth, net profit, market price and book value per share.

**Major findings are:**

- ) DPS of the commercial banks in average shows that there is no regularity in dividend payment.

- )] Banks should pay proper attention to enhance their percent of cash dividend on paid up value.
- )] From the regression analysis it can be conclude that a chance in DPS affects
- )] The share price differently in different banks.
- )] Payment ratio affects stock price differently in different banks.

**Bhurtel** (2006), conducted a study on “*Dividend Policy and its Impact on Stock price*”. The basic objective of the study was to identify the relationship between dividend and market price per share the major objective and major findings of this study can be stated as follows;

**Main Objective are:**

- )] To analyze the properties of portfolio on dividend
- )] To examine the relationship between dividend and stock price
- )] To survey the opinion of financial executive’s on corporate dividend practices

**Major findings are:**

- )] From the descriptive analysis the researcher found there is not any consistency in dividend policy in the sample banks, which has maintained stable dividend per share policy. It has indicated the need of dividend policy as well as the need of proper analysis of the banks.
- )] The MPS is affected by the financial position and the dividend paid by the firms, in this regards the mps of the sample firms are seen to be fluctuated. It denotes Nepalese investors are not treated fairly.
- )] Most of the Nepalese firm from the very past have not profit planning and investing strategy, which have imbalanced the whole position of the firms. It means there is not consistency even in the earning.

**Shrestha**, (2006), conducted a study on “*Effect of Dividend policy on Market Price of the stock of Nepalese commercial banks*” on July 2006 taking data through 2057-2061.

**Main Objectives are:**

- )] To find out the impact of dividend policy on market price of stock.

- J To analyze the variables such as profit, retained earning, growth rate and other relevant variables to show relationship between the value and other ingredients affecting it.
- J To analyze if there is any uniformity among DPS, EPS, MPS and DPR in the sample firms and the relation between them.

**Major findings are:**

- J Market price per share of every financial institution has fluctuating nature as indicated by standard deviation.
- J There is positive relationship between MPS and DPS and MPS and EPS incase of NABIL, SCBNL, HBL, NBBL, NBL and BOKL.
- J Most of the financial institutions stock prices are highly depend in fluctuations of EPS.
- J The customary strong EPS and relatively week lagged DPS effect in DPS in all firms.
- J There is greater influence of DPS rather than EPS to MPS in all the sample firms observed.

**Regmi** (2006), conducted a study on “*Impact of Dividend on Market Price of Share With Reference to Five Commercial Banks Listed in NEPSE*”.

**Main Objective are:**

- J To examine the relationship between dividends and stock prices.
- J To determine the impact of dividend policy on stock prices.
- J To analyze the financial variable affecting the stock value and impact the dividend paying implication under dividend valuation model.

**Major findings are:**

- J The MPS is affected by the financial position and the dividend paid by the firms, in this regard the MPS of the sample firms are seen to be fluctuated. It denotes Nepalese investors are not treated fairly.
- J There was correlation between EPS and DPS.
- J In aggregate, dividend paid by the company is not stable.

**Adhikari** (2008), conducted a study on “*Impact of Dividend on Market Price of Share*”.

**Main Objective are:**

- ) To examine the practices and effort made in dividend policy in the Nepalese firms with the help of sample firms.
- ) To analyzed if there is any uniformity among DPS, EPS, MPS, net worth and DPS in the sample firms.
- ) To examine the impact of dividend on market price of stock.

**Major findings are:**

- ) Dividend per share affected the share price validity in different sectors.
- ) The relationship between dividend per share and stock price was positive in the sample companies.
- ) Changing the dividend policy of dividend per share right help to increase the market price of shares.

**Bhattra** (2009), conducted a study on “*Dividend Practices of Commercial Banks and its Impact on Stock Prices*”.

**Main Objective are:**

- ) To analyze the impact of dividend on stock price.
- ) To identify the determination of the dividend per share (DPS) and market price of stock (MPS).
- ) To analyze the relationship of DPS with EPS and MPS.
- ) To compare dividend practices of selected commercial banks.

**Major findings are:**

- ) There is high degree positive relationship between DPS and EPS in most of the banks as they are statically significant.
- ) Relationship between DPS and MPS is found to be high degree positive in most of banks as they are statically significant also.



- J All the selected banks paid dividend in each year which shows that dividend paying practice is established in Nepalese commercial banks.
- J The dividend per share of Nepalese commercial bank is depending on current earnings. The banking is following earning based dividend policy.

**Bista**, (2009), conducted a study on “*Impact of Dividend on Market Price of Share of Selected Commercial Banks*”.

**Main Objective are:**

- J Highest the aspect of dividend policy of selected commercial banks.
- J To examine at the relationship of dividend with various factors like, DPS, MPS, Net worth, Net earning.
- J To identify the uniformity among DPS, EPS and DPR of the selected commercial banks.

**Major findings are:**

- J The market price per share is affected by the dividend related financial variable i.e. DPS and DPR either positively or negatively changes are DPS affected the market price per share differently in different bank.
- J Beside dividend, others factors also affected the market price per share i.e. earning per share price earning ratio, net worth per share etc. Their effect is also different banks.
- J In case of same banks, there exists negative relationship besides the MPS. Largely depends upon the dividend which been shown by the coefficient of multiple determination.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research Methodology indicates the methods and processes employed in the entire aspect of the study. In other words, research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives. Research methodology is a way for systematically solving the research problem. So, it is the methods, steps, and guidelines which are to be followed in analysis and it is a way of presenting the collected data with meaningful analysis. In other words, it is a systematic way to find research problems.

This chapter has been divided into four sections. Section one represents the research design, while section two describes the nature and source of data, section three represents the population and sample and section four explains the method of analysis.

#### **3.2 Research Design**

The research design of this study basically follows the impact of dividend on stock price. In other words, this research is designed so as to find out the impact on the market price of common stock of a company when dividend is paid to the shareholders and also how the market price of stock responds when dividend is not paid to the shareholders. In other words, the study is closely related to the impact of dividend on market price of common stock and wealth position of shareholders. Therefore, the descriptive as well as the analytical approach are adopted here to make the analysis more effective, financial tools, statistical tools and testing models are also used.

#### **3.3 Population and Sample**

There are thirty commercial banks in the country on 1<sup>st</sup> January, 2011 (including government owned, private and joint venture) due to time and resource factors it is not possible to study all of them regarding the study topic. Therefore, sampling will be done selecting from population.

Out of 30 commercial banks that are operating their activities in Nepal, we have selected 7 commercial banks for this study. So, we are going to analysis 7 commercial banks about their operating activities as a sample.

**Table 3.1**  
**Sample Banks**

S.No.	Selected Banks	Abbreviation Used
1	Himalayan Bank Limited	HBL
2	Nabil Bank Limited	NABIL
3	Standard Chartered Nepal Bank Limited	SCBNL
4	Nepal SBI Bank Limited	SBI
5	Everest Bank Limited	EBL
6	Bank Of Kathmandu Limited	BOK
7	Nepal Industrial and Commercial Bank	NIC

**Table 3.2**  
**Sampling Description**

Population(N)	Sample(n)	Sample Ratio(n/N)
Listed Commercial bank(N) = 30	Selected Commercial Banks for Study(n) = 7	7/30 = 23.33%

### 3.4 Nature and Source of Data

This study is based on the secondary data. The data relating to the dividend decision, which are directly obtained from commercial bank. Annual reports, balance sheet, profit and loss account of commercial banks are main source of data. Beside the data are also collected from various journals, articles, newspapers and magazines published by commercial firms. Main sources of secondary data are:

- ) Annual report published by commercial bank
- ) Data are collected for the year 2003/2004 to 2008/2009 in case of NABIL, HBL, SCBNL, SBI, EBL, BOK and NIC and as six years data are analyzed.
- ) Nepal Stock Exchange, website ([www.nepalstock.com](http://www.nepalstock.com)) and perspective firm's central office and security exchange board.

### **3.5 Methods of Analysis**

Various Financial and Statistical tools have been used to analyze the data of this study.

#### **a. Financial Tools**

Financial tools are those which help to study the financial position of the firms. The financial tools used in this study are as follows.

#### **b. Earning Per Share(EPS)**

The profitability of common stockholder's investment can be measured in many other ways. The income of per share is calculated by dividing the earning available to common shareholders by the total number of common stock outstanding, thus,

$$\text{EPS} = \frac{\text{Earning available to common shareholders}}{\text{Number of common stock outstanding}}$$

The higher earning indicates the better achievements in terms of profitability of the bank by mobilizing their funds and vice versa. In other words, the Earning per share indicates the strength and weakness of the bank.

#### **c. Dividend Per Share (DPS)**

The whole amount of earning may or may not be distributed to shareholders by a company. How much per share the dividend is distributed to common shareholder's can be known from this ratio. The dividend distributed among the common shareholders on a per share basis can be determined by this rated Formula for calculating this ratio is as under.

$$\text{DPS} = \frac{\text{Total dividend amount}}{\text{No of outstanding shares}}$$

Generally, the higher DPS creates positive attitude of the shareholders toward the bank's common stock, 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.

**d. Dividend Pay Out Ratio( DPR)**

The purpose of calculating this ratio is to know the portion of dividend distributed out of total earning. This ratio shows the relation between the returns belonging to equity shareholders and the dividend paid to them. It can be calculated as under:

$$\text{Dividend Payout Ratio (DPR)} = \frac{\text{Dividend per share}}{\text{Earning per share}}$$

The higher the dividend payout ratio, the lower will be the proportion of retained earning and vice versa.

**e. Market Price Per Share (MPS)**

Market price per share is that value of stock, which can be obtained by a firm from the market. Market value of share is one of the variables which are affected by the dividend per share and earning per share of the firm. If the EPS and DPS are high, value of the share will also be high. If the firm is growing concern and its earning power is greater than the cost of capital, the market value of share will be higher than the book value. If firms earning capacity is lower than the cost of capital, the market price of share will also be lower. The capital market determines MPS. Theoretically calculated current price of the share can be derived by using the following formula:

$$(\text{MPS} = P_0) P_0 \times \frac{D_1}{(K_s - g)}$$

$$P_0 \times \frac{D_0 (1 + g)}{(K_s - g)}$$

Where,

$P_0$  = Current market price per share

$D_0$  = Current dividend per share

$D_1$  = Expected dividend per share at the end of year 1

$g$  = Dividend growth rate

$K_s$  = Investor's required rate of return

#### **f. Dividend Yield (DY) Ratio**

It defined the relationship between dividend per share and market value per share. It is very useful for the investors. So, dividend yield is the dividend received by the investors as a percentage of market prices per share in stock market. Thus,

$$\text{Dividend Yield Ratio} = \frac{\text{Dividend per share}}{\text{Market price per share}}$$

#### **g. Price Earning Ratio( P/E)**

This ratio is closely related to the earning yield. The reciprocal of the earning yield is called the price earning ratio. It is very useful to prospective investors. The higher P/E ratio implies the high market price of a stock given the earning per share and greater confidence of investor in the firms future.

Thus,

$$\text{P/E Ratio} = \frac{\text{Market price per share}}{\text{Earning per share}}$$

#### **h. 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.

#### **i. Arithmetic Mean or Average**

Arithmetic Mean is the average return over periods. Arithmetic mean of a given set of observation is their sum divided by the numbers of observations. In general, X1, X2 .....Xn are given 'n' observation and observation. It is calculated by,

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

#### **j. Standard Deviation**

Standard deviation is quantitative measure of total risk. It provides more information about the risk of the assets. The standard deviation of a distribution is the square root of the variance of returns around the mean. It measures the absolute dispersion; the

following formula is applied to calculate the standard deviation, using historical returns.

$$\text{Standard Deviation} = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

### k. Coefficient of Variation

The coefficient of variation is the relative measure of dispersion, comparable across distribution which is defined as the ratio of standard deviation to the mean expressed in percent. The risk per unit of expected return can be measured by coefficient of variation. It should be used to compare investments when both the standard deviation and the expected values differ. C.V. is computed as follows:

$$\text{C.V.} = \frac{\text{Standard Deviation}}{\bar{X}} \times 100$$

The higher C.V. denotes the higher variability of variable and vice versa.

### L. Correlation Coefficient (r)

Correlation Coefficient measures the relationship between two variables. It is the statistical tool, which can be used to describe the degree to which one variable is linearly related to another and measures the directions of relationship between two set and figures. Correlation coefficient can be either positive or negative which range from +1 to -1 more precisely, if both variables are changing in the same direction, the correlation is said to be positive, on other hand, if both variables are changing oppositely to each other, then correlation is known as negative. Correlation can be seen between or among several variables. The correlation coefficient can be calculated as:

$$\frac{\text{Covariance (X, Y)}}{S.D_x \times S.D_y}$$

$$\text{Correlation Coefficient (r)} = \frac{\text{Covariance (X, Y)}}{S.D_x \times S.D_y}$$

Where,

$$\text{Covariance (x, y)} = \frac{\sum (x - \bar{x})(y - \bar{y})}{n}$$

r = Karl Pearson's Correlation coefficient

Under this study, correlation between the following variables is 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 dividend yield
- e) Market price per share and price earning ratio

#### **m. Coefficient of determination (r<sup>2</sup>)**

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<sup>2</sup> and the values lies between zero and unity or the r<sup>2</sup> is always a positive number. The r<sup>2</sup> is defined as the ratio of explained variance to the total variance.

Thus,

$$\text{Coefficient of determination} = \frac{\text{Explained variance}}{\text{Total variance}}$$

#### **n. Regression Analysis**

Regression analysis studies the statistical relationship between the variables. The main objective of regression analysis is to predict or estimate the value of dependent variable corresponding to a given value of independent variables. There are two types of regression analysis.

#### **o. Simple Regression Analysis**

Simple regression analysis, concerned with the study of the relationship between one variable called dependent variable and another variable called independent variable. Regression analysis has been developed to study and measure the statistical



relationship between two variables only, and then the process is known as simple regression analysis. In simple linear regression, a mathematical regression equation is developed to describe the functional relationship that exists between the two variables. In this study the following simple regression have been analyzed.

**p. Market price per share on Dividend per share(DPS)**

$$y = a + bx$$

Where,

y = Market price per share (MPS)

a = Regression constant

b = Regression coefficient

x = Dividend per share (DPS)

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

**q. Market price per share on Earning per share**

$$y = a + bx$$

Where,

y = Market price per share (MPS)

a = Regression constant

b = Regression coefficient

x = Earning per share (EPS)

This model has been constructed to examine the relationship between MPS (dependent variable) and EPS (independent variable).

**r. Market price per share (MPS) on Dividend payout ratio (DPR)**

$$y = a + bx$$

Where,

y = Market price per share (MPS)

a = Regression constant

b = Regression coefficient

x = Dividend payout ratio (DPR)

**s. Market price per share (MPS) on Dividend Yield**

$$y = a + bx$$

Where,

y = Market price per share (MPS)

a = Regression constant

b = Regression coefficient

x = Dividend yield

The relationship between MPS (dependent variable) and Dividend yield( independent variable) can be explained through this model

**t. Dividend per share on Earning per share**

$$y = a + bx$$

Where,

y = Dividend price per share (DPS)

a = Regression constant

b = Regression coefficient

x = Earning per share

The relationship between DPS (dependent variable) and EPS (independent variable) can be explained through this model.

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

$$\sum Y = na + b\sum x$$

$$\sum XY = a \sum x + b \sum x^2$$

Where,

'a' and 'b' are unknown

n = number of observation in the sample.

## II) Multiple Regression analysis

In multiple regression analysis, two or more independent variables are used to estimate the values of dependent variable. It is extension of simple regression technique, thus multiple regression analysis consists of the measurement of the relationship between the dependent variable and two or more independent variables. The main objectives of multiple regression analysis are;

- ) To derive an equation which provide estimates or the dependent variable from values of the two or more independent variable.
- ) To obtain a measure of the proportion of variance in the dependent variable which is explained by the independent variable
- ) To obtain a measure of error involved in using the regression equation as a basis for estimation using this regression equation as a basis for estimation of the dependent variable.

In this study, the following multiple regression analysis have been analyzed.

a) Market price per share on earning price per share and Dividend per share

$$y = a + b_1x_1 + b_2x_2$$

Where,

y = Market price per share

a = Regression constant

$b_1$  &  $b_2$  = Regression coefficient of 1<sup>st</sup> and 2<sup>nd</sup> variable

$X_1$  &  $X_2$  = EPS and DPS respectively

This model helps to predict the MPS on EPS and DPS

b) Market price per share on Earning per share and Dividend payout ratio

$$y = a + b_1x_1 + b_2x_2$$

Where,

y = Market price per share

a = Regression constant

$b_1$  &  $b_2$  = Regression coefficient of 1<sup>st</sup> and 2<sup>nd</sup> variable

$x_1$  &  $x_2$  = EPS and DPR respectively

It helps to predict the MPS on EPS and DPR

**Regression Constant:** The value of constant which is intercept of the model indicates the average level of dependent variable when independent variables are zero. In other words, it is better to understand that 'a'(constant) indicates the mean or average effect on dependent variable if all the variables committed from the model.

**Regression Coefficient:** The regression coefficient of each independent variable indicates the marginal relationship between that variable and value of dependent variable, holding constant the effect of all other independent variable in the regression model. In other words, the coefficient describes how changes in independent variables affect the values of dependent variable's estimate.

**Standard Error of Estimate (SEE):** With the help of regression equation perfect prediction is practically impossible, standard error of estimate is a measure of reliability of the estimating equation indicating the variability of the observed points around the regression line, that is the extent to which observed values differ from their predicted values on the regression line. The smaller the value of SEE, the closer will be the dots to the regression line and the better the estimates based on the equation for this line. If SEE is zero, then there is no variation about the line and the correlation will be perfect. Thus, with the help of SEE, it is possible for us to ascertain how well the representative the regression line is as a description of the average relationship between two series.

**Hypothesis Test:** Hypothesis means the presumption or quantitative statement of the population parameter which may be true or false. In order to make proper decision about the quantitative statement of the population, hypothesis is an assumption about unknown result while testing of hypothesis, an assumption is made about the population parameter to test whether the assumption is right or not, a sample is selected from the population, sample statistic is obtained, observe the difference between the sample mean and the population hypothesized value and test whether the test is significant or insignificant.

### **F- Test**

T test generally known as variance ratio test and is mostly used in context of analysis of variance. F- Statistics is used to test the significance of mean value of EPS, DPS,

MPS, DY, DPR and P/E ratio. F test is considered to be more appropriate, for test of hypothesis of equality among several sample mean test initially used to verify the hypothesis of equality between two variance. In fact F test is a test of significance concerning two sample variance. The fundamental assumptions of F- test are;

1. The population is normal
2. The observation is independent and sample are drawn randomly
3. There is no measurement error

The objective of F- test is to test hypothesis where the two samples are from same normal population with same variance.

### **3.6 Regression Analysis Development**

#### **a. Simple Regression Analysis**

Three simple regression analyses would be done which are as follows:

$$Y = a + bx$$

$$\text{Or MPS} = a + b (\text{DPS})$$

Where,

MPS = market price per share

DPS = Dividend per share

A & b is regression coefficient.

$$Y = a + bx$$

$$\text{Or MPS} = a + b (\text{EPS})$$

Where,

EPS = earning per share

$$Y = a + bx$$

$$\text{Or DPS} = a + b (\text{EPS})$$

#### **b. Multiple Regression Analysis**

Two multiple regression analysis would be done which are as follows;

$$Y = a + b_1 x_1 + b_2 x_2$$

$$\text{MPSt} = a + b_1 (\text{DPSt}) + b_2 (\text{EPSt})$$

Where,

MPSt = Market price per share for t year

DPSt = Dividend per share for t year

EPSt = Earning per share for t year

a, b1, & b2 are regression coefficient.

$$Y = a + b_1 x_1 + b_2 x_2$$

$$\text{Or } \text{DPS}_t = a + b_1 (\text{EPS}_t) + b_2 (\text{DPS}_{t-1})$$

Where,

DPSt = Dividend per share for t year

EPSt = Earning per share for t year

DPSt<sub>-1</sub> = Dividend per share for t-1 year

a, b1, & b2 are regression coefficient.

### **3.7 Hypothesis Development**

#### **First set of Hypothesis**

Null Hypothesis (H<sub>01</sub>): There is no significance difference among mean value of DPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis (H<sub>11</sub>): There is significance difference between among mean value of DPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

#### **Second Set of Hypothesis**

Null Hypothesis (H<sub>02</sub>): There is no significance difference among mean value of EPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis (H<sub>12</sub>): There is significance difference between among mean value of EPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

#### **Third Set of Hypothesis**

Null Hypothesis (H<sub>03</sub>): There is no significance difference among mean value of MPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis ( $H_{13}$ ): There is significance difference between among mean value of MPS of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

#### **Fourth Set of Hypothesis**

Null Hypothesis ( $H_{04}$ ): There is no significance difference among mean value of DPR of NABIL SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis ( $H_{14}$ ): There is significance different among mean value of DPR of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

#### **Fifth set of Hypothesis**

Null Hypothesis ( $H_{05}$ ): There is no significance difference among mean value of Dividend yields of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis ( $H_{15}$ ): There is significance difference among mean value of Dividend yield of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

#### **Six set of Hypothesis**

Null Hypothesis ( $H_{06}$ ): There is no significance difference among mean value of P/E ratio of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC.

Alternative Hypothesis ( $H_{16}$ ): There is no significance difference among mean value of P/E ratio of NABIL, SCBNL, SBI, EBL, BOK, HBL, and NIC.

## CHAPTER - IV

### PRESENTATION AND ANALYSIS OF DATA

In this chapter, to achieve the objective, which is set in introduction chapter, the relevant data and information on dividend policy and its impact on market price of stock of commercial banks are presented. Presentation and analysis of data is the study. Using the various financial variable and statistical tools discussed in “Research Methodology”. This Chapter has divided into four sections.

#### 4.1 Presentation of Financial Variables

Before observing the impact of different financial indicators and variables on dividend as well as value of firm, we need to present and analyze them systematically. For this purpose DPS, EPS, DPR, MPS, DY, P/E ratio have been selected as an effecting variables. However these variables show the dividend status of the banks as well as their strength. Consequently, helps to identify the banks' position regarding dividend payout. These variables have been presented by the help of table, figure and analyzed by using statistical tools as specified in chapter three.

##### 4.1.1 Analysis of EPS of the Sample Banks

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

**Table 4.1**  
**EPS of Sample Banks**

<b>Banks Years</b>	<b>NABIL</b>	<b>SCBL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>	<b>Average</b>
2003/04	92.61	143.55	14.26	27.50	45.58	49.05	13.65	55.17
2004/05	105.79	143.14	13.29	30.10	54.22	47.91	22.75	59.56
2005/06	129.21	175.84	18.27	43.67	62.78	59.24	16.10	72.16
2006/07	137.08	167.37	39.35	43.50	78.42	60.66	24.01	78.63
2007/08	108.31	131.92	28.33	59.94	91.82	62.74	25.75	72.62
2008/09	106.76	109.99	36.18	54.68	99.99	61.90	27.83	71.03
Mean	113.29	145.30	24.95	43.23	72.13	56.92	21.68	
S.D.	14.84	21.81	10.33	11.76	19.65	14.87	5.11	
C.V. (%)	13.10	15.01	41.40	27.20	27.24	26.12	23.57	

*Source: Appendix I and II*



Table 4.1 shows the EPS of the selected banks from the year 2003/04 to 2008/09. In the table mean, standard deviation and coefficient of variation respective have been presented. The EPS of NABIL range between 92.61 to Rs.137.08 during the period of study. During this period, the average EPS is Rs.113.29, the S.D. of the EPS is 14.84 and the C.V. of sample bank is 13.10% SCBNL with in the period of study, has an average EPS of Rs.145.30 ranging between Rs.109.99 to Rs.175.84. The S.D. is 21.81 and the fluctuation of 15.01% in shown by the C.V. of the bank. During the period of study SBI has an average EPS of Rs.24.95 with the S.D. 10.33. The EPS range between Rs.13.29 to Rs.39.35. The C.V. shows there is period of study which is 41.40%. The average EPS of BOK, during the period of study is Rs.43.23. It stayed with in the range of Rs.27.50 to Rs.59.94. The S.D. of EPS is Rs.11.76 where as C.V. is 27.20%. EBL has the EPS range between Rs.45.58 to Rs.99.99. The average EPS is Rs.72.13. The S.D. of EPS is Rs.19.65 where as C.V. of EPS is 27.24% During the period of study, NIC has an average EPS is Rs.21.68 and S.D. of EPS is Rs.5.11. The EPS range between Rs.13.65 to Rs.27.83. The C.V. shows period of study is 27.83& lastly the EPS of HBL range between 47.91 to 62.74 during the period of study. During this period, the average EPS is Rs 14.87 and the C.V. of sample bank is 26.12%.

From the above analysis, it can be seen that the average EPS of SCBNL is the highest and average EPS of NIC is the lowest under the period of study. The C.V. of SBI is higher among the sample bank and NABIL has lowest among the sample banks. It indicates that SBI has the most consistent EPS among all sample bank during the period of study. The C.V. of SBI is higher among the sample bank and NABIL has lowest among the sample banks. It indicates that SBI has the most consistent EPS among all sample bank during the period of study.

#### 4.1.2 Analysis of DPS of Sample Banks

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

**Table 4.2**  
**DPS of Sample Banks**

<b>Banks</b> <b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>	<b>Average</b>
2003/04	65	110	0	10	20	0	0	29.29
2004/05	70	120	0	15	0	11.58	10	32.37
2005/06	85	130	5	18	25	30	0.53	41.93
2006/07	100	80	12.59	20	10	15	1.05	34.09
2007/08	60	80	0	2.11	20	25	1.05	26.88
2008/09	35	50	2.11	7.37	30	12	0.79	19.61
Mean	69.17	95	3.28	12.08	17.5	15.60	2.24	
S.D.	20.29	27.54	4.53	6.22	9.90	9.73	3.49	
C.V. (%)	29.33	28.99	138.11	51.49	56.54	62.37	155.80	

*Source: Appendix I and II*

Table 4.2 shows the DPS of the selected banks from the year 2003/04 to 2008/09. In the table mean, standard deviation and coefficient of variation respectively have been presented.

While observing the mean DPS, SCBNL in first position with Rs.95. Similarly NABIL, EBL, HBL, BOK, SBI and NIC are in 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> position of mean DPS with Rs.69.17, Rs.17.5, Rs. 15.60 Rs.12.08, Rs.3.28, Rs.2.24 respectively. This result indicates that SCBNL is better than that of other banks with respect to dividend per share.

Using the C.V. criterion, we can say that consistency in DPS for SCBL is highest than other banks. C.V. of SCBL is lowest than other banks i.e., 28.99. It indicates the bank is following. Stable dividend policy in comparison to other banks policy. In another words, as it is less volatile than others are, there is more stability in dividend payment in SCBNL. Where as the DPS of NABIL, SBI, BOK, EBL, and NIC is high fluctuation. Similarly C.V. for NABIL, SBI, BOK, EBL, HBL and NIC are 29.33%, 138.11%, 51.44%, 56.51%, 62.37% and 155.80% respectively. From above analysis

we can see also that SBI, EBL and NIC have not paid cash dividend regularly during the period of study

#### 4.1.3 Analysis of Dividend Payout Ratio (DPR) of Sample Banks

The DPR of the sample banks under the study are tabulated as follows.

**Table 4.3**  
**DPR of Sample Banks**

<b>Banks</b> <b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>	<b>Average</b>
2003/04	70.19	76.63	0	36.36	43.88	0	0	32.44
2004/05	66.16	83.83	0	49.83	0	24.17	43.96	38.31
2005/06	65.78	73.93	27.36	41.22	39.82	50.64	3.29	43.15
2006/07	72.95	47.80	31.99	45.98	12.75	24.73	4.37	34.37
2007/08	55.40	60.64	0	3.59	21.78	39.85	3.78	26.43
2008/09	32.78	45.46	5.83	13.48	30	19.39	2.84	21.40
Mean	60.54	64.72	10.86	31.74	24.71	26.46	9.71	
S.D.	13.56	14.52	13.53	17.16	15.20	15.93	15.38	
C.V. (%)	22.40	22.44	124.58	54.06	61.51	60.24	158.39	

*Source: Appendix I and II*

An average DPR of NABIL is 60.58%. It shows that NABIL generally pay 60.58% of its total earning as dividend to its shareholders. The S.D. of DPR is 13.57. The C.V. is 22.40%. This indicates that there is an only about 22.40% fluctuation in the DPR of the bank over the study period. SCBNL has an average DPR is 64.72% it means SCBNL is generally paying 64.72% it means SCBNL is generally paying 64.72% of its earning as dividend to its shareholders. The S.D. of DPR is 14.52% and the C.V. is 22.44%. An average DPR of SBI indicates that SBI generally payout 10.86% of its total earning as dividend to its shareholders. The S.D. of DPR is 13.53% and C.V. is 124.58%. The C.V. indicates that the DPR of SBI highly inconsistency during the period of study. BOK has an average DPR is 31.74%. It means that BOK generally paying 31.74% of its earning as dividend to its shareholders. The S.D. of DPR is 17.16% and C.V. is 54.06% which is indicates that there is 54.06% fluctuation in the

DPR during the period of study. EBL has an average DPR is 24.71% during the study period. The Bank generally payout 24.71% of its total earning as dividend. The S.D. is 15.20% and the C.V 61.51% fluctuation during the period of study. NIC has an average DPR is 9.71%. The S.D. Fluctuation in the DPR of NIC highly inconsistency during the period of study. In average 26.46% dividend is paid by HBL. The fluctuation in divined payments is 60.24% which is indicated by cv in the table. The standard deviation is 15.93% during the period of study.

The above calculation shows that an average DPR of SCBNL is higher among the all bank and its C.V. has also lowest among all banks under study. It shows SCBNL has the consistent dividend payment.

#### 4.1.4 Analysis of MPS of Sample Banks

The MPS of the sample banks under the study are tabulated as follows:

**Table 4.4**  
**MPS of Sample Banks**

<b>Banks Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>	<b>Average</b>
2003/04	1000	1745	307	295	680	840	218	726.43
2004/05	1505	2345	335	430	870	920	366	967.29
2005/06	2240	3775	612	850	1379	1100	496	1493.14
2006/07	5050	5900	1176	1375	2430	1740	950	2660.14
2007/08	5275	6830	1511	2350	3132	1980	1284	3194.57
2008/09	4899	6010	1900	1825	2455	1760	1126	2853.57
Mean	3328.17	4434.17	973.5	1187.5	1824.33	1556.67	906.67	
S.D.	1786.58	1933.85	601.51	739.06	903.06	681.71	400.19	
C.V. (%)	53.68	43.61	61.79	62.24	49.50	43.79	54.08	

*Source: Appendix I and II*

Table 4.4 shows the MPS of selected banks during the study period. Like previous table, MPS of the selected banks has been presented in the top part and mean, standard deviation and coefficient of variation (C.V.) of MPS have been demonstrated in the bottom part.

As per the table, highest mean MPS is Rs.4434.17 of SCBNL and the lowest one is Rs.906.67 of NIC. Mean MPS of NABIL, SBI, BOK, HBL and EBL are Rs.3328.17, Rs.937.5, Rs.1187.5, Rs 1556.67 and Rs.1824.33 respectively. By this result we can say that SCBNL is best than others i.e. Rs.4434.17. As we observe in figure 4.4 MPS of all banks generally in increasing trend. When the capital rate increases, there is also increase in MPS. Here the analysis of MPS trend shows that capital increasing rate of all banks is not similar to each other.

When we take the CV criterion, consistency in MPS is highest in SCBL over the study period that is why is has lowest C.V. (i.e., 43.61%). Similarly C.V. for NABIL, SBI, BOK, EBL, NIC, HBL are 53.68%, 62.35%, 49.50%, 62.24%, 54.08% , 43.79% respectively.

#### 4.1.5 Analysis of Dividend yield (D/Y) of the Sample Banks

The Dividend Yield (D/Y) of the Sample banks under study is tabulated as follows:

**Table 4.5**  
**D/Y of Sample Banks**

<b>Banks</b> <b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>
2003/04	6.5	6.30	0	3.39	2.94	0	0
2004/05	4.65	5.12	0	3.49	0	1.26	2.73
2005/06	3.79	3.44	0.82	2.12	1.81	2.73	0.11
2006/07	1.98	1.36	1.07	1.45	0.41	0.86	0.11
2007/08	1.14	1.17	0	0.09	0.64	1.26	0.08
2008/09	0.71	0.83	0.11	0.40	1.22	0.43	0.07
Mean	3.13	3.04	0.33	1.82	1.17	1.09	0.52
S.D.	2.05	2.09	0.44	1.32	0.98	0.86	0.99
C.V. (%)	65.50	68.75	133.33	72.53	83.76	78.90	190.38

*Source: Appendix I and II*

The D/Y of NABIL range between 0.71% to 6.5% during the period of study. The average of D/Y is 3.13% The S.D. of the D.Y. under the period of study 2.05. The C.V. of bank is 65.50, which indicators that the fluctuation of D/Y of NABIL is

65.50%. SCBNL within the period of study has an average D/Y 3.04% ranging between 0.83% to 6.3%. The S.D. is 2.09 where as C.V. 68.75. The C.V. indicates there is fluctuation of 68.75% in the Dividend Yield.

Nepal SBI bank has an average D/Y of 0.33% within S.D. of 0.44. The D/Y range between 0 to 1.07%. The C.V. shows that there is a fluctuation of 133.33% in SBI has not paid dividend in FY 2003/04, 2004/05 and 2007/08.

EBL within in the period of study has an average DY of 1.17% ranging between 0% to 2.94%, EBL has not paid dividend in FY 2004/05. The S.D. is 0.98% where as C.V. is 83.76%. The C.F. indicates there is a fluctuation of 83.76%. During the period of study BOK has an average DY is 1.82% with a S.D. of 1.33. The D.Y. range between 0.09 to 3.49%. The C.V. shows that there is a fluctuation of 72.53% in D/Y of BOK. The D/Y. of NIC range between 0% to 2.73% during the period of study. The average D/Y. is 0.52% with a S.D. of 0.99. The C.V. shows that there is a fluctuation of 190.38% in the D/Y which is higher fluctuation. HBL has an average D/Y of 1.09% with in S.D. of 0.86. The D/Y range 0 to 2.73% the cv shows that there is a function of 78.90%, HBL has not paid dividend in 2003/04.

#### **4.1.6 Analysis of P/E Ratio of Sample Banks**

Price earning ratio reflects the price which is currently paid by the market for each rupees of price which is currently reported earning per share. The price earning ratio could be calculated by dividing the market price per share by earning per share.

**Table 4.6**  
**P/E Ratio of Sample Banks**

<b>Banks</b> <b>Year</b>	<b>NABIL</b>	<b>SCBNL</b>	<b>SBI</b>	<b>BOK</b>	<b>EBL</b>	<b>HBL</b>	<b>NIC</b>
2003/04	10.80	12.16	21.54	14.93	7.20	18.30	15.97
2004/05	14.27	16.38	25.21	16.04	14.29	19.20	16.09
2005/06	13.34	21.47	33.49	21.97	19.46	18.57	30.81
2006/07	36.84	35.25	29.89	31.99	31.61	18.69	39.56
2007/08	48.70	51.77	53.34	34.11	39.21	31.56	49.86
2008/09	45.89	54.64	52.52	24.55	33.37	28.43	40.46
Mean	28.97	31.95	36.00	23.93	24.19	22.46	32.13
S.D.	15.38	16.65	12.53	7.26	11.36	5.41	12.64
C.V. (%)	53.09	52.11	34.81	30.34	46.96	24.09	39.34

*Source: Appendix I and II*

P/E ratio of selected banks has been presented table 4.6 It is clear from the table that mean P/E ratio of SBI (i.e., 36.00) is the highest position throughout the study period where as HBL is lowest position with 22.46. Similarly NIC, SCBNL, NABIL, EBL and BOK are in 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> position with 32.13, 31.95, 28.97, 24.19 and 23.93 times respectively. P/E ratio of all banks is in increasing trend. It means that the stocks to their earnings and dividend payout.

From the above data and calculation it can be soon that the C.V. of NABIL is the highest and C.V. of BOK is lowest.

## **4.2 Statistical Tools**

### **4.2.1 Correlation Analysis**

The correlation analysis is generally used to describe the degree to which one variable is related to another. Hence, in statistics, it is used in order to depict the co-variation between two or more variable. 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 decrease in the value of the other. The correlation coefficient lies between +1 and -1. The +1 coefficient indicates that 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 variable.

Correlation matrix for selected banks among seven variables has been presented bellows:

#### 4.2.1.1 Correlation between Financial Variable of NABIL

**Table 4.7**  
**Correlation between Financial variable of NABIL**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
<b>EPS</b>	1	0.732	0.412	0.279	-0.267	0.148
<b>DPS</b>	0.732	1	-0.126	0.863	0.253	-0.117
<b>MPS</b>	0.412	-0.126	1	-0.488	-0.955	0.964

*Sources: Appendix III*

The table 4.2.1.1 indicates that the MPS of NABIL has negative correlation with its DPS, DPR AND D/Y it means so difference in increasing ratio of each year MPS. It indicates negative relation but banks paying dividend regularly with the payment of dividend the MPS has increasing in the same way MPS of NABIL is positively correlation with EPS and P/E. Similarly EPS has negative correlation with D/Y and P/E. Similarly EPS has negative correlation with D/Y and DPS has negative correlation with P/E ratio.

#### 4.2.1.2 Correlation between Financial Variable of SCBNL

**Table 4.8**  
**Correlation Matrix of SCBNL**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
<b>MPS</b>	-0.262	-0.766	1	-0.847	-0.982	0.952
<b>EPS</b>	1	0.679	0.262	0.305	0.249	-0.572
<b>DPS</b>	0.679	1	-0.766	0.898	0.775	-0.880

*Sources: Appendix III*



The above table indicates that MPS of SCBL have negative correlation with its EPS, DPS, DPR, and D.Y. it means little difference increasing in MPS in each year. So Bank regular paying dividend but not sound ratio. The MPS has positive correlated with its PLE ratio. On the other hand EPS of SCBL has negative correlation with its PLE ratio and positive correlation with its DPS, DPR and D.Y. Above table also indicate that DPS has negative correlation with its PLE ratio and positive correlation with its DPR and D.Y.

#### 4.2.1.3 Correlation between financial Variable of SBI

**Table 4.9**

**Correlation between financial Variable of SBI**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
MPS	0.862	0.165	1	0.041	0.084	0.903
EPS	1	0.611	0.862	0.410	0.409	0.584
DPS	0.611	1	0.165	0.919	0.977	-0.160

*Sources: Appendix III*

The above table shows that MPS of the SBI has positive correlation with its EPS, DPS, DPR, D.Y. and PLE ratio. The EPS has also positive correlation with its DPS, DPR, D.Y. and PLE ratio. The DPS has negative correlation with its PLE ratio on the other hand DP has positive correlation with its DPR and D.Y.

#### 4.2.1.4 Correlation between Financial Variable of EBL

**Table 4.10**

**Correlation between Financial Variable of EBL**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
MPS	0.928	0.319	1	-0.157	-0.436	0.903
EPS	1	0.452	0.928	-0.108	-0.397	0.779
DPS	0.452	1	0.319	0.827	0.596	0.171

*Sources: Appendix III*

From the above table it is found that the MPS of EBL has negative correlation with its DPR and D.Y. Similarly, the EPS is positive correlated with DPS and PLE ratio. But

negative correlation with PR and D.Y. Likewise the DPS has positive correlation with DPR, D.Y> and PLE ratio.

#### 4.2.1.5 Correlation between Financial Variable of BOK

**Table 4.11**

**Correlation between Financial variable of BOK**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
<b>MPS</b>	0.971	-0.574	1	0.835	-0.976	0.972
<b>EPS</b>	1	-0.504	-0.971	-0.810	-0.978	0.949
<b>DPS</b>	-0.504	1	-0.574	0.903	0.492	0.106

*Sources: Appendix III*

The above table indicates that the MPS of BOK has negative correlation with its DPS & D.Y. and MPS of BOK has positive correlation with its EPS, DPR and PLE ratio. Similarly EPS of BOK has negative correlation with its DPS, DPR and D.Y. whereas EPS has positive correlation with its PLE ratio. The DPS has positive correlation with DPR and DY and negative correlation with its P/E/ ratio.

#### 4.2.1.6 Correlation between Financial Variable of NIC

**Table 4.12**

**Correlation between Financial variable of NIC**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
<b>MPS</b>	0.834	-0.331	1	-0.358	-0.401	0.961
<b>EPS</b>	1	0.181	0.834	0.152	0.109	0.673
<b>DPS</b>	0.181	1	-0.331	0.999	0.997	-0.484

*Sources: Appendix III*

The above table indicates that MPS of NIC has negative correlation with its DPS, DPR, and D/Y. But positive correlation with EPS and P/E ratio. Similarly EPS of NIC has positive correlation with its DPS DPR D/Y and P/E ratio. The DPS of NIC has positive correlation with its DPR and D/Y where as negative correlation with its P/E ratio.

#### 4.2.1.7 Correlation between Financial Variable of HBL

**Table 4.13**

##### **Correlation between Financial Variable of HBL**

	<b>EPS</b>	<b>DPS</b>	<b>MPS</b>	<b>DPR</b>	<b>D/Y</b>	<b>P/E</b>
<b>MPS</b>	0.869	0.111	1	0.10	-0.23	0.78
<b>EPS</b>	1	0.64	0.869	0.554	0.245	0.612
<b>DPS</b>	0.64	1	0.111	0.992	0.905	0.28

*Sources: Appendix III*

The above table indicates that MPS of HBL has negative correlation with its D/Y. but positive correlation with DPS, DPR and P/E ratio. Similarly EPS of HBL has positive correlation with its DPS DPR D/Y and P/E ratio. Also the DPS of HBL has positive correlation with its DPR, D/Y and P/E ratio.

#### 4.2.2 Regression Analysis

The regression analysis is used to determine the statistical relationship between two or more variables and to make predication of one variable on the basis of the others. The regression analysis can either be simple regression or multiple regressions. When we take only one independent to predict the value of the dependent variable through the appropriate regressions time then the analysis is known as simple regression analysis. But the analysis performed by the use of two more independent variable is known as multiple regression analysis.

##### 4.2.2.1 Regression Analysis Between MPS on EPS

**Table 4.14**

##### **Regression analysis Between MPS on EPS**

Bank	a	b	r <sup>2</sup>	S.E.E	S.b
NABIL	3542.20	-1.89	0.170	1957.39	53.37
SCBNL	3682.96	5.17	0.069	2384.59	44.64
SBI	-279.07	50.21	0.743	373.51	14.77
EBL	-1250.78	42.63	0.861	413.14	8.58
BOK	-1447.47	60.95	0.943	219.34	7.61
HBL	-5310.09	117.69	0.755	-344.81	-23.19
NIC	-676.68	65.34	0.696	270.41	21.61

*Sources: Appendix IV*

The table 4.2.2.1 of regression analysis shows that regression constant (a), regression coefficient (b), coefficient of determination ( $r^2$ ) between MPS on EPS of SCBNL, NABIL, SBI, EBL, BOK, HBL and NIC. The regression constants are 3542.20, 3682.96 -279.09, -1250.78, -1447.47, -5310.09, -676.68 of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC respectively. The regression coefficients are -1.89, 5.17, 50.21, 42.63, 60.95, 117.69 and 65.34 of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC respectively.

As the result shows the slope of coefficient is -1.89 which indicates that negative correlation exists between MPS and EPS of the NABIL i.e. 1 rupee increase in EPS leads to an average of about Rs 1.89 decrease in MPS or stock price in case of NABIL. Above table shows the relationship between EPS and MPS of the SCBNL i.e. 1 rupee increase in EPS leads to an average about Rs 5.17 increase in MPS like so on other banks SBI, EBL, BOK, HBL and NIC all banks indicates positive correlation exists between MPS and EPS of the banks i.e. 1 rupee increase in EPS lead to an average of about Rs 50.21, Rs 42.63, Rs 60.95, Rs 117.69 and Rs 65.34 respectively increase in MPS.

The standard error of estimate (SEE) of NABIL, SCBNL, SBI, EBL, BOK, HBL and NIC are 1957.39, 2384.59, 373.51, 413.14, 219.34, -344.81 and 270.41 respectively. The S.b. of NABIL SCBNL, SBI, EBL, BOK, HBL and NIC are 53.37, 44.64, 14.77, 8.58, 7.61, -23.19 & 21.61 respectively. These values indicate the probable error in the predicates value for the respective banks.

The coefficient of determination ( $r^2$ ) is lowest for SCBL (0.069) which indicates that only 6.9% in MPS is explained by EPS i.e. 6.9% variation in MPS of the banks is explained due to the change in value of EPS of the bank. The value of  $r^2$  of NABIL, SBI, EBL, BOK, HBL and NIC are 0.170, 0.743, 0.861, 0.943, 0.755 and 0.696 respectively which indicate that 17%, 74.3%, 86.1%, 94.3%, 75.5% and 69.6% variation in the MPS of these banks are explained by to the change in EPS of the respective banks.

#### 4.2.2.2 Regression analysis Between MPS on DPS

Table 4.15

##### Regression analysis Between MPS on DPS

Bank	a	b	r <sup>2</sup>	S.E.E	S.b
NABIL	4097.30	-11.12	0.016	2170.56	43.67
SCBNL	9538.52	-53.73	0.587	1522.08	22.56
SBI	901.66	21.88	0.027	726.62	65.44
EBL	1314.73	29.12	0.102	1116.53	46.06
BOK	1991.79	-66.58	0.329	1409.59	93.16
HBL	1372.78	11.79	0.012	823.01	34.52
NIC	824.86	-37.94	0.109	462.53	54.10

Sources: Appendix IV

The above regression analysis of MPS on DPS shows that among the banks under study, SBI, HBL & EBL have positive regression relation between MPS and DPS of the banks where as NABIL SCBNL, BOK and NIC have negative relation between MPS and DPS. The regression relation between MPS and DPS of SBI, HBL and EBL indicate that with an increase of Rs 1 in DPS the MPS will increased by Rs 21.88, Rs 11.79 and Rs 29.12 respectively, other variable remaining constant. In contrast there will be decreases MPS of NABIL, SCBNL, BOK and NIC by Rs 11.12, 53.73, 66.58 and 37.94 respectively with an increase on DPS by Rs 1 assuming that the other variables are constant.

The standard error of estimate of NABIL, SCBNL, SBI, HBL, EBL, BOK and NIC are Rs 2170.56, 1522.08, 726.62, 823.01, 116.53, 1409.59 and 462.53 respectively. The standard error of b (s.b.) of NABIL, SCBNL, SBI, HBL, EBL, BOK and NIC are 43.67, 22.56, 65.44, 34.52, 46.06, 93.16 and 54.10 respectively. These values indicates the probable error in the predicated values for the respective banks there S.E. of b is lowest in SCBL (22.56) which shows the estimation of DPS can be predicted nearer to accuracy.

The coefficient of determination (r<sup>2</sup>) is lowest for HBL (0.012) which indicates that only 1.2% variances in the MPS is explained by DPS i.e. 1.2% variation in MPS of the bank is explained due to the change in value of DPS of the bank the coefficient of

determination in highest in case of SCBL (0.587). This indicates that 58.7% in variation in MPS of SCBNL is explained due to changed in the DPS of the bank. The value of  $r^2$  of NABIL, SBI, EBL, BOK and NIC are 0.016, 0.027, 0.102, 0.329, and 0.109 respectively, which indicate that 1.6%, 2.7%, 10.2%, 32.9% and 10.9% variation in the MPS of these banks are explained due to change in DPS of the respective banks.

#### 4.2.2.3 Regression analysis between MPS on DPR

**Table 4.16**

**Regression analysis between MPS on DPR**

<b>Bank</b>	<b>a</b>	<b>b</b>	<b>r<sup>2</sup></b>	<b>S.E.E</b>	<b>S.b</b>
NABIL	7219.61	-64.24	0.238	1909.72	57.44
SCBNL	11743.08	-112.94	0.717	1250.78	35.10
SBI	953.84	1.81	0.0017	736.08	22.21
EBL	2052.86	-9.25	0.025	1092.53	29.51
BOK	2314.07	-35.49	0.697	512.66	12.18
HBL	1158.98	8.73	0.01	524.14	13.73
NIC	830.08	-9.28	0.128	457.89	12.15

*Sources: Appendix IV*

The regression analysis between MPS and DPR shows positive relation between MPS and DPR of SBI and HBL. The regression relation between MPS and DPR of SBI and HBL indicates that with an increase of 1% in DPR, the MPS will increase by Rs 1.81 & 8.73 respectively. assuring that the other variables constant in the other hand the regression analysis between MPS and DPR of NABIL, SCBNL, EBL, BOK and NIC which indicates that with an increase in 1% in DPR the MPS of NABIL, SCBNL, EBL, BOK and NIC will decrease by Rs 64.24, 112.94, 9.25, 35.49 and 9.28 respectively, assuming that other variables are constant.

The standard error of estimate of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC are 1909.72, 1250.78, 524.14, 1092.53, 512.66 and 457.89 respectively. The standard error of b (s.b.) of NABIL, SCBNL, HBL SBI, EBL, BOK and NIC are 57.44, 35.10, 13.73, 22.21, 29.51, 12.18 and 12.15 respectively which indicate the possible error in

the predicated value for the respectively banks. Here S.E. of b is lowest in NIC (12.15), which shows the estimation of DPR can be predicated nearer to accuracy.

The coefficient of determination ( $r^2$ ) is lowest for SBI (0.0017) which indicates that only 0.17% in MPS is explained by DPR i.e. 0.17% variation in MPS of the bank is explained due to the change in the value of DPR of the bank. The coefficient determination is highest in case of EBL which indicates that 71.7% variation in MPS of BOK is due to the change of DPR of the bank. The value of  $r^2$  of NABIL, HBL, EBL, BOK and NIC are 0.238, 0.01, 0.025, 0.697, and 0.128 respectively which indicates that 23.8%, 10%, 2.5%, 69.7% and 12.8% variation in the MPS of these banks are explained due to the change in DPR of the respective banks.

#### 4.2.2.4 Regression Analysis between MPS on D/Y

**Table 4.17**

<b>Bank</b>	<b>a</b>	<b>b</b>	<b><math>r^2</math></b>	<b>S.E.E</b>	<b>S.b</b>
NABIL	5874.41	-813.93	0.071	718.60	143.01
SCBNL	7181.11	-904.59	0.964	466.96	91.02
SBI	1096.57	738.13	0.007	738.13	682.40
EBL	2293.36	-400.88	0.190	995.59	414.47
BOK	2188.15	-548.80	0.953	173.08	53.44
HBL	1158.98	8.73	0.01	524.14	13.73
NIC	819.73	-154.32	0.161	451.02	186.0

Sources: Appendix IV

The above table of regression analysis shows that all banks have negative regression relation between MPS on D/Y. MPS of NABIL, SCBNL, EBL, HBL, BOK and NIC will decrease by Rs.813.93, Rs.904.59, Rs.400.38, Rs.40.80, Rs.548.80, Rs.154.32 respectively. Only MPS on DY of SBI is positive which increases by Rs.738.13 with an increase in DY by 1% assuming that other variables are constant.

The standard error of estimate of NABIL, SCBNL, SBI, EBL, HBL, BOK and NIC are Rs.718.60, Rs.466.96, Rs.738.13, Rs.995.59, Rs.549.47, Rs.173.08 and Rs.451.02 respectively. The standard error of b (s.b.) of NABIL, SCBNL, SBI, EBL,

HBL, BOK and NIC are Rs.143.01, Rs.91.02, Rs.682.40, Rs.414.47, Rs 261.36, Rs.53.44 and Rs.186.0 respectively.

The values indicate the probable error in the predicated value for the respective banks. Here S.E. of b lowest in BOK, which shows the estimation of DY can be predicated nearer to accuracy.

The coefficient of determination ( $r^2$ ) is lowest for SBI (0.007) which indicates that only 0.7% in MPS is explained by D.Y i.e. 0.7% variation in MPS of the banks is explained due to the change in value of D.Y. of the banks. The value of  $r^2$  of NABIL, SCBL, EBL, HBL, BOK and NIC, 0.071, 0.964, 0.190, 0.052, 0.953 and 0.161 respectively. Which indicate that 7.1%, 96.4%, 19%, 5.2%, 95.3% and 16.1% variation in the MPS of these banks are explained due to change in D.Y. of the respective banks.

#### 4.2.2.5 Regression Analysis between DPS on EPS

**Table 4.18**

**Regression Analysis between DPS on EPS**

<b>Bank</b>	<b>a</b>	<b>b</b>	<b><math>r^2</math></b>	<b>S.E.E</b>	<b>S.b</b>
NABIL	75.89	0.54	0.536	517.66	14.11
SCBNL	122.61	-0.19	0.461	35.40	0.66
SBI	-3.45	0.27	0.373	4.38	0.17
EBL	0.908	0.23	0.204	21.88	0.45
BOK	23.75	-0.27	0.254	6.57	0.23
HBL	-44.75	1.06	0.410	9.07	0.61
NIC	-0.37	0.12	0.033	4.21	0.34

*Sources: Appendix IV*

NABIL, the regression constant or intercept coefficient (a) is 75.89 which show that the average DPS would be 75.89 if the EPS were zero. The results show the regression line (b) is 0.54 which indicates that positive correlation exists between EPS and DPS of NABIL. One rupee increase in EPS cause Rs 0.54 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is



0.536 which indicates that only 53.6% of the variation in DPS is affected or determined by the explanatory variables EPS.

SCBNL, the regression constant or intercept coefficient (a) is 122.61 which show that the average DPS would be 122.61 if the EPS were zero. The results show the regression line (b) is -0.19 which indicates that negative correlation exists between EPS and DPS of SCBNL. One rupee increase in EPS cause Rs 0.19 decrease in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.461 which indicates that only 46.10% of the variation in DPS is affected or determined by the explanatory variables EPS.

SBI, the regression constant or intercept coefficient (a) is -3.45 which show that the average DPS would be -3.45 if the EPS were zero. The results show the regression line (b) is 0.27 which indicates that positive correlation exists between EPS and DPS of SBI. One rupee increase in EPS cause Rs 0.27 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.373 which indicates that only 37.30% of the variation in DPS is affected or determined by the explanatory variables EPS.

EBL, the regression constant or intercept coefficient (a) is 0.908 which show that the average DPS would be 0.908 if the EPS were zero. The results show the regression line (b) is 0.23 which indicates that positive correlation exists between EPS and DPS of EBL. One rupee increase in EPS cause Rs 0.23 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.204 which indicates that only 20.40% of the variation in DPS is affected or determined by the explanatory variables EPS.

BOK, the regression constant or intercept coefficient (a) is 23.75 which show that the average DPS would be 23.75 if the EPS were zero. The results show the regression line (b) is -0.27 which indicates that negative correlation exists between EPS and DPS of BOK. One rupee increase in EPS cause Rs 0.27 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.254 which indicates that only 25.40% of the variation in DPS is affected or determined by the explanatory variables EPS.

HBL, the regression constant or intercept coefficient (a) is -44.75 which show that the average DPS would be 44.75 if the EPS were zero. The results show the regression line (b) is 1.06 which indicates that positive correlation exists between EPS and DPS of HBL. One rupee increase in EPS cause Rs 1.06 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.410 which indicates that only 41% of the variation in DPS is affected or determined by the explanatory variables EPS.

NIC, the regression constant or intercept coefficient (a) is -0.37 which show that the average DPS would be -0.37 if the EPS were zero. The results show the regression line (b) is 0.12 which indicates that positive correlation exists between EPS and DPS of NIC. One rupee increase in EPS cause Rs 0.12 increase in the dividend per share distributed by the bank. The coefficient of determination ( $r^2$ ) is 0.033 which indicates that only 33.3% of the variation in DPS is affected or determined by the explanatory variables EPS.

The regression analysis between DPS and EPS show that among the bank under study, NABIL, HBL, SBI, EBL and NIC have positive relation but SCBNL, and BOK have negative relation between DPS and EPS. The regression relation between DPS and EPS indicates that with an increase of Rs.1 and EPS, there will be increase in DPS of NABIL, HBL, SBI, EBL and NIC by Rs.0.54, 1.06, 0.27, Rs.0.23 and Rs.0.12 respectively. On the other hand SCBNL and BOK will decrease by Rs.0.19 and Rs.0.27 respectively.

#### **4.2.3 Multiple Regression Analysis**

To see the impact of more than one independent variable the multiple regressions have been used. It examines the relationship between one dependent variable and more independent variables. The market price of stock depends on more than one variable. So, the results of simple regression analysis are not reliable as far the multiple regression analysis eliminates all the limitations of simple regression analysis. This part of the study is designed to examine the relationship between two independent variables and one dependent variable. The regression results are presented. As, in this study, the pooled average data of the observed banks are used for multiple regression and coefficient of determination analysis.

## Multiple Regression and Coefficient of Determination Analysis of MPS on EPS and DPS

The model developed for this purpose;

$$y = a + b_1X_1 + b_2X_2$$

Where,

Y = market price per share (Dependent variables)

X<sub>1</sub> = Earning per share (Independent variables)

X<sub>2</sub> = Dividend per share (Independent variables)

a<sub>1</sub> = Regression Constant

b<sub>1</sub>&b<sub>2</sub>= Coefficient of Net Regression (or simply regression constant)

Multiple Regression and coefficient of determination Analysis of MPS on EPS and DPS.

**Table 4.19**  
**Multiple regression and coefficient of Determination**  
**Analysis of MPS on EPS and DPS**

Regression Model	a <sub>1</sub>	b <sub>1</sub>	b <sub>2</sub>	S <sub>Y.12</sub>	R <sup>2</sup> Y.12
Y=a+b <sub>1</sub> x <sub>1</sub> +b <sub>2</sub> x <sub>2</sub>	-1971.07	105.47	-105.52	321.99	0.95

*Sources: Appendix V*

The above table shows the output of multiple regression analysis between MPS (y) and other variables (EPS (X<sub>1</sub>) and DPS (X<sub>2</sub>)) of the banks in average. The regression constant (a<sub>1</sub>) is -1971.07 that indicate that when EPS and DPS equal to zero, then MPS of the observed banks would be Rs.1971.07. The regression coefficient b<sub>1</sub>, for banks is 105.47. Another regression coefficient b<sub>2</sub> is -105.52. EPS has positive impact in MPS where as another independent variable DPS has negative impact in MPS of the observed banks in average. As the coefficient of multiple determinations is 95% of variation in MPS is explained by variation in EPS and DPS. The standard error of estimation 321.99, it indicates that the possible error in the predicated value for the respective banks.

## Multiple Regression and Coefficient of Determination Analysis of MPS on EPS and DPR

The model developed for this purpose is as;

$$Y = a + b_1X_1 + b_2X_2$$

Where,

Y = Market price per share (Dependent variable)

X<sub>1</sub> = Earning per share (in dependent variable)

X<sub>2</sub> = Dividend payout ratio (independent variable)

a<sub>1</sub> = Regression constant

b<sub>1</sub> & b<sub>2</sub> = Coefficient of net regression (or simply, regression constant)

The following results have been obtained from the multiple

**Table 4.20**  
**Multiple Regression and Coefficient of Determination**  
**Analysis of MPS on EPS and DPR**

Regression Model	a <sub>1</sub>	b <sub>1</sub>	b <sub>2</sub>	S <sub>1</sub>	R <sup>2</sup> R.12
Y = a+b <sub>1</sub> X <sub>1</sub> +b <sub>2</sub> X <sub>2</sub>	-1439.37	87.11	-77.06	148.68	0.99

*Sources: Appendix V*

The above table shows the output of multiple regression analysis between MPS (Y) and other variables [EPS(X<sub>1</sub>) and DPR (X<sub>2</sub>)] of the banks in average. The regression constant (a<sub>1</sub>) is -1439.37. The regression coefficient b<sub>1</sub> for bank is 87.11, Another regression coefficient b<sub>2</sub> is -77.06. EPS has positive impact in MPS where as another independent variable DPR has negative impact in MPS of the observed banks in average. As the coefficient of multiple determination. Ry<sup>2</sup>.12 is 0.99 it means 99% of variation in MPS is explained by variation in EPS and DPR. The standard Error of estimation (Sy.12) is 148.68 it indicates that the possible error in the predicated value for the respective banks.

### 4.3 Test of Hypothesis

To test the significance difference among mean value of EPS, DPS, MPS, DPR, Dividend yield and P/E ratio in the sample banks, there are altogether six sets of

hypothesis formulated and then tested in the study. Under the first set, significant differences among DPS of the banks are tested. The same are tested for EPS, MPS, DPR, DY and P/E ratio respectively.

**First set of Hypothesis**

H<sub>01</sub>: There is no significance difference among mean value of DPS of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

H<sub>11</sub>: There is a significance difference among mean value of DPS of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.21**  
**Result of Hypothesis Regarding DPS**

<b>Particulars</b>	<b>DPS</b>
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	59.06
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

The above table 4.21 shows that prob.value of F-statistic is less than calculated value of F-statistic which implies that s-static is significant at 5% level of significance. That means null hypothesis is rejected and alternative hypothesis is accepted. It reveals that the Dividend per share among the banks is not same but they are significantly different.

**Second set of Hypothesis**

Null Hypothesis (H<sub>02</sub>): There is no significance different among mean value of EPS of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

Alternative Hypothesis (H<sub>12</sub>): There is significance different many mean value of EPS of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.22**  
**Result of Hypothesis Regarding EPS**

<b>Particulars</b>	<b>EPS</b>
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	188.85
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

Table 4.22 conclude that prob. value of F-statistic is less than calculated value of F-statistic which implies that F-statistic is significant at 5% level of significance. That means null hypothesis is rejected and alternative hypothesis is accepted. It reveals that the Earning per share among the banks is not same but they are significantly different.

### **Third set of Hypothesis**

H<sub>03</sub>: There is no significance difference among mean value of mps of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

H<sub>13</sub>: There is significance difference among mean value of MPs of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.23**  
**Result of Hypothesis Regarding MPS**

<b>Particulars</b>	<b>MPS</b>
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	7.38
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

When observe in the table 4.23, it is clear that the prob. value of F- statistic is less than calculated value of F-Statistic is less than calculated value of F-statistic. It implies that the F-statistic is significant at % level of significance. Hence, the null

hypothesis is rejected and alternative hypothesis is accepted. It means that the market price per share among the banks is not same but they are significantly different.

#### **Fourth Set of Hypothesis**

H<sub>04</sub>: There is no significance difference among mean value of DPR of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

H<sub>14</sub>: There is no significance difference among mean value of DPR of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.24**  
**Result of Hypothesis Regarding DPR**

<b>Particulars</b>	<b>DPR</b>
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	10.03
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

Result of Hypothesis regarding DPR show in the table 4.24, it is clear that the prob. value of F-statistic less than calculated value of F-statistic. It implies that the F-statistic is significant at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means the Dividend payout Ratio among the banks is not same but they are significantly different.

#### **Fifth set of Hypothesis**

H<sub>05</sub>: There is no significance difference among mean value of Dividend yield (D.Y) of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

H<sub>15</sub>: There is significance difference among mean value of Dividend Yield (D/Y) of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.25**  
**Result of Hypothesis Regarding D.Y.**

Particulars	D.Y.
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	10.97
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

From the table 4.25, we can conclude the result of hypothesis regarding Dividend yield among banks. From the table 4.25, we can conclude that the F-Statistic is significant at 5% level of significance with prob. value 2.42. Hence, null hypothesis is rejected and alternative hypothesis is accepted which implies that there is no similarity among the banks Dividend yield. They are significantly different to each other.

**Sixth set of Hypothesis**

H<sub>0</sub>: There is no significance difference among mean value of P/E ratio of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

H<sub>1</sub>: There is significance difference among mean value of P/E ratio of NABIL, SCBNL, HBL, SBI, EBL, BOK and NIC.

**Table 4.26**  
**Result of Hypothesis Regarding P/E ratio**

Particulars	P/E Ratio
Numerator Degree of Freedom	7
Denominator Degree of freedom	41
Significance level	5%
Calculated value of F-statistic	32
Prob. value of F-Statistic	2.42

*Sources: Appendix VI*

Table 4.26 present the result of hypothesis regarding price earning ratio among sample banks. As we see from the table 4.26 that prob. value of F-statistic is 2.42 which are at 5% level of significance. Hence Null hypothesis is accepted and



alternative hypothesis is rejected. Because calculated value of F-statistic is less than prob. value of F-statistic. It implies that there is similarity among the banks price earning ratio.

#### **4.4 Major Findings**

This section includes the key findings of the study obtained from the analysis of data. Conclusion derives from the findings are presenting in the next chapter.

- J The SCBNL has the highest mean EPS among the banks which is Rs 145.30 and NIC has the lowest, which is Rs 21.68 the same result is seen to be Rs 113.29, Rs24.95, Rs43.23 Rs56.92 and Rs73.13 in NABIL, SBI, BOK, HBL and EBL respectively. Most of the firm always seeks to have more earning so that they can sustain efficiently in the competitive capital market. Therefore, earning is the indicator of firm's. Again these is higher earning consistency in NABIL i.e., 13.10%, where as there is lower consistency in SCBL, SBI, BOK, EBL, HBL and NIC. Indicating C.V. by 15.01%, 41.40%, 27.20% 27.24%, 26.12% and 23.57% respectively than that of NABIL.
- J The SCBNL has the highest mean DPS among selected banks where as it is lowest in NIC (i.e. Rs95 and Rs2.24). If DPS of any firm is high, it will create positive attitude of its shareholders towards the firm, which is consequently helps to increase the market value of the share. In another words the firm is paying higher dividend implies that it is performing better. Consistency in DPS is also highest in SCBNL than that other banks representing (C.V. = 28.99%) which is lower than others.
- J Higher DPR indicates that the firm is paying higher dividend to its shareholders and lower Dividend payout ratio implies that the firm is retaining its profit to profitable investment opportunities. The mean DPR of NABIL, SCBL, SBI, BOK, EBL, HBL and NIC are 60.54%, 64.72%, 10.86% 31.74%, 24.71%, 26.46% and 9.71% respectively. This evidence shows that NIC is retaining more its earning and it might be the consequences of the higher growth opportunities.
- J The SCBNL has the highest mean MPS among the selected banks which is Rs4434.17 and BOK has the lowest, which is Rs739.06. Increase in MPS is the indication of better performance MPS trend over the sample period. Consistency

in mps in SCBNL is higher than that of others as its C.V. (i.e. 43.61%) is smallest as compared to other banks.

- J The average Dividend yield of NABIL is highest among the banks which is 3.13% and the lowest one is 0.52% in NIC. Dividend yield defines the relationship between dividend per share and market value per share. It is very useful for the investors.
- J The regression analysis of MPS on EPS shows that the regression coefficient of BOK is highest among sample banks in the regression analysis of mps on EPS. The regression analysis of MPS on DPS indicates that the regression coefficient (b) is positive for SBI, HBL and EBL while negative for NABIL, SCBNL, EBL, BOK and NIC.
- J The regression coefficient (b) of the regression analysis between mps on DPR is positive for HBL & SBI. The regression coefficient (b) for the relation between mps on DPR is negative for NABIL, SCBNL, EBL, BOK and NIC. The coefficient of multiple determinations ( $r^2$ ) of SCBNL is highest among sample banks. The regression coefficient (b) of the regression analysis between mps on D.Y. shows that NABIL, SCBNL, EBL, BOK and NIC have negative regression coefficients but SBI & HBL have positive regression coefficients. The coefficient of multiple determinations ( $r^2$ ) of SCBNL is highest and SBI is lowest among sample banks.
- J The regression coefficient (b) of the regression analysis between DPS on EPS is positive for NABIL, HBL, EBL, BOK and NIC, while on the other hand SCBNL and BOK have negative regression coefficients. The coefficient of multiple determinations ( $r^2$ ) of NABIL is highest among sample banks.
- J The multiple regression analysis of mps on EPS and DPS shows that the regression coefficient (b) is positive, which is shown from the pooled average analysis of multiple regressions. The coefficient of multiple determination  $r^2$  is 0.95. Again the regression coefficient ( $b_2$ ) is negative. Whereas the multiple regression analysis of MPS on EPS and DPR shows that the first regression coefficient ( $b_1$ ) is positive and the second regression coefficient ( $b_2$ ) is negative. The multiple determinations ( $r^2$ ) is 0.99. It is shown from the bank pooled average analysis of multiple regressions.

) From the test of hypothesis, it is found null hypothesis of no significant difference of EPs, DPS, MPs, DPR, P/E and D.Y. among selected banks are rejected.

## **CHAPTER - V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

This chapter focuses on summarizing the study held with the conclusions and some recommendation on the basis of findings. For this purpose, the chapter has been divided into three parts as summary, conclusion and recommendation.

#### **5.1 Summary**

The study was conducted with objectives to analyze the dividend practices and its impact on market price of stock of selected Nepalese commercial banks over the study period 2003/04 to 2008/09. Following a descriptive and analytical research design, the sample for the study of seven commercial banks listed in Nepal Stock Exchange (NEPSE). The Study is based on secondary data and the data obtained were analyzed using various descriptive statistical tools, correlation analysis and multiple regression models and various financial tools.

Dividend services as simple, 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 police decision is one of the 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 decisions.

Theories of dividend policies do differ some prefer resident theories that convey 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 other who argue that dividend policy does affect value to the factors of uncertainty. Many factors affect the dividend payment depending upon investors need and preference on one hand and the financing need of the financial institutions 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 earning. So distributing dividend to the share holder is effective way 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 share holders 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 factors, this study is made to analyze one of the important fact i.e. Dividend. The study covers seven commercial banks and only for last six fiscal years from 2003/04 to 2008/09. The available secondary data have been analyzed using various financial and statistical tools. So, the reliability of the conclusion of this study is determined on the accuracy of secondary data.

To make the study more reliable, different types of analysis have been conducted to find out the appropriate relationship between market price and other Variables, which affect the dividend. The theoretical statement is to study of the impact of dividend on stock price, therefore it is concluded that none of the sample firm have adopted consistent dividend policy except SCBNL. More or less the dividend policy depends on the earning per share of the company: the earning per share and dividend per share having the positive relation may also impact on market price of stock.

## **5.2 Conclusion**

The above mentioned major findings led this study to conclude that there is no uniformity in dividend policy and practices followed by Nepalese banks. Dividend is distributed as an ad-hoc or situational basis. The dividend payment is not consistent with earning and there is greater fluctuation on the trend of dividend payment. Dividend affects the market price of stock but the nature of effect would be different for different banks. There are also other factors that affect the market price of stock viz. earning per share, price earning ratio, information value of dividend decision etc.

However, the MPS do not truly and uniformly reflect the actual dividend paid by joint venture banks under study. There are no significant relationships of DPS with MPS in almost all of the banks.

### **5.3 Recommendation**

The study has found many findings and conclusions from the presentation and analysis of the various data. Based on this study the following recommendation and suggestions can be prescribed regarding dividend policy and practices of banks.

- J As the EPS of all the sample banks except SCBNL and NABIL is in the fluctuating trend, it may give uncertainty to shareholders and negatively affect the market price of the respective shares. So, those banks should search the fruitful investment opportunities.
- J From the analysis, it has been found that none of the sample banks have followed consistent dividend policy as a result of which a high degree of fluctuation is observed in DPS. It may not satisfy minimum Expectations of shareholders. So, all the firms should have well defined dividend policy which helps to satisfy the investors and to create better position of firm in the capital market. For this, the concerned firms may adopt the policy of paying reasonable DPS every year as it will create positive attitudes of shareholders towards the firms, which consequently helps to increase the market value of the shares. The psychological value of the shareholders is also valued as the assets of the firm.
- J All the firms should analyze the internal rate of return and cost of capital in deciding DPR, which helps to maximize the shareholders wealth.
- J All the firms must accept one major fact that EPS is to be considered for determining dividend amount. The analysis shows the condition of not being able to say either significant or insignificant relationship between EPS and DPS in average. It is important to consider earning rather than neglecting it while making dividend decision.
- J The legal rules and regulation must be in favor of investors to exercise the dividend practice and to protect the shareholders' rights.
- J Most of the banks seem to ignore the dividend expectation of the minority shareholders. It seems necessary to be organized to promote and protect the shareholders right.

- J The organization formed by conscious shareholders like 'Shareholder's Association of Nepal' should be encouraged to work against the management ignorance.
- J Due to lack of information about securities market, the potential investors are not stimulated properly. So, seminars, workshops etc. should be organized and information's should be delivered to shareholders as well as potential investors to develop efficient securities market in Nepal

Lastly, after making this study it is realized that dividend payment practices of the commercial banks are not regular in Nepal. Banks organizations establish to run for long periods in the small economy of Nepal there are already over a two dozen banks and have neck to neck competition. So even a small wrong decision can lead to bank runty. So it is necessity of legal provisions and rules for preserving certain policy regarding the dividend payment in the banking sectors for this purpose the concerned authority. i.e. Nepal Government, Nepal Rastra Bank, Security Board, Nepal Stock Exchange and also commercial institution should be can serious about the formulation and implication of rules regarding dividend payment this will help to regularized the dividend policy of the financial sector in Nepal.

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