

# CHAPTER- I

## INTRODUCTION

### 1.1 Background of the Study

Dividend is the result of a discretionary decision made by the board of directors of a company. Generally, a company announces dividend on the profit. Dividend policy Determine the division of earning by the three ways: I) pay that profit out to the shareholders, ii) reinvest it in the business through expansion, iii) debt reduction or share purchase or both. When a portion of the profit is paid out to the shareholders, the payment is known as dividend. Dividends are paid in either Cash or stock.

There is an ongoing debate about whether a company should pay out its earnings as Dividend or retain them for firm growth. There is further debate about which policy Investors prefer. Firms that are growing generally pay low or no dividends. Mature firms that are no longer in a growth phase often pay high and increasing dividends.

The dividend decision is regard as a financing decision since any cash dividend paid reduces the amount of cash available for investment by the firm. Dividends are Periodic cash payments by the company to its shareholders. The dividend payable to the preference shareholders is usually fixed by the terms of the issue of preference shares. But the dividend on equity shares is payable at the discretion of the Board of Directors of the company. For payment of dividends, a company must earn distributable profits from which the actual payments 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 directors.

Management may decide retaining earnings as opposed to paid out as dividends. The process of paying remaining amount after reinvesting from retained earnings to Shareholders is called dividend policy. Dividend policy involves the decision to pay out earning versus retaining them for reinvestment in the firm. Any change in dividend policy has both favorable and unfavorable effects on the firm's stock price. Higher the dividends means higher the

immediate cash flows to investors, which is good, but lower future growth, which is bad. The dividend policy should be optimal which balances the opposing forces and maximizes stock price.

Management should try to maintain regular dividend. To provide a regular dividend, the firm will have sufficient earnings. Management may also declared extra dividend in years when earnings are high and funds are available. Shareholders have different desires. Shareholders may be interested either in dividend incomes or capital gains. 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 a regular dividend.

The main focus of investors however is the dividend. But there is not any consistency and regular practice of dividend announcement in different firms. They are exactly different as per their dividend policies. Similarly in the secondary market the declaration of the dividend or the dividend policy of the firm changes the market price of the shares. Therefore it is expected that there is some impact of dividend policy over the market price of the stock. (Walter; 1996:342)

"By a dividend policy, we mean some kind of consistent approach to the distribution versus retention decision rather than making the decision on purely ad -hoc basis from period to period."(Pearson, Charles and Gordon; 1972:405)

Market price of the stock is the trading price of the stock listed in authorized or legal stock exchanges. 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 that 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 earnings 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 values 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 the cost of capital MPS will also be lower. MPS determined by capital market. (Karki; 2006:209)

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. Without valuation no one can coat the price without price there is no chance of trading. (Van Horne; 2000:211)

Every day in newspaper one can see the market price of the different shares of different companies. The trading of the share definitely requires the MPS, which can be obtained by the stock valuation. Share valuation in an economic progress generates rational securities prices. Although the price fluctuations may appear to be chaotic, they are random fluctuations that result from the random arrival of the new information. Dividend policy and MPS has always correlation; if the company pays high dividend 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.

The overall objectives of this paper are to observe the impact of dividends on stock price in Nepal. On top of that this paper has been written to determine the relationships of market price per share with related financial indicators such as earnings per share, retained earnings, lagged prices earnings ratio and lagged market price per share.

## **1.2 Statement of the Problems**

Generally, people are investing their money in the common stocks. Some investors are being more rational towards the investment process. They are studying background, past history and performance of the organization, market demand of the stock, dividend policy undertaken by the organization etc. Before investing their money. But still more investors are investing without knowing the basic concept and process of the investment. Most of the investors are

not aware of the risk involved in investing on such securities. Investors should be aware of the policies and decisions taken by the company management towards wealth or profit maximization. Different financial experts have introduced the dividend payment models which present their view towards dividend payment. Among them, MM model tells that dividends are irrelevant to the value of the firm. It believes that earnings should be retained only for getting benefit from investment opportunities. If there is no investment opportunity, all the earnings should be distributed as dividend. (Modigliani & Miller 1961: 89)

The dividend policy of the firm affects the value of the shares. His model supports that dividends are relevant. He argues that the choice of dividend policies almost affect the value of an enterprise. The Investment policy of a firm cannot be separated from its dividend policies. According to him, both are interlinked which is just opposite to Modigliani and Miller approach. Walter's model shows clearly the importance of the relationship between the return on a firm's investment or its internal rate of return ( $r$ ) and its cost of capital or the required rate of return ( $k$ ) in determining the dividend policy. As long as the internal rate greater than the cost of capital, the share price will be enhanced by retention and will vary inversely with dividend payment. In this way Walter's model's is also known as "Optimal Theory of Dividend". (Walter, 1966: 76)

There are two different views regarding the dividends policy and market price of stock. Those who think dividends have more impact in determining share price, argues that shareholders prefer current return rather than future return and dividends distribution is an indicator of earning capacity in future. The other views are based on the importance of retained earnings. They argue that earnings are indicator of future investment opportunities. The shareholders can enjoy tax advantage in retained earnings. For tax purpose, retained amount is not treated as income until it is realized.

A number of studies on impact of dividends on stock price have been carried out in different parts of world particularly in developed countries. Most of the earlier studies show the significant role of dividends policy on stock price. The corporate firms should follow the appropriate dividend policy to maximize the shareholder's value. Dividends policy is

considered as one of the important and critical variables affecting the share price. In the context of Nepal, limited studies (such as Pradhan: 2003, Manandhar : 1998) have been carried out by research scholars. (Still gap in the financial literature concerning the effect of dividends on stock prices particularly in banking and non- banking sector in Nepal).

In general, the dividend policy will affect the stock price in market. If the dividend policy is shareholder oriented, then the market price of the stock will increase. It's because people want to invest in those stocks, which give more return. But some scholars and experts do not agree with this relationship of dividend and market price of stock. Therefore the main focus of this study is to deal with the following problems so far it will be possible to cope with:

1. What impact does dividend policy impact on value of firm?
2. Are the banking and non-banking sector able to pay return to its shareholders?
3. What is the impact of dividend policy on the market price of the stock?
4. Is there any uniformity between the firms in regards to financial indicators and Variables?
5. What is the relationship between dividend with earning per share, market price per share, dividend payout ratio and retained earnings per share of the company?
6. What are the reasons behind stock price increasing after the announcement of Dividend

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

The overall objectives of these studies are to observe the impact of dividends on stock price in selected banking and non banking companies in Nepal. Banking and non-banking sectors are to earn sufficient profit to ensure the reasonable dividends to their stock holder. The aim of the study is basically to analyze and evaluate the application of dividend decision in the selected banks and the study focus on the prevalent dividend polices. Besides that, the specific objectives of the study are as follows:

- To examine the returns of the banking and non banking to its investors.

- To analyze the relationship between dividends per share (DPS), earning per Share (EPS), P/E ratio and market per share (MPS) retained earnings (R/E) per share .
- To identify the impact of dividend policy on market price of stock.
- To examine the forecasted MPS, EPS, DPS and DPR of the selected Banking and non banking sector.

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

All listed companies are required their annual report including audited financial statement within specific period as prescribed by the Security Exchange Act and Regulation in Nepal corporate firms are categorized in different industries such as commercial bank, development banks, and finance companies, insurance companies, hydropower, manufacturing and processing industries, trading, hotel and others. Among these industry, commercial banks. Development banks, finance companies are considered as banking sector rest of the industries are non banking sectors where listed on NEPSE.

Getting more return from the limited source of investment is the essential part for every investor while they seek to invest in different sector on portfolio. Nowadays, people are very much attracted towards investment in share for the purpose of getting higher return. So dividend policy has become an effective way for attracting the large number of new investors, retain present investors and to maintain goodwill and the desired controlling position of the firm. Despite investor s high expectation, there are almost none of the firms adopting clear dividend policy in Nepal. Therefore this study of the divided policy of the banking and non banking sector in Nepal may be rewarding. The study is not only helpful to the researcher but the final outcome of the study will prove to be a valuable tool for various concerned groups like shareholders, banks, finance companies, hotel, Hydropower, manufacture companies etc. The shareholders will be able to know whether the dividend policy of the company where they invested their money is relevant or not. They will also be able to know the position of the company in the financial market. The banks &finance companies will know the dividend practices followed by other banks. In other hand non-banking sectors also know the divided practices

and follow their policy. They will also be able to compare their own dividend practices with those of the banking and non-banking sectors chosen and find out whether they need to improve their dividend policy or not. This research will also be useful to management to point out the loopholes and suggest the remedies about the appropriate dividend policy and also for and also for stock brokers, financial agencies, policy makers and other interested person. It may be useful to government as well for policy making, controlling, and supervision and monitoring. Furthermore, students will be able to study about dividend policy and will be helpful as they can take it as reference if they are doing the research in the similar topics. As mentioned above, researchers can use it as a reference for their research.

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

There are limitations that weaken the generalizations – e.g. Inadequate coverage of industries, time constraint, reliability of statistical tools used and other variables. This study is simply for partial fulfillment of the requirement of the Master in Business Studies (M.B.S.). So this study will be limited by the following factors.

- The study is mainly conducted on the secondary data. So the result depends on the reliability of secondary data. However primary data is also used to analyze the impact of dividend policies on market price of stock.
- The study covers a period of five years (2007/08 to 2011/12).
- There are many factors that affect dividend decisions and valuation of the firm. However, only that factor s related with dividend will be considered in the study.
- Only two banking and two non banking sectors are taken as sample due to lack of time.
  1. Nabil bank Ltd.
  2. Everest bank Ltd.
  3. Butwal power company ltd.
  4. Chilimme hydropower company ltd

## **1.6 Organization of the Study**

This study will be divided into five chapters as follows:

### **Chapter One: Introduction**

This chapter will be deals with the subject matter of the study. The outline of the research is presented in the chapter. The whole research will be based on the introduction chapter. It deals with general background of the study, statement of the problems, objectives of the study, significance of the study, limitations of the study and organization of the study.

### **Chapter Two: Review of literature**

This chapter will be deals with the review of literature. It includes a discussion on the conceptual framework on dividend policy. It also includes review of various studies (i.e. various books, journals & articles, masters degree thesis etc) related with dividend decision. It also includes major studies relating with dividend decision.

### **Chapter Three: Research Methodology**

This chapter will be explains the Research methodology used to evaluate dividend practices of Banking and no-banking sectors in Nepal. It consists of research design, source of data, population and sample statistical tools and financial tools and it also includes limitation of the study.

### **Chapter Four: Data Presentation and Analysis**

In the four chapter the main part of the study which fulfills the objective of the study by presenting data and analyzing them with the help of various statistical tools as per methodology. In this chapter, descriptive analysis of the gathered data and information using statistical as well as financial tools is carried out. In this chapter, major findings of the study have been conducted based on primary and secondary data.



## **Chapter Five: summary, Conclusion and Recommendation**

This Chapter includes the major findings and conclusion of the study. This chapter deals with the summary and conclusion of the study and gives recommendations for improvement in the dividend behavior of the listed banks.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

Literature review is a “stock taking” of available literature in one’s field of research. Review of literature is an important part of any research work. It provides the boundary line for any research. Previous studies provide the foundation for present study. So, previous studies cannot be ignored. There must be continuity in research. This continuity in research is insured by linking the present study with past research studies. From this, it is clear that the purpose of literature review is to find out what research studies have been conducted in one’s chosen field of study and what remains to be done.

The review of literature is a crucial aspect because it denotes planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research problem under study and what has been done in the field of the research study being undertaken. For review study, the researcher uses different books, reports, journals and research studies published by various institutions, unpublished dissertations submitted by master level students.

#### **2.1 Conceptual Framework**

Dividend decision is not only important for the shareholders but also firm's internal growth. Dividends are desirable from shareholders point of view as it help to increase their current worth. It is desirable from company's point of view too, as it will help growth of firm. The dividend policy determines the amount of earning to be distributed to shareholders and to reinvest in the firm. Dividend is a portion of earnings which is distributed to shareholders in return of their investment in share capital. The dividend policy affects the overall financing decisions of the firm. Dividend implies to the portion of earning that is paid to the shareholders while dividend policy refers to the guidelines that management uses in establishing portion of retained earning that is paid to the shareholders in the form of dividend. Dividend policy covers two portion bonus share issue and cash dividends.

Bonus share announcement is one of the important decisions of the financial management. Before determine issue of bonus Share Company must study its impact on earnings per share and stock price. Bonus share is one type of dividend forms. Bonus share may be issued in addition to cash dividend. Issue of bonus share conserves cash where as cash dividend flow out the cash. (Shrestha; 1981:96)

It may emphases here that the market value of the share may improve as a result of the bonus issue if it is followed by increased dividends in the immediate future. If the dividends do not increase, it is likely that the market price may fall. A stock dividend is paid in additional shares of stock instead of cash, and simply involves the transfer of earned surplus to the capital stock account (Gitman; 2001: 286)

Dividend policy can be defined as percentage of dividend which maximizes the wealth of the share holders in long term. Dividend policy becomes a problem especially on the public limited companies. A firm's dividend policy has a effects of dividing in net profit in to two parts one is retained earnings and dividend. Dividend also divided into two parts i.e. bonus issue and cash dividend. (Shrestha; 1980:79)

Dividend policy is a financial decision which affects the shareholders value maximization and immediate purpose. Dividend in fact is the portion of the net earnings, which is distributed to shareholders by a company. After successfully completing the business activities of a company, if its financial statement shows the net profit, the board of directors decides to declare dividend to stockholders. Therefore the payment of corporate dividend is at the decision of board of directors. (Thapa and Gautam; 2011:396)

"Dividend policy is a consistent approach the distribution versus retention decision. Adequate dividend determines the amount of earnings to retain and payout by the firm. A dividend payment is distribution to the shareholder of something belonging to the corporation and specifically to the stockholder themselves as owners of corporation. (*Chareles M. Willium and G. Donalds; 1966: P.278.*)

Thus, this study aims to focus on all the relevant factors, prevailing practice of taking dividend policy and the effect of dividend policy on market price of stock of selected banking and non banking sector.

### **2.1.1 Forms of Dividend**

According to changing needs of corporate firms, dividend can be distributed in several forms. A corporation according to its policies objectives and situation distribute different kinds of dividend to its stockholders. The type of dividend that corporation follow is partly of matter of attitude of directors and partly relevant economic and financial factor. Dividend refers to the distributed earning to the ordinary shareholders of the firm in return to their investment. Normally, an investor expects to have return on his/her investment in the forms of dividend and capital gain. Shareholders are the residual claimer to the earning of the company. Directors must retain some earnings, whether or not profitable investment opportunities exist, to maintain the company as a sound and solvent enterprises.

Thus depending on the needs to finance their investment opportunities, companies may follow different dividend policies. Mature companies that have few investment opportunities may generally have high payout ratios. Shareholders of such companies would be more interested in dividends, as they obtain return on their investments, than the company. The share price of such companies is very sensitive to dividend changes. On the other hand, growth companies may have low payout ratios. Sometimes, the growth company retains most of its earning and declare bonus share to satisfy the dividend requirements of shareholders. (Gitman; 2001:374)

It is clear that the corporation distribute different types of dividend to its shareholders on the return of their investment. On the concentration of firm's policies objectives and circumstances the following types of dividends are provided:

#### **Cash Dividend**

A cash dividend is the dividend, which is distributed to the shareholders in cash, out of earnings of the company. When a cash dividend is distributed both total assets and net

worth of the company decrease as cash and earnings decreases. The market price of share drops in most cases by the amount of the cash dividend distributed. Most company pay cash dividend in sufficient liquidity conditions. (Van Horne; 1993:674)

### **Stock Dividends**

A stock dividend occurs when the board of directors authorizes a distribution of common stock of existing shareholders. Stock dividend increases the number of outstanding shares of the firm's stock. Stock dividend requires an accounting entry transfer from the retained earnings account to the common stock and paid in capital accounts. There is no cash involve in stock divided. Net worth remains unchanged, and the number of shares is increased. (Srivastava; 2001:281)

### **Interim Dividend**

Generally dividend is declared in the last of the financial year. This is called regular dividend. Many times directors can declare the dividend before the end of the financial years. This is called interim dividend. (Pandey; 1982:298)

### **Property Dividend**

Instead of cash dividend can be given in the form of property. Whenever, the assets which are not used in the operation of the business or in extraordinary circumstances distribute to the shareholders who are the actual owners of the company. (Van Horne; 2000:173)

### **Bond Dividend**

Company can distribute its own bond to the shareholders on the name of bond dividend. It helps the company to postpone the payment of cash. (Sharma; 2001:277)

## **2.1.2 Types of Dividend Policy**

The dividend amount paid out of profit, both from past and present, is guided by the dividend Policy, the firm follows. Generally, dividend Policy can be categorized as conservative, liberal, moderate and progressive dividend Policy. Whatever the dividend Policy followed by corporate firm, it is the concept that resolves the apparent conflict by finding optimal dividend payout that balance the need of the shareholders for their current income and expected future growth of the corporate firms so as to maximize the value of the firm. Within the framework of types of dividend Policy mentioned above, the corporate firm may choose to follow any of the dividend policy mentioned below:

### **+ Regular and Stable Dividend Policy**

Regular and stable dividend Policy is mostly used by most of the corporate firms. It is based on maintaining fix annual cash dividend for several years. It can be changed only when future earning looks sufficiently strong and permanent to support a new higher level of dividends. Irrespective of fluctuations in earnings, dividend per share remains relatively stable unless payout ratio drops below minimum of earning per share. The corporate firms that adopt regular and stable dividend Policy regard the payment of dividend is an important variable in the stock valuation process. (Mathur; 1979:125)

### **+ Regular Plus Extra Dividend Policy**

The policy refers to the combination of regular dividend with the payment of additional dividends whenever earnings are significantly high. Under this policy, low level of dividend is set first and then extra dividend in the time of final announcement of annual dividend is paid. The policy is undertaken to give the shareholders impression of corporate firms' intention of paying regular dividends. Corporate firm pursuing this policy emphasizes on need to pay regular dividends and at the same time need to retain earnings to meet long-term financial requirement. (Shrestha; 1980:126)

### **Fixed Payout Policy**

Corporate firms following fixed payout policy establish fix percentage of profits that will be paid out each year as dividends. Dividend Payout Ratio (DPR) relatively remains constant and may increase with the increase in profit. Dividend per share fluctuates from year to year while it may lead to erratic market prices for the corporate firms' stocks. (Sharma; 2001:128)

### **Residual Dividend Policy**

Residual dividend policy is based on the premises that investors prefer to have a firm retain and reinvest earnings rather than pay them out in dividends if the rate of return the firm can earn on reinvested earnings exceeds the rate of return investors can obtain for themselves on other investments of comparable risk. Further, it is less expensive for the firm to use retained earnings than it is to issue new common stocks. A firm using residual policy would follow these four steps:

- Determine the optimal capital budget.
- Determine the amount of equity required to finance the optimal capital budget given its target capital structure, recognizing that the funds used will consists of both equity and debt to preserve the optimal capital structure.
- To the extent possible, use retained earnings to supply the equity required.
- Pay dividends only if more earnings are available that is needed to support the optimal capital budget. (Mathur; 1979:129)

## **2.1.3 Dividend Payment Procedure**

The dividend payment procedures on behalf of a corporate firm can be given below:

### **Declaration Date**

This is the day on which the board of directors declares the dividend. At this time they set the amount of the dividend to be paid, the holder of record date and the payment date.

### **Holder- of- Record Date**

The dividend is payable to shareholders whose names appear in the register of members as on the holder of record date. This is the date the company opens

the ownership books to determine who will receive dividend; the stockholders of record on this date receive the dividend. If shareholders sell share before the record date, the buyer of shares will receive dividend. If shareholders sell shares after the record date, the seller of the shares will receive dividend. (Pandey; 1982:276)

### **Ex- Dividend Date**

This day is four days prior to the record date. Share purchased the after the ex- dividend date are not entitled to the dividend. The dividend is attached to the stock until the Ex-dividend date (four business days before the holders of record date), after which date it stays with the seller.

### **Payment Date**

At the time of dividend announcement, the board of directors also specifies the date on which the payment of dividend is actually made. This is called the payment date. On this date the company actually pays the dividend to all the stockholders of the date of record. (Waring; 1931:277)

## **2.1.4 Stock Split and Reverse Split:**

A stock split is essentially when a company increases the number of shares. In case of Stock splits, a company may double, triple or quadruple the number of shares outstanding. The market price of each share is merely lowered; economic reality does not change at all. It is therefore completely irrational for investors to get excited over Stock splits. The effect of a stock split is an increase in the number of shares outstanding and a reduction in the par, or stated, value of the shares. The total net worth of the firm remains unchanged. The stock split does not involve any cash payment, only additional certificates representing new shares.

Reverse split is a method that is used to raises the market price of a firm's stock by exchanging certain number of outstanding shares for one new shares 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 the 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. (Thapa and Gautam; 2011:341)

### **2.1.5 Stocks Repurchase**

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. Share price for repurchase or the equilibrium price is calculated from the following equation;

$$\text{Repurchase price (P)} = \frac{S * P_c}{S - N}$$

Where,

S= total number of share outstanding

P<sub>c</sub>= current market price per share

N=number of shares to be represented

In stock repurchase reduce the no of outstanding shares. Share repurchase has inverse objective than the bonus share issue. The company can repurchase its outstanding share through a fixed price self-tender offer. Repurchasing of share is considering as the part of dividend policy. If firm have excess cash and insufficient profitable investment opportunities to justify the use of these funds. The firm has two alternatives to distribute cash whether repurchase of shares or increase dividends. These two alternatives should make no difference to shareholders. Theoretically in the absence of personal income taxes with repurchase fewer shares remain outstanding and earnings per share (EPS) and ultimately, dividend per share (DPS) rise. As the result, the market price per share (MPS) rises as well. (Thapa and Gautam; 2011:344)

## 2.1.6 Factors Affecting Dividend Policy

Dividend policy is the major financial decision of management. Which determines the percentage of earnings of the firm is distributed its shareholders and what percentage of earnings retained in the firm which is decision for the growth of the firm. Dividends are desirable to its shareholders because it tends to increase current wealth where as retained earnings are desirable for the firm to the exploit investment opportunities as the internal sources of financing. So in order to develop a long term dividend policy, the directors should at bring a balance between desire of shareholders and the needs of company the company. The firm's decision regarding the amount of earnings to be distributed as dividend depends on the number of the firm's ability to declare and pay dividends are discussed factors. The factors which affect dividend policy are given below. (Waring; 1931:221)

### Legal Rules

The legal rules are important in establishing the legal boundaries with in which a firm finalized the dividend policy can operate. The legal rules provide the framework within which dividend policy can be formulated. Certain legal rules may limit the amount of dividends that a firm may pay. These legal constraints fall into two categories. First, Statutory restrictions may prevent a company firm paying dividends, while specific limitation differ by state policy. (Waring; 1931:222) Generally a corporation may not pay dividend in following situations;

- Firm s liabilities exceed its assets
- Amount of dividend exceeds the accumulated profits
- Dividend is paid from capital invested in the firm.

### Liquidity Position

The liquidity position of company is a prime position of company prime consideration in dividend decision. Because dividend represents a cash outflow, the greater the cash flow and overall liquidity position of the company, the greater its ability to pay a dividend. A company that is growing and profitable may not liquid because its fund may go

into the fixed assets and permanent working capital. Because the management of such a company usually desired to maintain some liquidity reduce to give its financial flexibility and protection against uncertainty. It may be hesitant to risk this position to pay a large dividend. (Van Horne; 2000:575)

### **Debt Repayment and Restriction on Debt Contract**

The dividend policy of corporate firm using debt is also affected by the decision to repay debt on or before maturity, generally require more retention of earning lowering the dividend rate. Sometimes long term debt contract may specify certain restriction such a payment of dividend from profit only after signing debt contract and requiring maintaining to desired level of net working capital. These restrictions certainly affect dividend policy. When a firm has sold debt to finance expansion or to substitute for other firms of financing, it is faced with two alternatives. It can refund the debt at maturity by replacing it with another form of security, or it can may provisions for paying debt. If the decision is to retire the debt, this will generally require for the retention of earnings. (Waring; 1931:225)

### **Access to Capital Markets**

All firms do not have equal access to capital market. A large established firm with record of profitability and stability earning has easy access to capital markets and other firms of external financing. Easy accessibility to the capital market provides flexibility to the management in paying dividend as well as in meeting the corporate obligation. Thus the fast growing firm having tight liquidity position will not face difficulty in paying dividends if it has access to the capital market. (Shrestha; 1981:298)

### **Tax Position of Stakeholder**

Because of difference among investors tax rate, certain investor preference for dividend versus capital gain have been observed in the market. Corporation owned by largely taxpayers in high income tax brackets tend toward lower dividend payout where as corporations owned by small investors tend toward higher dividend payout.

## **Control**

Control of management is very important for many small firms. These owners would prefer the use of debt and retained profits to finance new investments rather than issue stock. As a result dividend payout will be reduced. (New encyclopedia; 1986:345)


## **Rate of Assets Expansion**

The more rapid the rate which the firm is growing, the greater its need for financing assets expansion. The greater the future need for funds, the more likely the firm is to retain earnings rather than pay them out. If a firm seeks to raise funds externally, natural sources are the present shareholders, who already know the company. But if earnings are paid out as dividend and are subjected to high personal income tax rates, only a portion of them will be available for investment.

## **Desire of Shareholders**

Shareholders may be interested either in dividend incomes or capital gains. 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, management may be able to set dividends according to the preferences of its stockholders. For example, assume that the majority of a firm's stockholders are in high marginal tax brackets. They probably favor a policy of high earnings retention, resulting in eventual price appreciation, over a high payment policy. But in a large corporation whose shares are widely held, it is nearly impossible for a financial manager to take individual shareholder's preferences into account when setting dividend policy. (Thapa and Gautam; 2011:3)

## **Profit Rate**

 The rate of return on assets determines the relative attractiveness of paying out earnings in the form of dividend to stockholder. If other things remain same high profit rates is the indicator of high dividend payout.

## **Stability of Earning**

The firm which has stable earning is able to pay higher rate of dividend than those firms which do not have stable earning. The firm with stable earning has other firms are not able to predict the next years earning so they prefer to have low payout ratio and retain more amount for coming year. (Pradhan; 1992:422)

## **2.2 Irrelevance of dividend policy**

### **Modigliani and Miller's Study (1961)**

MM theorized that the dividend policy is irrelevant like in the capital-structure irrelevance proposition with no taxes or bankruptcy costs. This is known as the "dividend-irrelevance theory", indicating that there is no effect from dividends on a company's capital structure or stock price. MM argued that the value of the firm is based on its basic earning power and its business risk, not how it distributes earnings to shareholders. The dividend preference theory holds that the firm's value will be maximized by a high dividend payout ratio because investors regard cash dividends as being less risky than potential capital gains. Higher payout ratio leads to the increase in firm value and decrease in cost of capital.

The common assumptions this theory is explained below.

- There is a perfect capital market in which all investors behave rationally.
- Corporation tax does not exist therefore there is no differences between tax rates

In capital gains and dividends.

- The floatation costs on securities are ignored.
- There is neither a constant dividend policy of firm, which will not change the risk neither complexion nor the rate of return even in cases where the investments are funded by the retained earnings.

Based on these assumptions and using the process of arbitrage Miller and Modigliani have explained the irrelevance of the dividend policy. Firms have two options for utilization of its profit after tax i.e. (i) To retain the earnings and plough back for investment purposes (ii) distribute the earnings as cash dividends. If the firm selects the second option and declares dividend then it will have to raise capital for financing its investment decisions by selling new shares. Here, the arbitrage process will neutralize the increase in the share value due to the cash dividends by the issue of additional shares. This makes the investor indifferent to the dividend earnings and the capital gains since the share value of the firm depends more on the future earnings of the firm than on its dividend policy. Thus, if there are two firms having similar risk and return profiles the market value of their shares will be similar in spite of different payout ratios.

There are some voices of researchers supporting the irrelevance dividend hypothesis which will be reviewed as follows:

**(Black & Scholes, 1974)** It created 25 portfolios of common stock in New York Stock Exchange for studying the impact of dividend policy on share price from 1936 to 1966. They used capital asset pricing model for testing the association between dividend yield and expected return. Their findings showed no significant association between dividend yield and expected return. They reported that there is no evidence that difference dividend policies will lead to different stock prices. Their findings were consistent with dividend irrelevance Hypothesis.

**(Uddin & Chowdhury, 2005)** this study has relationship between share price and dividend payout. This studies carried out from (Dhaka stock exchange) DSE. The results implied that dividend announcement does not provide value gain for investors and shareholders experience approximately 20 % loss of value during thirty days before the announcement of dividend to thirty days following the announcement. He suggested that current dividend yield can reimburse the diminished value to some extents. Generally, his findings supported the irrelevancy of dividend policy.

## 2.3 Relevance of dividend policy

### 2.3.1. Relevance of dividend policy based on Uncertainty of future dividends

(Gordon, 1962) suggested a valuation models relating the market value of the stock with dividend policy. Gordon studied dividend policy and market price of the shares and proposed that the dividend policy of firms affects the market value of stocks even in the perfect capital market. He stated that investors may prefer present dividend instead of future capital gains because the future situation is uncertain even if in perfect capital market. Indeed, he explained that many investors may prefer dividend in hand in order to avoid risk related to future capital gain. He also proposed that there is a direct relationship between dividend policy and market value of share even if the internal rate of return and the required rate of return will be the same. In (Gordon, 1962)'s constant growth model, the share price of firm is subordinate of discounted flow of future dividends. Gordon's model is based on the following assumptions:

- No external financing is available for the corporation and retained earnings would be used to finance expansion as well.
- Return on Investment (r) and the cost of equity capital (k ) remain constant.
- Firm has an infinite life.
- The retention ratio remains constant and hence the growth rate is also constant  
( $g=br$ )
- $k > g$  i.e., cost of equity capital is greater than the growth rate.

Gordon concluded that dividend policy of a firm affects its value. The conclusion of the study is that investors give more value to the present dividends rather than future capital gain. This argument insisted that an increase in dividend payout ratio leads to an increase in the stock price for the reason that investors consider the dividend yield ( $D_1 / P_0$ ) is less risky than the expected capital gain.

**James E. Walter (1963)** considers that dividends are relevant and they do affect the share price. He showed the relationship between the internal rate of return ( $r$ ) and the cost of capital of the firm ( $k$ ), to give a dividend policy that maximizes the shareholders' wealth. The Walter's model is based on following assumptions

- ✚ Retained earnings are the only source of finance available to the firm, with no outside debt or additional equity used.
- ✚  $r$  and  $k$  are assumed to be constant and thus additional investments made by the firm will not change its risk and return profiles.
- ✚ Firm has an infinite life.
- ✚ For a given value of the firm, the dividend per share and the earnings per share remain constant.

The model studied the relevance of the dividend policy in three situations: (a)  $r > k_e$ , (b)  $r < k_e$ , and (c)  $r = k_e$ . When the return on investment is greater than its cost of equity capital, the firm can retained the earnings, since it has better and more profitable investment opportunities than the investors. It implies that the return of re-investment of the earnings is higher than what they earn by investing the dividends income. In the second case, the return on investment is less than the cost of equity capital and in such situation the investors will have a better investment opportunity than the firm. This suggests an optimal dividend policy of 100% payout. This policy of a full pay-out ratio will maximize the value of the firm. Finally, when the firm has a rate of return equal to the cost of equity capital, the firms' dividend policy will not affect the value of the firm.

### **2.3.2. Relevance of dividend policy based on information content of dividend**

(Miller & Modigliani, 1961) suggested that in imperfect market, dividend may affect the share price. So dividend announcements can be interpreted as a signal of future profitability of firm. (Asquith & Mullins Jr, 1983) used a sample of 168 companies paying dividend for the first time or paying dividend after at least 10-year interruption and studied the relationship between market reaction and dividend announcement. They analyzed the daily abnormal stock returns for the ten-day period prior and ten-day period following the dividend



announcement. Their findings implied an approximate abnormal return of +3.7 percent for a period of two days after announcement. Furthermore, they used cross-sectional regression and reported that first dividends' amount has significant positive impact on the excess returns on the day of dividend announcement. They concluded that the magnitude of changes in dividends can be also helps and importance.

### **2.3.3. Relevance of dividend policy based on agency cost**

(Jensen, Solberg, & Zorn, 1992) studied the determinants of cross-sectional differences in insider ownership, debt and dividend policy by using three-stage least squares. They considered 565 companies as sample for the year 1982 and used 632 companies as sample for the year 1987. They reported that high insider ownership companies adopt lower dividend payment and proposed that insider ownership and dividend payment have negative association. Their findings supported agency cost theory.

### **2.3.4 Impact of dividend policy on firm's risk**

(Ben-Zion & Shalit, 1975) studied the impact of size, leverage and firm's dividend records on the risk of common stock. They selected the 1000 largest US industrial corporations in 1970 as sample and examined the relationship between alternative risk measures with size, leverage and dividend records. The results of their research showed that the firm's size and leverage and dividend have significant relationship with firm's risk measures and are important determinants of firm's risk. They reported that firm's risk has significant negative relationship with both dividend yield and size, but leverage has significant negative impact on firm's risk.

### **2.3.5 Impact of dividend policy on share price volatility**

(Baskin, 1989) used a different method and examined the association between dividend policy and stock price volatility rather than returns. He added some control variables for examining the association between share price volatility and dividend yield. These control variables are earning volatility, firm's size, debt and growth. These control variables do not only have clear effect on stock price volatility but they

also affect dividend yield. For instance, the earning volatility has effect on share price volatility and it affects the optimal dividend policy for corporations. Moreover, with assumption that the operating risk is constant, the level of debt might have positive effect on dividend yield. Size of firm would be expected that affect share price volatility as well. That is, the share price of large firms is more stable than those of small firms as the large firm tend to be more diversified. Furthermore, small firms have limited public information and this issue can lead to irrationally react of their investors.

## 2.4 Review of related studies

After the dividend irrelevance theory proposed by Modigliani and Miller (MM) in 1961, many theories have emerged over the time such as Gordon (1962), Walter (1963), Friend and Puckett (1964). Some theories supported MM's theory of dividend irrelevance whereas most of the theories opposed.

**Lintner (1956)** presented a view to identifying the determinants of corporate dividend payment practice with the interview of the top managements of 28 firms. The study concluded that corporate management tends to establish target dividend payouts as a proportion of earnings and to set their dividend payments to adjust over time toward the desired fraction of earnings. Establishing a stable dividend hypothesis, Lintner showed the following relation between dividends and earnings:

$$D_t^* = rE_t \quad (1)$$

Where,

$D_t^*$  = dividend payment per share during the period t

r = the payout ratio

$E_t$  = firm's earnings per share during period t.

Lintner then developed his above observation as under:

$$D_t - D_{(t-1)} = a + c (D_t^* - D_{t-1}) \quad (2)$$

Where,

a = constant

c = constant speed of adjustment factor.

However, Lintner further developed the equation to explain the corporate dividends payment practice by adjusting the above observations to obtain a partial adjustment model as follows:

$$D_t = a + b_1 E_t + b_2 D_{t-1} + E_t \quad (3)$$

Where,

$$b_1 = cr$$

$$b_2 = 1 - c$$

$E_t$  = error term during period  $t$

Lintner used the above equation to explain the behavior of corporate dividend policy along with other variables explaining the stock prices using aggregate data in most of his tests.

**Friend and Puckett (1964)** provided the relationships between dividends and stock prices using regression analysis of 110 firms from five industries for the period of 1956 to 1958. The regression results  $P_t = a + bD_t + CR_t$  exhibited the strong dividends effect and relatively weak retained earnings effects on three of the five industries, i.e. Chemicals, foods and steels. Again, the study tested regression equation by adding lagged earnings price ratio  $P_t = a + bD_t + CR_t + d(E/P_{t-1})$ . The result showed that more than 80% of the variation in stock prices explained by these three independent variables. Dividends have a predominant influence in stock prices. The study also reveals the dividends and retained earnings coefficients are closer to each other than first set of regression.

**Kumar and Mohan (1975)** hypothesized that the market price of share is a function of dividends and retained earnings and used the following regression equation:

$$P_{it} = a + bD_{it} + R_{it} + e_{it} \quad (4)$$

Where,

$P_{it}$  = price of stock  $i$  at time  $t$ ,

$D_{it}$  = dividend per share of stock  $i$  at time  $t$  and

$R_{it}$  = retained earnings of stock  $i$  at time  $t$ .

The estimated coefficients for the two explanatory variables, dividends and retained earnings are more or less equally significant. They argued that the dividends hypothesis has a little superiority over the retained earnings in determining the share. Consistently, **Nishat** (1995) attempted to evaluate the relative importance of the dividends vis-à-vis retained earnings hypothesis in determining the share prices. He developed the following model to compare the dividends and retained earnings influence on the share prices in highly profitable growth industries of Pakistan.

$$P_{it} = \alpha_0 + \alpha_1 D_{it} + \alpha_2 R_{it} \quad (5)$$

Where,

$P_{it}$  = price of stock  $i$  at time  $t$ ,

$D_{it}$  = dividend per share of stock  $i$  at time  $t$  and

$R_{it}$  = retained earnings.

The above model might cause an upward bias in the dividends coefficient due to two major reasons. Firstly, the relationship is misinterpreted as it assumed that the riskiness of the firm is uncorrelated with dividend payout and share prices. This problem should be eliminated by introducing a variable namely lagged P/E ratio to measure individual deviation from the sample average price earnings ratio in the previous year periods as follows:

$$P_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 [P/E]_{i(t-1)} \quad (6)$$

Where,

$[P/E]_{i(t-1)}$  = price earnings ratio of the previous year

Secondly, the income reported by a corporation in any particular period is subject to short-run economic and accounting factors. If prices were related to normal than reported income, it would produce biased results in favor of dividend payout.

However, the difference between the dividends and retained earnings coefficient might be reduced by using the following model.

$$P_{it} = \lambda_0 + \lambda_1 D_{it} + \lambda_2 R_{it} + \lambda_3 P_{it}(t-1) \quad (7)$$

Where,

$P_{it}(t-1)$  = share price of the previous year

**Khan (2009)** found the evidences that dividends, retained earnings and other determinants have dynamic relationship with market share price in the context of Bangladesh. The study suggests that the overall impact of dividends on stock prices is comparatively better than that of retained earnings. The expected dividends play an important role in the determination of stock prices whatever determinants, like lagged price earnings ratio or lagged price, are considered.

In context of Nepal, few research works have been conducted in dividends payout. This study has been expected to find a pathway in dividend policy to affect market price per share providing useful information for all financial scholars. Moreover, the earlier studies on dividends need to be updated due to the rapid changes in financial market of Nepal.

**KD Manandhar (1998)** studied on dividend policy and value of firm to identify the determinants of dividend policy in the context of Nepal. The study found that dividend per share and return on equity have positive impact on market capitalization while earning per share, price-earnings ratio, and dividend yield have negative impact. It was also found a positive relationship between dividends and market capitalization.

**Pradhan (2003)** also carried out a study to determine the relative importance of dividend and retained earnings in determining the market price of stock. He found that dividend payment is more important as opposed to retained earnings in Nepal. The results revealed the customary strong dividends effect and a very weak retained earning effect indicating the attractiveness of dividends among Nepalese investors. The findings suggest that Nepalese stock market has not started recognizing the impact of retained earnings.

**Rabindra Joshi (2012)** the study on effect of dividend on stock prices in Nepal. He found that DPS is a motivating factor in the Nepalese financial sector which is strong enough to increase market price per share of the banking and non-banking firms. The result carried out the effect of DPS greater than REPS on the impact of market price per share. Lagged market price per share is an accelerator to increase market price per share in subsequent years. In addition the study found that dividends and retained earnings significantly explain the variations in share price in banking and non-banking sectors. The impact of dividend, however, is much more pronounced than that of the retained earnings. The relation of dividends and retained earnings on share price is positive in all cases.

**Chhetri (2008)** has explained that there are differences in financial position of high dividend paying and low dividend paying companies. The study revealed that there is a positive relationship between dividends and stock prices. Further, the coefficient of dividends is higher as compared to the coefficient of retained earnings.

### **Conclusions of literature review**

All national and international studies in the field of dividend policy have reported a certain kind of relationship model to explain the relation between price and dividend policy. The concept practices prevailed on the then period when study were made are not exactly same as of two days concepts and practices. Hence, conducting a recent study on dividend policy based on the previously developed model is the main aim of reviewing literature in the dividend policy.

The empirical findings of dividend researches have produced mixed results. Some found positive relationship between the dividend theories and the corporate dividend policy, while others did not. The theories on behavior of corporate dividend policy suggest that dividend policy is a residual decision. The price reactions to dividend changes are stronger for high dividend-yields stock. Similarly, evidences are found on the existence of dividend signaling effects. The initiation and increase in dividends has a significant positive impact on stock price.

## 2.5 Research Gap

There have been many national and international studies in the field of dividend policy. This study the impact of dividends on stock price in the context of Nepal. A majority of earlier studies conducted in developed countries show that dividend has a strong effect than retained earnings. The study examines whether this is consistent in the context of Nepal (or not) and the implication particularly to the selected banking and non-banking sector. While reviewing the earlier studies, it has been seen that these studies are fraught with some limitations. The findings of these studies are not unanimous across all sectors and time periods for explanatory variables and its impact on stock price. The reason behind this is the difference in methodology, sample size, and time. However, studies found that the dividend has a significant impact on market stock prices than other explanatory variables. In addition, only taking the sample as representative data almost studies have been conducted. Therefore, the result cannot be generalized to explain the whole behaviors of market.

A number of studies on impact of dividends on stock price have been carried out in different parts of the world particularly in developed countries. Most of the earlier studies show the significant role of dividend policy on stock price. The corporate firms should follow the appropriate dividend policy to maximize the shareholders' value. Dividend policy is considered as one of the important and critical variables affecting the share price. In the context of Nepal, limited studies (such as Pradhan: 2003, Manandhar: 1998 and Rabindra Joshi) have been carried out by research scholars. Still there is a gap in the financial literature concerning the effect of dividends on stock prices particularly in selected banking and non-banking sectors of Nepal.

Finally, this study is not a comprehensive research however; the overall objectives of this paper are to observe the impact of dividends on stock price of selected banking and non banking sectors in Nepal. On top of that this paper has been written to determine the relationships of market price per share with related financial indicators such as earnings per share, retained earnings, lagged prices earnings ratio and lagged market price per share. This attempt has been made to test the dividends retained earning hypothesis and to examine the estimated relationship over the period of time. The overall conclusion drawn in this study reveals that, the impact of dividends is more pronounced than that of retained earnings in the context of Nepal.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Research methodology is a technique of solving research problem and in depth study, search of any particular topic, subject or of investigation backed by the collection, presentation and interpretation of relevant details or data. Research methodology is a way to solve the research problem systematically. This is the steps, guidelines and tools used in the research by the researcher. It considers the logic behind the methods used in the context of research study and explains why particular method or technique is used.

Research methodology is away to systematically solve the research problem. It refers to the various sequential steps to be adopted by a researcher studying a problem with certain object in views (Kothari 1978 P. 19).

Thus, Research methodology is a technique used for conducting research. It provides various methods for the collection, presentation, interpretation and analysis of data. For this, various financial and statistical tools are used to analyze the data and conclude to the finding.

#### **3.2 Research design**

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research question and to control variance (Kerlinger, 1980: 275).

This study does not strictly follow entire aspect of a single research design. Both qualitative and quantitative types of data and information have been processed. So, descriptive, comparative (co-relational) designs have been used to find the impact of dividend policy on market price of shares. In order to ascertain the extent to which dividend and market price are related; to describe whether these two or more other variables co-vary and if so, to establish the direction, magnitude and form of observed relationship, comparative design would be appropriate. Similarly, descriptive nature of associated problems and other objectives of the study, descriptive design would be additional benefit to make this study complete and meaningful.

In addition to this, casual comparative design has employed. This design has helped to



investigate the possible causes affecting market price of shares by observing existing situation and to search the possible factors leading to these results. Hence, descriptive, co-relational and casual comparative designs have been used to complete this study

### 3.3 Population and sample Selection

This study is based on secondary data obtained from published annual reports of sample firms. The secondary data has been collected from listed companies in Nepal stock exchange (NEPSE). The sample includes banking and non-banking firm of Nepal. It includes the balance sheet, income statement and cash flow statement of sample banking and non-banking company listed in NEPSE. All listed companies are required to submit their annual report including audited financial statement within specific period as prescribed by the Security Exchange Act and Regulation in Nepal. Corporate firms are categorized in different industries such as commercial banks, development banks, and finance Companies, insurance companies, hydropower, manufacturing and processing industries, trading, hotels and others. Among these industry, commercial banks, development banks and finance companies are considered as banking sector and rest of the industries are considered as non-banking sectors. Several companies' shares are traded actively in stock market of Nepal.

**Table : 3.1 Sample banking and non- banking Firm**

<b>Industry</b>	<b>Population (as per listed in NEPSE)</b>	<b>Sample Firm</b>
Commercial bank	26	2
Development bank	68	0
Finance company	69	0
Hotel	4	0
Manufacturing and Processing	18	0
Hydropower	4	2
Insurance	21	0
Trading company	4	0
Other	2	0
Total	216	4

Source: (listed on NEPSE). Nepal

The total population of the study is 218 companies which are listed in Nepal stock exchange for fiscal year 2011/2012. Though there are 218 companies listed in NEPSE. In this study, 2 banking companies selected from Commercial bank which are ( Nabil bank Ltd and Everest bank Ltd.) and on the other hand, 2 non- banking companies from hydropower Which are ( Chilime hydropower company Ltd. and Butwal Power company Ltd.) .

**Table: 3.2 Classification of sample firms based on banking and non banking sector**

Institution	Population	Sample Firms	Observation	Period
	(as per Listed in NEPSE)			
Banking Sector	163	2	5	2007/08-2011/12
Non-Banking Sector	53	2	5	2007/08-2011/12
<b>Total</b>	<b>216</b>	<b>4</b>	<b>10</b>	

In Addition, this study can be taken two separate populations among the large population and only five year secondary data should be taken for analysis (i.e. 2007/08-2011/12).

### **3.4 Nature and Sources of Data**

This study is mainly based on secondary data. The research is based on secondary data. Data relating to dividends policy has been obtained from of two banking and two non- banking concerned institutions. Secondary data is defined data collected earlier for a purpose other than the one currently being pursued (pant: 2005).

In this study data has been collected from difference sources either in published form. Annual reports of the concerned institution, trading reports of NEPSE, publication of SEBON reports, NEPSE and NRB, Economic survey published by ministry of finance, research reports, newspaper, journals,articals,books etc.are the major sources of data of this study. In addition to this data from Website of NEPSE, SEBON, NRB, MOF and concerned banking and non-banking institution are other of data. The relevant data have been collected by official visit, search and library visit.

### **3.5 Data Processing Tools and Techniques**

The data analysis tools are applied as simple as possible. Data obtained from with each other to interpret the result the various sources cannot directly be used in their original form. They need to further verified and simplified for the purpose of analysis. Data, information further verified and simplified for the purpose of analysis. Data, information, figures and facts so obtained need to be checked, rechecked, edited and tabulated for computation According to the nature of data, they have been inserted in meaningful Tables which have been shown in appendices. Homogeneous data have been sorted in one Table and similarly various Tables have been prepared in understandable manner, odd data are excluded from the Table. Data have been analyzed and interpreted using financial and statically tools. The detail calculations that cannot be shown in the body part of the report are presented in appendices at the end of the report.

#### **3.5.1 Method of Analysis**

There are various financial and statistical tools have been used in this study. The analysis of data will be done according to pattern of data available. Financial tools and simple regression analysis are used in the analysis. The relationship between different variables related to study topic would be drawn out using financial and statistical tools. The various calculated results obtained through financial and statistical tools are tabulated under different headings, they are compared with each other to interpret the result.

This study, with help of descriptive statistics analysis, the classification of sample firms and comparison of sample firms based on sector s presented. The mean value of the sample firms under sector is computed to make comparison of sectors. The mean value gives the result of the average of each sector. The descriptive statistics are supposed by bar diagram and pie-chart describing the related variable i.e. EPS, DPS, MPS, and retained earnings per share and P/E ratio etc. It has been done with the help of SPSS (Statistical programmed of social science) tool and Financial tool.

### 3.5.2 Financial Tools

Financial tools are those which help to study the financial strength and weakness of the sample firms. The financial tools used in this study are briefly presented below,

#### A) Earnings per Share (EPS)

EPS is a financial tool used to know the earning capacity of the firm. Directly or indirectly, the market price of share is affected by the earning capacity of the firm. Thus, it helps in determining the market price of equity shares and in estimating the company's capacity to pay dividend to its equity shareholders. The performance and prospects of the company are also affected by EPS. Higher EPS reveals there is possibility of paying more dividend or issue bonus shares and thus it is true that MPS will be affected by all these factors. Similarly, comparison of EPS will also help in deciding whether equity capital is being effectively used or not. In this research, study of EPS enables to make a comparison between the sampled banks and its effect on MPS. The ratio can be computed by dividing the earning available to equity shareholders by the total number of equity shares outstanding.

$$\text{EPS} = \frac{\text{Net profit after tax}}{\text{number of outstanding share}}$$

#### B) Dividend per Share (DPS)

Dividend per share indicates the part of earning distributed to the equity shareholders on per share basis. DPS shows the portion of earning distributed to the stockholders. In order to flow the positive message in the market about the performance of the company, to meet the shareholders expectation a company makes the dividend distribution after retaining the required funds for internal financing and growth. It is true that higher DPS not only creates positive attitudes among shareholders but also helps to increase the market price of shares. Thus, MPS is also affected by DPS. In this research, study of DPS enable us to know the prevailing practice of dividend distribution in one hand and it works as an indicator of better performance in another. It is calculated by dividing the total dividend distributed to equity shareholders by the total number of equity shares outstanding.

$$\text{Dividend per share} = \frac{\text{Total amount of dividends to be paid}}{\text{Total number of share outstanding}}$$

### **C) Price Earnings Ratio (P/E Ratio) / Earning Multiplier**

Price- earnings ratio is also called the earnings multiplier. Price- earnings ratio is the ratio of market price per share to earnings per share. In other words, this represents the amount which the investors are willing to pay for each rupee of the firm' earnings. It reflects the price currently paid by the market for each rupee of currently reported earnings per share.

The P/E ratio measures investor's expectation and market appraisal of the performance of the firm. This is important to compare the market share prices of different stocks given their earning per share. The higher P/E ratio implies the high market share price of a stock given the earning per share and the greater confidence of investor in the firm's future. This ratio is computed by dividing Market per share by Earning per share. Thus,

$$P/E \text{ Ratio} = \frac{\text{Market price per Share (MPS)}}{\text{Earning per share (EPS)}}$$

### **D) Return Earning Per Share (R/E)**

Return earning also most important financial tools of company. R/E stands for retained earnings per share. A portion of net income left over making dividends payment to existing shareholders is known as retained earnings. When the retained earnings get divided by number of share outstanding, it is known as R/E. It is obtained by subtracting DPS from EPS.

$$\text{Return earning per share (R/E)} = \frac{\text{Total amount of retained earning - Dividend amount to be paid}}{\text{No. of outstanding Share}}$$

$$\text{Or, R/E per share} = \text{EPS} - \text{DPS}$$

### **E) Market Price per Share (MPS)**

MPS is that value of stock, which can be obtained by a firm from the sale of a Share in the market. MPS is one of the variables, which is affected by DPS of the firm. If the earning per share and dividend per share are high, the market value of the share will also be high. The capital market determines MPS. In this study the market price of share means the rupees value of one share indicated in NEPSE index.

Theoretically, calculated current price of the share can be derived by using the following formula:

$$P_0 = D_1 / (k_s - g)$$

$$\text{Or, } P = D_0 (1+g) / (k_s - g)$$

$P_0$  = Current market price per share

$D_0$  = Current dividend per share

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

$g$  = Dividend growth rate

$K_s$  = Investors required rate of return

= Risk free rate of return + Inflation rate + Market risk premium

• Present Price = PV of dividends during supernormal growth period + Value of stock price at the end of supernormal growth period Discounted back to present.

• Price = Dividend / Capitalization rate

### **F) Dividend yield (D/Y)**

Dividend yield is a percentage of dividends per share on market price per share. It measures the dividend in relation to market value of share. So, dividend yield is the dividend received by the investor as a percentage of market prices per share in the market. The share with higher dividend yield is worth buying. Thus the price of higher dividend yields increase sharply in the market. This ratio calculated by dividing dividends per share by market price per share of the stock. Thus,

$$\text{Dividend yield} = \frac{\text{Dividends per share}}{\text{Market price per share}}$$

### **G) Dividend payout ratio (DPR)**

DPR indicates as to what portion of EPS has been used for paying dividends and what has been retained for plugging back. This ratio is important from shareholder point of view as well as company management because if company paid whole retained earning it shows that there is no any future growth of company in future. So, DPR is negative relation with retained earnings. This ratio can be computed by below,

$$\text{DPR} = \text{Dividend per Share} / \text{Earning per Share}$$

$$\text{Or Retention ratio} = (1 - \text{DPR})$$

### **3.5.3 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.

#### **A) Mean or average ( $\bar{X}$ )**

An average is value, which represents a group of values. It shows the characteristics of the whole group. Generally the average value lies somewhere in between the two extremes, i.e. the largest and smallest items. It is also known as Average.

$$\text{Or } \bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{N}$$

$$\text{Mean } \bar{X} = \frac{\sum X}{N}$$

Where,  $\sum X$  = Sum of total value

N = no. of observation

## B) Standard Deviation (S.D.)

The measurement of the scatterings of the mass of figures in a series about an average is known as dispersion. S.D. is an absolute measurement of dispersion Property of drawbacks present in other measures of dispersion is removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. In simple term high SD means very less similarity in the values and low SD means high similarity among the values. SD gives the accurate result between the values only if their mean are same. In case of different mean, SD cannot be the accurate result. It is calculated for selected dependent and independent variable specified. It is the positive square root of mean squared deviation from the arithmetic mean and is denoted by and is calculated as follows:

Standard Deviation

$$\text{Standard deviation } (\delta_x) = \sqrt{\frac{\sum X^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

$$\text{Standard deviation } (\delta_y) = \sqrt{\frac{\sum Y^2}{n} - \left(\frac{\sum Y}{n}\right)^2}$$

## C) Coefficient of Variation (CV)

Coefficient of Variation measures the relative dispersion and denoted by CV. It is used in such problems where we want to compare the variability of two or more series. The series for which the CV is greater is said to be more variables and conversely less consistent, less uniform, less stable or less homogeneous. On the other hand, that series for which the coefficient of the variation is less is said to be less variable or more consistent, more uniform, more stable or more homogeneous. It is obtained by dividing by the arithmetic mean to standard deviation. Thus,

Where,

$$CV. = \frac{\text{Standard deviation}}{MEAN} * 100\%$$



$$CV. = \frac{\delta}{\bar{X}}$$

Where,

$\bar{X}$  = Mean

CV. coefficient of variance

$\delta$  = Standard deviation

CV reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviation is known as coefficient of standard deviation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as C.V. It is used for comparing variability of two distributions.

#### **D) Coefficient of correlation (r)**

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the direction of relationship between two set of figures. It is the square root of coefficient determination. Correlation can either be negative or positive. If both variables are changing in same direction, then correlation is said to be positive but when the variation in the two variables take place in opposite direction the correlation is said to be negative. The strength of correlation between the variables can be quantified. This is achieved by calculating the correlation coefficient. The correlation coefficient varies between +1 to -1; with +1 representing perfect positive correlations and -1 representing perfect negative correlation. In this study, simple coefficient of correlation is used to examine the relationship of different factors with dividend and other variables. The data regarding dividend over different years are tabulated and their relationship with each other are drawn out. In practical life, the possibility of obtaining either perfect positive or perfect negative correlation is very rare. The coefficient of correlation is calculated by:

$$\text{Coefficient of correlation (r)} = \frac{n\sum XY - \sum X * \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}}$$

Or Coefficient of correlation (r) =  $\frac{\sum XY}{\sqrt{\sum X^2} \cdot \sqrt{\sum Y^2}}$

This correlation coefficient is analysis between following variables.

MPS with DPS, EPS, R/E, P/E, DPR and D/Y

### **E) Coefficient of Determination (r)**

The coefficient of determination is the measure of the degree of linear association or Correlation between two or more independent variables. It measures the percentage total variation in dependent variables explained by independent variables. If ( has a zero value then, it indicates that there is no correlation which means all the data points in scatter diagram fall exactly on the regression line. If it has the value equal to one then it indicates that there is perfect correlation and as such the regression line is the perfect estimator. But in most of the cases the value of ( will lie somewhere between these two extremes of 1 and 0. One should remember that (close to one indicates a strong correlation between two variables and (near to zero means there is little correlation.

Coefficient of Determination (r<sup>2</sup>) =  $\frac{\text{Explained variance}}{\text{Total variance}}$

Or, (r<sup>2</sup>) =  $1 - \frac{\text{Unexplained variance}}{\text{Total variance}}$

### **F) Regression Analysis**

A number of studies have noted that increase in dividends lead to share price appreciation. It is generally held that the share price depends upon the expectation of future profit. For sector-wise regression analysis this study mainly considers two sectors i.e. banking and non- banking sector. It is not to choose conclusive between linear and logarithmic results on statistical basis. The logarithmic reduces the problem of regression weight. The linear regressions, unlike the logarithmic relation, can handle satisfactorily very small and negative retained earnings (Friends and Puckett, 1964). Thus, the liner regression has been considered for the study.

Regression analysis is the development of the statistical model that can be used to predict the values of variable. There are two types of variable in regression analysis. The variable whose value is to be predicted is called dependent variable and the variable which is used for prediction is called independent variable. The dependent variable is based upon the value of independent variable. In this study the following simple and multiple regressions have used to analyze and test the relationship between dependent and independent variables. The simple regression is used to study, the particular one dependent and one independent variable's relationship. The linear regression analysis would be:

➤ **Multiple regression analysis**

The multiple regression analysis is used for two or more independent variables are used to estimate the value of depended variable. This analyze following,

$$P_{it} = a + b_1D_{it} + b_2R/E_{it} + e_{it}$$

Where,

Where,

$P_{it}$  = Price of share in time't'

$D_{it}$  = Dividend per share in time't'

$R/E_{it}$  = Retained earnings per share in time't'

$e_{it}$  = Error term

• **Market price per share on DPS, R/E and P/Eper share**

$$P_{it} = a + b_1DPS_{it} + b_2R/E_{it} + b_3P/E + e_{it}$$

$P_{it}$  = Price of share in time't'

$DPS_{it}$  = Dividend per share in time't'

$R/E_{it}$  = Retained earnings per share in time't'

$P/E_{it}$  = Price earnings ratio in time't'

$e_{it}$  = Error term

This model has been constructed to examine the relationship between market price and DPS, R/E and P/E ratio.

- **Market price per share on EPS, R/E and P/E per share**

$$P_{it} = a + b_1EPS_{it} + b_2R/E_{it} + b_3P/E + e_{it}$$

$P_{it}$  = Price of share in time 't'

$EPS_{it}$  = earnings per share in time 't'

$R/E_{it}$  = Retained earnings per share in time 't'

$P/E_{it}$  = Price earnings ratio in time 't'

$e_{it}$  = Error term

This model has been constructed to examine the relationship between market price and EPS, R/E and P/E ratio.

- **Market price per share on DPS, R/E and P/E<sub>(t-1)</sub> per share**

Modifying the above equation, this study uses lagged price earning multiplier (price earnings ratio). The modified equation for the study is:

$$P_{it} = a + b_1DPS_{it} + b_2R/E_{it} + b_3P/E_{(t-1)} + e_{it}$$

Where,

$P/E_{i(t-1)}$  = Lagged price earnings ratio in time 't-1'

It is expected that the coefficient of both dividends and retained earnings should be positive in the price equation. The variable  $P/E_{i(t-1)}$  is added to keep the firm effect constant. This model helps to predict the market price per share on dividends per share, earning per share, retained earnings per share and price earnings ratio.

### **G) Probable Error (PE)**

The probable error of the correlation co-efficient is applicable for the measurement of reliability of the computed value of the correlation co-efficient 'r'. It is also denoted by P.E. It is calculated by the following formula.

$$\text{Probable Error (PE)} = \frac{0.6745(1-r^2)}{\sqrt{N}}$$

Where,

r= correlation co-efficient

N= Number of pairs observation

P.E is used to interpret whether the calculated value of 'r' is significant or not.

- i. If  $r < P.E.$ , it is insignificant.
- ii. If  $r > P.E.$ , it is significant.
- iii.  $P.E. < r < 6PE$  nothing can concluded.

## **H) Standard Error of Estimate (SEE)**

The standard error of estimate measures the variability around the line of regression. It also measures the accuracy of the estimated figures. The lesser the value of SEE of estimate the better is the model fitted. If standard error of estimate is Zero then there is no variation about the line and the correlation will be perfect.

Standard Error Correlation Coefficient, S.E. (r) =  $\frac{1-r^2}{s*\sqrt{n}}$

## **I) Test of hypothesis**

The part of study is concerned with the relationship between EPS,DPS, MPS,P/E ratio, R/E per share and other financial variable of sample of banking and non-banking sectors. In other words, this part of study is concerned with the test of the relationship between mentioned factors from the banking and non-banking sectors and their significance. Similarly, in other to examine the significance of regression analysis hypothesis testing has been made.

- **T- Statistics**

To test the validity of our assumption, if sample size is less than or equal to 30, t-test is used. For applying t-test in the context of small sample, first t- value is calculated and compared with the table value of t at a certain level of significant for given degree of freedom. If the calculated value of t -value exceeds the table value, we know that the difference is significant at 5% level. But if t- value is less than the concerning table value of the t, the different is not treated as significant.

- **F-TEST**

F-test generally known as variance ratio test and mostly used in context of analysis of variance. F-test is considered to be more appropriate for testing the hypothesis of equality to verify the hypothesis of significance of a variable to explain the variability in another variable. In fact F-test is a test of significance concerning two-sample variance. The fundamental assumption of F-test is,

- The population is normal
- The observation is independent and the sample drawn are random sample,
- 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.

### **J) Trend Analysis**

The arrangement of Statistical data chronologically (according to occurrence of time) is known as time series and the statistical analysis of this chronological variation is termed as Trend Analysis. It helps to know the past behavior of data in certain span of time interval. On the basis of these past trends, one can make plan in forthcoming days. This Least square method is the most popular and widely used mathematical method of measuring trend. This is frequently used for future prediction. There are various types of curves that may be used to describe the given data but in this text, an attempt has been made to discuss only the fitting of linear trend by the least square method.

Let, the equation of Trend Analysis would be,

$$Y = a + bx$$

Where,

Y = the given value of the variable in time series. It is a dependent variable.

a = Intercept of trend line or y- intercept.

b = Slope of Trend Line.

x= Time variable.

## CHAPTER IV

### DATA PRESENTATION AND ANALYSIS

This chapter deals with the presentation, analysis and interpretation of data collected by secondary sources in order to fulfill the objective. The researcher has already mentioned that the study has heavily based on secondary data. Secondary source includes official quotation of share prices, publication of SEBON and NEPSE, issue prospects and annual reports of respective companies. The financial as well as statistical tools are used for the comparison of financial indicators. Also the correlation and regression analysis of the sample firm is calculated and data are presented in a systematic tabulated form.

- ✚ Explain the financial variable related to dividend policy.
- ✚ Finding the correlation between dividends related variable and interpretation of them.
- ✚ Simple regression analysis so as to explain the relation of MPS with other dividend related financial variables.
- ✚ Multiple regression analysis to depict of MPS with other financial variables which can be find out from SPSS (Statistics programmed and Social science).

#### 4.1 Interpretation of financial variables and Indicator

##### 4.1.1 Market Price per Share (MPS)

Market price of share is that value of stock, which can be received by firm or equity holders selling it in capital market. The capital market determines MPS. In this analysis, MPS is calculated by taking the average of the highest and the lowest market price of NEPSE Index. The market price per share depicts the perception of the market relating to the performance of a company. MPS is the current price at which the stock is trade

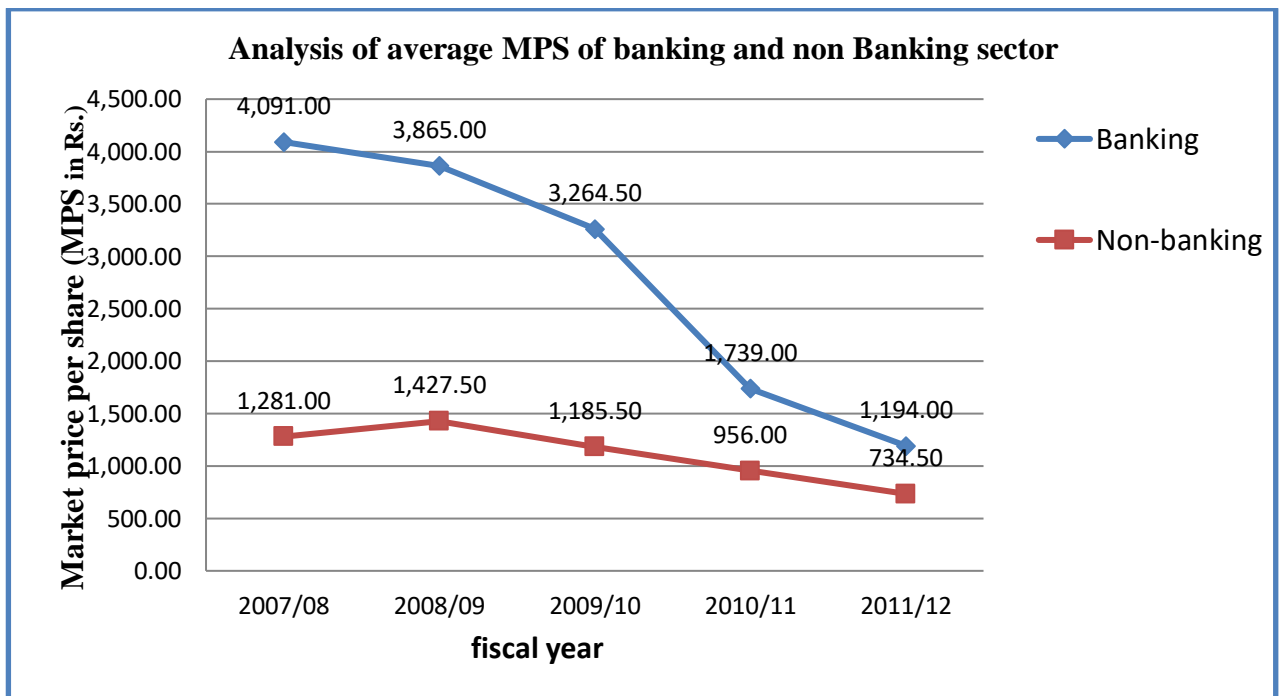
**Table:4.1 Comparative Analysis of Average MPS of Selected banking and non banking sector's**  
Average MPS in Rupee

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	4,091.00	3,865.00	3,264.50	1,739.00	1,194.00	2,830.70	1,295.85	46
<b>Non-banking</b>	1,281.00	1,427.50	1,185.50	956.00	734.50	1,118.70	270.84	24

**Source: Annual report of (company, SEBON and NEPSE)**

Table 4.1 Shows that the Average market price of the selected banking sector and non-banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average market price of banking sector in 2007/08 i.e. (Rs, 4091) and the lowest average MPS of the banking sectors in 2011/12 i.e. (Rs.1194). Similarly, the table also explain the highest and lowest average MPS of non- banking sectors in 2007/08 i.e. (Rs.1281) and 2011/12 i.e. (Rs.734.5) respectively. The table also explained the average MPS of banking and non banking sectors gradually decreases over the period it means that the sectors are not well performing during the comparative period of 2007/08 to 2011/12.

In addition, the mean value of banking and non-banking sector is Rs.2830.70 and Rs.1118.70 respectively. The banking and non banking sectors standard deviation and CV is (S.D.1295.85, CV 46% and S.D.270.84, CV 24%) respectively. It is clear that the banking sector has high value of standard deviation and percentage of coefficient variance more than the non-banking sector which shows banking sector is more risky and fluctuated.



**Figure: 4.1**



**Figure-4.1** shows the comparative analysis of banking and non-banking sector in which the mean MPS, CV, and S.D. is higher in banking sector. The average market price of banking and non banking sectors are gradually decreasing over the period.

#### 4.1.2 Earning Price per Share (EPS)

Normally the performance and achievement of business organization are measured in terms of earning capacity to generate earning. Higher earning shows the higher strength while lower earning shows weaker strength of business organization. So, higher the EPS means better the position in stock market.

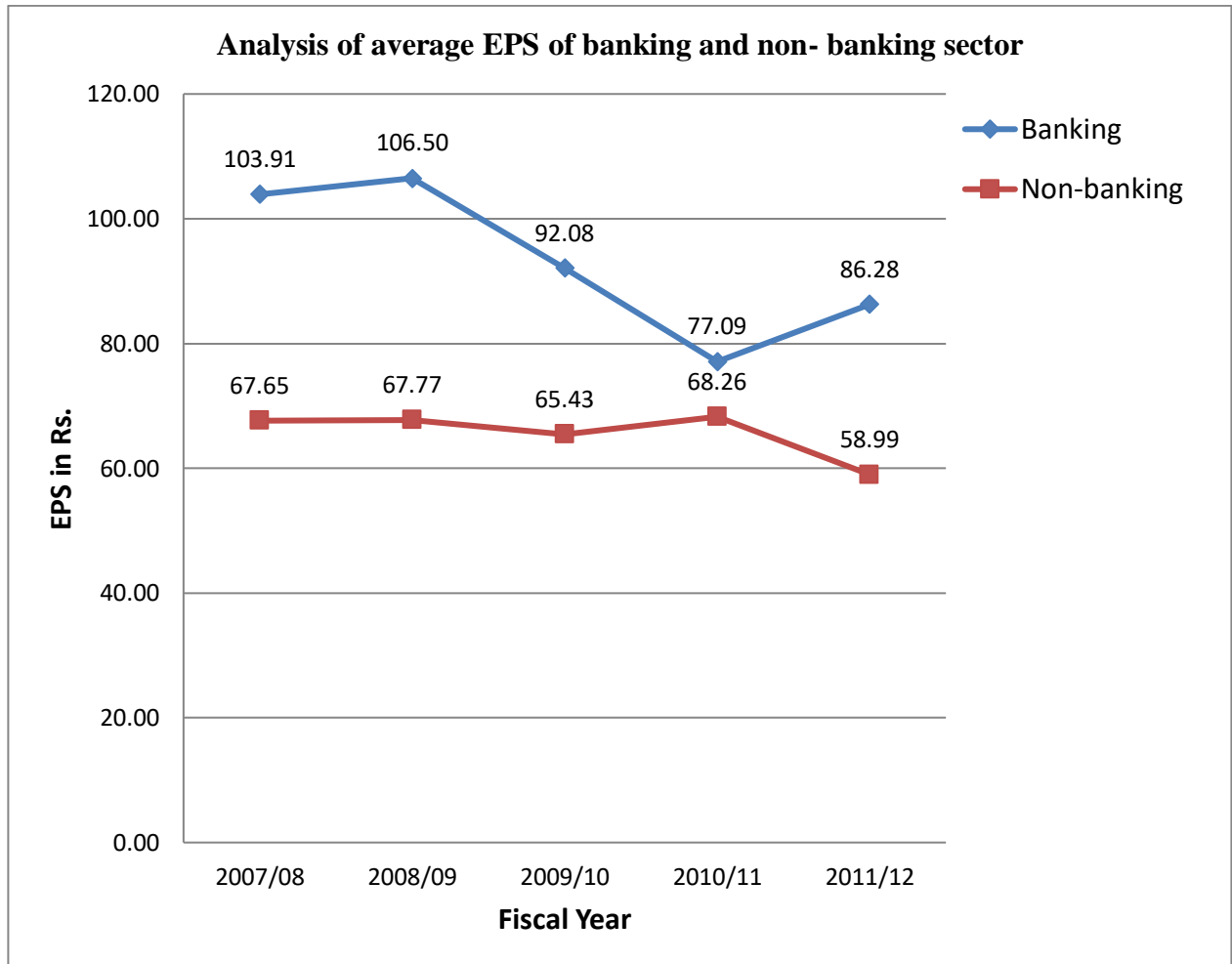
**Table:4.2 Comparative Analysis of Average EPS of Selected banking and non banking sector s**  
Average EPS in Rupee

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	103.91	106.50	92.08	77.09	86.28	93.17	12.25	13.00
<b>Non-banking</b>	67.65	67.77	65.43	68.26	58.99	65.62	3.86	6.00

**Source: Annual report of (company, SEBON and NEPSE)**

Table 4.2 explained that the Average earning price of the selected banking sector and non-banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average Earning price of banking sector in 2008/09 i.e. (Rs, 106.5) and the lowest average EPS of the banking sectors in 2010/11 i.e. (Rs.77.09). Similarly, the table also explain the highest and lowest average EPS of non- banking sectors in 2010/11 i.e. (Rs.68.26) and 2011/12 i.e. (Rs.58.99) respectively. The table also explained the average EPS of banking initially increases then in 2010/11 decrease and then after increases. In contrast, non banking sectors gradually decreases until 2009/2010 and then 2010/11 increases and then after decrease. It clear that, the sectors are volatile performing during the comparative period of 2007/08 to 2011/12.

In addition, the mean value of banking and non-banking sector is Rs.93.17 and Rs.65.62 respectively. The banking and non banking sectors standard deviation and CV is (S.D.12.25, CV 13% and S.D.3.86 CV 6%) respectively. It is clear that the banking sector has high value of standard deviation and percentage of coefficient variance more than the non-banking sector which shows banking sector comparatively risky and fluctuated. It concludes that the variability has been less consistency during the period.



**Figure: 4.2**

**Figure-4.2** shows the comparative analysis of banking and non-banking sector in which the mean EPS, CV, and S.D.is higher in banking sector according to their performance. The average earnings price of banking and non banking sectors are fluctuate over the period.

### 4.1.3 Dividend per Share (DPS)

Dividend per share (DPS) is that amount, which paid to common shareholders on a share basis. In other hand, it depend financial manager decision. it calculated by the dividend provided to equity shareholder to the number of outstanding share.

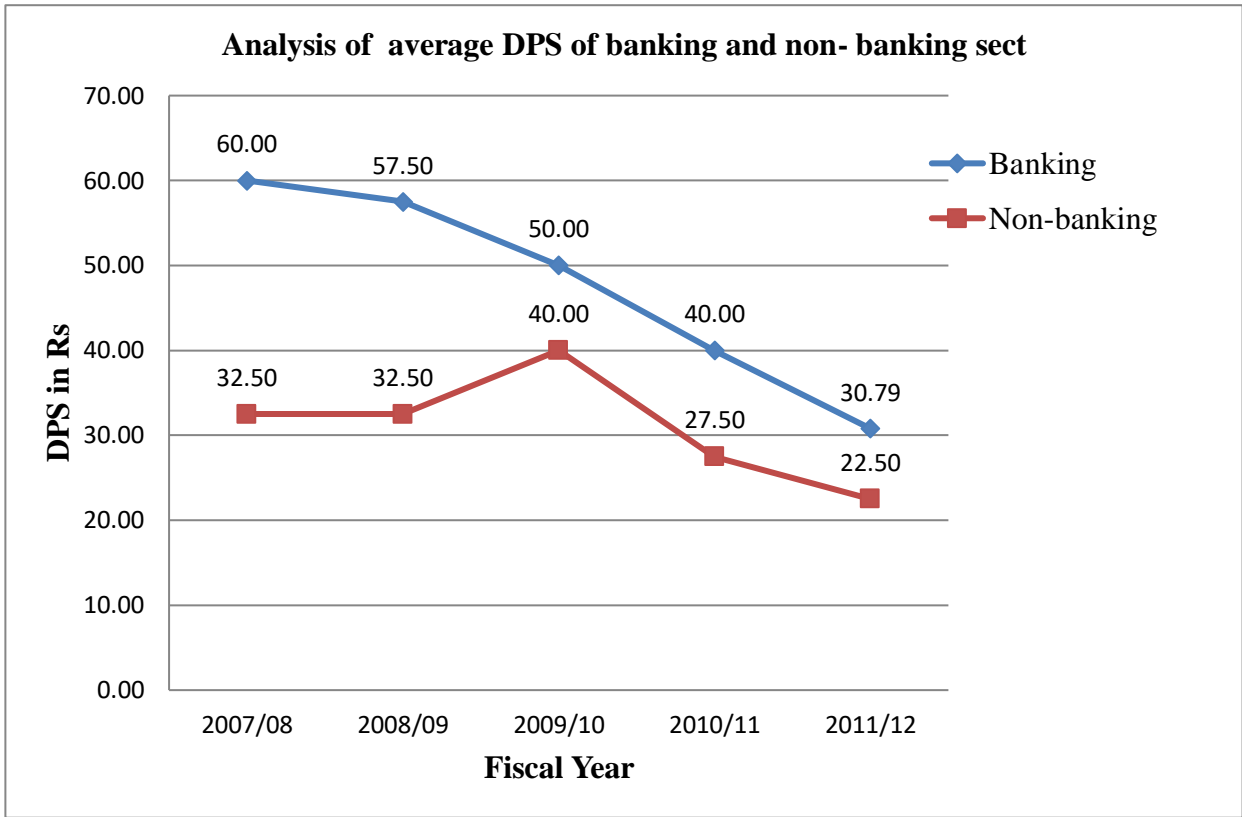
**Table:4.3ComperativeAnalysis of Average DPS of Selected banking and non banking sector s**

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	60.00	57.50	50.00	40.00	30.79	47.66	12.23	26.00
<b>Non-banking</b>	32.50	32.50	40.00	27.50	22.50	31.00	6.52	21.00

**Source: Annual report of (company, SEBON and NEPSE)**

Table 4.3 the table illustrates the Average dividends price of the selected banking sector and non- banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average dividends price of banking sector in 2007/08 i.e. (Rs, 60) and the lowest average DPS of the banking sectors in 2011/12 i.e. (Rs.30.79).Similarly, The table also explain the highest and lowest average DPS of non- banking sectors in 2007/08 i.e. (Rs.32.5) and 2011/12i.e. (Rs.22.50) respectively. It clear shows that The average DPS same in 2007/08 and 2008/09 i.e.( Rs.32.5) The table also explained the average DPS of banking and non banking sectors gradually decreases over the period it means that the sectors are not well performing during the comparative period of 2007/08 to 2011/12.

In addition, the mean value of banking and non-banking sector is Rs.47.66 and Rs.31 respectively. The banking and non banking sectors standard deviation and CV is (S.D.12.23, CV 26% and S.D 6.52, CV 21%) respectively. It is clear that the banking sector has high value of standard deviation and percentage of coefficient variance more than the non-banking sector which shows banking sector is more risky and fluctuated.



**Figure: 4.3**

**Figure-4.3** shows the comparative analysis of banking and non-banking sector in which the mean DPS, CV, and S.D. is higher in banking sector according to their performance. The average Dividend price of banking and non banking sectors are fluctuate over the period. However, the price has been gradually decreased over the period.

#### **4.1.4 Price Earnings ratio (P/E)**

Price Earnings Ratio represents the amount which the investors are willing to pay for each rupee of the firm's earnings. It reflects the preening. It reflects the price currently paid by the market for each rupee of currently reported earnings per share. The P/E ratio measures investor's share. The P/E ratio measures investor's expectation and market appraisal of the performance of the company

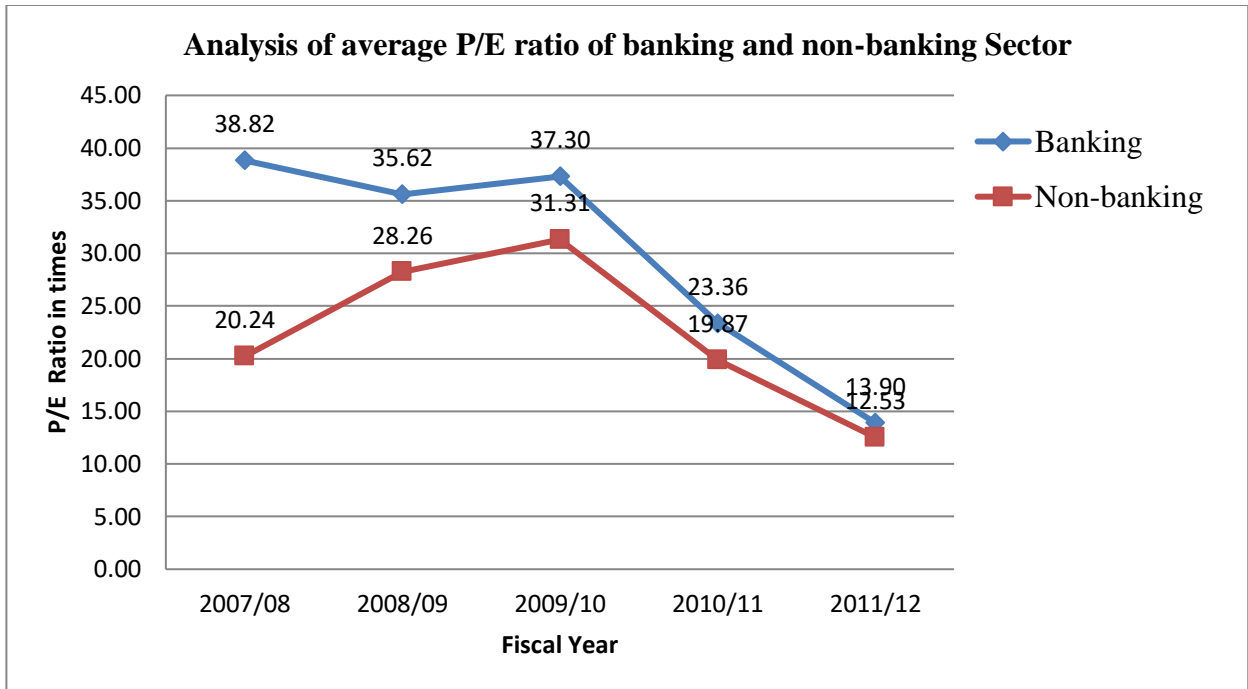
**Table:4.4ComperativeAnalysisof Average P/E ratio of Selected banking and non banking sector s  
P/E ratio in Times**

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	38.82	35.62	37.30	23.36	13.90	29.80	10.79	36.00
<b>Non-banking</b>	20.24	28.26	31.31	19.87	12.53	22.56	7.57	34.00

**Source: Annual report of (company, SEBON and NEPSE)**

Table 4.4 explained that the Average P/E ratio of the selected banking sector and non-banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average Earning price of banking sector in 2007/2008 i.e. (38.82 times) and the lowest average P/E ratio of the banking sectors in 2011/12 i.e. (13.9 times). Similarly, the table also explain the highest and lowest average P/E ratio of non- banking sectors in 2009/10 i.e. (31.31 times) and 2011/12 i.e. (12.53) respectively. It indicated that the investors are willing to pay each rupee of firm which means while higher times of P/E ratio investors should pay high value of firm and similarly lower P/E ratio paid lower value of firm. The table also explained the average P/E ratio of banking initially in 2008/09 decrease and then after gradually decreases over the period. In contrast, non banking sectors have been increases at the beginning until 2009/2010 and then after gradually decrease during the period. It clear that, the sectors are volatile performing during the comparative period of 2007/08 to 2011/12.

In addition, the P/E ratio mean value of banking and non-banking sector is 29.8 times and 22.56 times respectively. The banking and non banking sectors standard deviation and CV is (S.D.10.79, CV 36% and S.D.7.57 CV 34%) respectively. It is clear that the banking sector has high value of standard deviation and percentage of coefficient variance more than the non-banking sector which shows banking sector comparatively risky and fluctuated. It concludes that the variability has been less consistency during the period.



**Figure: 4.4**

**Figure-4.4** Illustrated the comparative analysis of banking and non-banking sector in which the mean P/E ratio, CV, and S.D. is higher in banking sector according to their performance. The average P/E ratio of banking and non banking sectors are fluctuate over the period.

#### 4.1.5 Retained earnings per share (R/E)

R/E stands for retained earnings per share. A portion of net income left over making dividends payment to existing shareholders is known as retained earnings. When the retained earnings gets divided by number of share outstanding, it is known as R/E. It is obtained by subtracting DPS from EPS.

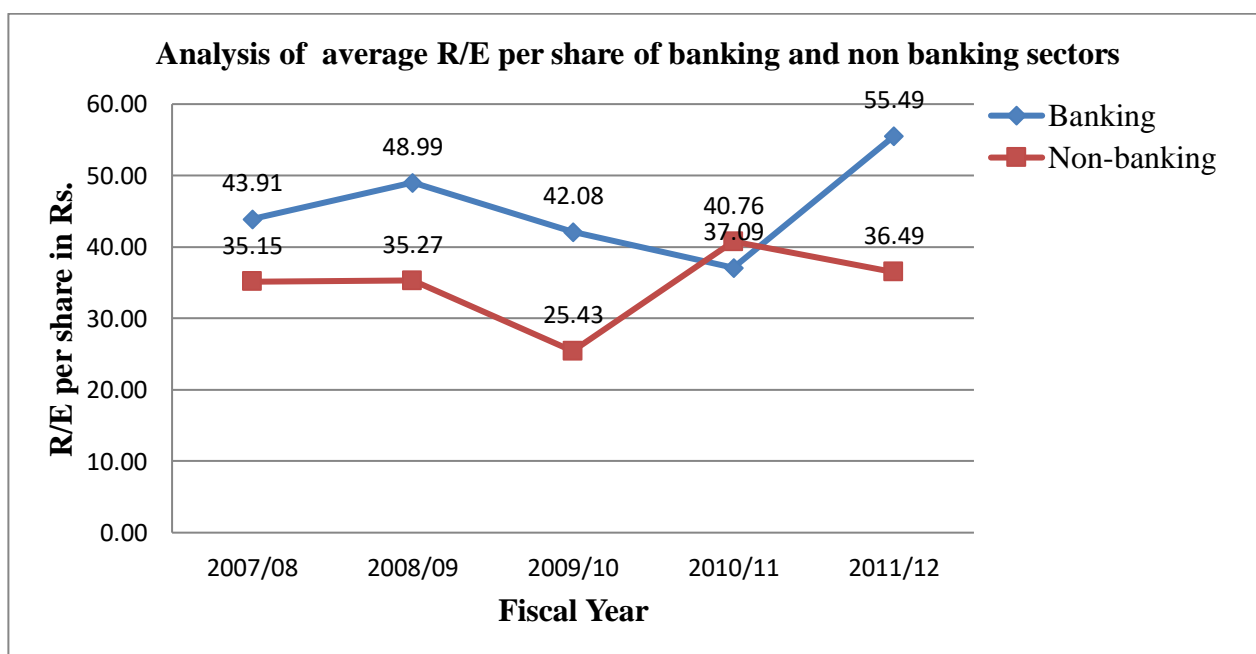
**Table:4.5 Comparative Analysis of Average R/E of Selected banking and non banking sector s**  
Average R/E per share in Rs.

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	43.91	48.99	42.08	37.09	55.49	45.51	7.02	15.00
<b>Non-banking</b>	35.15	35.27	25.43	40.76	36.49	34.62	5.76	17.00

**Source: Annual report of (company, SEBON and NEPSE)**

Table 4.5 illustrates that the Average R/E per share of the selected banking sector and non-banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average R/E per share of banking sector in 2011/12 i.e. (Rs, 55.49) and the lowest average R/E per share of the banking sectors in 2010/2011 i.e. (Rs.37.09). Similarly, the table also explain the highest and lowest average R/E per share of non- banking sectors in 2010/11 i.e. (Rs.40.76) and 2009/10 i.e. (Rs.25.43) respectively. The table also explained the average R/E per share of banking highly fluctuated over the period. In contrast, none banks also highly volatile of R/E per share over the period. It clear that, the sectors are volatile performing during the comparative period of 2007/08 to 2011/12.

In addition, the R/E per share of mean value of banking and non-banking sector is Rs.45.51 and Rs.34.62 respectively. The banking and non banking sectors standard deviation and CV is (S.D.7.02, CV 15% and S.D.5.76 CV 17%) respectively. It is clear that the non-banking sector has high percentage of coefficient variance more than the banking sector which shows non-banking sector comparatively risky and fluctuated the banking sectors. It concludes that the variability has been less consistency during the period.



**Figure: 4.5**

**Figure-4.5** Illustrated the comparative analysis of banking and non-banking sector in which the mean R/E per share and S.D.is higher in banking sector according to their performance However, coefficient of variance of non –banking sector has been higher than banking sectors. So, the non-banking sectors are more volatile than the banking sector. The average R/E per share of banking and non banking sectors are fluctuate over the period.

#### 4.1.6 Dividend Payout Ratio (DPR)

Dividend payout ratio (DPR) indicates the percentage of actual earnings of the banks received by the ordinary shareholders it is calculated by dividing the dividend per share to ordinary share holders by the earning per share (EPS).

**Table:4.6ComperativeAnalysis of Average DPR of Selected banking and non banking sector s**  
Average DPR in %

Sector	Fiscal Year					Mean	S.D.	C.V. %
	2007/08	2008/09	2009/10	2010/11	2011/12			
<b>Banking</b>	58.00	53.00	57.00	26.00	51.00	49.00	12.00	25.00
<b>Non-banking</b>	45.00	51.00	69.00	51.00	40.00	53.00	9.00	17.00

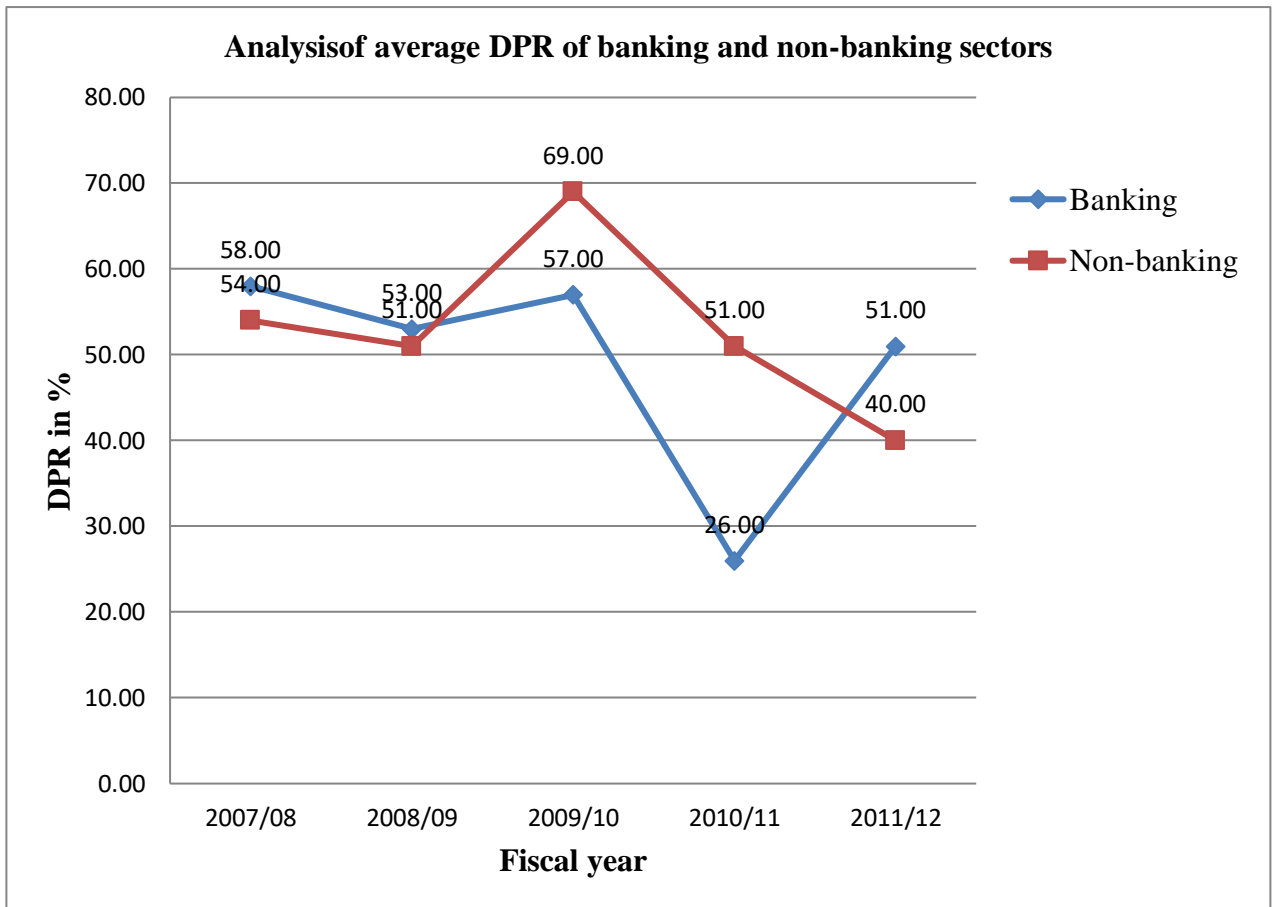
**Source: Annual report of (company, EBON and NEPSE)**

Table 4.6 Shows that the Average DPR of the selected banking sector and non- banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average DPR of banking sector in 2007/2008 i.e. (58%) and the lowest average DPR of the banking sectors in 2010/11 i.e. (26%).Similarly, the table also explain the highest and lowest average DPR of non- banking sectors in 2009/10 i.e. (69%) and 2011/12 i.e. (40%) respectively. The table also explained the average DPR percentage of banking and non banking sectors are highly fluctuated over the period. it means that the sectors are not well performing during the comparative period of 2007/08 to 2011/12.

In addition, the mean percentage value of banking and non-banking sector is 49 and 53 respectively. The banking and non banking sectors standard deviation and CV is (S.D.12. C.V .25% and S.D.9, C.V. 17%) respectively. It is clear that the banking sector has high value



of standard deviation and percentage of coefficient variance more than the non-banking sector which shows banking sector is more risky and fluctuated.



**Figure: 4.6**

**Figure-4.6** shows the comparative analysis of banking and non-banking sector in which the mean DPR, CV, and S.D. is higher in banking sector according to their performance. The average DPR of banking and non-banking sectors are fluctuate over the period. It clearly shows that comparatively higher percentage dividends payout ratio has been paid by non-banking sectors, which high DPR i.e. (69%).

#### **4.1.7 Dividend Yield (DY)**

DY for a stock relates the annual dividend to share price. Typically, companies with good growth potential retain a high proportion of earnings and have a low dividend yield, whereas more matured industries pay out high portion of their earnings as dividend and

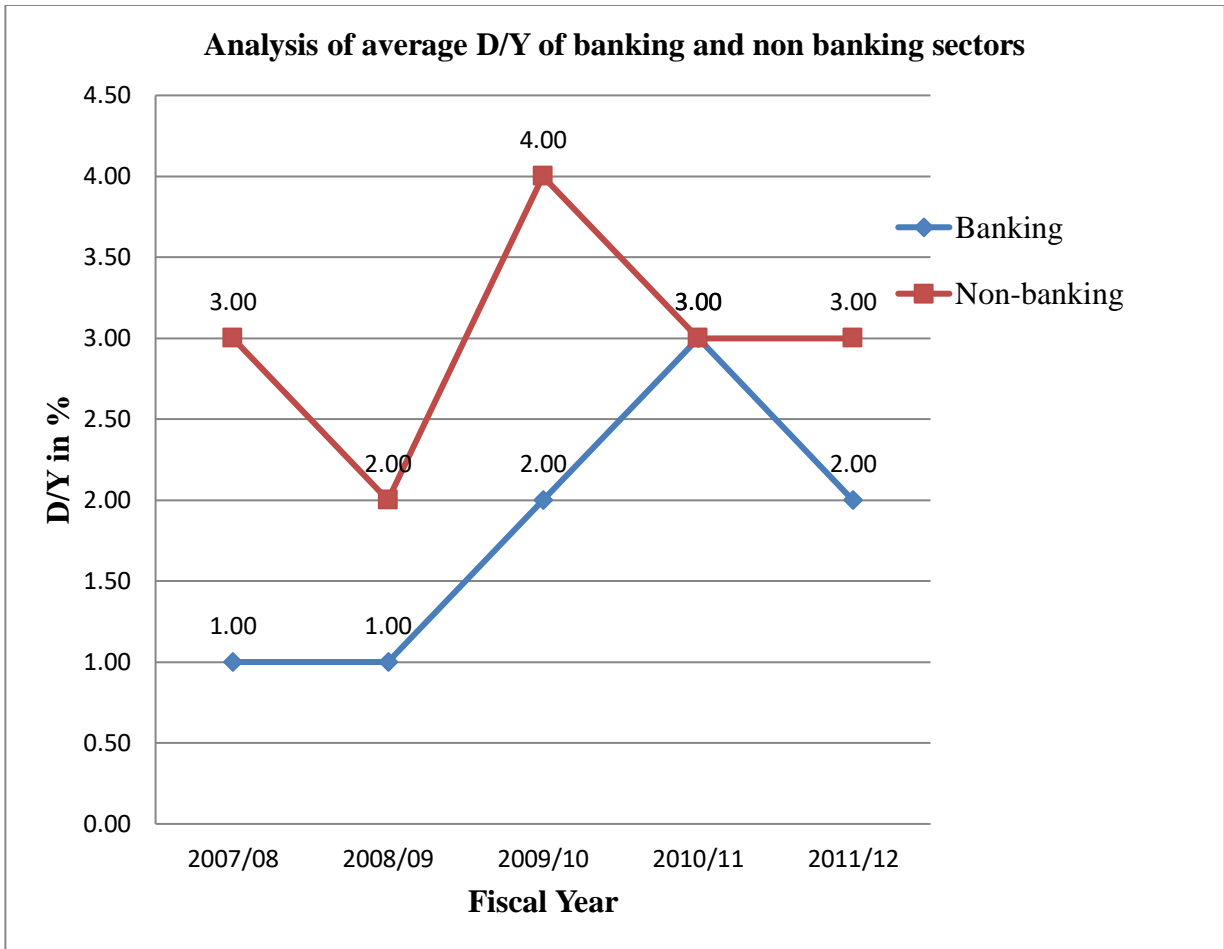
retain low proportion of earning and have a relatively high dividend yield. Dividend Yield is calculated as dividing dividend per share by market price per share.

**Table:4.7ComperativeAnalysis of average D/Y of Selected banking and non banking sector s**

Sector	Fiscal Year					Average D/Y in%		
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V. %
	Banking	1.00	1.00	2.00	3.00	2.00	2.00	1.00
Non-banking	3.00	2.00	4.00	3.00	3.00	3.00	0.400	14.00
<b>Source: Annual report of (company, SEBON and NEPSE)</b>								

Table 4.7 illustrates that the Average D/Y per share of the selected banking sector and non-banking sectors from Fiscal year 2007/08 to 2011/12. According to the table highest average D/Y per share of banking sector in 2010/11 i.e. (3%) and the lowest average D/Y per share of the banking sectors in 2007/2008 and 2008/09 i.e. (1%). Similarly, the table also explain the highest and lowest average R/E per share of non- banking sectors in 2009/10 i.e. (4%) and 2008/09 i.e. (2%) respectively. The table also explained the average D/Y per share of banking highly fluctuated over the period. In contrast, none banks also highly volatile of D/Y per share over the period. It clear that, the sectors are volatile performing during the comparative period of 2007/08 to 2011/12.

In addition, the D/Y per share of mean value of banking and non-banking sector is 2% and 3% respectively. The banking and non banking sectors standard deviation and CV is (S.D.1, CV 31% and S.D.4 CV 14%) respectively. It is clear that the banking sector has high percentage of coefficient variance more than the non-banking sector which shows banking sector comparatively risky and fluctuated then the non-banking sectors. It concludes that the variability has been less consistency during the period.



**Figure: 4.7**

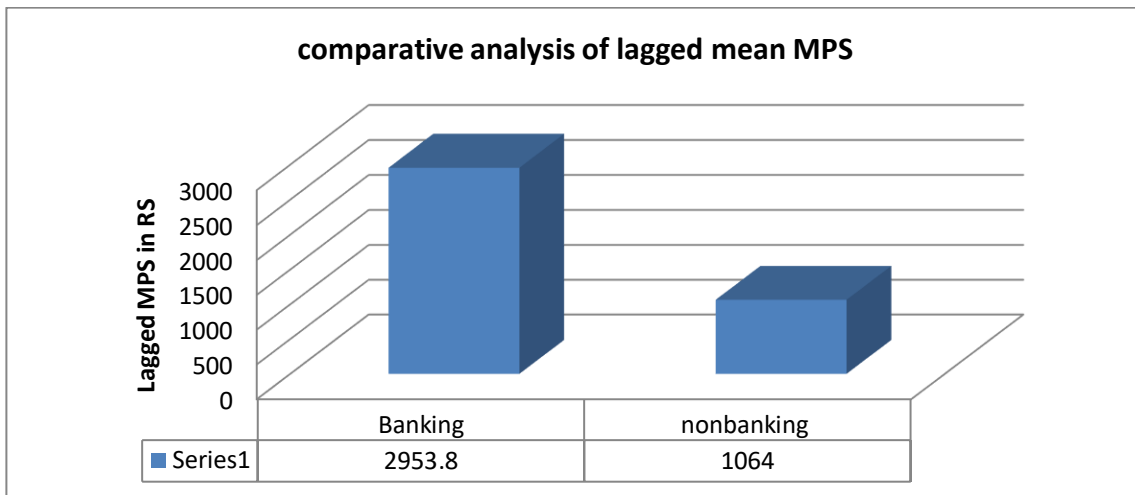
**Figure-4.7** To clear shows the comparative analysis of banking and non-banking sector in which, CV, and S.D. is higher in banking sector according to their performance. The mean D/Y value is lower than non-banking sectors. The average D/Y of banking and non banking sectors are fluctuate over the period. It explained that the highest D/Y has non banking sector in 2009/10 i.e. (40%)

## 4.2 Statistical analysis

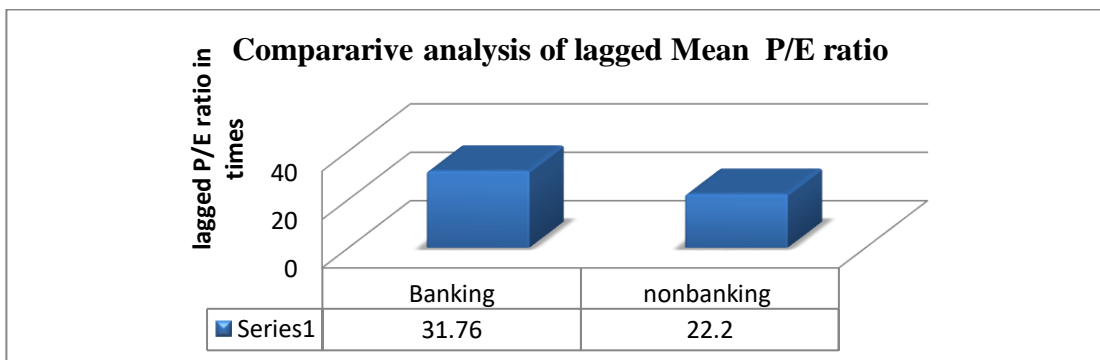
### 4.2.1 Descriptive analysis

In this study, descriptive statistics represent the information and relation with related input variable. It include the information of DPS, EPS, P/E ratio and lagged P/E ratio and lagged MPS each sample firm period of 2007/08 to 2011/12 which has been presented on bar chart.

With the help of descriptive analysis, the classification of sample firms and comparison of sample firms based on sector is presented. The mean value of sample firms under Sector is computed to make comparison of sectors. The mean value gives the result of the average of each sector. The descriptive statistics are supported by bar diagram describing the related variable i.e. EPS, MPS, DPS, REPS etc.



**Figure 4.8**



**Figure: 4.9**

Figure-4.8 and 4.9 shows the comparative analysis of banking and non-banking sector in which the Mean, lagged MPS and lagged P/E ratio is higher banking sector.

**a) Frequencies table for Banking Sector**

Statistics						
	Mps	EPS	DPS	R/E	P/E	
N	5	5	5	5	5	5
	0	0	0	0	0	0
Mean	2830.7000	93.1720	47.6580	45.5120	29.8000	
Median	3264.5000	92.0800	50.0000	43.9100	35.6200	
Mode	1194.00 <sup>a</sup>	77.09 <sup>a</sup>	30.79 <sup>a</sup>	37.09 <sup>a</sup>	13.90 <sup>a</sup>	
Std. Deviation	1295.850	12.25013	12.22548	7.01662	10.79081	
Variance	1679228	150.06577	149.46232	49.23302	116.44160	
Range	2897.00	29.41	29.21	18.40	24.92	
Minimum	1194.00	77.09	30.79	37.09	13.90	
Maximum	4091.00	106.50	60.00	55.49	38.82	

**Source: SPSS (Table4.2.1)**

SPSS Table 4.2.1 The frequencies table explained the maximum, minimum, range, S.D. mean and median value of banking sectors financial variables where, median value is greater than mean value it explained negatives skewed and vice versa.

Statistics						
	Mps	EPS	DPS	R/E	P/E	
N	5	5	5	5	5	5
	0	0	0	0	0	0
Mean	1118.7000	65.6200	31.0000	33.4200	22.5620	
Median	1185.5000	67.6500	32.5000	35.1500	20.2400	
Mode	743.50 <sup>a</sup>	58.99 <sup>a</sup>	32.50	25.43 <sup>a</sup>	12.53 <sup>a</sup>	
Std. Deviation	270.83542	3.86348	6.51920	5.76012	7.57416	
Variance	73351.83	14.92650	42.50000	33.17900	57.36797	
Range	684.00	9.27	17.50	15.33	18.78	
Minimum	743.50	58.99	22.50	25.43	12.53	
Maximum	1427.50	68.26	40.00	40.76	31.31	

**Source: SPSS (Table 4.2.2)**

## B) Frequencies table for non Banking Sector

SPSS- table 4.2.2 The frequencies table explained the maximum, minimum, range, S.D. mean and median value of banking sectors financial variables where, median value is greater than mean value it explained negatives skewed and vice versa.

### 4.2.2 Correlation Coefficient between financial variable

Correlation is generally used to describe the degree to which one variable is related to another. The coefficient of correlation shows the magnitude and direction relation between the variables. It helps to determine both positive and negative relationship of the variables. The positive correlation indicates that increase in value of one variable leads to increase in value of another variable and negative correlation depicts the inverse relationship between variables. The dividends related variables EPS, DPS, MPS, P/E Ratio and R/E per share are the financial variables for this study. Correlation between these variables for the variables for the individual banking sectors and non banking sectors is shows separately in the following SPSS data.

#### A) Correlation between financial variable of Banking sectors

		Correlations				
		mps	eps	dps	r/e	p/e
Pearson Correlation	mps	1.000	.877	.990	-.194	.960
	eps	.877	1.000	.836	.290	.718
	dps	.990	.836	1.000	-.284	.955
	r/e	-.194	.290	-.284	1.000	-.411
	p/e	.960	.718	.955	-.411	1.000
Sig. (1-tailed)	mps	.	.025	.001	.377	.005
	eps	.025	.	.039	.318	.086
	dps	.001	.039	.	.322	.006
	r/e	.377	.318	.322	.	.246
	p/e	.005	.086	.006	.246	.
N	mps	5	5	5	5	5
	eps	5	5	5	5	5
	dps	5	5	5	5	5
	r/e	5	5	5	5	5
	p/e	5	5	5	5	5

**Table: 4.2.3**

**Source: SPSS**

Table-4.2.3 the correlation matrix presents the magnitude and direction of correlation between various financial variable of the banking sectors. Basically. The degree of relationship of MPS with the other variables is seen in the table. It is clear that MPS has positive relation with EPS, DPS, and P/E ratio and other hand MPS is negative correlated with R/E per share. Positive correlation shows the positive direction of movement and relation of the variables. It means both variable move same direction at the degree of correlation value. In other hand MPS has negative relation with the retained earnings per share(R/E). i.e. (-0.194) it means that the MPS has opposite movement and relationship with variables. EPS has high correlation with MPS, DPS and P/E ratio. Among this, EPS has higher correlation with MPS i.e. 0.877 and the lowest with R/E per share i.e., 0.290. Here, the data shows that DPS is negatively correlated with R/E per share i.e., -0.284 and it has positive correlation with MPS, EPS and P/E ratio. Among this, DPS has higher correlation with MPS and lowest correlation R/E per share. Finally, R/E has higher negative correlation with P/E ratio i.e., -0.411. Among this, R/E has negative correlation with MPS, DPS and P/E ratio. In addition to this R/E has only positive correlation with EPS i.e., 0.290.

Furthermore, the table also explained the coefficient of determination which indicated sig. (1-tailed). The R/E ratio has high percentage of coefficient of determination with the MPS in one tailed test i.e. ( $r=0.377$  or  $r^2=0.377*0.377*100$ ). So this high value of correlation is insignificant in statistical terms. It means that increase or decrease MPS is explained by (R/E) per share to extend of 14.21% which is indicated by the coefficient of determination between them. In addition, the MPS has highly correlated with the DPS and other hand coefficient of determination value seen in one tail (0.001) it has significance because it has level of significance is less than 5%. In this data, the EPS coefficient of determination has 0.0625% ( $r^2=0.025*0.025*100$ ) with MPS so, it's significant with MPS. Secondly, the EPS has been positive correlation with all financial variables. However the coefficient of determination is less than 5% with the DPS, MPS and P/E ratio. The EPS coefficient of determination with DPS, P/E, and MPS is 0.039, 0.086, and 0.025) respectively. So it is significant with EPS. However the R/E has Coefficient of determination i.e.(0.318) with EPS so it is Insignificant. Again, in this data shows that the DPS coefficient of determination has 0.0001 % ( $r^2=0.001*0.001*100$ ) so, it`s significant with MPS. Secondly, the DPS has been positive

correlation with all financial variables exception of R/E. However the coefficient of determination is more than 5% with the R/E i.e. (10.37%) so it is insignificant. In other hand DPS has 0.15% coefficient of determination with the EPS. So it is significant In addition to this DPS has less than 5% coefficient of determination with MPS and P/E ratio. Again, this data shows that the R/E per share coefficient of determination has 14.21 %( $r^2=0.377*0.377*100$ ) so, it is insignificant with MPS. Secondly, the R/E has been positive correlation with EPS and negative correlation with MPS, DPS and P/E. However, the coefficient of determination is more than 5% with the DPS, P/E ratio and EPS i.e. (10.37%, 6.05% and 10.11%) respectively. So, it is insignificant. Finally, this data shows that the P/E ratio per share coefficient of determination has 0.0025 %( $r^2=0.005*0.005*100$ ) so, it is significant with MPS. Secondly, the P/E has been positive correlation with EPS, DPS and MPS and negative correlation with the R/E. However the coefficient of determination is less than 5% with the EPS, MPS and DPS i.e. (.086,.005 and .006) Respectively. So, it is significant with EPS, MPS and DPS. In other hand P/E has 6.05% coefficient of determination with the R/E so it is insignificant.

## B) Correlation between financial variable of Non-Banking sectors

		Correlations				
		MPS	EPS	DPS	R/E	P/E
Pearson Correlation	MPS	1.000	.726	.717	-.333	.774
	EPS	.726	1.000	.513	.092	.569
	DPS	.717	.513	1.000	-.807	.908
	R/e	-.333	.092	-.807	1.000	-.663
	P/E	.774	.569	.908	-.663	1.000
Sig. (1-tailed)	MPS	.	.082	.086	.292	.062
	EPS	.082	.	.188	.441	.159
	DPS	.086	.188	.	.049	.016
	R/e	.292	.441	.049	.	.112
	P/E	.062	.159	.016	.112	.
N	MPS	5	5	5	5	5
	EPS	5	5	5	5	5
	DPS	5	5	5	5	5
	R/e	5	5	5	5	5
	P/E	5	5	5	5	5

Table: 4.2.4

Source: SPSS



Table-4.2.4 the correlation matrix exhibits the magnitude and direction of correlation between various financial variable of the non-banking sectors. Normally. The degree of relationship of MPS with the other independent variables is seen in the table. It is clear that MPS has positive relation with EPS, DPS, and P/E ratio and other hand MPS is negative correlated with R/E. Positive correlation shows the positive direction of movement and relation of the variables. It means both variable move same direction at the degree of correlation value. In other hand MPS has negative relation with the retained earnings per share(R/E). i.e. (-0.333) it means that the MPS has opposite movement and relationship with R/E. EPS has positive correlation with MPS, DPS and P/E ratio. Among this, EPS has higher correlation with MPS i.e. 0.726 and the lowest with R/E per share i.e., 0.092. Here, the data shows that DPS is negatively correlated with R/E per share i.e. (-0.807).and it has positive correlation with MPS, EPS and P/E ratio. Among this, DPS has higher correlation with P/E ratio and lowest correlation EPS. Finally, R/E has only positive correlation with EPS i.e., 0.092. Among this, R/E has negative correlation with MPS, DPS and P/E ratio. In addition to this R/E has higher negative correlation with DPS i.e., -0.807

Furthermore, the table also explained the coefficient of determination which indicated sig. (1-tailed). The MPS has high percentage of coefficient of determination with the R/E ratio in one tailed test i.e. ( $r=0.292$  or  $r^2=0.292*0.292*100$ ). So this high value of correlation is insignificant in statistical terms. It means that increase or decrease MPS is explained by (R/E) per share to extend of 8.53% which is indicated by the coefficient of determination between them. In addition, the MPS has highly positive correlated with the P/E ratio and other hand coefficient of determination value seen in one tail (0.062). It has significance because it has level of significance is less than 5%. In this data, the EPS coefficient of determination has 0.67% ( $r^2=0.082*0.082*100$ ) with MPS so, it's significant with MPS. Secondly, the EPS has been positive correlation with all financial variables. Similarly, the coefficient of determination is less than 5% with the DPS, MPS and P/E ratio. The EPS coefficient of determination with DPS, P/E, and MPS is ( $r=0.188, 0.159, \text{ and } 0.082$ ) respectively. However EPS has 0.441 Coefficient of determination with the R/E So it is insignificant on 5% significant level. Again, in this data shows that the DPS coefficient of determination has 0.74% ( $r^2=0.086*0.086*100$ ) so, it's significant with MPS. Secondly, the DPS has been positive correlation with all financial variables except the R/E. Similarly, the coefficient of

determination is less than 5% with the R/E P/E and EPS i.e. (0.24%, 0.026% and 3.53%) respectively. So, it is significant with P/E ratio. Again, this data shows that the R/E per share coefficient of determination has 8.53 % ( $r^2=0.292*0.292*100$ ) so, it is insignificant with MPS. Secondly, the R/E has been positive correlation with only EPS. Similarly, the coefficient of determination is more than 5% with the EPS i.e. (19.45 %). So, it is insignificant. Other hand it has significant with DPS and P/E ratio which coefficient of determination is (0.049 and 0.112) respectively. Finally, this data shows that the P/E ratio per share coefficient of determination has 0.38 % ( $r^2=0.062*0.062*100$ ) so, it is significant with MPS. Secondly, the P/E has been negative correlation with R/E. similarly the coefficient of determination is Less than 5% with the EPS, DPS and R/E i.e. (2.53, 0.026% and 1.25%) respectively. So, it is significant with EPS, DPS and R/E.

#### **4.3.1 Regression Analysis**

A number of studies have noted that increase in dividends lead to share price appreciation. It is generally held that the share price depends upon the expectation of future profit. For sector-wise regression analysis this study mainly considers two sectors i.e. banking and non- banking sector. It is not to choose conclusive between linear and logarithmic results on statistical basis. The logarithmic reduces the problem of regression weight. The linear regressions, unlike the logarithmic relation, can handle satisfactorily very small and negative retained earnings (Friends and Puckett, 1964). Thus, the liner regression has been considered for the study.

#### **4.3.2 Multiple Regression Equation and their interpretation.**

This part of study is designed to examine the relationship between MPS, DPS, R/E and P/E ratio of banking and non banking sector in first model. Secondly. This explained multiple regressions with MPS, EPS, R/E and P/E ratio of banking and non banking sector. In other hand this study explained regression of stock price on DPS, R/E and lagged P/E ratio of banking and non banking sectors.

### A) Impact of DPS, R/E and P/E ratio on stock price in banking and non banking sectors

The regression result having the three independent variable variables are presented in the table below. It presented the multiple linear relationships between stock price, dividend, P/E ratio and Retained earnings.

$$P_{it} = a + b_1D_{it} + b_2R/E_{it} + b_3P/E_{it} + e_{it}$$

Where,

$P_{it}$  = it represent the Market price per share at t time.

$D_{it}$  = Dividends per share at t time.

$R/E_{it}$  = retained earnings at t time.

$P/E_{it}$  = price earnings ratio at t time.

$e_{it}$  = Error during time t .

#### 4.3.1 Multiple Regression analysis of MPS on DPS, R/E and P/E ratio

Sector	Variable	Value of (b)	t-value	Significance	SEE	R square	F-statistics
Banking Sector	constant	-3222.99	-18.919	0.034	38.24	1	0.019
	DPS	66.44	11.72	0.054			
	R/E	30.41	9.44	0.067			
	P/E ratio	50.69	7.44	0.085			
Non-Banking sector	constant	-462.413	-0.27	0.832	291.72	0.71	0.651
	DPS	19.26	0.324	0.801			
	R/E	18.11	0.613	0.65			
	P/E ratio	16.788	0.35	0.786			

Source SPSS: Appendix

The sign \* (Asterisk) denoted the significance of coefficient at 5%.

Table-4.3.1 illustrates the multiple regressions of MPS on dividends per share, retained earnings and P/E ratio. The constant (a) is indicated intercept coefficient the banking sector has Y-intercept of regression line (a) i.e.-3222.99 this indicates the market price will be (-

3222.99) when other three independent variable i.e. (DPS, P/E and R/E) equal to zero. And other hand Value of (b) implies the coefficient of independent variables. In the case of banking sector, the coefficient of dividends has 66.44, which indicates that the one rupee change in dividends leads to 66.44 rupee increase or decrease in market price per share. Similarly, the coefficient of R/E and P/E ratio has (30.41 and 50.69) respectively which also indicates the one rupee change in R/E and P/E ratio leads to (30.41 and 50.69) respectively increase in market price per share of banking sectors. In other hand, in case of non banking sector the coefficient of Y-intercept of regression line (a) i.e. (-462.413) this implies the market price will be (-462.413) when other three independent variable equal to zero. In addition the DPS, P/E and R/E has (19.26,16.788 and 18.11 respectively) which indicates that the one rupee change in DPS, P/E and R/E leads to same(19.26,16.788 and 18.11 respectively) change in market price per share. Furthermore, In the case of banking sectors the t-value shows that  $b_1$ ,  $b_2$  and  $b_3$  are statically significance at Five percent significance level because the calculated t-value is more than tabulated value at 5% level of significant. It means DPS, P/E and R/E of that banking sectors significance explain the variation of in MPS. This result further reveals that influence of independent variables results greater increase in MPS and vice versa. Similarly, the percentage of significance has more than 5% in banking sector. So, it significant on 10% level of significance. Another point of view, F-value also less than 5% i.e. (0.019). So, it is significance. That means, it is significant explained to DPS, R/E and P/E ratio. In the banking sectors, R square is 1 which implies that the factor that affects the MPS is P/E ratio, R/E and DPS. This independent variable has 100% effect on MPS, except this there is no any other factor that affects MPS. However SEE has 38.24 which are comparatively lower than non-banking but it has some variation because some external factor should be affect on relation such technical error, business size, tax policy etc.

In addition, in the case of non banking sector the t-value shows that  $b_1$ ,  $b_2$  and  $b_3$  are statically insignificance at five percent significances level because the calculated t-value has lower than tabulated t-value. It reveals that insignificant relation between MPS and other independent variable i.e. (DPS, P/E and R/E). in addition, the percentage of significance is more than 10% so, it is insignificant with MPS. The coefficient of determination ( $r^2$ ) has 0.71; this empirical result shows about 71% of total variation in MPS due to change in independent variables i.e. ((DPS, P/E and R/E). Second last SEE value, has comparatively higher than the

banking sectors i.e. (291.72) that shows that there is no perfect correlation it means lesser or zero SEE estimated better performance. Finally, the table shows f-value of non banking sector is higher at 5% significance level i.e. (0.651) which indicated insignificant relationship with MPS and other independent variables.

**B) Impact of EPS, R/E and P/E ratio on stock price in banking and non banking sectors**

The regression result having the three independents variable variables are presented in the table below. It presented the multiple linear relationships between stock prices, EPS, P|E ratio and Retained earnings.

$$P_{It} = a + b_1E_{it} + b_2R/E_{it} + b_3P/E_{it} + e_{it}$$

Where,

$P_{It}$  = it represent the Market price per share at t time.

$E_{it}$  = Earnings per share at t time.

$R/E_{it}$  = retained earnings at t time.

$P/E_{it}$  = price earnings ratio at t time.

$e_{it}$  = Error during time t .

**4.3.2 Multiple Regression analysis of MPS on EPS, R/E and P/E ratio**

Sector	Variable	Value of (b)	t-value	Significance	SEE	R-square	F-statistics
Banking Sector	constant	3206.37	-21.386	0.03	33.68	1	0.017
	EPS	67	13.312	0.048			
	R/E	-37.68	-5.613	0.112			
	P/E ratio	50.65	8.445	0.075			
Non-Banking sector	constant	1704.58	-0.406	0.754	283.75	0.726	0.635
	EPS	42.7	0.41	0.752			
	R/E	-8.39	-0.139	0.912			
	P/E ratio	13.38	0.284	0.824			

Source SPSS: Appendix

Table-4.3.1 illustrates the multiple regressions of MPS on earnings per share, retained earnings and P/E ratio. The constant (a) is indicated intercept coefficient the banking sector has Y-intercept of regression line (a) i.e. -3206.37 this indicates the market price will be (-3206.37) when other three independent variable i.e. (EPS, P/E and R/E) equal to zero. And other hand Value of (b) implies the coefficient of independent variables. In the case of banking sector, the coefficient of EPS has 67, which indicates that the one rupee change in earnings per share leads to 67 rupee increase or decrease in market price per share. Similarly, the coefficient of R/E and P/E ratio has (-37.68 and 50.65) respectively which also indicates the one rupee change in R/E and P/E ratio leads to (-37.68 and 50.65) respectively increase or decrease in market price per share of banking sectors. In other hand, in case of non banking sector the coefficient of Y-intercept of regression line (a) i.e. (-1704.58) this implies the market price will be -1704.58) when other three independent variable equal to zero. In addition the EPS, P/E and R/E has (42.7, -8.39 and 13.38 respectively) which indicates that the one rupee change in EPS, P/E and R/E leads to same ((42.7, - 8.39 and 13.38 respectively) change in market price per share. Furthermore, In the case of banking sectors the t-value shows that  $b_1$ ,  $b_2$  and  $b_3$  are statically significance at Five percent significance level. It means EPS, P/E and R/E of that banking sectors significance explain the variation of in MPS. This result further reveals that influence of independent variables results greater increase in MPS and vice versa. Here, the EPS has percentage of significance i.e. 4.8% with MPS So, it is significant in 5% level of significance. And the P/E has significant on 10% level of significance which has 7.5% significance. Furthermore, the R/E has 11.2% level of significant which has insignificant with MPS. Another point of view F-value also less than 5% I e. 1.7%. So, it is significance. That means, it is significant explained to EPS, R/E and P/E ratio. In the banking sectors, R square is 1 which implies that the factor that affects the MPS is P/E ratio, R/E and EPS. This independent variable has 100% effect on MPS, except this there is no any other factor that affects MPS. However SEE has 33.68 which are comparatively lower than non-banking but it has some variation because some external factor should be effect on relation so, it has not perfect correlation with each other.

In addition, in the case of non banking sector the t-value shows that  $b_1$ ,  $b_2$  and  $b_3$  are statically insignificance at five percent significances level because the calculated t-value has lower than tabulated t-value. It reveals that insignificant relation between MPS and other independent

variable i.e. (EPS, P/E and R/E). In the non banking sector the level of significance has more than the 10% so, it has insignificant. The coefficient of determination ( $r^2$ ) has 0.726; this empirical result shows about 72.6% of total variation in MPS due to change in independent variables i.e. (EPS, P/E and R/E). Second last SEE value, has comparatively higher i.e. (283.75) that shows that there is no perfect correlation it means that lesser or zero SEE estimated better performance. Finally, the table shows f-value of non banking sector is higher at 5% significance level i.e. (0.635) which indicated insignificant relationship with MPS and other independent variables.

### **C) Impact of Dividends, Retained Earnings and Lagged P/E Ratio on Stock Price**

As past earning shows the track of the company, these earning may benchmark for the investor to decides whether to hold or buy the share of the company at the prevailing price. It may now be practical to see the results of regression models by incorporating the lagged price earnings ratio as one of the more independent variable in the above mentioned equation. The table below presents the regression results of stock price on dividends, retained earnings and lagged price earnings ratio.

$$P_{It} = a + b_1 D_{it} + b_2 R/E_{it} + b_3 P/E_{(t-1)} + e_{it}$$

$P_{It}$  = it represent the Market price per share at t time.

$D_{it}$  = Dividends per share at t time.

$R/E_{it}$  = retained earnings at t time.

$P/E_{t-1}$  = lagged price earnings ratio at( t-1)time.

$e_{it}$  = Error during time t .

#### 4.3.3 Regression of MPS on dividends, retained earnings and lagged price earnings ratio

Sector	Variable	Value of (b)	t-value	Significance	SEE	R square	F-statistics
Banking Sector	constant	-3075.38	-1.787	0.325	286.895	0.988	0.141
	DPS	106.87	8.776	0.072			
	R/E	18.72	0.775	0.58			
	P/E (t-1)	-0.959	0.044	0.972			
Non-Banking sector	constant	-1528.97	-0.824	0.561	209.657	0.85	0.48
	DPS	56.19	2.053	0.289			
	R/E	34.77	1.1	0.47			
	P/E (t-1)	-13.41	-1.039	0.488			

Source SPSS: Appendix

The table 4.3.3 shows the empirical result of multiple regression analysis of MPS on DPS, R/E and lagged price earnings ratio of banking and non banking sectors along with t-statistics f-statistics standard error of estimation and coefficient of multiple determinations.

The outcome presented in above table shows that the estimated coefficient has expected positive sign for dividends, and retained earnings in banking and non-banking sector. It has negative Coefficient in  $P/E_{(t-1)}$  i.e. (-0.959 and -13.41 respectively) of banking and non banking sectors. The result shows positive sign of coefficient implies the strong dividends effect indicating attractiveness of dividends among Nepalese investors. On other hand the negative sign coefficient indicating the negative perception in market of banking and non banking sector, In the Case of banking Sector the coefficient of dividend is 106.87 which signify that one rupee change in dividend leads to 106.87 rupees changes in market price per share. In the case of non banking sector, the coefficient of dividend is 56.19, which indicates that one rupee increase in dividend leads to 56.19 rupees increases in market price per share. Similarly, R/E has positive sign coefficient of banking and non banking sectors i.e. (18.72 and 34.77).it means that one rupee change in R/E to same rupees changes in market price per share. The coefficient of determination ( $r^2$ ) has 0.988;in banking sector this empirical result shows about 98.8% of total variation in MPS due to change in independent variables i.e. (DPS,  $P/E_{(t-1)}$  and R/E). Furthermore, SEE value (286.895) also positive that indicate there is variation with relationship it means there is no perfect correlation between dependent and independent variables. In the case of banking sectors the t-



value shows that  $b_2$  and  $b_3$  are statically insignificant at Five percent significance level. It means,  $P/E_{(t-1)}$  and  $R/E$  of that banking sectors insignificant explain the variation of in MPS. However DPS t-value has higher than the tabulated value it some extent of lead the MPS. In addition the percentage of significance is more than the 5%. So, it is insignificant. Significance of F-value has 0.141 also insignificant to denoted that this regression equation cannot significant explain the variation in MPS that result by the independent variables.

In addition, in the case of non banking sector the t-value shows that  $b_1$ ,  $b_2$  and  $b_3$  are statically insignificant at five percent significances level because the calculated t-value has lower than tabulated t-value. It reveals that insignificant relation between MPS and other independent variable i.e. (DPS,  $P/E_{(t-1)}$  and  $R/E$ ). On other hand the Percentage of level of significant has more than 10% it is insignificant with the MPS. The coefficient of determination ( $r^2$ ) has 0.85; this empirical result shows about 85% of total variation in MPS due to change in independent variables i.e. (DPS,  $P/E_{(t-1)}$  and  $R/E$ ). Second last SEE value, has i.e. (209.657) that shows that there is no perfect correlation it means that lesser or zero SEE estimated better performance. Finally, the table shows Significance f-value of non banking sector is higher at 5% significance level i.e. (0.48) which indicated insignificant relationship with MPS and other independent variables.

## **4.4 Result and Major Finding**

### **4.4.1 Finding from analysis of Financial Indicator**

- ✚ From the analysis of the average market price of banking and non banking sector, it found that the highest MPS Rs.4091 and Rs. 1281 respectively. Similarly, the mean value, Standard deviation and coefficient of variation of banking sector have higher than the non banking sectors. In other hand the market price gradually decrease over the period.
- ✚ The outcome result shows that the average EPS of both banking and non banking sectors has fluctuate over the period. The highest EPS of banking non banking sectors has (Rs.106.5 and Rs.68.26) respectively and lowest EPS has (Rs.77.09 and Rs.58.99) respectively. Here, the Mean value, S.D. and C.V. of banking sector has higher than the non banking sector.

- ✚ The above financial indicator result exhibits the average DPS of banking sector has gradually decrease over the period however the average DPS of non baking sector has fluctuated over the period. The average DPS has increase the beginning of the fiscal period and reach peak point at mid fiscal year over the period and then decreases slowly. The highest average DPS of banking and non banking sector has (Rs.60 and Rs.40) respectively. In addition, the mean value, S.D. and C.V. of banking sector has higher than the non banking sector.
- ✚ The analysis of P/E ratio of banking and non banking sector shows that, the highest P/E ratio of banking and non banking sectors has (38.82and 31.31) times respectively and the lowest value has (13.9 and 12.53) times respectively. Furthermore the P/E ratio of both sectors has fluctuated over the period. In addition, the mean value, S.D. and C.V. of banking sector has higher than the non banking sector.
- ✚ From the above analysis of average R/E per share data shows, the highest average R/E of banking sectors has Rs.55.49 and the lowest average R/E has Rs.37.09. and other hand the highest average R/E Rs. 40.76 of non banking sector and the lowest average R/E has Rs.25.43.Here the R/E of banking and non banking sector has volatile over the period. In addition the Mean value, S.D. and C.V. of banking sector has higher than the non banking sector.
- ✚ The analysis of average DPR of banking and non banking has remained unstable over the period. The highest and lowest percentage of DPR of banking sector has 58% and 26% respectively. In other hand the highest and lowest percentage of DPR of non banking sector has 69% and 40% respectively. In addition, the non banking sector has a percentage of DPR Gently increase at the beginning of the period and reached the top i.e. (69%) in 2009/10 and decrease slowly during the period. Furthermore, the mean value of non banking sector has higher than the banking sector however the S.D. and C.V. of banking sectors has higher than the non banking sectors.
- ✚ The outcomes presents the average Dividend yield has fluctuated over the period. The highest dividend yield of banking and non banking sector has (3% and %) respectively. And other hand lowest dividend yield of banking and non banking sector has (1% and 2%) respectively. In addition the mean value of banking sector has lower

than the non banking sector however the S.D. and C.V. of banking sector has higher than the non banking sector.

- ✚ The lagged mean price and lagged P/E ratio of banking sector has higher than the non banking sectors.

#### **4.4.2 Finding from multiple Correlation analysis of Financial Indicator**

##### **A. For banking sector**

- ✚ The multiple correlation analysis of financial indicators of banking sector found that the MPS has positive correlation with EPS, DPS and P/E ratio i.e. (0.877, 0.99 and 0.96) respectively. And negative correlation with R/E per share. In addition the EPS has positive correlation with all financial variables. The highest positive correlation with MPS i.e. (0.877) and lowest positive correlation with R/E per share i.e. (0.29). In the case of DPS the negative correlation with R/E i.e. (-0.284). On the other hand DPS has positive correlation with MPS, EPS and P/E ratio i.e. (0.99, 0.836 and 0.955) respectively. And the case of R/E positive correlation with EPS and negative correlation with MPS, DPS and P/E ratio. Finally, the P/E ratio has negative correlation with R/E and positive correlation with the MPS, EPS and DPS.

##### **B) For non banking sector**

- ✚ In the above multiple correlation analysis it found that MPS has positive correlation with EPS, DPS and P/E ratio i.e.(0.726, 0.717 and 0.774) respectively. And negative correlation with the R/E i.e. (-0.333). In addition the EPS has positive correlation with the all financial variables. The highest positive correlation has MPS i.e. (0.726) and lowest positive correlation with R/E i.e. (0.092). In the case of DPS, the negative correlation with R/E i.e. (-0.807) and on the other hand DPS has positive correlation with MPS, EPS and P/E ratio i.e. (0.717, 0.513 and 0.908) respectively. Here, the R/E positive correlation with EPS i.e. (0.092) and negative correlation with the remaining financial variables. The highest negative correlation of R/E has (-0.807) with the DPS. Finally, P/E ratio has positive correlation with MPS, DPS, and EPS i.e. (0.774, 0.908 and 0.569) respectively among them highest positive correlation with DPS and negative correlation with the R/E.

#### **4.4.3 Finding from multiple regression analysis of Financial Indicator**

##### **A) Multiple regressions of MPS on DPS, R/E and P/E**

- ✚ In the case of banking sectors the multiple regression analysis of MPS on DPS, R/E and P/E ratio found that the coefficient of variation has positive it means that the MPS has positive relationship with DPS, R/E and P/E ratio. And it calculated t-value has more than the tabulated value so, it significant with the MPS. In other hand the percentage of significance of DPS has less than 5% and R/E and P/E ratio has less than 10% so, it significant at 10% level of significant. In addition, the coefficient of determination or R-square has 1 this empirical result shows about 100% of total variation in MPS due to change in independent variables. Finally F-test also significance at 5% level which has less than 5% i.e. (1.7%).
- ✚ In the case of non banking sectors the coefficient of independent variable has positive so, the MPS has positive relationship with DPS, R/E and P/E ratio. In other hand the calculated t-value has less the tabulated value so, it is insignificant. In Addition the percentage of significance has more than the 5% so, it is insignificant. The R-square Value has 0.71 it shows that the 71% of variation in MPS due to change in independent variables. Finally, F- value also insignificant because it confident level has 65.1%.

##### **B) Multiple regressions of MPS on EPS, R/E and P/E**

- ✚ In banking sector the multiple regression analysis of MPS on EPS, R/E and P/E ratio found that coefficient of P/E and EPS has positive with the MPS and R/E has negative with MPS. It means same direction and relationship of result to the variables. In addition the calculated t- value has more than the tabulated value So, it is significant. Here, EPS has 0.048 significance value it indicated that it significant on 5% level of significance. And other hand the P/E ratio has 0.075 significance value it shows this significance on 10% level of significance. The R-square value has 1 that indicated 100% total variation on MPS due to the change of independent variables. Furthermore the f-test also shows the significance in 5% level of significant i.e.1.7%.

✚ In the case of nonbanking sector the coefficient of R/E has negative this indicated the variable has negative relationship with MPS. On the other hand the EPS and P/E has positive coefficient that means the variables has positive relationship with MPS. In addition, the calculated t-value has less than the tabulated value So, it is insignificance. The R-square value has 0.726 that empirical result shows about 72.6% of variation in MPS due to the change of independent variables. Finally, F-statistics value has 0.635 that indicated insignificance with the MPS.

c) **Multiple regressions of MPS on DPS, R/E and P/E<sub>(t-1)</sub>**

✚ In the case of banking sector, the multiple regression of MPS on DPS, R/E and lagged P/E ratio found that coefficient of lagged P/E has negative it indicated that the lagged P/E has negative relation with MPS and other DPS and R/E has positive coefficient it result that positive relationship with the MPS. The calculated t-value of DPS has more than tabulated t-value and it also shows significance i.e.0.72 which indicated the DPS has significance on 10% level of significance. On the other hand the calculated t-value of R/E and lagged P/E ratio has less than the tabulated-value so it is insignificant. In addition, the r-square has 0.988 that indicated 98.8% of variation in MPS due to change of independent variables. Finally, F-Test value has 0.141 it is insignificant.

✚ In non banking the coefficient of lagged P/E ratio has negative so, it has negatives relationship with the MPS. And other hand DPS and R/E has positive coefficient with the MPS. In addition, the calculated t-value has less than tabulated t-value it shows the insignificance. The R-square value of non banking sectors has 0.85 this empirical result shows about 85% of variation on the MPS due to the change of independent variables. Finally, the F-statistical value has 0.48 that means the insignificance with the result.

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMNDATION

In this chapter presented the summary of study and draw conclusions from the study based on analysis made in previous chapter. The next attempt in this chapter will be made for the recommendation on the basis of finding for this whole purpose the chapter is sub divided into summary, conclusion and recommendation as followings,

## **5.1 Summary**

This paper is complementary study to determine the effect of dividend policy on market price of share. Dividend policy is major financial policy of organization which determines not only the sustainability and growth but also reflect the image of organization in the market. Every investor expects high return earnings on their investment amount. Company paying higher dividend with high earnings has good public image and market price also high in Nepalese stock market but the company with poor earning and poor dividend payment has less interest and expectation of shareholders. In addition political stability, capital, structure and other external factor also impact on market price of share. Therefore the market price of companies gradually decreases during the period.

In Nepalese stock market, only few companies pay regular dividends however, they do not have stable dividend policy .Number of companies is just in growing stage and therefore, pay a small dividends and some companies do not pay any dividend to their shareholders. During the study period the researcher picked up the banking sector (Nabil and Everest bank ltd.) And non banking sector (Butwal Power Company and Chilime hydro company) paying regular dividend to the share holder. Other hand the dividend gradually decreasing and fluctuated of the banking and non -banking sectors. The objectives have examined the impact of dividend policy on market price of share for two bank and two non banks. For this purpose, various financial and statistical tools were developed to analyze the data from the sectors. Using the cross section data of two banks and two non banks from twenty observations, researchers attempted to determine the impact of different variables in determining the market price of share.

The finding indicated the share value has affected by earnings, dividends payments and retained earnings. The positives relationships of market price of share with EPS, DPS, P/E and R/E show the higher dependability of MPS on EPS, DPS, P/E and R/E. In addition the

P/E and R/E negative relation during the descriptive regression on their different relation this shows the opposite relationship with the market price. The important of dividend has higher than the importance of the retained earnings is major conclusion of this study which has consistent with the result of previous studies conducted on this topic. Similarly, this study concluded that more or less dividend policy depends on earning of the company since there is positive correlation between the EPS and DPS. In other words, management can be able to increase stock price in the market by increasing dividends to some extent.

Hence, the investors also determine the performance of the firms from the dividend provided by them. This dividend distribution has very important factor to any organization for its effective goal achievement and to satisfy its shareholders. Regular dividends attracting the new investors. In addition, Market value of the share is also affected by the dividend decision of the company. Not only this, Companies earnings, investment need, tax position of stockholders and different dividend sachers influence the dividend policy.

## **5.2 Conclusions**

In conclusion, the study was able to establish the reasons why dividend is important to the Nepalese investors and does the dividend policy signaling affect to share price. This study attempts to analyze different theoretical models in explaining the impact of dividend vice-versa MPS on other independent variables like DPS, EPS, and price earnings ratio of the previous year, lagged price on the prices of the stocks associated with selected banking and non banking sector of listed NEPSE. To this end, some empirical studies relating stock prices to dividends MPS and retained earnings conducted elsewhere have been analyzed. These studies produced the dividend policy significance with the market price of share in banking sector and other hand the dividend policy has insignificance with the market price in the non banking sector. Furthermore, the market price of share has insignificant with the previous lagged P/E ratio, dividend per share and retained earnings. In my study, the relative importance of dividend, retained earnings, price earnings ratio of the previous year and market price in explaining stock prices of the companies listed with NEPSE are explained. These study conclusions are follows,

- ✚ The data found that there are not any consistent dividend policy of the banking and nonbanking sectors. Hence, the result of different analysis accepts the theoretical assumption and sometimes does not.
- ✚ The study concludes that major determinant of dividend policy is earning of companies. Dividend distribution is also depends upon the earnings capacity of the companies.
- ✚ Another conclusion of this study has that Nepalese investors give more priority and importance to the dividend distribution rather than retained earnings.
- ✚ The market price is function of numerous variables Such as DPS, EPS, P/E R/E etc. The banking and non banking sectors MPS has positive correlation with the EPS,DPS and P/E ratio and hence positive impact is seen in the market price where as retained earnings is negatively correlated with banking and non banking MPS and hence negative impact is seen.
- ✚ The outcome concluded that both sectors higher EPS has higher prospect to pay high dividend and vice versa.
- ✚ Higher importance of dividend among Nepalese investor signifies that management can increase the market price of stock raising dividend to some extent.
- ✚ Generally increase in EPS and DPS of the banking and non banking sector shows the increasing performance of sectors.
- ✚ The result found that it has statistically significance with MPS on EPS, DPS, P/E and R/E in banking sectors. However, it has not statistically significance with MPS on EPS, DPS, R/E and P/E ratio in non banking sectors. Therefore other external factor should be affected to the MPS.
- ✚ In the regression of MPS on DPS, R/E and lagged P/E ratio both sectors are statistically insignificant. It shows that these are not the major determination of market value. The association of other variables equally determines the market value of share.

Hence, After having observed the impact of dividends on stock price of Nepalese stock market, it is found that DPS is a motivating factor in the Nepalese financial sector which is



strong enough to increase market price per share of the banking and non-banking firms. It has also found that the effect of DPS as well as R/E per share on the impact of market price per share. Lagged market price per share is an accelerator to increase market price per share in subsequent years. Finally, the study shows that dividends and retained earnings significantly explain the variations in share price in banking sectors. And other hand dividend and retained earnings insignificance explained the not totally variation of MPS in non banking sector it means that other external variable should be affected. The impact of dividend, however, is much more pronounced than that of the retained earnings. The relation of dividends and retained earnings on share price is positive in all cases.

### **5.3 RECOMMENDATION**

The study found the research, following recommendation has made for better application of the dividend policy to have the strong MPS in the capital market.

- ✚ The analysis has found that there is no consistent dividend pay to the shareholder of banking and non banking sector. It made negative perception to the shareholders. So, all the firms should have well defined dividends policy which helps to satisfy the investors and to create well position of firm in the capital market.
- ✚ Although the dividends payout ratio of sample banking and non banking fluctuated over the period. There is no rational approach in deciding the payout. All the firms should analyze the internal rate of return and cost of capital in deciding DPR, which helps to maximize the shareholders wealth.
- ✚ The legal rules and regulation must be in favor of investors to exercise the dividends practice and to protect the shareholders right.
- ✚ The decision regarding dividend payment should not be biased and it should always be in favor of the prosperity and betterment of the company.
- ✚ It is necessary to enact legal rules that bind companies to pay dividend. The legal rule for the treatment of dividend is most for the sooth growth of the enterprises as well as growth of national economy. For this purpose, NEPSE, SEBON, Nepal government and other concerned parties should work together.

- ✚ Each and every company should provide information regarding their activities and performance, so, that investor can analyze the situation and invest their money in the best company.
- ✚ Non- banking sector companies or all listed company should be transparent their financial position. It brings the investors should making good decision for making money.

Finally, after this study, Nepalese stock market should also making practice of dividend policy. In addition, banking and non banking sector does not pay dividend regularly. Companies are established to run a long period in the small economy of Nepal. Nepal has member of WTO and other regional organization it become more competitive market in the globalization. So, even a small wrong decision can lead to break down of company. Hence, there is necessary of legal provision and rules for prescribing certain policy regarding the dividend payment in the banking and non banking sectors. For this purpose the concern authority i.e. Nepal Government, NRB, SEBON and NEPSE should be conscious about formulation and implementation of rule and regulation regarding dividend payment. This will helps to regulated of the dividend payment in the Nepalese stock market.

## **BIBLOGHAPHY**

- Bhattra, R. (2009). *Stock market in Nepal Kathmandu Securities research center and service (SRCS) Pvt. Ltd.*
- Black, F., & Scholes, M. S. (1974). "The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns". *Journal of Financial Economics*. 1, 1-22.
- Black, F., & Scholes, M. S. (1976). "The Dividend Puzzle". *The Journal of Portfolio Management*. 2, 5-8.
- Chawala, D. & Srinivasan, G. (1999). *Impact of Dividend and Retention on Share Prices on Econometric Study*. Bombay: Decision. 14(3):32-34.
- Chawla, D., & Srinivasan, G. (1987). "Impact of Dividend and Retention on Share Price- An Economic Study". *Decision*, 14 (3), 137-140.
- Chhetri, G. R. (2008). *Dividend and Stock Prices: A Case of Nepal*. An unpublished M.Phil. Thesis submitted to Tribhuvan University.
- Gautam, R. & Thapa, K. (2011), *capital Structure management*. Asmita Books Publisher & Distribution Pvt. Ltd.
- Joshi, R. (2012). *Effect of Dividend on stock prices in Nepal*. NRB Economic Review, Vol.24.2
- Journal of business studies quarterly* (2012). Muhammad Hashemijoo, Multimedia University, Malaysia, Vol. 4.1, pp.111-129.
- Khanal, P. (2012). *A study of Dividend policy and its impact on market price of share*. An Unpublished Master degree thesis submitted to faculty of management, T.U.
- Linter, J. (1956). *Distributions of Incomes of Corporations among Dividends, Retained Earnings and Taxes*. *American Economic Review*, 46 (1).
- Manandhar, K.D. (2000). *Preliminary Test of Lagged Structure of Dividend Management Dynamics*. Kathmandu: Shankar Dev Campus.
- Miller, M. H., & Modigliani, F. (1961). "Dividend Policy, Growth, and the Valuation of Shares". *Journal of Business Finance*, 34, 411-433.

- Nishat, M. (1995). *Share Prices, Dividend & Share Retained Earnings Behavior in Pakistan Stock market*. The Indian Economic journal, 40, 56-95.
- Pradhan, R. S. (2003). *Effects of Dividend on Common Stock Prices: The Nepalese evidence*. Research in Nepalese Finance. Katmandu: Buddha Academic Enterprises (P) Ltd.
- Prasain, P. (2012). *Impact of Dividend on market price of share*. An Unpublished Master degree thesis submitted to faculty of management, T.U.
- Van Home, J.C. (2006). *Fundamentals of Financial Management*. New Jersey Prentice Hall Inc. pp. 280-300.
- Weston, J. F., Copeland, Thomas E., and Shastri, K. (2004). *Financial Theory and Corporate Policy: International Edition, 4/E*. Pearson Publication.

**Websites:**

[www.Everestbankltd.com](http://www.Everestbankltd.com)

[www.nabibank.com](http://www.nabibank.com)

[www.BPC.com.np](http://www.BPC.com.np)

[www.chilime.com.np](http://www.chilime.com.np)

[www.NRB.org.np](http://www.NRB.org.np)

[www.sebon.gov.np](http://www.sebon.gov.np)

[www.dividendpolicy.com](http://www.dividendpolicy.com)

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

**Appendix-A**

**For Banking Sectors four variables**

## Frequencies

### Statistics

	MPS	EPS	DPS	R/E	P/E
N	5	5	5	5	5
	0	0	0	0	0
Mean	2830.7000	93.1720	47.6580	45.5120	29.8000
Median	3264.5000	92.0800	50.0000	43.9100	35.6200
Mode	1194.00 <sup>a</sup>	77.09 <sup>a</sup>	30.79 <sup>a</sup>	37.09 <sup>a</sup>	13.90 <sup>a</sup>
Std. Deviation	1295.850	12.25013	12.22548	7.01662	10.79081
Variance	1679228	150.06577	149.46232	49.23302	116.44160
Range	2897.00	29.41	29.21	18.40	24.92
Minimum	1194.00	77.09	30.79	37.09	13.90
Maximum	4091.00	106.50	60.00	55.49	38.82
Sum	14153.50	465.86	238.29	227.56	149.00

a. Multiple modes exist. The smallest value is shown

## Regression

### Correlations

		MPS	EPS	DPS	R/E	P/E
Pearson Correlation	MPS	1.000	.877	.990	-.194	.960
	EPS	.877	1.000	.836	.290	.718
	DPS	.990	.836	1.000	-.284	.955
	R/E	-.194	.290	-.284	1.000	-.411
	P/E	.960	.718	.955	-.411	1.000
Sig. (1-tailed)	MPS	.	.025	.001	.377	.005
	EPS	.025	.	.039	.318	.086
	DPS	.001	.039	.	.322	.006
	R/E	.377	.318	.322	.	.246
	P/E	.005	.086	.006	.246	.
N	MPS	5	5	5	5	5
	EPS	5	5	5	5	5
	DPS	5	5	5	5	5
	R/E	5	5	5	5	5
	P/E	5	5	5	5	5

## For Non banking sector for four variable

### Statistics

		mps	eps	dps	r/e	p/e
N	Valid	5	5	5	5	5
	Missing	0	0	0	0	0
Mean		1118.7000	65.6200	31.0000	33.4200	22.5620
Median		1185.5000	67.6500	32.5000	35.1500	20.2400
Mode		743.50 <sup>a</sup>	58.99 <sup>a</sup>	32.50	25.43 <sup>a</sup>	12.53 <sup>a</sup>
Std. Deviation		270.83542	3.86348	6.51920	5.76012	7.57416
Variance		73351.83	14.92650	42.50000	33.17900	57.36797
Range		684.00	9.27	17.50	15.33	18.78
Minimum		743.50	58.99	22.50	25.43	12.53
Maximum		1427.50	68.26	40.00	40.76	31.31
Sum		5593.50	328.10	155.00	167.10	112.81

a. Multiple modes exist. The smallest value is shown

## Regression

### Correlations

		MPS	EPS	DPS	R/E	P/E
Pearson Correlation	MPS	1.000	.726	.717	-.333	.774
	EPS	.726	1.000	.513	.092	.569
	DPS	.717	.513	1.000	-.807	.908
	R/E	-.333	.092	-.807	1.000	-.663
	P/E	.774	.569	.908	-.663	1.000
Sig. (1-tailed)	MPS	.	.082	.086	.292	.062
	EPS	.082	.	.188	.441	.159
	DPS	.086	.188	.	.049	.016
	R/E	.292	.441	.049	.	.112
	P/E	.062	.159	.016	.112	.
N	MPS	5	5	5	5	5
	EPS	5	5	5	5	5
	DPS	5	5	5	5	5
	R/E	5	5	5	5	5
	P/E	5	5	5	5	5

## Appendix – B

## Banking sector multiple Regression with MPS on EPS, R/E and P/E ratio

### Regression

#### Descriptive Statistics

	Mean	Std. Deviation	N
mps	2830.7000	1295.85018	5
eps	93.1720	12.25013	5
r/e	45.5120	7.01662	5
p/e	29.8000	10.79081	5

#### Correlations

		mps	eps	r/e	p/e
Pearson Correlation	mps	1.000	.877	-.194	.960
	eps	.877	1.000	.290	.718
	r/e	-.194	.290	1.000	-.411
	p/e	.960	.718	-.411	1.000
Sig. (1-tailed)	mps	.	.025	.377	.005
	eps	.025	.	.318	.086
	r/e	.377	.318	.	.246
	p/e	.005	.086	.246	.
N	mps	5	5	5	5
	eps	5	5	5	5
	r/e	5	5	5	5
	p/e	5	5	5	5

#### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	p/e, <sup>a</sup> r/e, eps	.	Enter

a. All requested variables entered.

b. Dependent Variable: mps

#### Model Summary<sup>a</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	1.000	1.000	.999	33.68474	1.000	1972.911	3	1	.017	2.357

a. Predictors: (Constant), p/e, r/e, eps

b. Dependent Variable: mps

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6715776	3	2238592.045	1972.911	.017 <sup>a</sup>
	Residual	1134.665	1	1134.665		
	Total	6716911	4			

a. Predictors: (Constant), p/e, r/e, eps

b. Dependent Variable: mps

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-3206.371	149.930		-21.386	.030					
	eps	67.000	5.033	.633	13.312	.048	.877	.997	.173	.075	13.400
	r/e	-37.677	6.712	-.204	-5.613	.112	-.194	-.984	-.073	.128	7.820
	p/e	50.649	5.998	.422	8.445	.075	.960	.993	.110	.068	14.766

a. Dependent Variable: mps

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	eps	r/e	p/e
1	1	3.910	1.000	.00	.00	.00	.00
	2	.082	6.896	.01	.00	.01	.05
	3	.007	23.637	.99	.01	.07	.00
	4	.001	76.604	.00	.99	.92	.94

a. Dependent Variable: mps

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1187.6694	4067.3582	2830.7000	1295.74073	5
Residual	-22.4086	23.6417	.0000	16.84239	5
Std. Predicted Value	-1.268	.954	.000	1.000	5
Std. Residual	-.665	.702	.000	.500	5

a. Dependent Variable: mps



## Banking sector multiple Regression with MPS on DPS, R/E and P/E ratio

**Statistics**

	MPS	DPS	R/E	P/E
N	5	5	5	5
Mean	2830.70	47.58	45.51	29.80
Std. Error of Mean	579.522	5.529	3.138	4.826
Median	3264.50	50.00	43.91	35.62
Mode	1194 <sup>a</sup>	30 <sup>a</sup>	37 <sup>a</sup>	14 <sup>a</sup>
Std. Deviation	1295.850	12.364	7.017	10.791
Variance	1679227.700	152.868	49.233	116.442
Skewness	-.478	-.574	.475	-.973
Std. Error of Skewness	.913	.913	.913	.913
Kurtosis	-2.548	-1.361	-.143	-.941
Std. Error of Kurtosis	2.000	2.000	2.000	2.000
Range	2897	30	18	25
Minimum	1194	30	37	14
Maximum	4091	60	55	39
Sum	14154	238	228	149

a. Multiple modes exist. The smallest value is shown

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error
MPS	5	2897	1194	4091	2830.70	579.522	1295.850	1679227.700	-2.548	2.000
DPS	5	30	30	60	47.58	5.529	12.364	152.868	-1.361	2.000
R/E	5	18	37	55	45.51	3.138	7.017	49.233	-.143	2.000
P/E	5	25	14	39	29.80	4.826	10.791	116.442	-.941	2.000
Valid N (listwise)	5									

**Descriptive Statistics**

	Mean	Std. Deviation	N
MPS	2830.70	1295.850	5
DPS	47.58	12.364	5
R/E	45.51	7.017	5
P/E	29.80	10.791	5

**Correlations**

		MPS	DPS	R/E	P/E
Pearson Correlation	MPS	1.000	.989	-.194	.960
	DPS	.989	1.000	-.292	.956
	R/E	-.194	-.292	1.000	-.411
	P/E	.960	.956	-.411	1.000
Sig. (1-tailed)	MPS	.	.001	.377	.005
	DPS	.001	.	.317	.006
	R/E	.377	.317	.	.246
	P/E	.005	.006	.246	.
N	MPS	5	5	5	5
	DPS	5	5	5	5
	R/E	5	5	5	5
	P/E	5	5	5	5

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	pe, re, dps <sup>b</sup>	.	Enter

a. Dependent Variable: mps

b. All requested variables entered.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	1.000 <sup>a</sup>	1.000	.999	38.237	1.000	1531.074	3	1	.019	2.338

a. Predictors: (Constant), pe, re, dps

b. Dependent Variable: mps

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6715448.766	3	2238482.922	1531.074	.019 <sup>b</sup>
	Residual	1462.034	1	1462.034		
	Total	6716910.800	4			

a. Dependent Variable: mps

b. Predictors: (Constant), pe, re, dps

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
													(Constant)
1	DPS	66.400	5.667	.634	11.718	.054	-5.600	138.400	.989	.996	.173	.074	13.429
	R/E	30.409	3.222	.165	9.438	.067	-10.529	71.346	-.194	.994	.139	.715	1.398
	P/E	50.690	6.810	.422	7.444	.085	-35.839	137.218	.960	.991	.110	.068	14.774

a. Dependent Variable: mps

**Coefficient Correlations<sup>a</sup>**

Model		pe	re	dps	
1	Correlations	pe	1.000	.467	
		re	.467	1.000	
		dps	-.958	-.374	1.000
	Covariances	pe	46.375	10.245	-36.984
		re	10.245	10.380	-6.825
		dps	-36.984	-6.825	32.109

a. Dependent Variable: mps

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	dps	re	pe
1	1	3.895	1.000	.00	.00	.00	.00
	2	.096	6.372	.01	.00	.05	.03
	3	.006	24.697	.99	.02	.71	.00
	4	.002	40.666	.00	.97	.24	.97

a. Dependent Variable: mps

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1186.87	4064.03	2830.70	1295.709	5
Residual	-25.295	26.974	.000	19.118	5
Std. Predicted Value	-1.269	.952	.000	1.000	5
Std. Residual	-.662	.705	.000	.500	5

a. Dependent Variable: mps

**Banking sector multiple Regression with MPS on DPS, R/E and P/E (t-1) ratio**

**Statistics**

		MPS	DPS	R/E	P/E(t-1)
N	Valid	5	5	5	5
Mean		2830.70	47.58	45.51	31.76
Std. Error of Mean		579.522	5.529	3.138	3.397
Median		3264.50 <sup>a</sup>	50.00 <sup>a</sup>	43.91 <sup>a</sup>	35.62 <sup>a</sup>
Mode		1194 <sup>b</sup>	30 <sup>b</sup>	37 <sup>b</sup>	23 <sup>b</sup>
Std. Deviation		1295.850	12.364	7.017	7.596
Variance		1679227.700	152.868	49.233	57.699
Skewness		-.478	-.574	.475	-.510
Std. Error of Skewness		.913	.913	.913	.913
Range		2897	30	18	15
Minimum		1194	30	37	23
Maximum		4091	60	55	39
Sum		14154	238	228	159

a. Calculated from grouped data.

b. Multiple modes exist. The smallest value is shown

c. Percentiles are calculated from grouped data.

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
MPS	5	2897	1194	4091	2830.70	579.522	1295.850	1679227.700	-.478	.913	-2.548	2.000
DPS	5	30	30	60	47.58	5.529	12.364	152.868	-.574	.913	-1.361	2.000
R/E	5	18	37	55	45.51	3.138	7.017	49.233	.475	.913	-.143	2.000
P/E(t-1)	5	15	23	39	31.76	3.397	7.596	57.699	-.510	.913	-3.183	2.000
Valid N (listwise)	5											

**Correlations**

		MPS	DPS	R/E	P/E(t-1)
Pearson Correlation	MPS	1.000	.989	-.194	.166
	DPS	.989	1.000	-.292	.218
	R/E	-.194	-.292	1.000	-.498
	P/E(t-1)	.166	.218	-.498	1.000
Sig. (1-tailed)	MPS	.	.001	.377	.395
	DPS	.001	.	.317	.362
	R/E	.377	.317	.	.196
	P/E(t-1)	.395	.362	.196	.
N	MPS	5	5	5	5
	DPS	5	5	5	5
	R/E	5	5	5	5
	P/E(t-1)	5	5	5	5

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.994 <sup>a</sup>	.988	.951	286.895	.988	26.869	3	1	.141	3.098

a. Predictors: (Constant), Pet-1, DPSit, R/Eit

b. Dependent Variable: MPSit

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Partial	Tolerance	VIF	
1	(Constant)	3075.383	1720.874	-1.787	.325	-24941.165	18790.399						
	DPS	106.872	12.177	8.776	.072	-47.858	261.601	.989	.994	.971	.908	1.102	
	RE	18.716	24.158	.101	.775	-288.245	325.677	-.194	.612	.086	.716	1.396	
	P/et-1	-.959	21.867	-.006	-.044	.972	-278.802	276.883	.166	-.044	.005	.746	1.341

a. Dependent Variable: MPSit

**Coefficient Correlations<sup>a</sup>**

Model		P/Et-1	DPS	R/E	
1	Correlations	P/Et-1	1.000	-.087	.466
		DPS	-.087	1.000	.217
		R/E	.466	.217	1.000
	Covariances	P/Et-1	478.152	-23.160	246.101
		DPS	-23.160	148.291	63.845
		R/E	246.101	63.845	583.626

a. Dependent Variable: MPSit

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	DPS	R/E	P/E(t-1)
1	1	3.908	1.000	.00	.00	.00	.00
	2	.051	8.772	.01	.20	.13	.15
	3	.037	10.218	.00	.65	.00	.41
	4	.004	31.888	.99	.15	.87	.44

a. Dependent Variable: MPSit

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1188.60	4136.00	2830.70	1287.886	5
Std. Predicted Value	-1.275	1.014	.000	1.000	5
Standard Error of Predicted Value	152.681	286.844	251.634	56.204	5
Adjusted Predicted Value	-14061.74	5920.04	411.09	8213.291	5
Residual	-118.884	242.893	.000	143.447	5
Std. Residual	-.414	.847	.000	.500	5
Stud. Residual	-1.000	1.000	-.200	1.095	5
Deleted Residual	-1829.040	15255.742	2419.609	7217.265	5
Stud. Deleted Residual	.	.	.	.	0
Mahal. Distance	.333	3.199	2.400	1.186	5
Cook's Distance	.099	706.654	144.102	314.500	5
Centered Leverage Value	.083	.800	.600	.296	5

a. Dependent Variable: MPSit

**APPENDIX-C**

**Non-Banking sector multiple Regression with MPS on EPS, R/E and P/E ratio**

**Regression**

**Descriptive Statistics**

	Mean	Std. Deviation	N
mps	1118.7000	270.83542	5
eps	65.6200	3.86348	5
r/e	33.4200	5.76012	5
p/e	22.5620	7.57416	5

**Correlations**

		mps	eps	r/e	p/e
Pearson Correlation	mps	1.000	.726	.036	.774
	eps	.726	1.000	.537	.569
	r/e	.036	.537	1.000	-.302
	p/e	.774	.569	-.302	1.000
Sig. (1-tailed)	mps	.	.082	.477	.062
	eps	.082	.	.175	.159
	r/e	.477	.175	.	.311
	p/e	.062	.159	.311	.
N	mps	5	5	5	5
	eps	5	5	5	5
	r/e	5	5	5	5
	p/e	5	5	5	5

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	p/e, <sup>a</sup> r/e, eps	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: mps

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.852 <sup>a</sup>	.726	-.098	283.75391	.726	.881	3	1	.635	1.365

- a. Predictors: (Constant), p/e, r/e, eps
- b. Dependent Variable: mps

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	212891.0	3	70963.672	.881	.635 <sup>a</sup>
	Residual	80516.283	1	80516.283		
	Total	293407.3	4			

- a. Predictors: (Constant), p/e, r/e, eps
- b. Dependent Variable: mps



Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-1704.580	4197.481		-406	.754			
	eps	42.699	104.211	.609	.410	.752	.726	.379	.215
	r/e	-8.394	60.300	-.179	-.139	.912	.036	-.138	-.073
	p/e	13.379	47.028	.374	.284	.824	.774	.274	.149

a. Dependent Variable: mps

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	725.9787	1294.6899	1118.7000	230.70057	5
Residual	-177.8020	148.2640	.0000	141.87696	5
Std. Predicted Value	-1.702	.763	.000	1.000	5
Std. Residual	-.627	.523	.000	.500	5

a. Dependent Variable: mps

## Non-Banking sector multiple Regression with MPS on DPS, R/E and P/E ratio

### Regression

Descriptive Statistics

	Mean	Std. Deviation	N
mps	1118.7000	270.83542	5
dps	31.0000	6.51920	5
r/e	33.4200	5.76012	5
p/e	22.5620	7.57416	5

Correlations

		mps	dps	r/e	p/e
Pearson Correlation	mps	1.000	.717	.036	.774
	dps	.717	1.000	-.448	.908
	r/e	.036	-.448	1.000	-.302
	p/e	.774	.908	-.302	1.000
Sig. (1-tailed)	mps	.	.086	.477	.062
	dps	.086	.	.225	.016
	r/e	.477	.225	.	.311
	p/e	.062	.016	.311	.
N	mps	5	5	5	5
	dps	5	5	5	5
	r/e	5	5	5	5
	p/e	5	5	5	5

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	p/e, <sup>a</sup> r/e, dps	.	Enter

a. All requested variables entered.

b. Dependent Variable: mps

**Model Summary<sup>a</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.843 <sup>a</sup>	.710	-.160	291.72217	.710	.816	3	1	.651	1.233

a. Predictors: (Constant), p/e, r/e, dps

b. Dependent Variable: mps

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	208305.5	3	69435.158	.816	.651 <sup>a</sup>
	Residual	85101.826	1	85101.826		
	Total	293407.3	4			

a. Predictors: (Constant), p/e, r/e, dps

b. Dependent Variable: mps

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-462.413	1710.724		-.270	.832			
	dps	19.260	59.450	.464	.324	.801	.717	.308	.174
	r/e	18.111	29.527	.385	.613	.650	.036	.523	.330
	p/e	16.788	47.975	.469	.350	.786	.774	.330	.188

a. Dependent Variable: mps

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	733.5046	1294.1946	1118.7000	228.20247	5
Residual	-183.0326	141.0600	.0000	145.86109	5
Std. Predicted Value	-1.688	.769	.000	1.000	5
Std. Residual	-.627	.484	.000	.500	5

a. Dependent Variable: mps

**Nonbanking sector multiple Regression with MPS on DPS, R/E and P/E (t-1) ratio**

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
MPS	5	684	744	1428	1118.70	121.121	270.835	73351.825	-.485	.913	-.955	2.000
DPS	5	18	23	40	31.00	2.915	6.519	42.500	.118	.913	.264	2.000
R/E	5	15	25	41	34.62	2.514	5.620	31.589	-1.262	.913	2.731	2.000
P/E(t-1)	5	21	11	31	22.20	3.662	8.188	67.045	-.364	.913	-.711	2.000
Valid N (listwise)	5											

**Statistics**

	MPS	DPS	R/E	P/E(t-1)
N Valid	5	5	5	5
Mean	1118.70	31.00	34.62	22.20
Std. Error of Mean	121.121	2.915	2.514	3.662
Median	1185.50 <sup>a</sup>	30.83 <sup>a</sup>	35.27 <sup>a</sup>	20.24 <sup>a</sup>
Mode	744 <sup>b</sup>	33	25 <sup>b</sup>	11 <sup>b</sup>
Std. Deviation	270.835	6.519	5.620	8.188
Variance	73351.825	42.500	31.589	67.045
Skewness	-.485	.118	-1.262	-.364
Std. Error of Skewness	.913	.913	.913	.913
Range	684	18	15	21
Minimum	744	23	25	11
Maximum	1428	40	41	31
Sum	5594	155	173	111

a. Calculated from grouped data.

b. Multiple modes exist. The smallest value is shown

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	737.39	1375.27	1118.70	249.725	5
Std. Predicted Value	-1.527	1.027	.000	1.000	5
Standard Error of Predicted Value	114.538	209.568	184.104	39.852	5
Adjusted Predicted Value	-6453.70	2646.29	167.90	3738.907	5
Residual	-94.271	175.605	.000	104.829	5
Std. Residual	-.450	.838	.000	.500	5
Stud. Residual	-1.000	1.000	-.200	1.095	5
Deleted Residual	-1460.786	7197.203	950.802	3545.455	5
Stud. Deleted Residual	.	.	.	.	0
Mahal. Distance	.394	3.197	2.400	1.165	5
Cook's Distance	.106	294.360	62.086	129.929	5
Centered Leverage Value	.098	.799	.600	.291	5

a. Dependent Variable: MPSit

**Descriptive Statistics**

	Mean	Std. Deviation	N
MPS	1118.70	270.835	5
DPS	31.00	6.519	5
R/E	34.62	5.620	5
P/E(t-1)	22.20	8.188	5

**Correlations**

		MPS	DPS	R/E	P/E(t-1)
Pearson Correlation	MPS	1.000	.717	-.333	-.296
	DPS	.717	1.000	-.807	.130
	R/E	-.333	-.807	1.000	-.092
	P/E(t-1)	-.296	.130	-.092	1.000
Sig. (1-tailed)	MPS	.	.086	.292	.314
	DPS	.086	.	.049	.418
	R/E	.292	.049	.	.441
	P/E(t-1)	.314	.418	.441	.
N	MPS	5	5	5	5
	DPS	5	5	5	5
	R/E	5	5	5	5
	P/E(t-1)	5	5	5	5

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PEt, REit, DPSit <sup>b</sup>	.	Enter

a. Dependent Variable: MPSit

b. All requested variables entered.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.922 <sup>a</sup>	.850	.401	209.657	.850	1.892	3	1	.480	2.728

a. Predictors: (Constant), PEt, REit, DPSit

b. Dependent Variable: MPSit

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	249451.075	3	83150.358	1.892	.480 <sup>b</sup>
	Residual	43956.225	1	43956.225		
	Total	293407.300	4			

a. Dependent Variable: MPSit

b. Predictors: (Constant), PEt, REit, DPSit

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-1528.965	1856.331		-.824	.561	-25115.883	22057.954					
<sup>1</sup> DPS	56.188	27.372	1.352	2.053	.289	-291.601	403.977	.717	.899	.795	.345	2.898
R/E	34.766	31.615	.721	1.100	.470	-366.939	436.472	-.333	.740	.426	.348	2.873
P/E(t-1)	-13.412	12.915	-.405	1.039	.488	-177.510	150.686	-.296	-.720	.402	.983	1.018

a. Dependent Variable: MPSit

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	737.39	1375.27	1118.70	249.725	5
Std. Predicted Value	-1.527	1.027	.000	1.000	5
Standard Error of Predicted Value	114.538	209.568	184.104	39.852	5
Adjusted Predicted Value	-6453.70	2646.29	167.90	3738.907	5
Residual	-94.271	175.605	.000	104.829	5
Std. Residual	-.450	.838	.000	.500	5
Stud. Residual	-1.000	1.000	-.200	1.095	5
Deleted Residual	-1460.786	7197.203	950.802	3545.455	5
Stud. Deleted Residual	.	.	.	.	0
Mahal. Distance	.394	3.197	2.400	1.165	5
Cook's Distance	.106	294.360	62.086	129.929	5
Centered Leverage Value	.098	.799	.600	.291	5

a. Dependent Variable: MPSit