CHAPTER - I
INTRODUCTION

1.1 General Background of the Study

Dividends are the divisions of the profits of a company, which are received by the shareholders. The study of dividend policy helps to know how a firm divides its net earning into retained earnings and dividends. Retained earnings are the most significant internal sources of financing the growth of the firm. On the other hand, dividends may be considered favorable from shareholders point of view as they tend to increase there current return. In general, a firm can choose among different forms of dividend policies based on there earnings and capital requirement. In practice, dividend policy varies from firm to firm and industry to industry. Some firms pay whole earnings as dividend and some retains more portions of the earnings and pay less as dividend. In beginning, firm pays more earnings as dividend to create better image and existence in the financial market but later they may change their policy and announced a certain percent earnings as dividend. Thus, the important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm.

Dividend is that portion of earning which is paid to the shareholders as a return on investment. The retained earning provides funds to finance the firm's long term growth of the firm. "A dividend policy that allows shareholders to get their share of the profit by always paying out a fixed percentage of earnings tend to be preferred over one that regularly pays stable or in increasing dividend" *(Gitman;1988:602)*. Dividend payout of course reduces the total amount of internal financing. So, dividend is always a controversial topic because shareholders expect higher dividend but firms ensures towards setting aside funds for maximizing the shareholders wealth. "Dividends may be paid in cash, stock, or merchandise. Cash dividends are most common and merchandise dividends are least common. Shareholders are not promised a dividend, but he or she grows to expect certain payment on the historical dividend pattern of firm. Before dividends are paid to common stockholders the claims of all creditors, the government and preferred stockholders must be satisfied" (*Gitman; 1988:609)*.

Market price of the stock is the price in which the stock are traded in the organized stock exchange in the over the counter market. In context of Nepal, the market price per share is the price coated for purchasing and selling under the Nepal stock exchange *(NEPSE)*. Market price per share is that value of stock which can be obtained by a firm from the market. Market value of share is affected by the dividend of share and earning per share of the firm. If the dividend per share and earning per share is high, the market value of share will also be high. Market value of share may be high or low than the book value. If the firm is growing, market value of share will be higher than the book value. If the firms' capacity is lower than the cost of capital, market value will also be lower. Market price of share is determined by capital market.

The concept of the banking and its development has been closely attached with socio-economic development. Banking sector as a monetary agent of economic development plays important role to build up the confidence to businesspersons for promoting their business economic confidence of various segments and extends credit to people.

The establishment of Nepal Bank Ltd in 1937 A.D. is the foundation stone of development of financing sector, particularly banking and the concept of finance companies are even new in Nepalese practices. To regulate the banking activities and monetary policy, Nepal Rastra Bank, the Central Bank has been established. The first commercial bank fully owned by government named 'Rastriya Banijaya Bank' was established in 1966. The commercial bank has its own role and contribution in the economic development. It has a source of economic development; it maintains economic confidence of various segments and extends credit to the people. In global perspective, Joint Ventures (JVs) are the modes of trading through partnership among nations and is also a form of negotiation between various groups of industrialists and traders to achieve mutual exchange of goods and services for sharing competitive advantages.

A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation i.e. industries or commercial investment and production or trade.

Following the economic liberalization, financial sector reform introduced in eighties by Nepal Rastra Bank, eased entry restrictions with an amendment to the Commercial Bank Act 1974. As a result, three banks namely Nabil Bank Limited (initially, it was registered as Nepal Arab Bank Limited) and Standard Chartered Bank Ltd (initially, it was registered as Nepal Grindlays Bank Limited) come into operation prior to 1990s. In the same regard, in 1992, Himalayan Bank was established as a joint venture with Habib Bank Limited of Pakistan. The bank is the first joint venture bank managed by Nepali CEO. However, it was only in 1992, after Nepal Rastra Bank adopted a liberal attitude in permitting commercial banks to open, the financial liberalization really took place. Six new banks, all in joint ventures of foreign banks have come into operation making the total number of the commercial banks to eleven. In addition, letter of intent has been given to three more commercial banks to operate on regional basis and currently there are 26commercial banks (*including JVBs).*

The capital market of Nepal is small and it is at early stage of growth. The establishment of joint venture banks has brought new hopes for productive mobilization of funds according to their new trends of dividend distribution among foreign joint venture banks. The appreciation in the market value of the share of the joint venture banks have without any doubt, provided adequate sense of protection to shareholders.

Having given the overall dividend implications among companies and financial institution, this study is more specific in assessing the dividend practices of commercial banks of Nepal and their comparative study.

1.2 Statement of the Problem

There are many empirical studies on dividend policy and its impact on stock prices in developed capital market. However, no simple and conclusive relationship exists between the amount paid out in dividend and market price of share. There is still a considerable controversy concerning the relation between dividends and common stock price.

The capital market is the part and parcel for corporate development. Though it is in early stage of development, Nepalese investors in recent years have poured funds in newly established companies encouragingly. This trend which is the corner-stone to the development of capital market would continue until investors are pouring funds in such companies. "The attraction of such funds and the rate of return to the investment of the investors depend upon the decisions made by the management of the companies. It is follow pragmatic approach by the management with regard to providing returns to investors on their investment. Dividend is the most inspiring aspect for the investment of shares of the corporations. In a world on which verbal statements can be ignored, dividend action does provide a clear-cut means or 'making a statement' that 'speaks louder than a thousand words" (*Solomon; 1963:90-91).* Solomon contains that dividend may offer tangible evidence of the firm's ability to generate cash, and as a result, the dividend policy of the firm affects share price. Even if dividends do affect a firm's value, unless management knows exactly how they affect value, there is not much that they can do to increase the shareholders wealth. The implication of corporate dividend practices thus an empirical question for this study.

Since mid 1980s when the government adopted the economic liberalization policy, many joint venture banks have been established in Nepal. Many investors are curious to invest in these financial institutions to get dividend and maximize wealth. In Nepalese context R.S. Pradhan's study (*1993)* states that stocks paying higher dividend have higher liquidity, lower leverage, higher earnings, higher turnover and higher interest coverage. Similarly, Sudhakar Timilsena *(1997)* finds the positive relationship between dividend per share and stock price per share. However, a question arises that at what extent these findings are still relevant in the recent day context, although many changes have been taken places. This study tries to study on dividends practices of Nepalese Joint Venture Banks from different perspectives.

Companies can adopt different dividend polices as it is the outcome of the firms profitability and investment opportunities. Some firms practice residual policy, some practice fixed dividend policy and even some practice fixed dividend payout policy. There is complete dividend theory which explains this cross-sectional variation. Modigliani and Miller *(1961*) state that the dividend policy is irrelevant because the

dividend payment is simply an act of dividing the shareholder's residual claim into retained earning and dividend. The total yield on the stock is simply the sum of dividend yield plus capital gain yield. When the firm pays more dividends, the capital gain will be low and vice-versa. In general practice, there is direct relationship between dividend and the stock price; however, the relationship is not yet clear and controversial issue in finance literature. This study explores to shed some light on dividend practices of Nepalese firms and its impact on stock prices.

The study mainly deals with the following issues:

1. What is the impact of dividend per share (DPS) on the market price of stock?
2. What are the determinants of dividend per share (DPS) and market price per share (MPS)?
3. Do the banks with higher dividend payout and earning have higher market value of shares?
4. Is there any uniformity in dividend distribution among the sample firm?

1.3 Objectives of the Study

The major objectives of the study are to examine the impact of dividend policy on stock price in Nepalese commercial banks. The specific objectives of the study are as follows:

1. To analyze the impact of dividend on stock price.
2. To identify the determinants of the dividend per share(DPS) and market price of stock.(MPS)
3. To analyze the relationship of DPS with EPS and MPS.
4. To compare dividend practices of selected commercial banks.

1.4 Limitations of the Study

Due to time and resource constraints, present study has been limited as specific as below:

1. This study covers only dividend policy of selected commercial banks and its impact on stock price.
2. There are so many determinants that affect dividend decision and market price of stock but only selected has been studies.

3. This study relies on secondary data collected from Annual Reports of respective firm and the data available in NEPSE.
4. The study period covers only 5 years i.e. 2003/04 to 2007/08.
5. The study covers only six commercial banks as sample.

1.5 Significance of the Study

Every people are attracted to invest in share capital for purpose of getting more return as well as to maximize their wealth. So the dividend policy has become an effective way to attract new investors. This study will be helpful to understand the dividend policy of commercial banks in Nepal. It will be helpful to related persons like policy maker, shareholders, investors and further researchers.

1.6 Organization of the Study

The study has been organized into five chapters, as prescribed by the university, as follows:

Chapter One: Introduction
Chapter Two: Review of Literature
Chapter Three: Research Methodology
Chapter Four: Presentation and Analysis of Data
Chapter Five: Summary and Conclusion

Chapter One: It is devoted to theoretical analysis and brief review of the study. This chapter is significant to the study.

Chapter Two: It is devoted to theoretical analysis and brief review of related and it includes a discussion on the conceptual framework and review of the major empirical studies.

Chapter Three: It describes the research methodology employed in the study.
Chapter Four: It deals with presentation and analysis of relevant data and information through definite sources of research methodology.

Chapter Five: It states summary, conclusion and recommendation of the study. This chapter states main findings, issues, and gaps and suggestive framework of study.

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

CHAPTER - II
REVIEW OF LITERATURE

In this chapter, an attempt has been made to analyze the theoretical aspect and related literature relating to the topic. To make the review simple and systematic, this chapter has been divided into five sections. Section I is the conceptual review, Section II is the review of empirical studies,Section III is Rules Governing Dividend Practice in Nepal, Section IV is Review of journal and section V is review of previous thesis.

2.1 The Conceptual Framework

Under this topic, conceptual consideration, types of dividend, dividend policies, residual theory of dividends, the information content of dividends. Dividend policy of a company is the division of its net earnings between distribution to shareholders as dividend and retention for its investment. Therefore, a firm's dividend policy has the effect of dividing its earnings into two parts retained earnings and dividends. All aspects and questions related to payment of dividend are contained in dividend policy. There is a reciprocal relationship between retained earnings and cash dividends. The increase of one may cause decrease of another. Dividend decision is the major decision of managerial finance. It is important because dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. The decision depends upon the objective of the management for wealth maximization. The firms use the net profit for paying dividends to the shareholders, if the payment will lead to maximization of wealth of owners. If not, it is better to retain them to finance investment programs. The relationship between dividend and value of the firm should, therefore, be the criterion for decision-making.

"Shareholder expects two types of return from the purchase of stock, i.e., capital gain and dividend. Since dividends would be more attractive to shareholder, one might think that there would be a tendency for corporations to increase distributions of dividends to shareholder. But one might equally pressure that gross dividends would be reduced somewhat with an increase in net income after tax dividends still available to shareholders, and increase in the retained earning for the corporation" *(Smith;1977:90-91).* It is therefore, a wise policy to maintain a balance between

shareholder's interests with that of corporate growth from internally generated funds. It is better to pay dividend when earnings cannot be profitably reinvested by a firm. Financial management is, therefore, concerned with the activities of corporation that affects the well being of shareholders. That well-being can be partially measured by the dividend received, but a more accurate measure in the market value of share . Shareholders usually think that the dividend yield is less risky than capital gain.

Dividend policy is of great importance because it affects the financial structure, the flow of funds, corporate liquidity and investor's attitudes. Thus, it is one of the central decisions which is seeking to maximize the value of firm's common stock. Due to its rapidly increasing importance and aspects many thoughts and provoking ideas in this area are to be reviewed. This chapter highlights upon the literature that were concerned in this connection. Similarly, what other have said, done or written etc. about the dividend policy are also reviewed which has provided useful input in this study. Therefore, in this chapter conceptual framework given by different authors in this area, review from books, thesis, journals, procedure of dividend payment, factors affecting dividend policy and rules regarding dividend policies are presented.

2.1.1 Types of Dividend

Corporations need to use different forms of dividend in view of the objectives and policies which they implement. The different types of dividends are given below:

Cash Dividends

Cash dividend refers to the portion of earnings paid in cash to the investors in proportion to their shares of cash of tile Company. The cash amount and reserves account of a company reduces when the cash dividend is distributed. The market price of the share drops in most cases by the amount of cash dividend distributed. The firm has to maintain adequate balance of cash for the payment of cash dividend otherwise; funds to be borrowed for this purpose may be difficult. Cash planning is useful for the company paying stable dividend. To what extent cash dividend is popular and adopted by companies in Nepal may be an interesting study.

Stock Dividend and Stock Splits

A stock dividend is a payment in the form of additional shares of stock instead of cash. A stock split is essentially the same. When a stock splits, shareholders are given a larger number of shares for the old shares they have already owned. In either case, each shareholder retains the same percentage of all outstanding stock that had been used before the stock dividends or split. Thus, for example, a 10 percent stock dividend would, mean that each shareholder was given one share of stock for every ten shares already owned. Under a two-for-one stock split, each shareholder would be given one additional share of stock for every share already owned thus doubling tile number of shares owned by each shareholder.

"A stock dividend or split does not change the assets of the firm, since nothing is received by the firm for new shares issued. In spite of the fact that stock dividends and splits don't change the underlying assets, liabilities, or equity of the firm, there is some empirical evidence that the total market value of a company's equity increase when the stock dividend or split occurs, roughly a 2 to 6 percentage increase" *(Grinblatn et al: 1984 :124).* Some of the joint-venture banks of Nepal have followed the practice of paying stock dividend along with cash dividend.

Property Dividend

This type of dividend payment is very rarely found where the corporation gives its asset or property to her shareholder in the form of dividend other than cash. The corporation where there are the assets or properties that are no longer required in the operation of the business .Corporations own products follows such type of dividend distribution and securities of subsidiaries are examples that have been paid as property dividend.

Bond Dividend

Bond dividend is a payment of dividend by the corporation in the form of bond to the shareholders. In the other words, the corporation declares dividend in the form of its own bond with a view of avoiding cash out flows .Bond dividend does not change its liquidity position.

Script Dividend

If the dividend is paid to the shareholders in the form of promissory notes promising to pay at a specified future date then such type of dividend is called the script dividend. In this, the company issues and distributes transferable promissory notes to the shareholders, which may or may not bear interest.

Except cash dividend, the other dividends are paid to the shareholders to avoid the cash outflow .Cash dividend and stock dividends are frequently used and quite popular in dividend practice. Only cash dividend has been considered in this study.

Corporate Share Repurchase

Corporate share repurchase is often viewed as an alternative to paying dividends. If a firm has some surplus cash *(or it can borrow)*, it may choose to buy back some of its own stock. It is instructive to see why share repurchases may be viewed as an alternative to paying dividends. By repurchasing stock, a company is reducing the number of shares outstanding. "If the price earning (*P/E)* ratio does not change after the repurchases, the stock price must rise. If a firm has excess cash and insufficient profitable investment opportunities to justify the use of these funds, it is in the shareholder's interests to distribute the funds. The distribution can be accomplished either by the repurchase of stock or by paying the funds out in increased dividends" *(Van Horne;2000:328)*. It is thus corporate share repurchase is often viewed as an alternative to paying dividends. A repurchase is a signal that manages, who possess an insider's knowledge of the firm, are convinced that their stock is worth more than its current piece . In addition, either conviction is strong enough to lead them to pay a premium for the stock despite the risk of dilution if they are wrong. The company Act, 2063, Section 182 has made a new provision regarding the purchase of its own share which was prohibited by the company act 2053. Company act 2053 stated that no company shall purchase its own shares or supply loans against the security of its own shares *(GON, 2053 B.S.).*

2.1.2 Dividend Policy

Dividend policy determines the division of earning between reinvestment in firm and payment to shareholders. Retain earning are one of the significant sources for financing corporate growth, but dividend refers to the cash flows that occurs to

shareholders. Basically, dividend policy outlines the basis to determine the amount of dividend to be paid. But at the same time it also specifies the form of dividend payment procedures *(Bhattara; 2005).*

2.1.3 The Residual Theory of Dividends

Dividend policy can be viewed of a firm's investment decisions. Whether a company pays dividends or not depends on its investment policy assumes that the internally generated funds are comparatively cheaper than the funds obtained from external sources. The theory is based on the promise that investors prefer to have the firm retain and reinvest earning exceeds the rate of return the investor could, himself, obtain on other investments of comparable risk. The dividend under a residual dividends policy equals the amount left over from earnings after equity investors. If equity investment equals earnings, no dividends are paid. If equity investment is greater than earnings, then no dividends are paid and new shares are sold to cover any equity investment not covered by earnings. If there is no any investment opportunity, then cent percent earnings are distributed to shareholders. The dividends is therefore merely a residual dreaming after all equity investment needs are fulfilled.

Although the residual theory of dividends appears to make further analysis of dividend policy unnecessary, it is indeed not clear that dividends are solely a means of disbursing excess funds. It would therefore be imprudent to conclude that there is no other implication of dividend policy, and so this study shall take a close look at the relationship between dividends and share price.

2.1.4 The Information Content of Dividends

"It has often been pointed out that a company that raises its dividends often experiences and increases in its stock price and that a company that lowers its dividends has a falling stock price. Since management may have greater insight than the rest of the market as to the level of presents and future earning power, they may use dividend payments as the medium through which their expectations are conveyed" (*Pettit; 1976:96).* A number of writers have suggested that a considerable amount of information is conveyed by changes in dividends. In light of this, the management of a firm may use divided payments as a method of indicting their estimates of the firm's earning power and liquidity .

2.1.5 Common Factors Affecting Dividend Policy

Dividend policy is concerned with deciding the part of profit to be distributed to the shareholders. Such a policy depends on various factors, which, include the number investment opportunities available, liquidity position of firm, repayment of debt, control, taxes, legal rules, cost of selling new stock, nature of investors etc.

Investment Opportunities

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

Liquidity Position

The liquidity position of the firm also affect to the fraction of profit to be distributed to the shareholders. Dividend payments represent cash outflows, the more liquid a firm is, the more able it is to pay dividends.

Amount of Earnings

A company with stable earnings pays more dividends in a prospect of continuity of the earnings in the future. But a company having fluctuating earnings pays less dividends to face its future financial difficulties.

Incidence of Taxation

One aspect of taxation has already been mentioned above but all aspects of taxation, corporate and personal, must be regarded as relevant factors to be taken into account.

Repayment of Debt

If the company has to repay the debt in the current year, it needs more fund and retains more profit paying less amount as dividend. Shareholder may have different expectations as per their economic status and the effect of tax differential on dividend and capital gain. A retire shareholder may require regular dividend while a wealthy shareholder may prefer the capital gain benefit.

Access to the Capital Market

A company having the ability to liquidating can still pay dividend if is able to raise debt or equity in the capital markets. It also provides flexibility in the financial position of the firm, which in fact could meet the desires of the stockholders

(dividend) as well as the firm's obligations. Capital market reputation of a firm always make easy to raise funds and funds availability helps to meet both requirement as mentioned before.

Inflation

Some company may have followed the policy of paying the high dividend at the time of inflation in order to protect the shareholders from the erosion of the real value of the dividend. But the company with falling result can not follow this policy. This policy not only tries to suit the inflation but also in the lower economic growth it helps to create the capital market for the investment opportunities.

Legal Provision

Dividend declaration is not only the concern of shareholders and company, but it is also the issue of the government regulation. Therefore the government may put some criteria to the company for the announcement of the dividend. So the company must consider the provision made either in company act or by government.

Control

External financing, unless it is through a right issue, involves dilution of control. If external finance is raised through a public issue of equity capital, the existing shareholders will have to share control with new shareholders. Internal financing by the way of retained earnings, on the other hand, lends to no dilution of control. Hence, if the share shareholders and the management of a company are averse to dilution of control, the firm should rely more on retain earnings.

2.2 Review of Empirical Works

This section is dedicated to the review of the major studies in general concerning dividends and stock prices, management views on dividend policy, and management views on stock dividends. This study draws heavily from these studies to carry it out.

Lintner (1956), made an important study focusing on the "*Behavioral Aspect of Dividend Policy*" in the American context. He investigated a partial adjustment model as he tested the dividend patterns of 28 companies. He concluded that a major portion of the dividend of a firm could be expressed in the following way:

$DIV_t = P\ EPS_t$

$DIV_t - DIV_{t-1} = P\ EPS_t - DIV_{t-1}$

$DIV_t - DIV_{t-1} = b\ (P\ EPS_t - DIV_{t-1})$

$DIV_t - DIV_{t-1} = a+b\ (P\ EPS_t - DIV_{t-1}) + e_t$

$DIV_t = a + bp\ EPS_t - b\ DIV_{t-1} + DIV_{t-1} + e_t$

$DIV_t = a + bp\ EPS_t - b\ DIV_{t-1} + DIV_{t-1} + e_t$

$DIV_t = a + b\ DIV_{t-1} + (1-b)DIV_{t-1} + e_t$

Where,

EPS_t = earnings per share.

DIV_t = Dividend in Time t

P= target payout ratio.

a = constant relating to dividend growth.

(1-b) = safety factor

e_t = error term

b = the adjustment factor relating to the previous period's dividend and new desired level of dividends,

where $b<1$.

The major findings of this study were as follows:

- Firms generally think in terms of proportion of earnings to be paid out. Investment requirements are not considered for modifying the pattern of dividend per share (or dividend rate).
- Firms generally have target payout ratios in view while determining change in dividend per share (or dividend rate).

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

Their study of irrelevance of dividend was based on the following critical assumptions:

- The firm operates in perfect capital market.
- There are no taxes.
- The firm has a fixed investment policy which is not subject to change.
- Risk of uncertainty does not exist.

Modigliani and Miller provided the proof in support of their argument in the following manner:

Step 1: The market price of a share in the beginning of the period is equal to the present value of dividend paid at the end of the period plus the market price of the share at the end of the period.

$$\left[P_0 = \frac{D_1 + P_1}{1 + K_e} \right]$$

Symbolically,

Where,

P_o = Market price at the beginning or at the zero period.

K_e = Cost of equity capital (assume constant)

D_1 = Dividend per share to be received at the end of the period

P_1 = Market price of the share at the end of the period

Step 2: Assuming that the firm does not resort to any external financing the market value of the firm can be computed as follows:

$$\left(nP_0 = \frac{n(D_1 + P_1)}{1 + K_e} \right)$$

Where, n = Number of equity shares at zero period

Step 3: if the firm's internal sources of financing is the investment opportunities fall short of the funds required, and Δn is the number of new shares issued at the end of year 1 at price p_1, then the equation of step 2 can be written as :

$$np_0 = \frac{nD_1 + (n + Dn)P_1 - DnP_1}{1 + K_e}$$

Where,

n = No. of shares at the beginning

Δn = No of equity shares issued at the end of the period

Step 4: If the firm were to finance all investment proposals, the total of new shares issued would be given by the following equation.

$$\Delta nP_1 = I - (E - nD_1)$$

Or, $\Delta np_1 = I - E + nD_1$

Where,

ΔnP_1 = the amount obtained from the sale of new shares to finance capital budget.

I = the total amount requirement of capital budget

E = Earnings of the form during the period

$E - nD_1$= Retained Earnings

Step 5: By substituting the value of $\Delta nP1$ from equation of step 4 to equation of step 3, the finding is:

$$np_0 = \frac{nD_1 + (n + \Delta n)p_1 - (I - E + nD_1)}{1 + K_e}$$

$$or, \quad np_0 = \frac{P_1(n + \Delta n) - I + E}{1 + K_e}$$

Step 6: Conclusion: There is no role of dividend in above equation. So Modigliani and Miller concluded that dividend policy has no effect on the share price.

In this way, according to Modigliani and Miller's study, it seems that under conditions or perfect capital markets, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firm's investment policy, its dividend policy may have no influence on the market price of the shares *(Modigliani and Miller's;1961:345).* However, the view that dividend is irrelevant or not justified, once the assumption is modified to consider the realities of the world. In practice, every firm follows one kind of dividend policy or another. The selection of a certain dividend policy depends on the age and nature of the firm.

Gordon (1962), in his study concluded that "*Dividend Policy of a Firm Affects its Value*", in his model, he pleaded that investors are not indifferent between current dividends and retention of earnings. The conclusion of his study is that investors value the present dividend more than future capital gain. His argument insisted that an increase in divided payout ration leads to increase in the stock prices for the reason that investors consider the dividend yield (D_1/Po) is less risky than the expected capital gain.

Hence, investors required rate of return increases as the amount of dividend decreases. This shows that there exists a positive relationship between the amount of dividend and the stock prices.

His model is based on the following assumptions:

i. The firm is an all-equity firm.
ii. No external financing is available.
iii. Internal rate of return, r, appropriate discount rate, $k_{e,}$ are constant.
iv. The firm and its stream of earnings are perpetual.
v. The corporate taxes do not exist.
vi. The retention ratio, b, once decided upon, is constant. Thus the growth rate, g=br, is constant forever.
vii. This discount rate is greater than growth rate, k>br = g.

Based on the above assumptions, Gordon provided the following formula, which is a simplified version of the original formula *(Franc, 1972)* to determine the market value of a share.

$$P = \frac{E\,(1-b)}{(K-br)}$$

Where,

P = Price of share

E = Earnings per share

b = Retention ratio

l- b = Percentage of earnings distributed as dividend

E (l-b) = Dividend per share

K= Capitalization rate or cost of capital

br = Growth rate in r, i.e. rate of return on investment of an all equity firm.

According to his model, the following facts are revealed.

In the case of growth, share price tends to decline in corresponding to earnings with increase in payout ratio or decreases in retention ratio, i.e. high dividend corresponding to earnings leads to decrease in share prices. Therefore, dividends and stock prices are negatively correlated in growth firm. In the case of normal firm, share value remains constant regardless of changes in dividend policies. It means dividend and stock prices are free form each other in normal firm, i.e. r is equals to k firm. In the case of declining firm, share prices tend to rise in correspondence with rise in dividend payout ratio, it means dividends and stock prices are positively correlated with each other in a decline firm.

Friend and Puckett (1964), conducted a study on "*Relationship between Dividends and Stock Prices*", by running regression analysis on the data of 110 firms from five industries in the year 1956 and 1958. These five industries were chemical, electric utilities, electronics, food and steels. These industries were selected to permit a distinction made between the results for growth and non-growth industries and to provide a basis for comparison with result by other authors for earlier years. They also considered cyclical and non-cyclical industries that they covered. The study periods covered a boom year for the economy when stock prices leveled off after rise and a somewhat depressed year for the economy when stock price, however, rose strongly .

They used dividends, retained earnings and price earnings ratio as independent variables in their regression model of price function. They used supply function, i.e. dividend function also. In their dividend functions, earnings, last year's dividends and price-earnings ratio are independent variables. They quoted that the dividend supply function *(equation*) was developed by adding to the best type of relationship developed by Lintier.

Symbolically, their price function and dividend supply functions are,

Price function: $P_t = a + b\,D_t + c\,R_t + d\,(E/P)_{t-1}$

Where,

P_t = Per-share price at time t

D_t = Dividends at time t

R_t = Retained earnings a time

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

Dividend supply function: $D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$

Where,

E_t = Earnings per share at time t

D_{t-1} = Last year dividend

This study was based on the following assumptions:

- Dividend to react to year to year fluctuations in earnings.
- Price doesn't contain speculative components.
- Earnings fluctuations may not sum zero over the sample.

Their regression results based on the equation of $P_t = a + b D_t + c R_t + d (E/P)_{t-1}$ showed the strong dividend and relatively weak retained earnings effects in three of the five industries, i.e., chemicals, foods and steels. Again they tested other regression equations by adding lagged earnings price ration to the above equation and resulted the following equation:

$P_t = a + b D_t + c R_t + d (E/P)_{t-1}$.

They found the following results: they found that more than 80% of the variation in stock prices can be explained by three independent variables. Dividends have a predominant influence on stock prices in the same three out of five coefficients are closer to each other for all industries in both years except for steels in 1956, and correlation are higher, again except industries but they found the differences between the dividends and retained earnings coefficients are not quite so marked as in the first set of regressions. They also found that the dividends and retained earnings for steels. They also calculated dividend supply equation, i.e., $D_t = e + f E_t + g D_{t-1} + h (E/P)_{t-1}$ and the derived price equation for four industry groups in 1985. In their derived

price equation, it seems that there was no significant changes form those obtained from the single equation approach explained above. They argued that the stock prices or more accurately the price earnings ration does not seem to have a significant effect on dividend payout. On the other hand, they noted that the retained earnings effect is increased relatively in three of the four cases tested. Further, they argued that their results suggested price effect on dividend supply are probably not a serious source of bias in the customary derivation of dividend and retained earnings effects on stock prices, though such a bias might be marked if the disturbing effect short run income movements are sufficiently great.

Further, they used lagged price as a variable instead of lagged earnings price ration and showed that more than 9% of variation in stock price can be explained by three independent variables and retained earnings received greater relative weight than dividends in the most of the cases. The only exception was steels and foods in 1958. They considered chemicals, electronics and utilities as growth industries, in these groups; the retained earnings effect was larger than the dividend effect for years covered. For the other two industries, namely foods and steels, there was no significant systematic difference between the retained earnings and dividend coefficients.

Similarly, they tested the regression equation of $P_t = a + b D_t + c R_t + d (E/P)_{t-1}$ by using normalized earnings again. They obtained retained earnings by subtracting dividends form earnings. They added prior year's earnings price variable and they compared the result. Comparing the result they found that there was significant role normalized earnings and retained earnings but an effect of normalized price earnings ration was constant. When they examined the later equation, they found that the difference between dividend and retained earnings coefficients disappeared. Finally, they concluded that management might be able to increase prices some what by raising dividends in foods and steels industries.

They conducted more detailed examination of chemical samples. That examination disclosed that the result obtained largely reflected the undue regression weighting given the three firms with price deviating most form the average price in the sample of 20 firms and retained earnings as price determinant.

Finally, Friend and Puckett came into conclusion that it is possible that management might be able, at least in some measure, to increase stock prices in non-growth industries by raising dividends and in growth industries by greater retention, i.e. low dividends.

Walter (1966), on "*Dividend and Stock Price*", according to him, the dividend policy of a firm cannot be looked aside from investment policy. His argument is just the opposite of what Modigliani and Miller said. He argued that dividend policy affects the stock prices, i.e., dividend is relevant with stock prices. The relationship between firm's internal rate of return and cost of capital is determining factor to retain profits or distribute dividends. As along as the internal rate is greater than the cost of capital, the stock price will be enhanced by retention and will vary with dividend payout.

His model was based on number of assumptions as given below:

- Retained earnings constitute the exclusive source of financing. The firm does not resort to debt or equity financing.
- The firm's internal rate of return and its cost of capital are constant.
- The firm distributes its entire earnings or retains it for reinvestment immediately.
- There is no change in values of earnings per share and the dividend per share.
- The firm has perpetual life.
- Considering the above assumption, Walter's model to determine the market price per share is as follows:

$$P = \frac{Div}{K} + \frac{r(EPS - div)/K}{K}$$

$$Or, P = \frac{Div + (r/k)\ (EPS - Div)}{K}$$

Where,

P = Market price per share

Div = Dividend per share

EPS = Earnings per share

r = Internal rate of return

K = Cost of capital

According to him the given firm may have three situations. They are:

r>k

If the firm's internal rate to return exceeds the cost of capital, the relationship between dividends and sock prices is negative, i.e. more dividends to lead low sock prices. This kind of firm is referred to as growth firms. Walter argued that zero dividends would maximize the market value of shares for growth firms.

r=k

If the firm has r=k, there is no role of dividends on stock prices, i.e., dividends are indifferent from stock prices. In other words, dividend payout does not affect the value of share whether the firm retains the profit or distributes dividends, is a matter of indifference. This kind of firm is referred to as normal firm.

r<k

If the firm's internal rate of return (r) is less than the cost of capital (k), the relation between dividends and stock prices is positive, i.e. increase in dividend per share yield increase in stock prices. This kind of firm is referred to as declining firm. He argued, cent percent dividend policy would maximize the market price of shares for declining firm.

To conclude, according to Walter, when the firm is in a growth stage, then dividends are negatively correlated with stock prices. In the declining firms, dividends are positively correlated between dividends and stock prices. In the normal firm, there is no relationship between dividends and stock prices, i.e., dividend are indifferent to variate in market price of shares.

Shrestha, M.K. (1985), made on "*Dividend Policy in Selected Public Limited Companies*" based on the data collected for altogether 18 public limited companies of the year 1982/83. The study is devoted to streamline dividend policy under three fold aspects that cover (a) firstly, to provide conceptual glimpse of dividend and dividend models (b) secondly, to analyze and interpret the dividend payment implications in selected public limited companies through the use of dividend models in accidence. With the available data that are manageable and (c) lastly, to provide suggestions that

help guide in the determination and appropriate adoption of a suitable dividend policy in the public limited companies.

After analyzing the data using different models, it can be said that dividend policy constitutes one of the most critical it is concluded that, it can be said that dividend policy constitutes on of the most critical issues of the public limited companies. In empirical terms, many of the public limited companies are found to pay negligible dividend to the shareholders in which GON provide to be a potential investor. Dividend implies paying left-over earnings and theories of dividend policy do differ since some prefer residual theory that conveys passive residual available for payment and the controversial M.M. hypothesis insists on dividend irrelevance in the sense that dividend policy does not matter. There are others who argue that dividend policy does affect value due to the factors of uncertainty. Many factors affect the payment depending upon investors' needs and preferences of one hand and the financing needs of the public limited companies to top potential investment opportunities on the other hand. Dividend policy cash or stock split and other forms as well as determine stable, fluctuating and extra dividend payment. The dividend models have their own assumptions in the determination of value in terms of dividend per share, earnings per share, retained earning per share and also comparing these variables through the mathematical relationships with actual and normal capitalization rate. The application of Walter's and Gordon's dividend models in calculating the stock value of selected public limited companies reveals both acceptable and fantastic results. And the need for public limited companies to resort the formulation of and appropriate dividend policy in terms of developing target dividend payout ratio can not be ignored.

Pradhan, R.S. (1993), entitled "*Stock Market Behavior in a Small Capital Market*" , A case of Nepal was based on the data collected for 17 enterprises from 1986 through 1990. The objectives of his study ere as follows:

- To examine assess the stock market behavior in Nepal
- To examine the relationship of market equity, market value to book value, price earnings, and dividends with liquidity, profitability, leverage, assets turnover, and interest coverage. The empirical model he used was as follows:
- $V= bo+b_1$ LIQ $+b_2$ LEV + b_3 EARN + b_4 TURN $+b_5$ Cov + U

Where,

- V chosen for the study were Market equity (ME), Market Value of Equity to its book Value (MV/BV), Price-Earning Ratio (PE), Dividend Per Share to market Price Per Share (DPS/MPS), and Dividend Per Share to Earnings Per Share (DPS/EPS).
- LIQ = Current ratio (CR) or Quick ratio (QR)
- LEV = Long term debt to total assets (LTD/TA) or long-term to total capitalization (LTD/TC)
- EARN = Return on assets, that is, earnings before tax to total assets (EBT/TA) or earnings before tax to net worth (EBT/BW)
- TURN = Fixed assets turnover, that is, sales to average fixed assets (S/TA), or total assets turnover, that is, sales to average total assets (S/TA)
- COV = Interest coverage ratio, that is earnings before tax to interest
- U = Error term

Some findings or his study, among others, were as follows:
Higher the earnings on stocks, larger the ratio of dividends per share to market price per share.

- Dividend per share and market per share are positively correlated.
- Positive relationship between the ratios of dividend per share to market price per share and interest coverage.
- Positive relationship between dividend payout and liquidity.
- Negative relationship between dividend payout and leverage ratio.
- Positive relationship between dividend payout and profitability.
- Positive relationship between dividend payout and turnover ratios
- Liquidity and leverage ratios are more variable for the stock paying lower dividends.
- Earnings, assets turnover, and interest coverage are more variable for the stock Paying higher dividends.

2.3 Rules Governing Dividend Practices in Nepal

There are some legal provisions in Company act of Nepal regarding the dividend payment. The responsibility to protect shareholder's interest is handed to stock

exchange centre by the security exchange act 1983-1984 A.D. Only this is not enough to protect shareholders interest because the attitude of board of directors plays dominant role in public limited companies. In many cases, long-term debt, debentures and preferred stock agreements contain restrictions on the maximum common stock dividend that can be paid by a firm. Such covenants are designed to protect senior claim holders from executive withdrawals by real owners. Dividend is paid only out of certain earnings. In present situation, it is advisable to intact separate shareholders protection act safe guard shareholders right as and interests. Shareholders association of Nepal has been established for the purpose. The responsibilities to undertake required action to protect shareholders interests was given to SEC by security exchange act 1983-1984. Recently, Nepal government has issued company Act 2063. The Act marks some legal provision for dividend payments. Those provisions are as follow:

Section 179

Section 179 *(subsection -1)* states that the company can issue the bonus share from its portion of dividend after passing special resolution by the general meeting.

Subsection -2 of section 179 states that company should inform to the office before issuing the bonus share.

Section 182

Subsection -1 of section 182 states that dividend should be distributed within 45 days from the decision dividend distribution except the following circumstances.

- Incase of any law forbids the distribution of dividend.
- Incase the right to dividend disputed.
- Incase dividend can not be distributed within the time limit mentioned about owing to circumstances anyone's control and without any fault on the part of the company. The company can distribute the dividend after taking the prior consent if Nepal Government holds full or partial ownership of the company.
- Incase dividend are not distributed within the time limit mentioned in the subsection -1 dividend and extra interest should be distributed.

Only the person whose name stands shall be entitled to get dividend. In addition to this, the company Act 2063 makes other provision regarding dividend and interim dividend payments. The company Act -2063 has made a new provision regarding the purchase of its own share, which was prohibited by the previous company act-2053.

Section -61

This section states that no company shall purchase its own shares or supply loans against the security of its own shares. In the following circumstances, the company can purchase its own shares from its retained earnings to be distributed as dividend.

- If all amount against shares issued by the company is paid.
- If issued share of public company is registered in security board.
- If there is provision regarding the purchase of own share in the article of association of respective company.
- If special resolution is passed by the general meeting of respective company regarding the purchase of its own shares.
- If loan amount of the company shall not be doubled by its capital and reserve funds after purchasing its own shares.
- If the purchased own share amount will not exceed by 20% of company's total paid-up capital and general reserve funds.
- The direction of the office issued by time will not be against.
- Regarding the purchase of own shares will not be against the directives of the office.
- Other provisions also have been made in the company Act 2063 regarding the purchase of its own share.

2.4 Review from Journals

Shiller (1981) published an article on " *Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?*".He used two set of data for standard and poor series and 30 stocks from Dow Jones Industrial Average. He used the simple efficient market model to justify that the change in dividend how far causes the movement of stock prices.

$$P_t = \sum_{k=0}^{\infty} r^{k+1} \quad E_t D_{t+k} \qquad O<r<1$$

Where,

D_t =Real dividend paid at the end of time t.

E_t = Mathematical expectation conditional on information available at time t.

R=Constant real discount factor.

K=Discount factor

He has seen that measure of stock price volatility over the past century appear to be far too high five to thirteen times to be attributed to new information about future real dividend if, uncertainity about future dividends is measured by simple standard deviation of real dividends around their long run exponential growth path. He concluded that, since the market did not know in advance with certainty the growth path and distribution of dividends that was ultimately observed, however one can not possible major events which did not occur such an explanation of volatility of stock price however is academic in that it relies fundamentally on unobservable and can not be evaluated statistically.

Feldstein and Green (1983), published a paper work on "*Why do not Corporations Eliminate their Dividends and Increase their Retained Earnings"?* where they provide a simple model of market equilibrium to explain why firms that maximize the value of their shares pay dividends even though the funds would instead be retained and subsequently distributed to shareholders in a way that would allow them to be taxed more favorable as capital gain.

The each firm is subjectively unique, and that both high and low tax investors will want to invest in all firms. Both proportions and portfolio investors can also borrow and that corporations as well as investors can earn the risk free returns. This study indicated that existing tax treatment of dividend distorts corporate financial decisions and may cause a misallocation of total investment. It will be important to see whether these adverse effects remain in the more general analytic framework.

Manandhar (1997), has carried out study on the topic of "*Bonus Share and Dividend Changes Empirical Analysis in Nepalese Context"* based on the data collected for the years from 1987/88 to 1997/98.The analysis covers 35 observations per bonus divided rate and 29 samples of the Nepalese corporate firms selected from the listed corporate firms in NEPSE.The sample corporate firms include 5 from banking,3 from insurance and finance company and 4 from manufacturing, trading and airlines.

The study is made to analyze the actual dividends behavior of Nepalese corporate firms after an issue of bonus share. Moreover, there are some specific research questions.

1. Is there any association between dividend rate and bonus issue?
2. Is quantum of the dividends increase directly related to ratio of bonus issue?
3. Does the dividend announcement of the management indicate its intention of increasing future dividend?
4. Is the announcement of bonus share issue has a significant impact in market price of share?
5. Is there any systematic policy of dividend distribution after the issue?
6. Is there diversity in the increase in dividend rate and the total dividend payment after bonus issue?
7. Is the relationship between existing dividend and various ranges of bonus share issue ratio is not found significant in Nepalese corporate firms?

Pradhan and Adhikari (2004), published an article on "*Dividends and Stock Performance in Nepal*" where they ascertain cross sectional differences in performance of stocks in terms of underlying behavior of dividend per share to earning per share. Pooled Cross-Sectional linear regression was computed by using a data set of 99-observation covering 33 listed companies. The findings revealed that performance of stocks paying higher dividends are comparatively better than that of stocks paying lower dividends. Findings also revealed that performance is more variable for the stocks paying higher dividends.

The results of the cross-sectional analysis shows that stocks with larger ratio of DPS to book value per share have higher liquidity, lower leverage, higher assets turnover and higher interest coverage. Similarly, stocks with higher ratio of DPS to EPS have

higher liquidity, low earnings, higher assets turnover and higher interest coverage. It also indicated that liquidity; assets turnover, interest coverage, leverage and earnings are more variables for the stocks paying higher dividends.

Shrestha (1998), published an article on *"A Study of Dividend Policy and Value of the Firm in Small Stock Market".In* this research article following model is used:

$$Y=f(X_1, X_2, X_3, X_4, X_5)$$

Where,

Y=Value of a firm

X_1=DPS

X_2=EPS

X_3=P/E Ratio

X_4=Return on Equity (ROE)

X_5=Dividend Yield (D/P)

This study aimed to identify some of significant financial variables, which are significant to the value of firm. It helps to understand the dividend policy of sample companies and their effect on market value of the firm as represented by market capitalization and thus misunderstanding the relevancy and irrelevancy of dividend policy on market capitalization in stock market in Nepal. The financial variables taken under study to understand the dividend policy followed are DPS, EPS, P/E Ratio, return on equity and Dividend yield. It is found that DPS, Return on equity and Dividend yield have the significant impact whereas EPS and P/E Ratio have found no significant impact on market value.

Bhattarai (2005), published an article on *"Split Shares to Benefit Small_Investors*".On his article he explained that a well performing company reflects the performance in the market price, which is beating up. Those companies whose dividend is higher like Standard Chartered Bank, Nepal Bank Ltd, NABIL Bank have high market price. Although, their market price per share is higher, the investors are willing to purchase their share. But, small investors cannot afford to purchase the share because the prices

of these shares are prohibited. Stock split may be a good solution to drop down the price of these shares, which is affordable to small investors.

2.5 Review of Thesis

Gautam, Rishi Raj (1988), had conducted research work on "*Dividend Policy of Commercial Bank: A Comparative Study of NGBL, NIBL and NABIL"* .The study is based on secondary data.

His objectives of the study were to identify the type of dividend followed by the banks; examine the impact of dividend on share price; identify the relationship between DPS and other financial indicators. He also specified one way to encourage risk-taking ability and preference is to have proper risk-return trade off by bank's management board in a way that higher return must be the investment rule for higher risk-takers that comprise bank's shareholders. He conducted this study also to know the uniformity among DPS, EPS and DPR of the sample companies.

His conclusions of the study had shown that, there was not clearly defined dividend policy was found followed by sample companies. He did not see the market price of the share to be more or less dependent to EPS or DPS.He did not find significant relationship between DPS and other financial indicators. He did not find uniformity EPS but prominent difference in DPS and DPR.In the year 1992, the bank had paid 60% (40 % stock dividend and 20% cash dividend) of its profit as dividend to the shareholders to satisfy their needs and 40% of earnings was retained to retain to refinance for the internal growth of the bank. However, dividend growth rate is not equal to the growth rate of earnings.

K.C., Pramesh (1991), had conducted a study on *"Dividend Policy of Joint Venture Bank in Nepal"*, which has the objectives to provide conceptual framework of dividend models, to analyze the financial variables affecting the stock value and interpret the dividend paying implication under dividend valuation model and to provide suggestions, which will give vision for determination and espousal of dividend policy of joint venture banks.The summary of the major findings of the study were the earning per share of all joint venture banks was raised satisfactorily,

there was co-relation between EPS and BVPS ,amount of cash dividend had been rising each year,the P/E ratio, earning yield, dividend yield percentage exposed cyclical behavior, the market value per share of joint venture banks stocks in security exchange center was significantly fluctuated and trading on high price. Joint venture banks in Nepal were seen as growth banks because actual capitalization rate (r) is higher than the normal capitalization rate (k) which is r>k. Under CAPM the Beta Risk of joint venture banks was less riskier. Cash dividend per share (CDPS) of joint venture banks was significantly increasing in each year.

Parajuli, **Num Prasad** (2003), carried out a research on the topic "*Dividend Policies and Practices of Joint Venture Banks in Nepal; a Comparative Study of Commercial Joint Venture Banks*".

His objectives of the study were to analyze dividend policy and practice of these banks, examine the relationship of dividend with various factors DPS, MPS, Net Worth, Net Earnings and Book value off Stock. He recommended possible future guideline and to suggest to the policy makers executive and investors to overcome various issues and gaps based on the findings of the analysis.

He included the four banks as samples. His conclusion had shown that banks declare high dividend return on paid up capital. He found relationship between DPS and net earning was positive in these sample banks. He did not find uniformity in dividend policy. MPS had highly fluctuated and traded on high price. Change on DPS affects MPS.P/E ratio and dividend yield were in consistent. He did not find stable dividend policy adopted by these banks for a long period.

Dhungana, Dadi Ram (2003), conducted a study on" *Dividend Policy of Commercial Banks and Insurance Companies*" for the partial fulfillment of the Master's in Business Studies from Shanker Dev Campus. His objective was to highlight the aspects of dividend policies and practices of bank and insurance companies. He also analyzed the relationship of dividend with carious key such as Earning per Share (EPS),Net Profit(NP),Net Worth(NW) and stock Price. Factors affecting dividend policy decision of Banks and Insurance companies were also

analyzed. He had provided a workable suggestion and possible guidelines to overcome various issues and gaps based on the findings of the analysis.

He had conducted his research by taking 3 commercial banks and 3 insurance companies as sample. He used both primary and secondary data. His major findings and conclusion shows, EPS and DPS of all selected companies are satisfactory except Nepal Bangladesh Bank Ltd. and Nepal Industrial and Commercial Bank Ltd.The coefficient of variation showed that Nepal Bangladesh Bank Ltd had greater fluctuations in EPS & DPS where as the Himalayan Bank Ltd has consistent in EPS & DPS.EPS & DPS of Insurance companies were seen consistent. The co-relation between EPS and DPS is positive incase of Himalayan Bank Ltd. and Nepal Bangladesh Bank Ltd.(5% significant level).Coefficient of all the three insurance companies was positive with EPS and DPS (1% significant level).The analysis of correlation between current ratio and DPS were positive.MPS and Dividend of last year D(t-1) were positively correlated.EPS and MPS were negatively correlated. Corporation respondents gave the first priority to earnings, second to liquidity and third priority to past dividend.

Sharma, Rajesh (2003), conducted a study on *" Dividend Theories and Practice; an Empirical Analysis on Joint Venture Banks of Nepal."* He submitted this thesis work for the partial fulfillment for Master's in Business Studies to the Shanker Dev Campus, Kathmandu.He had chosen four sample banks; Standard Chartered Bank Ltd, NABIL Bank Ltd, Himalayan Bank Ltd, and Nepal Investment Bank Ltd .His objectives of the study were to find dividend procedures followed by the JVBs of Nepal in the context of Nepal. The aim of the study was also to find out ability and attitude of paying dividend and analysis of variance in the payment of dividend between banks with similar profit range. Major Factors affecting dividend policy of JVBs, legal aspects, and shareholders consideration were analyzed with analyzing Practices of issuing bonus shares.

After conducting the different analysis his major findings showed that the high dividend paying firms are fund to be more financially strong in comparison to low dividend paying firms. The MPS was affected by dividend policy while change in DPS affects the share price of different firms differently. He did not find dividend

payment is as regular phenomena in Nepalese companies but still the major leading joint venture banks paying dividend (either cash or stock) regularly in order to meet the shareholder's expectation. Dividend was not seen decreased and increased with accordance to the EPS.Net profit of the organization does not properly support the declaration of dividend. His findings also concluded that the MPS is considerably higher than the actual net worth. This huge gap clearly indicated that investors do not have adequate knowledge about the actual financial status of the company. Managers preferred smooth dividend payments by moving only part way towards the target payout on each year. They tried to look into the future when they set the payment.

Basnet, Pooja (2004), conducted a study on " *Dividend Policy of Listed Companies in Nepal: A comparative study of Banking, Finance and Insurance Companies*". She conducted this study to assess the prevailing practice of Nepalese listing companies regarding dividend; to highlight the prevailing dividend policy adopted by the listed companies; to assess the impact of dividend on market price of share of the selected companies. She analyzed the relationship between dividend with EPS, net profit & net worth and provides a useful workable suggestion.

Her major findings showed that, there was not uniformity of dividend distributing policy and practices in selected companies. A change in DPS and payout ratio affects the share prices differently in different sector companies. The relationship between DPS with EPS, net profit and net worth were positive in all sector companies.

She suggests and recommended that there must have clearly defined divided policy, legal rules must be enacted. She suggested that Companies should have long-term vision and establish the organization to promote and to protect activities in favor of investors. Further, she recommended that choice should be given to shareholders whether they prefer stock dividend or cash dividend with using target rate of earnings i.e. profit planning and target payout rates. At last, she suggested that all activities and information regarding performance should be timely provided

Research Gap

In this study, the reasearcher has taken new thesis, journels and articles from different reasesrchers which are related to dividend policy that helps to know about dividend

practice and its effect on financial indicators, relationship among them and shows a glance of actual dividend behavior in Nepal. Further, the study has taken up 5 years latest data with due consideration of EPS, DPS, DPR, MPS etc and data are different from those of previous in term of time and space. So, it has been believed that this study will be different and comprehensive as compared to previous reaserch and study.

CHAPTER-III
RESEARCH METHODOLOGY

Research methodology describes the method and process applied in the entire aspect of the study. In other words, it is a systematic way to find research problems. Every research should be outline in the systematic manner and for that reason Research Methodology is one of the most important parts of every research.

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

3.1 Research Design

This study is carried out to get the empirical result of comparative analysis of dividend practices in the sample commercial banks and its impact on stock price. This study attempts to analyze the relationship between the dividend practices and market price of share. Similarly, the other variable relating to the dividend per share and market price per share has been considered. Hence, the study has followed both analytical and descriptive design.

3.2 Nature and Sources of Data

This study is based on accounting data of firms listed in NEPSE for the period of 2003/04 to 2007/08. The required data have been extracted from annual reports and financial statements of the firms Security Board Nepal (SEBON) and NEPSE database. Hence, this study mainly relies on secondary data.

3.3 Population and Sample

There are altogether 195 companies listed in NEPSE. Out of them 18 listed commercial banks are considered as population. Among the commercial banks listed in NEPSE, six commercial banks have been chosen by selected method. In result, Standard Chartered Bank, Himalayan Bank, Nabil Bank, Bank of Kathmandu, Everest Bank and Development Credit Bank Limited are selected for the sample study.

Table 3.1

Sampling Description

Population (N)	Sample (n)	Sample Ratio (n/N)
Listed Commercial Banks =19	6	6/19=31.58%

3.4 Method of Analysis

In this study, various financial and statistical tools have been applied to analyze the variables regarding to study topic.

3.4.1 Financial Tools

Ratio analysis is mostly used financial company. So it is very easy to understand, it holds greater significance. Here, in this study different financial ratios have been employed to derive in meaningful conclusion.

Earning Per Share (EPS)

Earning per share calculation assess to know whether the Commercial Banks earning power on per share basis have changed over the period or not EPS is calculated by dividing the net profit after taxes by the total number of the common shares outstanding.

$$\text{EPS} = \frac{\text{Net Profit after Tax}}{\text{No.of Outstanding Shares}}$$

Dividend per Share (DPS)

interest and performance dividend paid to ordinary shareholders per share basis. Dividend per share is calculated by dividing the total dividend to equity share holders by the total number of share.

$$\text{DPS} = \frac{\text{Total Dividend Amount}}{\text{No.of Outstanding Shares}}$$

Market Price per Share (MPS)

Market price per share is affected by DPS of the firm and can be obtained by a firm from the market. If the EPS and DPS are high, the MPS will also be high. In this study, MPS can be obtained from capital market and it is the closing price of the share indicated in the NEPSE index.

Dividend Payout Ratio (D/P Ratio)

This ratio reflects the percentage of the profit is distributed as dividend and the percentage is retained as reserve and surplus for the growth of the Commercial Banks and Finance Companies.

It is calculated by dividing DPS by EPS.

$$\text{D/P Ratio} = \frac{\text{DPS}}{\text{EPS}}$$

Price Earning Ratio (P/E Ratio)

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

$$\text{P/E Ratio} = \frac{\text{MPS}}{\text{EPS}}$$

3.4.2 Statistical Tools

Arithmetic Mean

Arithmetic mean is the average return over periods. Arithmetic mean of a given set of observation is their sum dividend by the number of observations. To illustrate it, let us suppose that X_1, X_2------ X_n denote return of given 'n' number of securities and $\overline{X}$ is the arithmetic mean return of the given observation. It is calculated by,

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

where,

$\overline{X}$ = arithmetic mean return

n = number of observations

$\sum X$= sum of given observation

For simplicity, Microsoft excel has been used to compute the mean.

Standard Deviation

It is quantitative measure of total risk. It provides more information about the risk of the assets. The standard deviation of a distribution is the square root of the variance of

returns around the mean. It measures the absolute dispersion. The following formula is applied to calculate the standard deviation, using historical returns.

$$\text{s.d.}(\sigma) = \sqrt{\frac{\Sigma (X - \overline{X})^2}{n}}$$

Coefficient of Variation (CV)

The risk per unit of expected return can be measured by coefficient of variation. It should be used to compare investments when both the standard deviation and the expected values differ. CV is computed as follows

$$CV = \frac{\sigma}{\overline{X}}$$

Correlation Coefficient

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

$$\text{Correlation Coefficient (r)} = \frac{\text{Covarience (x,y)}}{\sigma x \, \sigma y}$$

Where,

$$\text{Covarience (x, y)} = \frac{1}{n}\sum(X - \overline{X})(Y - \overline{Y})$$

r= Karl pearson's Correlation Coefficient

Coefficient of Multiple Determination (R^2)

Coefficient of multiple determinations is very useful tool in interpreting the value of multiple correlation coefficients. It is denoted by 'R^2' and can be obtained by squaring the coefficient of multiple correlations. R^2 measures the degree of linear association between two variables. One of which happens to be independent and other being dependent variable. More preciously, it measures the total variation in dependent variables, which is expressed as percentage. Value of R^2 is ranging from zero to one.

The value of R^2 equal to 1 indicates that the other unexplained variation is zero and the impact on dependent variable is exactly (100%) due to independent variables used in the regression model.

$$R^2 = Rxyz = \sqrt{\frac{r^2xy+r^2xz-2r_{xy}r_{yz}r_{xz}}{1-r^2yz}}$$

Where,

R^2= Coefficient of Multiple determination interms of Zero order correlation Coefficient

Adjusted R^2

Adjusted R^2 is a non decreasing function of the number of explanatory regression present in the regression model. It almost invariably increases so it is one of the better statistical tools to measure the degree of variation in dependent variable explained by changes in independent variable to check the model adequacy.

Regression Equation

Regression analysis is concerned with the study of the relationship between one dependent variable to one or more other independent variables. There is two type of regression analysis, simple linear regression analysis, concerned with the study of the relationship between one variable called the dependent variable and one other variable called independent variable. Multiple linear regression analysis concerned with the study of the relationship between one variable called the dependent variable and more other variables called independent variable.

Regression Constant

Regression constant is a value of dependent variable when other independent variables are zero. In other words, it is the intercept of the model, which indicates the average level of dependent variable when independent variable is zero. If all the variables are omitted from the model, the regression constant indicates the mean or average effect on dependent variable. It is denoted by ‘a’.

Regression Coefficient

Regression coefficient describes how changes in independent variables affect the value of dependent variables estimate. In other words, the regression coefficient of each independent variable indicates the marginal relationship between that variables

and value of dependent variable, holding constant the effect of all other independent variables in the regression model. They are denoted by b, b_1, b_2, b_3 etc.

Multiple Regression Model

This model is used to analyze the impact of dividends on stock price taking all independent variable EPS, DPS, D/P ratio, P/E ratio at a time to find the dependency level of stock price on independent variable assuming all variable change in a same event.

Standard Error of Estimate (SEE)

With the help of regression equation perfect prediction is practically impossible. The standard error of estimate measures the reliability of the estimating equation, indicating the variability of the observed point around the regression line that is the extent to which observed value differ their predict values on the regression line. The small value of the standard error of estimate (SEE), the closer will be the dots to regression line. If SEE is zero, there is no variation about the line and correlation will be perfect. Thus, with the help of SEE it is possible for us to ascertain how will and representative regression line is as a description of the average relationship between two series.

$$\text{SEE}=6x.yz = \sqrt{\frac{\sum X_x^2 - a\sum X_x - b_1\sum X_x X_y - b_2\sum X_x X_z}{n-3}}$$

Hypothesis Test

Hypothesis is an assumption about unknown result. While testing of hypothesis, an assumption is made about the population parameter. To test whether the assumption is right or not, a sample is selected from the population, sample statistic is obtained, observe the difference between the sample mean and the population hypothesized value and test whether the test is significant or insignificant.

F-statistics

F-statistics is used to test the significance of mean value of EPS, DPS, MPS, BVPS, DPR, and PE Ratio. F-statistic is considered more appropriate for the test of hypothesis of equality among several sample means.

3.5 Hypothesis Development

First Set of Hypothesis

Null HypothesisH_{01}: There is no significance difference among mean value of EPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative HypothesisH_{11}: There is significance difference among mean value of EPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Second Set of Hypothesis

Null HypothesisH_{02}: There is no significance difference among mean value of DPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative HypothesisH_{12}: There is significance difference among mean value of DPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Third Set of Hypothesis

Null HypothesisH_{03}: There is no significance difference among mean value of MPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative HypothesisH_{13}: There is significance difference among mean value of MPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Fourth Set of Hypothesis

Null Hypothesis H_{04}: There is no significance difference among mean value of BVPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative Hypothesis H_{14}: There is significance difference among mean value of BVPS of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Fifth Set of Hypothesis

Null Hypothesis:H_{05}: There is no significance difference among mean value of DPR of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative Hypothesis H_{15}: There is significance difference among mean value of DPR of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Sixth Set of Hypothesis

Null Hypothesis H_{06}: There is no significance difference among mean value of PE Ratio of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Alternative HypothesisH_{16}: There is significance difference among mean value of PE Ratio of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

CHAPTER-IV
PRESETION AND ANALYSIS OF DATA

The raw data collected from various sources has been organized and processed using various tools as discussed under unit “Research Methodology”. The information obtained is presented and analyzed using various statistical and financial tools in this unit in order to achieve the objectives of this study.

In discussing the study results, we focus on following areas: analysis of financial indicators, impact of dividends on stock, determinants of dividend per share and market price per share, and relationship of MPS with DPS and EPS.

4.1 Analysis of Financial Indicators

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

Earning Per Share (EPS)

EPS measures the earning capacity of a firm and it is expressed as per share basis. It helps to show the earning availability to each ordinary shareholder.

Table 4.1

EPS of Sample Banks

Year	SCBL	HBL	NBL	BOKL	EBL	DCBL	Av
2003/04	149.30	49.45	84.66	17.72	29.9	10.41	56.91
2004/05	143.55	49.05	92.61	27.5	45.6	19.22	62.92
2005/06	143.14	47.91	105.49	30.1	54.2	22.27	67.19
2006/07	175.84	59.24	129.21	43.67	62.8	13.68	80.74
2007/08	167.37	60.66	137.08	43.5	78.4	16.78	83.97
Mean	155.84	53.262	109.81	32.50	54.18	16.47	70.34
St.Dev.	14.90	6.15	22.73	11.12	18.19	4.63	12.96
C.V.(%)	9.56	11.55	20.70	34.23	33.58	28.12	18.42

Source: Appendix A (i)-(vi)

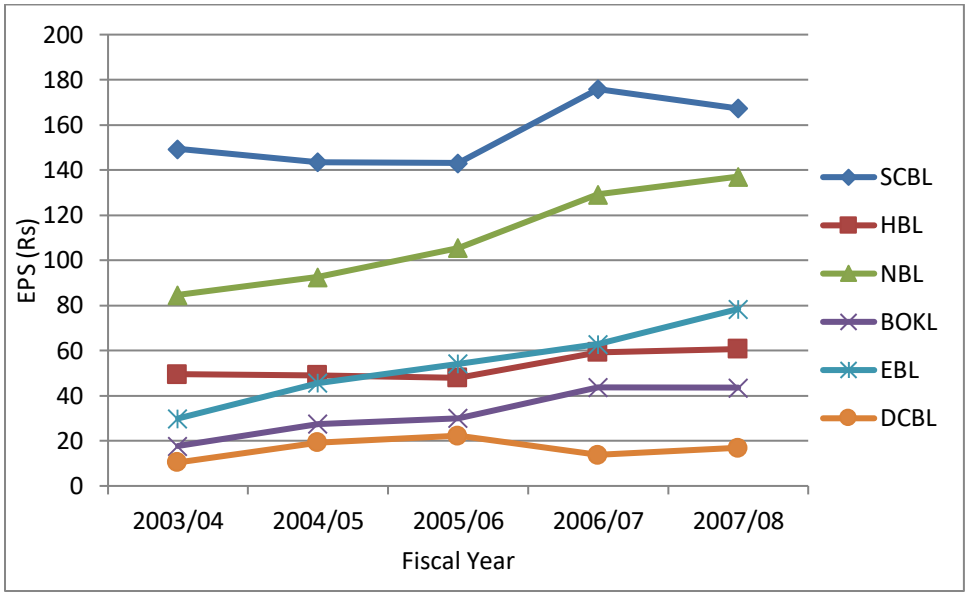
Table 4.1 shows the EPS of the selected banks from the year 2003/04 to 2007/08. In the table, mean, standard deviation and coefficient of variation respectively have been presented.

When we observe the mean EPS, SCBL is in 1st position with Rs. 155.84. Similarly, NBL, EBL, HBL, BOKL and DCBL are in 2nd, 3rd, 4th, 5th and 6th position of EPS with Rs. 109.81, Rs. 54.18, Rs. 53.26, Rs. 32.50 and Rs. 16.47 respectively. In the figure, top line represents the earning trend of SCBL, which is higher than other banks and the second top line represents the earning trend of NBL which is in increasing trend over the sample period.

In the table 4.1, the result of standard deviation is also presented but it is not the absolute measure. So, CV has been chosen for relative measurement. Lower the CV, the smaller the volatility and vice versa. When we take the CV criterion, we can say that SCBL is being success to maintain more or less constant earning throughout the periods and consistency in earnings is more than that of other banks that is why CV of SCBL (i.e. 9.556%) is less than all other banks. Similarly, CV for HBL, NBL, DCBL, EBL and BOKL is 11.55%, 20.70%, 28.12%, 33.58% and 34.23% respectively. Based on these results we can say that volatility in earnings is more for BOKL than other banks.

Figure 4.1

EPS of Sample Banks



Dividend Per Share (DPS)

Dividend is the part of a firm's earning, which is paid to equity shareholders. It can be shown in per share basis, which indicates what exactly the equity shareholders receive in his one share invested.

Table 4.2

DPS for the banks

Year	SCBL	HBL	NBL	BOKL	EBL	DCBL	Av
2003/04	120	25	50	5	20	10.53	44.00
2004/05	110	20	65	10	20	10.53	45.00
2005/06	120	31.58	70	15	20	12.63	51.32
2006/07	140	35	85.1	48	25	12.63	66.62
2007/08	130	40	140	20	40	12.63	74.00
Mean	124	30.32	82.02	23.25	25	11.79	56.92
St.Dev.	11.40	7.94	34.75	16.83	8.66	1.15	13.45
Cv.(%)	9.19	26.18	42.37	72.39	34.64	9.76	23.63

Source: Appendix A (i)-(vi)

Table 4.2 shows the DPS of the selected banks from the year 2003/04 to 2007/08. In the table, mean, standard deviation and coefficient of variation respectively have been presented.

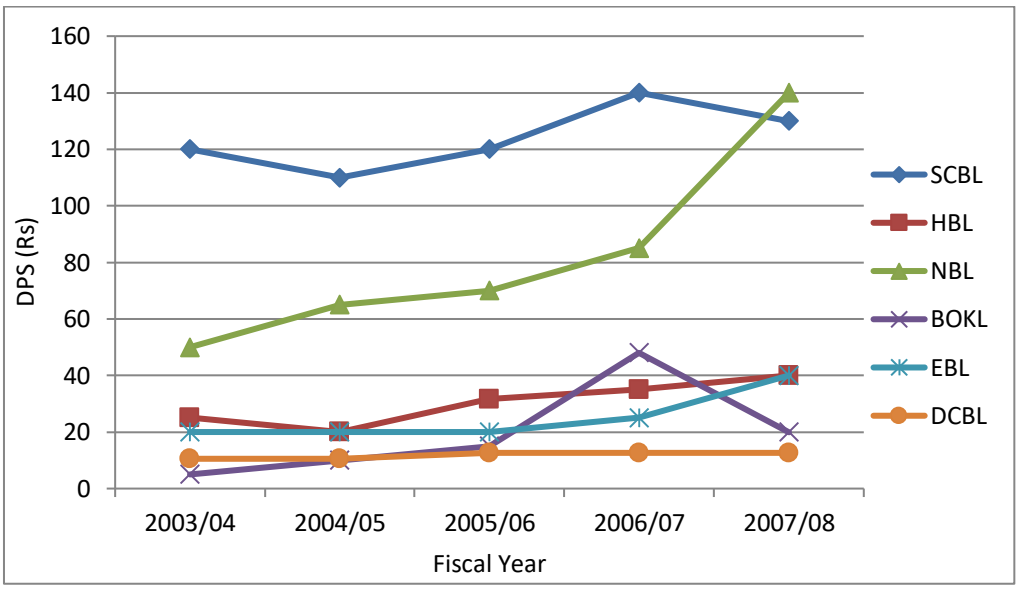
While observing the mean DPS, SCBL is in 1st position with Rs. 124. Similarly, NBL, HBL, EBL, BOKL and DCBL are in 2nd, 3rd, 4th, 5th and 6th position of DPS with Rs.

82.02, Rs. 30.32, Rs.25, Rs. 23.25 and Rs. 11.79 respectively. This result indicates that SCBL is better than that of other banks with respect to dividend per share.

Using the CV criterion, we can say that consistency in DPS for SCBL is highest than other banks. CV of SCBL is lowest than other banks i.e. 9.19%. It indicates that the bank is following stable dividend policy in comparison to other banks' policy. In another words, as it is less volatile than others are, there is more stability in dividend payment in SCBL. Similarly, CV for DCBL, HBL, EBL, NBL and BOKL is 9.76, 26.18%, 34.64%, 42.37% and 72.39% respectively.

Figure 4.2

DPS for the Banks



Market Price Per Share (MPS)

When equity shares are sold in the capital market, the money of the shares is called market value of the shares. MPS is determined in the capital market by trading the securities. 'Trading' means buying and selling the securities. Here, it is the closing price of common stocks of selected banks during the study period. MPS of selected banks has been shown in table 4.3.

Table 4.3

MPS for the Sample Banks

Year	SCBL	HBL	NBL	BOKL	EBL	DCBL	Av
2003/04	1640	836	740	198	445	145	771.80
2004/05	1745	840	1000	295	680	165	912.00
2005/06	2345	920	1505	430	870	305	1214.00
2006/07	3775	1100	2240	850	1379	390	1868.80
2007/08	5900	1740	5050	1375	2430	800	3299.00
Mean	3081	1087.2	2107	629.6	1160.8	361	1613.12
St.Dev.	1791.05	380.29	1741.80	485.35	788.45	265.4101	1032.75
C.v.(%)	58.13	34.98	82.67	77.09	67.92	73.52079	64.16

Source: Appendix A (i)-(vi)

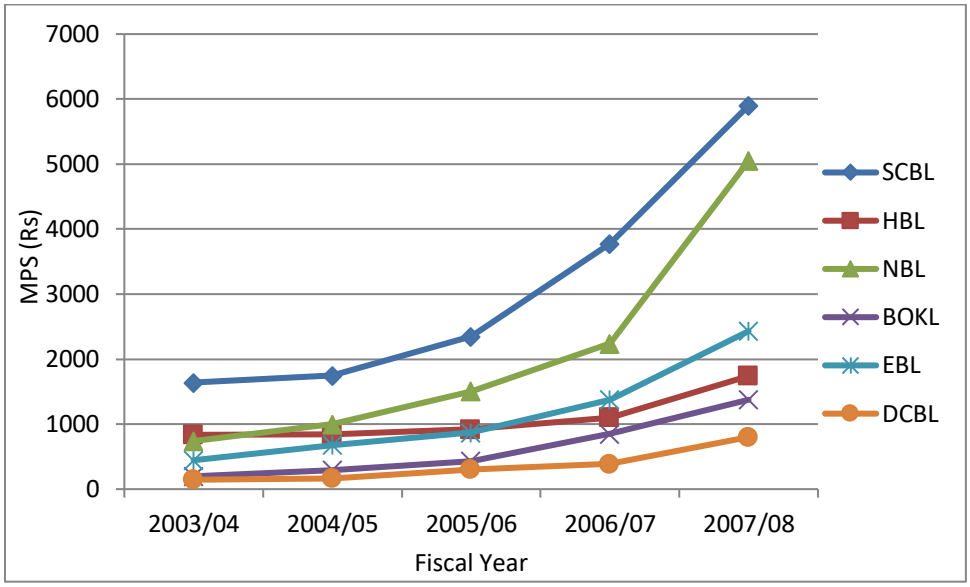
Table 4.3 shows the MPS of selected banks during the study period. Like previous tables, MPS of the selected banks has been presented in the top part and mean, standard deviation and coefficient of variation (CV) of MPS have been demonstrated in the bottom part.

As per the table, highest mean MPS is Rs. 3081 for SCBL and the lowest one is Rs. 361 for DCBL. Mean MPS for NBL, EBL, HBL and BOKL is Rs.2107, Rs. 1160.80, Rs. 1087.20 and Rs. 629.60 respectively. By this result, we can say that SCBL is best for all banks because its mean MPS is highest than others i.e. RS. 3081. As we observe in fig. 4.3, MPS of all banks is in increasing trend. When the capital rate increases, there is also increase in MPS. Here, the analysis of MPS trend shows that capital increasing rate of all banks is not similar to each other.

When we take the CV criterion, consistency in MPS is highest in HBL over the study period that is why it has lowest CV (i.e. 34.98%). Similarly, CV for SCBL, EBL, DCBL, BOKL and NBL are 58.13%, 67.92%, 73.52%, 77.09% and 82.67% respectively.

Figure 4.3

MPS for the Sample Banks



Dividend Payout Ratio (D/P Ratio)

Business firms used to pay dividend considering their earnings. Dividend payout ratio shows what percentage of actual earnings of a firm has been distributed to equity shareholders as dividend against their investment. It has been defined earlier.

Table 4.4

D/P for the Sample Banks

Year	SCBL	HBL	NBL	BOKL	EBL	DCBL	Av
2003/04	80.37	50.56	59.06	28.22	66.89	101.15	57.02
2004/05	76.63	40.77	70.19	36.36	43.86	54.79	53.56
2005/06	83.83	65.92	66.36	49.83	36.90	56.71	60.57
2006/07	79.62	59.08	65.86	109.92	39.81	92.32	70.86
2007/08	77.67	65.94	102.13	45.98	51.02	75.27	68.55
Mean	79.62	56.45	72.72	54.06	47.70	76.05	62.11
St.Dev.	2.79	10.81	15.14	32.34	10.70	20.75	7.40
CV(%)	3.50	19.14	20.81	59.82	22.44	27.28	11.92

Source: Appendix A (i)-(vi)

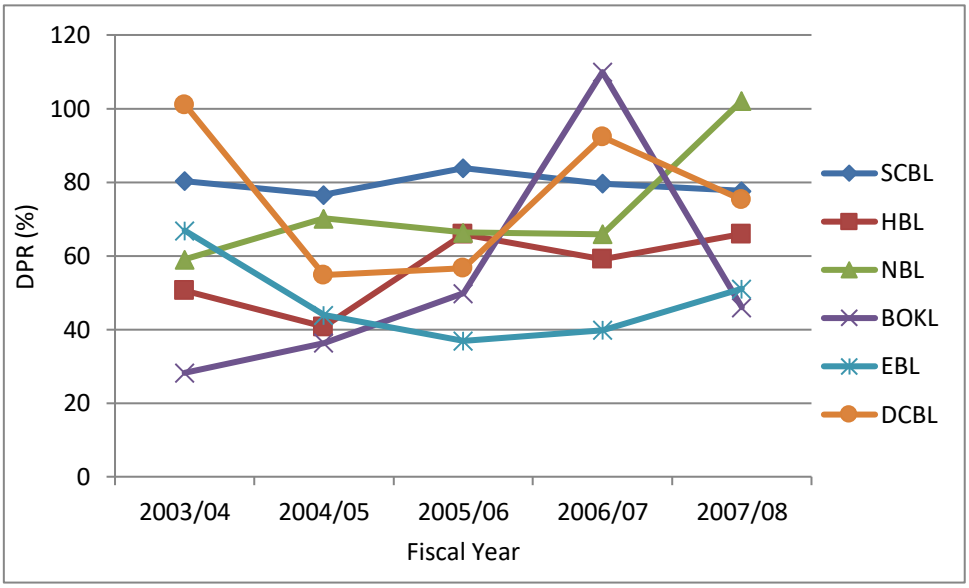
D/P ratio of selected banks has been presented in table 4.4. It is clear from the table, that mean D/P ratio of SCBL (i.e. 79.62%) is in the highest throughout the study period whereas EBL is in lowest position with 47.70%. Similarly, DCBL, NBL, HBL and BOKL are in 2nd, 3rd, 4th and 5th position respectively. D/P ratio of 47.70%

indicates that EBL is less good bank regarding dividend payment. However, there may be other factors such as net profit, no. of equity shares, competitive advantages, goodwill etc. that can affect the dividend policy of the banks.

Considering the another decision making criterion, CV for SCBL, HBL, NBL, EBL, DCBL and BOKL is 3.50%, 19.14%, 20.81%, 22.44%, 27.28% and 59.82% respectively. This suggests that SCBL is following stable dividend payout ratio in comparison to other selected banks.

Figure 4.4

D/P for the Sample Banks



Price Earning Ratio (P/E Ratio)

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

Table 4.5

P/E Ratio for the Sample Banks

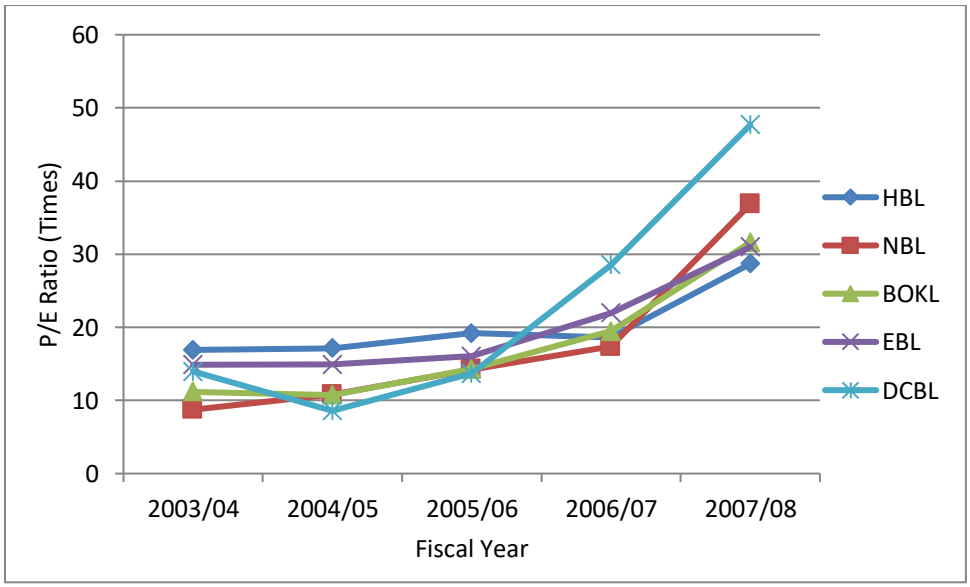
Year	SCBL	HBL	NBL	BOKL	EBL	DCBL	Av
2003/04	10.98	16.91	8.74	11.17	14.88	13.93	12.54
2004/05	12.16	17.13	10.8	10.73	14.91	8.58	13.14
2005/06	16.38	19.20	14.27	14.29	16.05	13.70	16.04
2006/07	21.47	18.57	17.34	19.46	21.96	28.51	19.76
2007/08	35. 25	28.68	36.84	31.61	30.99	47.68	32.03
Mean	15.25	20.10	17.60	17.45	19.76	22.48	18.03
St.Dev.	4.75	4.90	11.25	8.65	6.20	15.93	7.98
C.V(%).	31.16	24.36	63.92	49.55	31.37	70.85	44.26

Source: Appendix A (i)-(vi)

P/E ratio of selected banks has been presented in table 4.5. It is clear from the table that means P/E ratio of DCBL (i.e. 22.48) is in the highest position throughout the study period whereas SCBL is lowest position with 15.25. Similarly, HBL, EBL, NBL and BOKL are in 2nd, 3rd, 4th and 5th position with 20.10, 19.76, 17.60, and 17.15 times respectively. It is seen from the table that P/E ratio for NBL and BOKL is approximately same to each other. P/E ratio of all banks is in increasing trend. It means that the stocks of all selected banks are judged very well with respect to their earnings and dividend payout. Surprisingly decrease in P/E ratio in year 2004/05 for DCBL may be due to recession of other economic Indicator.

Figure 4.5

P/E Ratio for the Sample Banks



4.2 Correlation Matrix

Correlation matrix for selected banks among several variables has been presented below:

Table 4.6

Correlation Matrix of SCBL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.939	1		
MPS (Rs.)	0.764	0.679	1	
BVPS (Rs.)	0.821	0.760	0.993	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (i)

The correlation matrix table 4.6 shows that the EPS and DPS are positive and highly correlated which is signified by the correlation coefficient 0.939. It is significant at 5% level of significance. From this it reveals that dividend of SCBL depends on its earnings of that year i.e. if EPS increases DPS also increases and vice-versa. The correlation coefficient between EPS and mps is 0.764, it reveals that EPS and mps are highly correlated but these are statistically insignificant. Similarly, EPS and BVPS are positive and strongly correlated. It implies that if EPS increases BVPS also increases in the same direction and vice-versa. The correlation coefficient between DPS and mps is 0.679. It means, there is moderate dependency of BVPS and DPS. The correlation coefficient 0.76, between DPS and BVPS reveals that if DPS increases BVPS also increases and vice-versa. The correlation coefficient between mps and BVPS is 0.993. It is significant at 1% level of significance. It implies that the movements of variables are positive and strongly correlated. MPS increase with the increase of BVPS.

Table 4.7

Correlation Matrix of HBL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.802	1		
MPS (Rs.)	0.833	0.833	1	
BVPS (Rs.)	0.181	0.175	0.619	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (ii)

From the table 4.7, it is revealed that there is positive correlation between EPS and DPS but these are statistically insignificant. As indicated by correlation coefficient 0.802. It implies that the increase in EPS also increase in DPS. There is positive correlation between EPS and DPS with mps implies that the increase in EPS and leads to increase in mps. The correlation coefficient between EPS and BVPS is 0.181 and DPS and BVPS are 0.175. It signifies that the impact of EPS and DPS on BVPS is found very less. On the other hand, MPS and BVPS are moderate and positively correlated. The correlation coefficient between mps and BVPS is 0.619. It implies that mps increases with the increase o BVPS.

Table 4.8

Correlation Matrix of NBL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.883	1		
MPS (Rs.)	0.877	0.995	1	
BVPS (Rs.)	0.990	0.915	0.902	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (iii)

The correlation matrix table 4.8 shows that EPS and DPS are positive and strongly correlated by correlation coefficient 0.883. The relationship is significant at 5% level of significance. It means that dividend of NBL depends on its earning of that year. The correlation coefficient between EPS and mps is 0.877. These are positively correlated. It means if EPS increases market price of stock is also increases but these

are statistically insignificant. EPS and BVPS have very strong significant correlation at 1% level of significance as measured by the correlation coefficient 0.990. It implies that when the value of EPS increases not only DPS, BVPS also increases. The correlation coefficient between DPS and MPS 0.995. The relationship is positive and strongly significant at 1% level of significance. It means there is a positive impact of dividend on market price of stock. The correlation coefficient 0.915 between DPS and BVPS are positive and highly significant at 5% level of significance. It reveals that if DPS increases BVPS also increases and vice-versa. The correlation coefficient 0.902 between mps and BVPS reveals that price of stock moves as book value of stock moves. The correlation between mps and BVPS is statistically significant at 5% level of significance.

Table 4.9

Correlation Matrix of BOKL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.796	1		
MPS (Rs.)	0.889	0.520	1	
BVPS (Rs.)	-0.068	0.405	-0.514	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (iv)

The correlation matrix table 4.9shows that the EPS and mps are positive and highly correlated which is indicated by the correlation coefficient 0.889 at 5% level of significance. It reveals that if EPS increases mps also increases and vice-versa. The correlation coefficient between EPS and DPS is 0.796 which indicates highly dependency of DPS on EPS. Similarly, the correlation coefficient between DPS and mps is moderate i.e. 0.52 and DPS and BVPS also have positive and moderate correlation. The correlation coefficient of BVPS with EPS and mps are -0.068 and -0.514 respectively which reveals that BVPS is negatively correlated with EPS and mps. This result explains that book value per share decreases when the earning and market price of stock is increases.

Table 4.10

Correlation Matrix of EBL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.837	1		
MPS (Rs.)	0.943	0.969	1	
BVPS (Rs.)	0.964	0.885	0.954	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (v)

The correlation matrix table 4.10 shows that there is positive and highly correlation between EPS and DPS but these are statistically insignificant. Correlation coefficient between EPS and DPS is 0.837. It reveals that if EPS increases DPS also increases. The correlation coefficient between EPS and mps is 0.943 which is positive and highly significant at 5% level of significant. It shows that EPS is one of the significant factors for the increment of the market price of stock. EPS and BVPS have positive and very strong significant correlation at 1% level of significance as measured by the correlation coefficient 0.964. It implies that when the EPS increases not only mps but BVPS also increases. The correlation coefficient between DPS and mps is 0.969 which is significant at 1% level of significance. It implies that there is a positive impact of dividend on market price of stock. DPS and BVPS also have positive and strongly correlation which is significant at 5% level of significance. It reveals that if DPS increases BVPS also increases. The correlation coefficient 0.954 between mps and BVPS are positive and highly correlated. It is significant at 5% level of significance. It implies that the movements of variables are positively correlated. MPS increase with the increase of BVPS.

Table 4.11

Correlation Matrix of DCBL

	EPS (Rs.)	DPS (Rs.)	MPS(Rs.)	BVPS (Rs.)
EPS (Rs.)	1			
DPS (Rs.)	0.327	1		
MPS (Rs.)	0.102	0.709	1	
BVPS (Rs.)	0.306	0.909	0.839	1
Correlation is significant at the 0.01 level Correlation is significant at the 0.05 level				

Source: Appendix B (vi)

The correlation matrix table 4.11 shows that the correlation coefficient of DPS and BVPS with EPS are 0.327 and 0.306 respectively which reveals that EPS is positive and moderately correlated with DPS and BVPS. The correlation coefficient between EPS and mps is 0.102. It signifies that the impact of EPS over mps is found very less. Similarly, it is observed that DPS and MPS are positively correlated i.e. if dividend increases market price of stock also increases but these are statistically insignificant. The correlation coefficient DPS and MPS are 0.709. It reveals that the increase in DPS consequently increases the market price of the stock. The correlation coefficient between DPS and BVPS is positive and highly significant at 5% level of significance. It implies that if DPS increases BVPS also increases. The correlation coefficient 0.839 between MPS and BVPS is positive. It means if MPS increases BVPS also increases but these are statistically insignificant.

4.3 Multiple Regression Analysis

To see the impact of more than one independent variable the multiple regressions have been used. It examines the relationship between one dependent variable and more independent variables. Firstly, the relationship between dependent variable i.e. Dividend Per Share (DPS) and two independent variables i.e. EPS and lagged dividend has been observed. Secondly, the same has been studied taking EPS and lagged dividend as independent variables whereas MPS as dependent variable. The regression results are presented as:

4.3.1 Regression Result of EPS and Lagged Dividend (DPS_{t-1}) on DPS

The multiple regression model has been developed taking DPS as dependent variable and EPS and lagged DPS as independent variables. It shows the relationship between EPS and lagged DPS for each selected banks which help to see the impact of earnings and lagged dividend on current dividend.

Table 4.12

Regression result of SCBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	27.65	35.97	0.77	0.583
EPS (b_1)	0.8445	0.2342	3.61	0.172
DPS_{t-1} (b_2)	-0.2909	0.3104	-0.94	0.521
R-Square		93.5%		
Adjusted R^2		80.6%		
Std. Error		5.685		
F-statistic		7.24		
Prob. Value		0.254		

Sources: Appendix C (i)

The estimates of the model can be expressed as:

$DPS = 27.7 + 0.84\ EPS + 0.29\ DPS_{t-1}$

The y-intercept 27.65 value indicates constant portion of the equation i.e. when the value of all the independent becomes zero the value of dividend will be equals 27.65. The slope coefficient of EPS is 0.8445, which is statistically insignificant. But EPS is found as positive determinants of dividend. Lagged dividend $DPD_{t-1,}$ 0.2909 is also statistically insignificant.

The independent variables in the model explain about 80.6% variation in DPS, measured by adjusted R^2. The F-statistic is statistically insignificant. It implies that the regression model as a whole is insignificant.

Table 4.13

Regression Result of HBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-75.12	59.08	-1.27	0.424
EPS (b_1)	3.084	2.07	1.49	0.376
DPS_{t-1} (b_2)	-2.167	2.058	-1.05	0.484
R-Square		80.9%		
Adjusted R^2		42.7%		
Std. Error		6.435		
F-statistic		2.12		
Prob. Value		0.437		

Sources: Appendix C (ii)

The estimates of the model can be expressed as:

$DPS = -75.12 + 3.08\ EPS - 2.17\ DPS_{t-1}$

The y-intercept -75.12 values does not hold any economic value since the magnitude of dividend does not go to negative. The slope coefficient of EPS 3.084 is positive but statistically insignificant. The slope coefficient of lagged dividend, DPS_{t-1}, -2.167 is also insignificant in any level of significance.

The independent variables in the model about 42.7% variations in the DPS, measured by adjusted R^2. The F-statistic 2.12 is statistically insignificant that reveals the regression model as a whole is insignificant.

Table 4.14

Regression Result NBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-51.18	85.82	-0.60	0.658
EPS (b_1)	-0.170	2.005	-0.08	0.946
DPS_{t-1} (b_2)	2.383	2.858	0.83	0.558
R-Square		82.5%		
Adjusted R^2		47.4%		
Std. Error		24.94		
F-statistic		2.35		
Prob. Value		0.419		

Source: Appendix C (iii)

The estimates of model can be expressed as:

$DPS = -51.18 - 0.17\ EPS + 2.383\ DPS_{t-1}$

The y-intercept -51.18 does not hold any economic value since the magnitude of dividend does not go to negative. The slope coefficient of EPS is -0.17 which is statistically insignificant. Similarly, the slope coefficient of lagged DPS 2.383 is positive but statistically insignificant.

The value of adjusted R^2 is 0.474. It implies that only 47.4% variation in DPS is explained by the repressor and rest is unexplained. The F-statistic of the model does not signify the validity of the model since the prob. Value is above 10%. Hence the regression model as a whole is insignificant.

Table 4.15

Regression Result of BOKL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-62.459	3.910	-15.98	0.040
EPS (b_1)	2.8168	0.126	22.38	0.028
DPS_{t-1} (b_2)	-0.8327	0.056	-14.95	0.043
R-Square		99.8%		
Adjusted R^2		99.4%		
Std. Error		1.311		
F-statistic		251.54		
Prob. Value		0.045		

Source: Appendix C (iv)

The y-intercept -62.459 values does not hold any economic value since the magnitude of dividend does not go to negative. The slope coefficient of EPS is 2.8168 which are statistically significant at 5% level of significance. It implies that one unit change in EPS will change 2.8168 units change in dividend per share, keeping other variables constant. The lagged dividend is also statistically significant at 5% level of significance with the slope coefficient of -0.833.

The independent variables in the model explain about 99.45% variation in DPS, measured by adjusted R^2. The F-statistic, 251.54 is statistically significant at 5% level of significance. It implies that the regression model as a whole is significant.

Table 4.16

Regression Result of EBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-39.28	12.35	-3.18	0.194
EPS (b_1)	0.2907	0.1678	1.73	0.333
DPS_{t-1} (b_2)	0.2597	0.9392	2.41	0.251
R-Square		98.4%		
Adjusted R^2		95.3%		
Std. Error		2.041		
F-statistic		31.75		
Prob. Value		0.125		

Source: Appendix C (v)

The estimates of the model can be expressed as:

$DPS = -39.3 + 0.291\ EPS + 2.26\ DPS_{t-1}$

The y-intercept -39.3 does not hold any economic value since the magnitude of dividend does not go to negative. The slope coefficient of EPS 0.291 is not statistically significant. Similarly, the slope coefficient of lagged dividend is 2.26 prob. value is 0.251. It implies that the slope coefficient of lagged dividend is statistically insignificant.

The independent variables in the model explain about 95.3% variation in the DPS, measured by adjusted R^2. The F-statistic is statistically insignificant. It implies that the regression model as a whole is insignificant.

Table 4.17

Regression Result of DCBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-10.08	17.66	-0.57	0.670
EPS (b_1)	0.3387	0.3442	0.98	0.050
DPS_{t-1} (b_2)	1.389	1.035	1.34	0.408
R-Square		66.1%		
Adjusted R^2		0.0%		
Std. Error		1.059		
F-statistic		0.98		
Prob. Value		0.582		

Source: Appendix C (vi)

The estimates of the model can be expressed as:

$DPS = -10.1 + 0.339\ EPS + 1.39\ DPS_{t-1}$

The y-intercept -10.1 values does not hold any economic value since the magnitude of dividend does not go to negative. The slope coefficient of EPS and lagged DPS are 0.339 and 1.39 respectively but these are statistically insignificant.

The value of adjusted R^2 is 0. It implies that there is no variation in DPS explained by the independent variables. The F-statistic is insignificant. It implies that the regression model as a whole is insignificant.

4.3.2 Regression Result of EPS and Lagged Dividend on MPS

The multiple regression model has been developed taking MPS as dependent and EPS and lagged DPS as independent variables. It shows the relationship between EPS and lagged DPS for each selected banks which helps to see the impact of earnings and lagged dividend on value of the banks i.e. MPS.

Table 4.18

Regression Result of SCBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-15202	7546	-2.01	0.293
EPS (b_1)	45.11	49.13	0.92	0.527
DPS_{t-1} (b_2)	94.20	65.12	1.45	0.385
R-Square		86.1%		
Adjusted R^2		58.3%		
Std. Error		1193		
F-statistic		3.10		
Prob. Value		0.373		

Source: Appendix D (i)

The estimates of the model can be expressed as:

$MPS = -15202 + 45.1\ EPS + 94.2\ DPS_{t-1}$

The y-intercept -152052 values does not hold any economic value since the magnitude of market price of stock does not go to negative. In the model, the slope coefficient of EPS and lagged dividend are 45.1 and 94.2 respectively, which are statistically insignificant.

The value of adjusted R2 is 0.583. It implies that 58.3% variation in market price of stock is explained by the independent variables and rest 41.7% is unexplained. The F-statistic of the model is statistically insignificant. It implies that the regression model as a whole is insignificant.

Table 4.19

Regression Result of HBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-718	3690	-0.19	0.878
EPS (b_1)	17.3	129.3	0.13	0.915
DPS_{t-1} (b_2)	33.3	128.5	0.26	0.839
R-Square		67.7%		
Adjusted R^2		3.0%		
Std. Error		401.9		
F-statistic		1.05		
Prob. Value		56.9		

Source: Appendix D (ii)

The estimates of the model can be expressed as:

$MPS = -718 + 17\ EPS + 33\ DPS_{t-1}$

Table 4.19 shows the regression result of EPS and lagged dividend on MPS. In the model, EPS and lagged dividend exit as positive influencer of the market price of the share. The slope coefficient of EPS and DPS_{t-1} are 17 and 33 respectively but these are statistically insignificant.

The value of adjusted R^2 is 0.03. It implies that only 3% variation in market price of the stock is explained by independent variables and rest 97% is unexplained. The F-statistic of the model does not signify the validity of the model since the prob. value is above 10%. Hence the regression model as a whole is insignificant.

Table 4.20

Regression Result of NBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-5123	3939	-1.30	0.417
EPS (b_1)	-10.36	92.03	-0.11	0.929
DPS_{t-1} (b_2)	129.9	131.2	0.99	0.503
R-Square		86.6%		
Adjusted R^2		59.9%		
Std. Error		1145		
F-statistic		3.24		
Prob. Value		0.366		

Source: Appendix D (iii)

The estimates of the model can be expressed as:

$MPS = -5123 - 10.4\ EPS + 130\ DPS_{t-1}$

Table 4.20 shows the regression result of EPS and lagged dividend on MPS. In the model, EPS exits as negative influencer of the market price of the share. The slope coefficient of EPS is -10.4. The slope coefficient of lagged dividend exits as positive influencer of the market price of stock. But these are statistically insignificant.

The value of adjusted R^2 is 0.599. It implies that only 59.9% variation in market price of the stock is explained by independent variables. The F-statistic of the model is statistically insignificant. Thus, the regression model as a whole is insignificant.

Table 4.21

Regression Result of BOKL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-467.29	19.64	-23.79	0.027
EPS (b_1)	24.6518	0.6323	38.99	0.016
DPS_{t-1} (b_2)	16.0295	0.2799	57.27	0.011
R-Square		100%		
Adjusted R^2		100%		
Std. Error		6.588		
F-statistic		8173.16		
Prob. Value		0.008		

Source: Appendix D (iv)

The estimates of the model can be expressed as:

$MPS = -467 + 24.7\ EPS + 16\ DPS_{t-1}$

Table 4.21 shows the regression result of EPS and lagged dividend on MPS. The slope coefficient of EPS is 24.7 which are statistically significant at 5% level of significance. It implies that one unit change in EPS will change 24.7 units change in market price of stock, keeping other variables constant. Similarly, the lagged dividend is also found as positive determinants of market price of the stock. The slope coefficient of lagged dividend is 16 and it is statistically significant at 5% level of significance.

The value of adjusted R^2 is 1. It implies that 100% variation in market price of stock is explained by independent variables. The F-statistic of the model signifies the validity of the model since F-statistic is statistically significant at 1% level of significance. It can be concluded that the regression model as a whole is significant.

Table 4.22

Regression Result of EBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-3107.1	787.9	-3.94	0.158
EPS (b_1)	40.64	10.71	3.80	0.164
DPS_{t-1} (b_2)	94.04	59.92	1.57	0.361
R-Square		99.1%		
Adjusted R^2		97.2%		
Std. Error		130.2		
F-statistic		53.93		
Prob. Value		0.096		

Source: Appendix D (v)

The estimates of the model can be expressed as:

$MPS = -3107 + 40.6\ EPS + 94\ DPS_{t-1}$

The table 4.22 shows the regression result of EPS and lagged dividend on MPS of EBL. The slope coefficient of EPS and lagged dividend are 40.6 and 94 respectively but these are statistically insignificant in any significant level (1%, 5%, and 10%).

The value of adjusted R^2 is 0.972. It implies that 97.2% variation in market price of stock is explained by independent variables. The F-statistic is statistically significant at 10% level of significance. It reveals that the regression model as a whole is significant.

Table 4.23

Regression Result of DCBL

	Coefficients	Standard Error	t-Stat	p-value
Intercept (a)	-5915	2215	-2.67	0.228
EPS (b_1)	89.78	43.17	2.08	0.285
DPS_{t-1} (b_2)	407.2	129.8	3.14	0.196
R-Square		92.1%		
Adjusted R^2		76.3%		
Std. Error		132.8		
F-statistic		5.84		
Prob. Value		0.281		

Source: Appendix D (vi)

The estimates of the model can be expressed as:

$MPS = -5915 + 89.8\ EPS + 407\ DPS_{t-1}$

The table 4.23 shows the regression result of EPS and lagged dividend on MPS of DCBL. From the table, the slope coefficient of EPS and lagged dividend are 89.8 and 407 respectively. But these are statistically insignificant.

The independent variables in the model explain only 76.3% variation in the market price of stock, measured by adjusted R^2. The F-statistic is statistically insignificant. It implies that the regression model as a whole is insignificant.

4.4 Test of Hypothesis

To test the significance difference among mean value of EPS, DPS, MPS, BVPS, DPR and PE Ratio in the sample banks, there are altogether six sets of hypothesis formulated and then tested in the study. Under the first set, significant differences among EPS of the banks are tested. The same are tested for DPS, MPS, BVPS, DPR and PE Ratio respectively.

First Set of Hypothesis:

H_{01}: There is no significance difference among mean value of EPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

H_{11}: There is significance difference among mean value of EPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

Table 4.24

Result of Hypothesis Regarding EPS

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	1%
Calculated Value of F-Statistic	65.87
Prob. Value of F-Statistic	0.000

Sources: Appendix E (i)

As we see from the table 4.24 that prob. value of F-statistic is less than 1 which implies that F-statistic is significant at 1% level of significance. That means null hypothesis is rejected and alternative hypothesis is accepted. It reveals that the earning per share among the banks is not same but they are significantly different.

Second Set of Hypothesis

H_{02}: There is no significance difference among mean value of DPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

H_{12}: There is significance difference among mean value of DPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

Table 4.25

Result of Hypothesis Regarding DPS

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	1%
Calculated Value of F-Statistic	33.71
Prob. Value of F-Statistic	0.000

Sources: Appendix E (ii)

Table 4.25 presents the result of hypothesis regarding dividend per share among banks. It is clear from the table that the prob. value of F-statistic is less than 1. It means F-statistic is significant at 1% level significance. Hence, null hypothesis is rejected and alternative hypothesis is accepted which implies that there is no similarity among the banks' DPS. They are significantly different to each other.

Third Set of Hypothesis

H_{03}: There is no significance difference among mean value of MPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

H_{13}: There is significance difference among mean value of MPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

Table 4.26

Result of Hypothesis Regarding MPS

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	1%
Calculated Value of F-Statistic	4.23
Prob. Value of F-Statistic	0.007

Sources: Appendix E (iii)

When we observe in the table 4.26, it is clear that the prob. value of F-statistic is less than 1. It implies that the F-statistic is significant at 1% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that the market price per share among the banks is not same but they are significantly different.

Fourth Set of Hypothesis

H_{04}: There is no significance difference among mean value of BVPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

H_{14}: There is significant difference among mean value of BVPS of SCBL, HBL, NBL, BOKL, EBL and DCBL.

Table 4.27

Result of the hypothesis regarding BVPS

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	1%
Calculated Value of F-Statistic	39.11
Prob. Value of F-Statistic	0.000

Sources: Appendix E (iv)

As we see from the table 4.27, it is clear that the prob. value of F-statistic is less than 1. It implies that the F-statistic is significant at 1% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that the book value per share among the banks is not same. They are significantly different to each other.

Fifth Set of Hypothesis

H_{05}: There is no significance among mean value of DPR of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

H_{15}: There is significance among mean value of D/P Ratio of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Table 4.28

Result of Hypothesis Regarding D/P Ratio

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	5%
Calculated Value of F-Statistic	2.62
Prob. Value of F-Statistic	0.050

Sources: Appendix E (v)

From the table 4.28, we can conclude the result of hypothesis regarding dividend payout ratio among banks. From the table 4.29, we can conclude that the F-statistic is significant at 5% level of significance with prob. value 0.05. Hence, null hypothesis is rejected and alternative hypothesis is accepted which implies that there is no similarity among the banks' DPR. They are significantly different to each other.

Sixth Set of Hypothesis

H_{06}: There is no significance among mean value of PE Ratio of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

H_{16}: There is significance among mean value of P/E Ratio of SCBL, HBL, NBL, BOKL, EBL, and DCBL.

Table 4.29

Result of Hypothesis Regarding P/E Ratio

Particulars	
Numerator Degree of Freedom	5
Denominator Degree of Freedom	24
Significance Level	No
Calculated Value of F-Statistic	0.20
Prob. Value of F-Statistic	0.934

Sources: Appendix E (vi)

Table 4.29 presents the result of hypothesis regarding price earning ratio among banks. As we see from the table 4.29 that prob. value of F-statistic is 0.934 which is no significant at any level (1%, 5%, & 10%). Hence, null hypothesis is accepted and alternative hypothesis is rejected. It implies that there is similarity among the banks' price earning ratio.

4.5 Major Findings

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

1. The SCBL has the highest mean EPS among the banks which is Rs. 155.84 and DCBL has the lowest, which is Rs. 16.47. The same result is seen to be Rs. 109.81, Rs. 54.18, Rs. 53.26, and Rs. 32.50 in NBL, EBL, HBL and BOKL respectively. Most of the firm always seeks to have more earning so that they can sustain efficiently in the competitive capital market. Therefore, earning is the indicator of firm's strength. Again there is higher earning consistency in SCBL i.e. 9.56% whereas there is lower consistency in HBL, NBL, DCBL, EBL and BOKL indicating CV by 11.55%, 20.70%, 28.12%, 33.58% and 34.23 respectively than that of SCBL.
2. The SCBL has the highest mean DPS among selected banks whereas it is lowest in DCBL (i.e. Rs. 124 and Rs. 11.79). If DPS of any firm is high, it will create positive attitude of its shareholders towards the firm, which is consequently helps to increase the market value of the share. In another words, the firm is paying higher dividend implies that it is performing better. Consistency in DPS is also highest in Standard Chartered Bank than that of other banks representing CV=9.19% which is lower than others.

3. Higher D/P ratio indicates that the firm is paying higher dividend to its shareholders and lower D/P ratio implies that the firm is retaining its profit to profitable investment opportunities. The mean D/P ratio of SCBL, DCBL, NBL,BOKL, HBL and EBL is 79.62%, 76.05%, 72.72%, 71.54%, 56.45% and 47.70% respectively. This evidence shows that EBL is retaining more its earning and it might be the consequences of the higher growth opportunities.
4. The SCBL has the highest mean MPS among the selected banks which is Rs. 3081 and DCBL has the lowest, which is Rs. 361. Increase in MPS is the indication of better performance. MPS trend of all banks is in increasing trend over the sample period. Consistency in MPS in HBL is higher than that of others as its CV (i.e. 34.98%) is smallest as compared to other banks.
5. The average P/E ratio of DCBL is highest among the bank which is 22.48% and lowest one is 15.25% in SCBL. It implies the better earning pattern of DCBL among the banks. From CV analysis, earning pattern of HBL is better among the banks because it has lowest CV i.e., 24.36%.
6. Correlation matrix of selected banks shows that correlation between DPS and MPS is positive and highly significant in NBL and EBL. It implies that there is a positive impact of dividend on market price of stock. It means if dividend increases, market price of share also increases and vice-versa.
7. Correlation matrix of HBL shows the positive correlation between DPS and MPS but they are statistically insignificant. Similarly, correlation matrix of SCBL, BOKL, and DCBL shows the positive and moderate relationship between DPS and MPS.
8. Result of multiple regression equation of EPS and lagged DPS on DPS shows that the coefficient of EPS is higher than that of coefficient of lagged DPS in most of banks. The 'Adjusted R^2' is comparatively higher in BOKL (99.4%), EBL (95.3%) and SCBL (80.6%) whereas it is lower in NBL (47.4%) and HBL (42.7%) which implies that the variation of 99.4%, 95.35, 80.6%, 47.4% and 42.4% in DPS is explained be EPS and lagged dividend in respective banks.
9. Result of multiple regression equation of EPS and lagged dividend on MPS indicates that coefficient of lagged DPS is higher than that of coefficient of EPS in all banks except BOKL. The 'Adjusted R^2' is exactly 1 in BOKL which implies that market price of stock depends on EPS and lagged DPS.

Again the adjusted R^2 In EBL (99.1%), DCBL (92.1%), NBL (86.6%), SCBL (86.1%) and HBL (67.7%) implies that the variation of 99.1%, 92.1%, 86.6%, 86.1% and 67.7% in MPS is explained by EPS and lagged dividend in respective banks.

10. From the test of hypothesis, it is found that null hypothesis of no significant difference of EPS, DPS, MPS, BVPS and DPR among selected banks are rejected and whereas the null hypothesis of no significant difference of P/E ratio is accepted.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This unit is divided into three sections. The first section provides a brief summary of the study. The second section demonstrates conclusions of the study and the third section contains recommendations.

5.1 Summary

The study was conducted with objectives to analyze the dividend practices and its impact on market price of stock of Nepalese commercial banks over the study period 2003/04 to 2007/08 following a descriptive and analytical research design. The sample for the study comprised of 6 commercial banks listed in Nepal Stock Exchange (NEPSE). The study is based on secondary data and the data obtained were analyzed using various descriptive statistical tools, correlation analysis and multiple regression models and various financial tools.

It is no exaggeration to say that most of the firms always seek to have more earning so that they could sustain efficiency in the competitive capital market. Therefore, earnings are the indicator of firms' strength. Here, mean EPS of SCBL is Rs. 155.84 which is highest than others. Again, there is highest earning consistency in SCBL representing CV =9.56% which is smallest than others.

The firm which is paying higher dividend implies that it is performing better. Here, SCBL is the best of all as its mean DPS is highest than that of other banks i.e. Rs. 124 whereas it is lowest in DCBL i.e. Rs. 11.79. The same result is seen to be Rs. 82.02, Rs. 30.32, Rs. 25 and Rs. 23.25 in NBL, HBL, EBL and BOKL respectively. Consistency in DPS is also highest in SCBL as compared to others. CV of SCBL is 9.19%. As we know that lower the CV, higher will be the consistency and vice-versa. Average market price per share for SCBL, NBL, EBL, HBL, BOKL and DCBL is Rs. 3081, Rs. 2107, Rs. 1160, Rs. 1087.20, Rs. 629.6 and Rs. 361 respectively. Consistency in MPS in HBL is higher than that of other as its CV is 34.98% which is smallest as compare to other banks. MPS trend of all bank has been increasing during the study period.

The SCBL has the higher D/P ratio which is 79.62% whereas EBL has lowest D/P ratio, which is 47.70%. It implies that EBL is retaining more and SCBL has retained least in sample period. Similarly, the average P/E ratio of DCBL is highest than that of others which is 22.48%. It implies the better earning pattern of DCBL as compared to others.

The correlation matrix of selected banks has shows that there is a strong relationship among the variables namely EPS, DPS, MPS and BVPS whereas there is no statistical significant relationship in all. From the correlation matrix, it is clear that relationship between DPS and MPS is positive and highly significant in most of banks but it is statistically significant in NBL and EBL. It implies that there is a positive impact of dividend on market price of share. If dividend increases, market price of share is also increases and vice-versa.

In regression equation of EPS and lagged DPS on dividend shows that the coefficient of EPS is higher than that of coefficient of lagged DPS in SCBL, HBL and BOKL but it is lower in NBL, EBL and DCBL. Similarly, there is high degree of positive correlation between dependent variable i.e. dividend and independent variables i.e. EPS and lagged dividend in all of the banks. Again, the result of Adjusted R^2 shows the variation of 99.4%, 95.3%, 80.6%, 47.4%, and 42.7% in BOKL, EBL, SCBL, NBL and HBL in DPS is explained by EPS and lagged DPS in respective banks.

Similarly, result of regression equation of EPS and lagged DPS on MPS indicates that coefficient of lagged DPS is higher than that of coefficient of EPS in most of the banks. Again, there is high degree of positive correlation between dependent variable i.e. market price of share and independent variables i.e. EPS and lagged dividend in all of the banks. In this regression model, the explanatory variables explain 100% measured by Adjusted R^2 in BOKL and F-statistic is significant at 1% level of significance. The Adjusted R^2 in EBL (99.1%),DCBL (92.1%), NBL (86.6%), SCBL (86.1%) and HBL (67.7%) implies that the variation of 99.1%, 92.1%, 86.6%, 86.1% and 67.7% in MPS is measured by EPS and lagged DPS in respective banks.

Finally, while testing of hypothesis, it is found out that the mean EPS, DPS, MPS, BVPS and D/P ratio among selected banks are significantly different but the null hypothesis of no significant difference of P/E ratio is accepted.

5.2 Conclusions

Based on major findings, this study concludes that there is higher dividend impact on market value of the banks share in most of the banks. In another words, dividend plays an important role to change the market price of shares. Besides this, the following conclusions are made:

- There is high degree positive relationship between DPS and EPS in most of the banks as they are statistically significant.
- Relationship between DPS and MPS is found to be high degree positive in most of banks as they are statistically significant also.
- While comparing the impact of EPS and lagged DPS on dividend, it is found out that there higher role of EPS change to the DPS as compared to lagged dividend.
- By observing the effect of EPS and lagged DPS on MPS, there is higher role of lagged DPS to change the MPS as compared to EPS in most of the banks.
- All the selected banks paid dividends in each year which shows that dividend paying practice is established in Nepalese commercial banks.
- The dividend per share of Nepalese commercial bank is depending on current earnings. The banks are following earning based dividend policy.
- Only two variables earning and lagged dividend is not sufficient to explain the change in dividend and market price of share meaning that it is necessary to add other more variables in the regression model.

5.3 Recommendations

Based on the above conclusions, following recommendations have been provided:

- The sample banks are not adopting a fixed or defined dividend policy; they are adopting the dividend policy according to their requirement with the change of time and situation. But most of the investors prefer defined dividend policy. Therefore, companies should clearly define their dividend policy and communicate to investors. Clearly defined dividend policy help to determine

specific policy i.e stable dividend or constant payout or low regular plus extra. This helps to investors in deciding whether to buy or not the share of a particular company and to build good image, stock market.

- Most of the banks had great fluctuation in DPS, EPS, and Dividend Payout Ratio, Price Earning and Share Price in terms of coefficient of variation. Such fluctuation increase in risk position of investors. Therefore, company should try to stabilize these variables.
- Wide fluctuations in dividend payout ratio should be minimized. Consistency in dividend payout ratio over the period helps in gaining the shareholders' confidence and then maximizing firms' value.
- The legal rule regarding dividend should be clear for the smooth growth of the enterprises as well as growth of the national economy. There is lack of rules binding companies to pay dividend. Some of the companies are unable for paying dividend, some are suffering from loss and there is an effort to minimize loss rather than payment of dividend. So, the government should act in favor of investors and bind these companies by special rules. There is not any other organization fully devoted to protect investor's interest. For this purpose GON, NEPSE, SEBON and other concerned parties should work together in favour of investors and bind their companies by separate rules.
- Current and lagged earnings as well as expected future earnings should be taken in account while changing dividends.
- Formula of dividend policy will clearly guide the way of dividend distribution. The policy should determine whether the company is going to adopt stable dividend policy, constant payout ratio or low regular plus extra dividend. What should be the long run dividend payout ratio, either it is pure residual ratio theory, fixed dividend payout policy of smooth residual dividend policy, should have been clearly explained by the dividend policy.
- The Market price of the Stock of the commercial banks in the later years is found to be very high in comparison to their earnings of the banks which can be studied from P/E ratio. It implies that the investors should be very careful while investing in such stocks and must be aware of rum ours.
- Certain specific rules and regulation should be made from SEBON as well from the side of the government side regarding the of the dividend.

- Companies should have long term vision regarding earnings and dividend payment that helps to cope with challenging competitive situation of present world. Companies should define their vision clearly considering their future plans, expansion in business, future economy of the country etc. Various internal and external factors should be considered before taking decision.
- Banks should have target rate of earnings.i.e. Profit planning and target payout ratio because the fluctuation in EPS and DPR may cause confusion on the mind of shareholders.
- The legal rules and regulations must be in favor of investors to exercise the dividend practice and to protect the shareholders right.
- Each and every company should provide the information regarding their activities and performance, so that investors can analyze the situation and invest their money in the best company.

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APPENDICES

A. Dividend Practices of Selected Banks

(i) SCBL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	
2003/04	149.3	120	1640	403.15	80.37	10.98
2004/05	143.55	110	1745	399.25	76.63	12.16
2005/06	143.14	120	2345	422.38	83.83	16.38
2006/07	175.84	140	3775	468.22	79.62	21.47
2007/08	167.37	130	5900	512.12	77.67	35. 25
Average	155.84	124	3081	441.02	79.62	15.25
st dev	14.90	11.40	1791.05	48.27	2.79	4.75
C.V(%)	9.56	9.19	58.13	10.95	3.50	31.16

(ii) HBL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	Ratio
2003/04	49.45	25	836	247.82	50.5561	16.906
2004/05	49.05	20	840	246.93	40.7747	17.1254
2005/06	47.91	31.58	920	239.59	65.9153	19.2027
2006/07	59.24	35	1100	228.72	59.0817	18.5685
2007/08	60.66	40	1740	264.74	65.9413	28.6845
Average	53.26	30.32	1087.20	245.56	56.45	20.10
st dev	6.15	7.94	380.29	13.17	10.81	4.90
C.V(%)	11.55	26.18	34.98	5.36	19.14	24.36

(iii) NBL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	Ratio
2003/04	84.66	50	740	267.3	59.06	8.74
2004/05	92.61	65	1000	301.37	70.19	10.8
2005/06	105.49	70	1505	337.16	66.36	14.27
2006/07	129.21	85.1	2240	381.37	65.86	17.34
2007/08	137.08	140	5050	418.4	102.13	36.84
Average	109.81	82.02	2107	341.12	72.72	17.60
st dev	22.73	34.75	1741.80	60.49	15.14	11.25
C.V(%)	20.70	42.37	82.67	17.73	20.81	63.92

(iv) BOKL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	Ratio
2003/04	17.72	5	198	192.52	28.22	11.17
2004/05	27.5	10	295	218.38	36.36	10.73
2005/06	30.1	15	430	213.6	49.83	14.29
2006/07	43.67	48	850	230.67	109.92	19.46
2007/08	43.5	20	1375	162.81	45.98	31.61
Average	32.498	23.25	629.6	203.596	71.54	17.45
st dev	11.12	16.83	485.35	26.64	32.34	8.65
C.V(%)	34.23	72.39	77.09	13.08	45.21	49.55

(v)EBL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	Ratio
2003/04	29.9	20	445	150.1	66.89	14.88
2004/05	45.6	20	680	171.52	43.86	14.91
2005/06	54.2	20	870	219.87	36.90	16.05
2006/07	62.8	25	1379	217.67	39.81	21.96
2007/08	78.4	40	2430	292.75	51.02	30.99
Average	54.18	25	1160.8	189.79	47.70	19.76
st dev	18.19	8.66	788.45	54.94	10.70	6.20
C.V(%)	33.58	34.64	67.92	28.95	22.44	31.37

(vi) DCBL

YEAR	EPS	DPS	MPS	BVPS	DPR	P/E
	(Rs)	(Rs.)	(Rs)	(Rs)	(%)	Ratio
2003/04	10.41	10.53	145	105.27	101.15	13.93
2004/05	19.22	10.53	165	112.72	54.79	8.58
2005/06	22.27	12.63	305	120.48	56.71	13.70
2006/07	13.68	12.63	390	126.68	92.32	28.51
2007/08	16.78	12.63	800	129.25	75.27	47.68
Average	16.47	11.79	361	118.88	76.05	22.48
st dev	4.63	1.15	265.41	9.93	18.56	15.93
C.V(%)	28.12	9.76	73.52	8.35	24.40	70.85

B. Correlations by SPSS 11.5

(i) SCBL

		EPS	DPS	MPS	BVPS
EPS	Pearson Correlation	1	.939(*)	.764	.821
	Sig. (2-tailed)	.	.018	.133	.089
	N	5	5	5	5

DPS	Pearson Correlation	.939(*)	1	.679	.760
	Sig. (2-tailed)	.018	.	.208	.136
	N	5	5	5	5
MPS	Pearson Correlation	.764	.679	1	.993(**)
	Sig. (2-tailed)	.133	.208	.	.001
	N	5	5	5	5
BVPS	Pearson Correlation	.821	.760	.993(**)	1
	Sig. (2-tailed)	.089	.136	.001	.
	N	5	5	5	5

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

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

(ii)HBL

Correlations

		EPS	DPS	MPS	BVPS
Eps	Pearson Correlation	1	.802	.833	.181
	Sig. (2-tailed)	.	.103	.080	.770
	N	5	5	5	5
Dps	Pearson Correlation	.802	1	.833	.175
	Sig. (2-tailed)	.103	.	.080	.778
	N	5	5	5	5
Mps	Pearson Correlation	.833	.833	1	.619
	Sig. (2-tailed)	.080	.080	.	.266
	N	5	5	5	5
Bvps	Pearson Correlation	.181	.175	.619	1
	Sig. (2-tailed)	.770	.778	.266	.
	N	5	5	5	5

(iii) NBL

Correlations

		EPS	DPS	MPS	BVPS
EPS	Pearson Correlation	1	.883(*)	.877	.990(**)
	Sig. (2-tailed)	.	.047	.051	.001
	N	5	5	5	5
DPS	Pearson Correlation	.883(*)	1	.995(**)	.915(*)
	Sig. (2-tailed)	.047	.	.000	.029
	N	5	5	5	5
MPS	Pearson Correlation	.877	.995(**)	1	.902(*)
	Sig. (2-tailed)	.051	.000	.	.036
	N	5	5	5	5
BVPS	Pearson Correlation	.990(**)	.915(*)	.902(*)	1
	Sig. (2-tailed)	.001	.029	.036	.
	N	5	5	5	5

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

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

(iv) BOKL

Correlations

		EPS	DPS	MPS	BVPS
EPS	Pearson Correlation	1	.796	.889(*)	-.068
	Sig. (2-tailed)	.	.107	.044	.914
	N	5	5	5	5
DPS	Pearson Correlation	.796	1	.520	.405
	Sig. (2-tailed)	.107	.	.369	.499
	N	5	5	5	5
MPS	Pearson Correlation	.889(*)	.520	1	-.514
	Sig. (2-tailed)	.044	.369	.	.375
	N	5	5	5	5
BVPS	Pearson Correlation	-.068	.405	-.514	1
	Sig. (2-tailed)	.914	.499	.375	.
	N	5	5	5	5

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

(v) EBL

Correlations

		EPS	DPS	MPS	BVPS
EPS	Pearson Correlation	1	.837	.943(*)	.964(**)
	Sig. (2-tailed)	.	.077	.016	.008
	N	5	5	5	5
DPS	Pearson Correlation	.837	1	.969(**)	.885(*)
	Sig. (2-tailed)	.077	.	.006	.046
	N	5	5	5	5
MPS	Pearson Correlation	.943(*)	.969(**)	1	.954(*)
	Sig. (2-tailed)	.016	.006	.	.012
	N	5	5	5	5
BVPS	Pearson Correlation	.964(**)	.885(*)	.954(*)	1
	Sig. (2-tailed)	.008	.046	.012	.
	N	5	5	5	5

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

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

(vi) DCBL

Correlations

		EPS	DPS	MPS	BVPS
EPS	Pearson Correlation	1	.327	.102	.306
	Sig. (2-tailed)	.	.592	.871	.617
	N	5	5	5	5
DPS	Pearson Correlation	.327	1	.709	.909(*)
	Sig. (2-tailed)	.592	.	.180	.032
	N	5	5	5	5
MPS	Pearson Correlation	.102	.709	1	.839
	Sig. (2-tailed)	.871	.180	.	.076
	N	5	5	5	5
BVPS	Pearson Correlation	.306	.909(*)	.839	1
	Sig. (2-tailed)	.617	.032	.076	.
	N	5	5	5	5

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

Regression by SPSS 11.5

C. $DPS_t = a + b_1 EPSt + b_2 DPS_{t-1} + U$

(i) SCBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPS x, EPS t(a)	.	Enter

a All requested variables entered.

b Dependent Variable: dpst

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.967(a)	.935	.806	5.68484

a Predictors: (Constant), DPSx, EPS t

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	467.683	2	233.841	7.236	.254(a)
	Residual	32.317	1	32.317		
	Total	500.000	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: dpst

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.653	35.967		.769	.583
	EPSt	.844	.234	1.091	3.606	.172
	DPSx	-.291	.310	-.284	-.937	.521

a Dependent Variable: DPS t

(ii) HBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPS x, EPS t(a)	.	Enter

a All requested variables entered.

b Dependent Variable: DPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899(a)	.809	.427	6.43519

a Predictors: (Constant), DPS x, EPS t

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	175.261	2	87.630	2.116	.437(a)
	Residual	41.412	1	41.412		
	Total	216.672	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: DPST

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-75.120	59.078		-1.272	.424
	EPSt	3.084	2.070	2.418	1.490	.376
	DPSx	-2.167	2.058	-1.709	-1.053	.484

a Dependent Variable: DPS t

(iii) NBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPS x, EPS t(a)	.	Enter

a All requested variables entered.

b Dependent Variable: DPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908(a)	.825	.474	24.94466

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2926.771	2	1463.386	2.352	.419(a)
	Residual	622.236	1	622.236		
	Total	3549.007	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: DPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-51.184	85.822		-.596	.658
	EPSt	-.170	2.005	-.102	-.085	.946
	DPSx	2.383	2.858	1.003	.834	.558

a Dependent Variable: DPSt

(iv) BOKL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: dpst

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999(a)	.998	.994	1.31128

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	865.031	2	432.515	251.541	.045(a)
	Residual	1.719	1	1.719		
	Total	866.750	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: dpst

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-62.459	3.910		-15.975	.040
	EPSt	2.817	.126	1.426	22.379	.028
	DPSx	-.833	.056	-.952	-14.945	.043

a Dependent Variable: DPSt

(v) EBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: dpst

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992(a)	.984	.953	2.04124

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	264.583	2	132.292	31.750	.125(a)
	Residual	4.167	1	4.167		
	Total	268.750	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: DPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-39.283	12.349		-3.181	.194
	EPSt	.291	.168	.430	1.732	.333
	DPSx	2.260	.939	.597	2.406	.251

a Dependent Variable: DPSt

(vi) DCBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered

b Dependent Variable: DPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813(a)	.661	-.016	1.05850

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.187	2	1.094	.976	.582(a)
	Residual	1.120	1	1.120		
	Total	3.308	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: DPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-10.076	17.661		-.571	.670
	EPSt	.339	.344	1.176	.984	.505
	DPSx	1.389	1.035	1.604	1.342	.408

a Dependent Variable: DPSt

D. $MPS_t = a + b_1 EPS_t + b_2 DPS_{t-1} + U$

(i) SCBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928(a)	.861	.583	1192.74816

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8813220.584	2	4406610.292	3.097	.373(a)
	Residual	1422648.166	1	1422648.166		
	Total	10235868.750	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-15201.716	7546.389		-2.014	.293
	EPSt	45.111	49.129	.407	.918	.527
	DPSx	94.196	65.121	.642	1.446	.385

a Dependent Variable: MPSt

(ii) HBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823(a)	.677	.030	401.90410

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	338073.098	2	169036.549	1.046	.569(a)
	Residual	161526.902	1	161526.902		
	Total	499600.000	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-717.617	3689.651		-.194	.878
	EPSt	17.324	129.255	.283	.134	.915
	DPSx	33.283	128.508	.547	.259	.839

a Dependent Variable: MPSt

(iii) NBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.931(a)	.866	.599	1144.80016

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8489051.343	2	4244525.671	3.239	.366(a)
	Residual	1310567.407	1	1310567.407		
	Total	9799618.750	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5123.106	3938.666		-1.301	.417
	EPSt	-10.355	92.032	-.118	-.113	.929
	DPSx	129.938	131.152	1.041	.991	.503

a Dependent Variable: MPSt

(iv) BOKL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000(a)	1.000	1.000	6.58764

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	709381.603	2	354690.801	8173.164	.008(a)
	Residual	43.397	1	43.397		
	Total	709425.000	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-467.288	19.642		-23.790	.027
	EPSt	24.652	.632	.436	38.985	.016
	DPSx	16.030	.280	.641	57.269	.011

a Dependent Variable: MPSt

(v) EBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995(a)	.991	.972	130.23120

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1829160.583	2	914580.292	53.925	.096(a)
	Residual	16960.167	1	16960.167		
	Total	1846120.750	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3107.089	787.892		-3.944	.158
	EPSt	40.640	10.708	.725	3.795	.164
	DPSx	94.038	59.921	.300	1.569	.361

a Dependent Variable: MPSt

(vi) DCBL

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	DPSx, EPSt(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MPSt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960(a)	.921	.763	132.75984

a Predictors: (Constant), DPSx, EPSt

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	205824.825	2	102912.412	5.839	.281(a)
	Residual	17625.175	1	17625.175		
	Total	223450.000	3			

a Predictors: (Constant), DPSx, EPSt

b Dependent Variable: MPSt

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5915.477	2215.026		-2.671	.228
	EPSt	89.782	43.173	1.199	2.080	.285
	DPSx	407.213	129.813	1.809	3.137	.196

a Dependent Variable: MPSt