

**IMPACT OF DIVIDEND ON EQUITY  
SHARE PRICING IN NEPAL**

Submitted by:

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Faculty of Management

Tribhuvan University

In partial Fulfillment of the requirements for the Degree of  
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## **APPROVAL SHEET**

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## VIVA-VOCE SHEET

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

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## **DECLARATION**

I hereby declare that the work reported in this entitled " " **IMPACT OF DIVIDEND ON EQUITY SHARE PRICING IN NEPAL**"" submitted to Tribhuvan Multiple Campus, Palpa, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master of Business Studies (M. B. S.) under the supervision of supervisor **Mr. Sharada Dhoj Chhetri** of Tribhuvan Multiple Campus, Palpa.

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## ABBREVIATIONS

BOK = Bank of Kathmandu
C.V. = Coefficient of Variation
DCBL = Development Credit Bank Limited
DPR = Dividend Payout Ratio
DPS = Dividend Per Share
EBL = Everest Bank Limited
EPS = Earning Per Share
F.Y = Fiscal Year
Govt. = Government
HBL = Himalayan Bank Limited
JVB = Joint Venture Bank
Ltd. = Limited
MBL = Machhapuchhre Bank Limited
MPS = Market Price Per Share
NBL = Nabil Bank Limited
NEPSE = Nepal Stock Exchange Limited
NHFC = National Housing and Finance Company
NIC = Nepal Industrial and Commercial Bank
NRB = Nepal Rastra Bank
NWPS = Net worth Per Share
P.E = Probable Error
S.D = Standard Deviation
SCBL = Standard Chartered Bank Limited
SEBON = Securities Board of Nepal
SFC = Siddharth Finance Limited
TU = Tribhuvan University

# **CHAPTER I**

## **INTRODUCTION**

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

Investors in developing countries like Nepal mostly look at the profitability of the firm while purchasing equity shares from the secondary market. Since dividend paid to the shareholders is one of the best indicators of profitability, it is generally believed that dividend plays a crucial role in determining market price of the corporate share. Dividend is defined as that portion of the net earnings of the firm, which is distributed to the stockholders either in the form of cash or stock as per its dividend policy. A firm generally pays stock dividend if it plans to increase the capital so as to expand the business. The objective of dividend policy should be to maximize the shareholders return so that value of their investment is maximized. Dividend decision is one of the major decisions taken by the firm. The amount of dividend declared by a firm shows the actual position of the earnings of the firm.

The firm issues equity shares to raise ownership capital and the investors buy them, with the expectation to receive a share of profit. The value of the firm is said to be high when the market price of the company's common stock is higher. The wealth maximization principle also implies that fundamental objective of the firm should be to maximize the market price of the company's share. Firms that perform better than others have higher stock prices and can raise additional funds (both debt and equity) in more favorable terms. Therefore, it is important to identify the factors that determine the market price of equity shares of any organization. Financial institutions including the commercial banks, in Nepal are the institutions that mobilize resources in the society. Their survival and growth is very important for the growth of the nation. Thus, the study of the historical

growth of capital market and the equity price behavior of commercial banks in Nepal is much relevant in the present context.

The history of capital market in Nepal is not very long. Biratnagar Jute Mills Ltd. was the first company to issue share to general public in 1937. Institutional development of securities market in Nepal started when Securities Exchange Centre (SEC) was established under the Companies Act in 1976. It was established with the joint capital contribution of Nepal Rastra Bank and Nepal Industrial Development Corporation. The objective of the establishment of Securities exchange Centre was to facilitate and promote the growth of capital market in Nepal. It was converted into Nepal Stock Exchange (NEPSE) in 1993, with the establishment of Securities Board. It is a non-profit making organization operating under Securities Exchange Act 1983.

During 90's along with the economic liberalization in Nepal many joint venture banks established in private sector, which subscribed shares widely to the general public. Commercial banking appeared as the most profitable business and therefore in the beginning the price of shares of commercial banks continuously went up. However, the stock market had been much volatile in Nepal during the last decade because of internal conflict, political instability, insider trading and various other reasons.

## **1.2. Statement of the Problem**

The stock market reveals the situation of country's economy. When stock market is in the boom, the financial market of the country is good and in the case of decline of stock market, financial market of the country goes bad. In Nepalese economy, share price is highly determined by the market conditions. Without any significant economic ups and downs in the economy equity market sometimes becomes much volatile. With the result investors in bank equity suffer higher economic loss. Therefore, it is much important to identify the causes responsible for the fluctuations of equity share prices in Nepal and suggest measures, which makes the share market stable. In this light, the relationship

between dividend paid and the market price of equity shares needs to be analyzed with more focus. There are several studies that present the brief examination of the relationship between the dividend paid and the market price of the equity shares. The earlier studies lack a comprehensive study of the behavior of market price as a result of changes in dividends.

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

The main objective of the study is to examine the effect of dividend on pricing system of the equity shares. Following are the major objectives of the study:

- To analyze the impact of dividend per share (DPS) in equity share price behavior
- To examine the relationship of Market price per share with other financial indicators such as Earnings Per Share, Dividend Payout Ratio and Net Worth per share
- To carry out an empirical analysis in order to find out the impact of dividend on equity share pricing in Nepal.

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

This study helps to know the impact of dividend on the market price of equity share of some financial institutions. This study will be useful to the concerned people like shareholders, management and policy makers. This study will be useful to all of the sampled financial institutions taken in this study. Equity share traders will take advantage of this thesis while trading shares in the secondary market. This study will be very helpful for students for further research to find more details on the related topic.

### **1.5. Limitation of the Study**

The study covers only the effect of dividend on equity share behavior of selected financial institutions only. It does not deal with market prices of other securities like preference shares and Government securities, bonds and debentures. This study does not

cover the analysis of capital structures; the cost of capital and financial flows of capital in the market.

The result of this study will be limited to the relationship between the dividend and the equity stock pricing behavior of commercial banks, financial institution and public limited companies. This study assumes that the individuals who respond to this survey are truthful. Since the data are mainly collected from the secondary source, the consistency of the findings is reliable upon the reliability of the secondary data and information. Only ten financial institutions have been taken into consideration for this study i.e. seven commercial banks, two finance companies and one development bank. This study covers the data of only five years. i.e.

## **1.6 . Organization of the Study**

The research will be divided into the following chapters:

### *Chapter - I: Introduction*

The first chapter would include the general introduction, statement of problem, objectives, significance of the study and limitation of the study.

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

The second chapter would deal with Review of Literatures, books, articles, Journals, reports and other relevant material.

### *Chapter -III: Research Methodology*

The third chapter would include Research Methodology. This chapter would include the methodology adopted for carrying out this research and sources of data and methods of data collection.

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

The fourth chapter would contain presentation and analysis of Secondary as well as primary data. This chapter would be divided into two sections. The first section would attempt to analyze and evaluate data with the help of analytical tools and interpretation the results obtained. The second part would present the response of the individual share investors on the pricing behavior, their understanding of the market and other relevant aspects contain the presentation of primary data.

#### *Chapter -V: Summary, Conclusion and Recommendations*

And the last chapter will show the Summary, Conclusion and Recommendations of the study. This chapter would present the results obtained through the analysis and recommends some suggestions.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

This chapter reviews the literature related with the research topic, with more focus on the impact of dividend on equity share pricing. In this regard, an insight would be put on the theories, then on the researches conducted outside and inside the country. Furthermore, the theoretical underpinning of the concepts used during the analysis and the theories behind the share pricing would also be explained. While preparing this thesis, the researcher reviewed various magazines, journals, books, reports, etc and collected materials from different sources. The review of literature has been divided into three categories namely conceptual framework, theories related to the topic and review of articles, books and masters' level thesis.

#### **2.2 Conceptual Framework**

In this section, some of the basic literatures on dividend, dividend policy and stock price behaviour are reviewed. This section would broadly discuss the concepts related to the research topic. It includes following.

- Dividend
- Dividend Policy
- Equity Share

##### **2.1.1 Dividend**

After fulfilling the tax obligations, some part of the net earning of the firm is divided into retained earnings for further investment and some part is distributed among its shareholders. Dividend is that portion of the firm's net earnings that is distributed to the shareholders. Dividend is distributed either in form of cash or in form of share. When the firm is heading towards expansion, it keeps the earning as retained earnings for expansion as cash is needed for the expansion of every business. When business has no more plan of expansion, it distributes its cash as a dividend to its shareholders.



## **A. Major forms of Dividend**

### **Cash Dividend**

When the company pays the dividend in form of cash, this is called cash dividend. This is the most common form of dividend and most preferred by the shareholders. When cash dividend is distributed, both total assets and net worth of the company decrease as cash and earnings decrease. The market price of the share drops in most cases as per the amount of the cash dividend distributed.

### **Stock Dividend**

Sometimes, when there is good investment opportunity for the company and the whole portion of the profit is needed for reinvestment, the company prefers to retain the whole portion of profit. But, in order to satisfy the shareholders the company should also pay the dividend. In such case, the company decides to pay the dividend in the form of stock. Such dividend is called stock dividend. When a firm pays stock dividend, the net worth of the share and total assets remains unaffected.

### **Interim Dividend**

Generally dividend is declared in the last of financial year. This is called regular dividend. Many times directors can declare the dividend before the end of the financial year. This is called interim dividend.

### **Bond Dividend**

Companies can give dividends in the form of bonds. These bonds can be long term bonds. These are given when the company is unable to take the burden of interest of loans.

### **Special Dividend**

When directors of the company do not want to change the dividend separately and when the companies have good cash and reserves. This dividend is given with the regular dividend but separately (Thapa; 2002: 143-144).

## **B. Theories of Dividend**

### **i. Dividends as Residual**

As long as the firm has investment projects with returns exceeding those that are required, it will use retained earnings and the amount of senior securities that increase in equity base will support, to finance these projects. When we treat dividend policy as strictly a financing decision, the payment of cash dividends is a passive residual. The amount of dividend payout will fluctuate from period to period in keeping with fluctuations in the amount of acceptable investment opportunities available to the firm. If these opportunities abound, the percentage of dividend payout is likely to be zero. On the other hand, if the firm is unable to find profitable investment opportunities, dividend payout will be 100 percent. For situations between these two extremes, the payout will be a fraction between zero and one. The treatment of dividend policy as a passive residual determined solely by the availability of acceptable investment proposals implies that dividends are irrelevant; the investor is indifferent between dividends and retention by the firm. A residual theory of dividend policy does not necessarily mean that dividends need fluctuate from period to period in keeping with fluctuations in investment opportunities. A firm may smooth out actual payments by saving some funds in surplus years, in anticipation of deficit years. If forecasting is relatively accurate, the firm can establish its dividend payment at a level at which the cumulative distribution over time corresponds to cumulative residual funds over the same period (James C Van Horne : 340).

### **ii. Wealth Maximization Theory**

Larger dividend is announced and distributed to shareholders under this theory in order to maximize their wealth. This theory is generally adopted by the newly established and declining companies to upkeep its image and retain the shareholder's positive attitude towards the company's stock (Pradhan, 2004; 392).

### **2.2.2 Dividend Policy**

Dividend policy is one of the major decisions of the firm. The dividend payout ratio of the firm depends upon the way earnings are measured.

## **Factors Influencing Dividend Policy**

Company's firm's dividend policy is affected by various factors. Some of them are unique to that company, and some of the more general considerations are given below:

### **i. Legal Rule**

Certain rules may limit the amount of dividends a firm may pay. These legal constraints fall into two categories. First, statutory restriction may prevent a company from paying dividend. While specific limitations vary by state, generally a corporation may not pay a dividend.

- a. If the firm's liabilities exceed its assets
- b. If the amount of the dividend exceeds the accumulated profits or retained earnings.
- c. If the dividend is being paid from capital invested in the firm. The second type of legal restrictions is unique to each firm and results from restrictions in debt and preferred stock contracts.

### **ii. Liquidity Portion**

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

### **iii. Need to Repay Debt**

The need to repay debt also influences the availability of cash flow to pay dividend.

### **iv. Rate of Asset Expansion**

Rate of asset expansion creates a need to retain funds rather than to pay dividends.

### **v. Profit Rate**

A high rate of profit on net worth makes it desirable to retain earnings rather than to pay them out if the investor will earn less on them.

## **vi. Control**

It is very important for every firm to maintain the control rate. These owners would prefer the use of debt and retained profits to finance new investments rather than issue new stock. As a result dividend payout will be reduced (Thapa, 2002: 142).

### **2.2.3 Equity Share**

Equity shares are normally called common stocks. They are issued by the firm to raise ownership capital and the investors buy them to with the expectation that they receive a share of profit periodically. The holders of common stocks, called shareholders or stockholders are the legal owners of a company. The equity shares are the permanent and vital source of capital residual claim, in the sense that creditors and preferred stock holders must be paid as scheduled before common stockholders can receive any payments.

#### **Features of Equity Share**

**Claim on Income:** The common stockholders have claim to residual income, which is earnings available for ordinary shareholders. After paying expenses, interest charges, taxes and preference dividends and retained earnings, Dividends are immediate cash flow to shareholders, whereas retained earnings are reinvested in the business. A company is not under any obligation to distribute dividends out the available earnings.

**Claim to Assets:** The equity shareholders have a residual claim on the companies' asset. Out of the realized value of assets, first the claims to debt-holder and then preference shareholders are satisfied, and the remaining balance, if any, is paid to the common stockholders.

**Right to control:** The ordinary shareholders have the legal power to elect directors to the board, if the board fails to protect their interest, they can replace the directors. They are able to participate in the management of the company through their voting right and right to maintain proportionate ownership.

**Voting Right:** Common stockholders have the right to vote on stockholder matter, such as selection of board of directors, sale of fixed assets, merger of the company, amendment of corporate charter etc.

**Pre-emptive Right:** It does something before others. It is also a right of the stockholders. It gives holders of common stock the firstly option to purchase additional issues of common stock. The purpose of pre-emptive right is to protect the power of control of present stockholders (Bhattarai: 151-152)

**Limited Liability:** The common stock holders are the true owner of the company, but their liability is limited to the amount of their investment in shares. If a stockholder has already fully paid the issue price of shares purchased, he has nothing more to contribute in the event of financial distress or liquidation. The limited liability feature of share encourages unwillingly investors to invest their funds in the company which helps company to raise funds (Pandey, 1995: 905-908).

## 2.2 Theoretical Underpinnings

**Modigliani and Miller's (1961)**, gave the most comprehensive argument for the irrelevant of dividend in their article. In the history of finance, firstly, they declared that dividend policy does not affect the value of the firm, i.e. dividend has no effect on the share price of the firm. They argued that the value of the firm depends on the firm's earnings, which depends on its investment policy. M.M.'s hypothesis of irrelevance is based on the following assumption: The firm operates in perfect capital market in which all investors are rational, information is freely available, flotation costs do not exist, infinitely divisible securities and no investor is large enough to affect the market price (per share) of security.

1. Taxes do not exist.
2. The firm has a fixed investment policy of which is not subject to change
3. Risk of uncertainty does not exist.
4. They provided the proof in support of their argument in the following manner.
5. The market price of a share of the firm at the beginning of a period is defined as equal to the present value of dividend paid at the end of the period plus the market price at the end of the period, symbolically,

$$P_0 = \frac{D_1 + D_2}{1 + ke}$$

Where,

$P_0$  = current market price per share

$K_e$  = cost of equity capital (The rate is assumed to be constant through out the time)

$D_1$  = Dividend per share

$P_1$  = MPS (Market price of the share) at the end of the period

Assuming that the firm doesn't resort to any external financing the market value of the firm can be computed as follow:

Multiplying both sides of eq-1 by the no. of shares outstanding ( $n$ ), we obtain the total value of the firm if no new financing exists.

$$P_0 = \frac{D_1 + P_1}{1 + k_e}$$

Where,  $n$  = no. of equity shares at zero period.

If the firm's internal sources, financing its investment opportunities fall short of the funds required and  $\Delta n P_1$ . The value of the firm at time zero will be:

$$nP_0 = \frac{n(D_1 + P_1) + (\Delta n p - \Delta n p_1)}{1 + K_e}$$
$$nP_0 = \frac{nD_1 + nP_1 + (n + \Delta n) - \Delta n P_1}{1 + K_e}$$

Where,

$n$  = no. of shares at the beginning

$\Delta n$  = no. of equity shares issued at the end of the period

If the investment proposals of a firm, in a given period of time, can be financed either by retained earnings or the issuance of new shares or both. Thus the amount of new issued will be formed by the given equation:

$$\Delta n p_1 = I - (E - n D_1)$$

$$\text{or } \Delta n p_1 = I - E + n D_1 \dots\dots\dots (iv)$$

Where,

$\Delta n p_1$  = the amount obtained from the sale of new shares to finance capital budget.

$I$  = the total amount required of capital budget

E = Earning of the firm during the period

E-nD1 = Retained earnings

By substituting the value of  $\Delta n p_1$  from equation (iv) to equation (iii) we get,

$$nPo = \frac{nD1 + P1(n + \Delta n) - \sum + \sum - nD1}{1 + Ke}$$
$$nPo = \frac{P1(n + \Delta n) - I + \sum}{1 + Ke}$$

Modigliani and Miller concluded that dividend policy has no effect on the share price. So, there is no role of dividend in above equation. [Since dividend doesn't appear directly in expansion and E, I, (n+Δn) p1 and ke are assumed to be independent of dividend, MM concludes that dividend policy has no effect in the value of the firm. In this way according to Modigliani and Miller's study: "It seems that under condition of perfect capital markets, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firms investment policy its div policy may have no influence on the market price of the shares.

**Walter (1966)**, in his study he concluded that dividend policy almost always affects the value of enterprises. In his view, the investment policy of a firm is directly affected by dividend policy. Such concept is just opposite to Modigliani and Miler approach. He argues that the significant relationship between return of investment or internal rate of return and its cost of capital is the main argument of this model. They are the most important considering factor to retain profits and distribute dividend. As long as the internal rate is greater than the cost of capital, the stock price will be unchanged by retention and will vary inversely with dividend payout. This model is based on the following certain assumptions in the determinants or firm's value.

1. The firm has perpetual life
2. The value of EPS (initial earnings) and DPS (dividend a) are assumed to exist no change forever in determining a given value.
3. The firm's internal rate of return (r) cost of capital (k) is considered to remain constant.
4. The firm distribution its entire earning or retains it for reinvestment immediately.

5. The firm relies on internally generated funds to finance all investment opportunity that are debt or new equity is not issued for outside financing. Based on above assumption Walter's formula to determine the market price per share is as follows:

$$P = \frac{DPS}{K} + \frac{r}{k} \frac{(EPS - DPS)}{K}$$

Where,

P= market price per share,

DPS = Dividend per share

EPS = Earning per share

r= Internal rate of return

k= cost of capital

Walter suggested different dividend policy for different nature of the firm. There are generally 3 natures.

#### **Growth firm (r>k)**

Growth firms are those firms which expand rapidly because of ample investment opportunity, cost of capital or expected rate of return of shareholders. Those firms will maximize the value per share if they follow a policy of retaining all earnings for investment. Thus correlation between dividend and stock price is negative. For such firm optimal dividend payout ratio is zero.

#### **Growth firm (r=k)**

The firm whose internal rate of return and cost of capital being equal is known to be normal firms. In such retention of earnings and distribution of dividend doesn't make change. The stock price does affect the share price.

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

If a firm has not profitable investment opportunities, the shareholders will be better off if earnings are paid out to them so as to enable them to earn a higher return by using the funds elsewhere. In other words, if firm's rate of return (r) is less than cost of capital (k) the relation between dividends and stock price is positive i.e. increasing in DPS fields increasing in market price per share? Thus optimum pay out for declining firm is 100 %.



**Gordon (1962)**, conducted a study which shows that the value of shares, even in a situation in which the revenue on investment is equal to the capitalization rate that is ( $r=k$ ). It is generally assumed that the investors preferred present dividend rather than the future capital gains. It specially stresses that an increase in dividend pay out ratio leads to increase in stock price for the reason that investors consider the dividend yield ( $D1/P0$ ) is less risky than the expected capital gain. Hence, investors required rate of return increases as the amount of decreases. It is clear that there is positive relationship between the amount of dividend and stock prices.

**Basic assumptions of this model are as follows:**

1. The internal rate of return ( $r$ ) and the cost of capital ( $k_e$ ) are considered to remain constant.
2. The firm as well as its stream of earnings is perpetual
3. The company operates in the world of no taxes.
4. The firm is assuming to be an all equity firm (i.e. not debt exists)
5. No external financing is available so retained earnings should be used to meet funds required.
6. The retention ratio ( $b$ ) once decided upon is constant thus growth rate  $g$  is the product of  $b$  and  $r$  is tend to remain unchanged
7. ' $k_e$ ' must be greater than ' $g$ ' to get meaningful value.

According to Gordon the market value of share is equal to present values of future streams of dividend. A simplified version of Gordon's model can be symbolically expressed as follows:

Gordon has provided the following formula, which is the simplified version of original formulae to determine the market value of share.

$$P = \frac{EPS(1 - b)}{K_e - br}$$

Where,

$p$  = price of a share

EPS = Earning per share

$B$  = Retention Ratio

$(1-b)$  = Dividend pay out ratio

$k_e$  = capitalization rate or cost of capital

$b \times r$  = Growth rate

According to this model following facts are revealed.

### **Growth firm ( $r > k_e$ )**

Share price had to decline in correspondence with increase in payout ratio or decrease in retention ratio i.e. high dividends corresponding to earning leads to decrease in share price. Therefore, dividends and stock prices are negatively correlated in growth firm. Normal firm ( $r = k_e$ ): Share value remains constant regardless of change in dividend policies, which means dividends and stock prices are free from each other. Declining firm ( $r < k_e$ ): Share price deals to rise in correspondence with rise in dividend payout ratio. It means dividends and stock price are positively correlated which each other in declining firm.

Both Walter's and Gordon's model are based on the assumption given and 'k' being constant. Thus, both the model's conclusion about dividend policy is similar.

**Van Horne and Mc Donald (1968)**, conducted a more comprehensive study on dividend policy and new equity financing. The purpose of this study was to investigate the combine effect of dividend policy and new equity financing decision on the market value of the firm's common stock. They explored same basic aspects of conceptual framework, and empirical tests were performed during year-end 1968, for two industries, using a well- known valuation model, i.e. a cross section regression model. The required data were collected from 86 electric utility firms included on the COMPUSTAT utility data tape and 39 firms in the electronics and electronic component industries as listed on the COMPUSTAT industrial data type. They tested two regression models for the utilizing industry. From the study it was found that share value of electric firms in 1968 was adversely affected by new equity financing in the presence of cash dividends except for those firms in the highest new issue group and it made new equity financing in the presence of cash dividends except for those firms in the highest new issue group and it made new equity a more costly from financing that retention of earning. They also indicated that the payment of dividend through excessive equity financing reduces share prices (Van Horne; et. al; 507-519).

## **Review of Related Studies**

### **Review of Journals / Articles and Research works**

In order to make this study more comprehensive some articles, researches and studies related to Impact of dividend on equity share pricing are reviewed hereunder. Radhe S. Pradhan Studied on

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 this study were to assess the stock market behavior in Nepal and 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.

**Some findings of his study 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 ratio 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.
- Positive relationship between dividend payout and interest coverage.
- 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

Deepak Chawala and Srinivasan (1987) studied the impact of dividend and retention on share price. They took 18 Chemicals and 13 sugar companies and estimated cross section relationship fro the year 1969 and 1973. The basic objectives of the study were to set a model to explain share prices, dividend and retained earnings relationship, to test the dividend and retained earnings hypothesis, to examine the structural changes in estimated relations over time and to achieve above mentioned objectives they used simultaneous equation model as developed by friends and Puckett in 1964.

**1) Price Function**

$$P_t = f(d_t, R_t, P/E(t-1))$$

**2) Dividend Supply Function**

$$D_t = f(E_t, D(t-1), P/E(t-1))$$

Identity,  $E_t = D_t + R_t$

Where,

P=Market price Per Share

D= Dividend per Share

R= Retained Earning Per Share

E=Earning Per Share (D+R)

(P/E) = Deviation from the sample, average of price earning ratio (Price earning multiple

t= Subscript for time

They used two stages least square technique for estimation and from the result they found that the estimated coefficient had the correct sign and the coefficient of determination of all the equation were very high in case of chemical industry. Thus it implies that the stock price and dividend supply variation can be explained by their independent variables. But in case of sugar industry, they found that the sign for the retained earning is negative. Finally, they concluded that the dividend hypothesis holds well in the chemical industry and both dividend and retained earnings significantly explain the variations in share price in that chemical industry (Chawala and Srinivasan, 1987:137-140).

Khagendra Prasad Ojha (2000), did a Research on "Financial Performance and common stock pricing". The main objectives of his research were to study and examine the difference of financial performance and stock prices, to examine the relationship of dividends and stock price and to explore the signaling effects in stock price.

### **Major findings of this research are:**

Nepalese stock market is in infancy stage. In general it is very new and just started to develop. Dominance of banking sector is prevalent in the market due to other industries including finance companies, insurance and manufacturing is not encouraging. Corporate firm with long history have relatively stable profitability parameters that the firm established after the economic liberalization of 1990. Older firms have been issuing bonus share more times than the new one. Dividend per share is relatively more stable than the dividend payout ratio. That's why payout ratio and dividend yields have been highly fluctuating. Due to lack of proper investment opportunity most of the investors have directed their saving towards the secondary stock market. There is significant positive correlation between the dividends paid and stock prices of banking and manufacturing industries. All other have not a perfect correlation between the net worth

per share and common stock price".

Yogendra Timilsina (2001) conducted a research on Capital Market Development and Stock Price Behaviour in Nepal. He published an article with a heading "Capital Market Development and Stock Price Behaviour in Nepal" in the Economic Review published by Nepal Rastra Bank in April 2001. The following is the main part of the study.

### **Capitalisation of Dividends**

Investors are interested in return, therefore, the price they will be prepared to pay for the share will depend upon the size of dividends. According to the dividend valuation model future streams of cash dividends are to be valuate and discounted by the cost of equity (Ke). Hence the value of an equity share is the present value of all future streams of cash dividends an investor expects to receive. Since the company is a going concern and has an indefinite life, an investor has to assume a fixed period within which he wants to hold the share. Thus, the model is:

$$P_0 = \sum_{t=1}^{\infty} \frac{Dt}{(1 + Ke)^t}$$

Where,

P<sub>0</sub>= Present market value of an equity

D<sub>t</sub> = Expected future dividend at each future date t

Ke= The required rate of return for equity which discounts the future dividend to a present value per share.

This model considers dividend per share, not total dividends. The amount of dividend is dependent on company's pay out policy. The declared dividend may be only a small proportion of profits of the company available to equity shareholders. The part of profits retained in the company represents deferred income to the shareholders. This profit is available to the company for the financing of assets to produce more profits and dividends in future. On the other hand, dividends are sometimes declared in excess of earnings. Therefore, the arguments raised against this model is that the method of valuing shares is misleading if the dividend income is not consistent. Since the dividend declared by the company is normally much less than the rate of earning, earning yield is frequently regarded as a better measure of valuing the share. John Burr

Williams has defended the Dividend Model on the reasoning that the part of earnings which are not paid out as dividends are reinvested in the business and which ultimately would produce more dividends through growth. "If earnings not paid out in dividends are all successfully reinvested at compound interest for the benefit of the stockholder, as critics imply, then these earnings should provide dividends later; if not, then they are money lost. Furthermore, if these reinvested earnings will produce dividends, then our formula will take account of them when it takes accounts of all future dividends; but if they will not, then our formula will rightly refrain from including them in a discounted annuity of benefits" (Williams, 1998).

#### 1.1.4 Zero Growth

If all future dividends are expected to remain constant i.e. there is no growth in the rate of dividend, the model becomes:

$$P_0 = \sum_{t=1}^{\infty} \frac{D}{(1 + Ke)^t} = \frac{D}{Ke}$$

Here, the market value of share is the capitalised value of dividend per share at the normal rate of return or cost of equity. If only a part of the earning is paid out as dividends the market value of share under this method is much below than the value computed under the capitalization of earning method. Therefore, this model is suitable in cases where dividend pay out ratio is one hundred percent and there is no growth in the rate of earnings.

#### Constant Growth

In case, dividends of the company are expected to grow at a constant rate over time, the constantly growing dividend stream is to be evaluated using an appropriate compound growth factor:

$$D_t = D_0(1+g)^t$$

Where,

g=Periodic constant growth rate

The rate of dividend declared in the current year ( $D_t$ ) would become equal to the previous year's rate of Dividend ( $D_0$ ) plus growth rate during  $t$ th year. Therefore, the present value (current market value of equity) of the growing dividend stream over  $n$  finite interval is:

$$P_0 = \sum_{t=1}^n \frac{D_0(1+g)^t}{(1+K_e)^t}$$

When  $g$  is less than  $K_e$ , the model can be presented as:

$$P_0 = \frac{D_0(1+g)}{K_e - g} = \frac{D_1}{K_e - g}$$

### 1.1.6 Variable Growth

Not all firms are zero growth or constant growth firms. Most of the firms confirm to variable growth rate of dividends in future. However, it is very difficult to predict the future growth path of a company beyond a few years. Therefore, a particular rate of dividend is projected for each of the next few years (say, 3 years) and again another rate of dividend could be projected for further 3 years.

Thus, the value of share (at  $t=0$ ) under this model is:

$$P_0 = \frac{D_0(1+g_1)t_1}{(1+K_e)t_1} + \dots + \frac{D_2(1+g_3)t_3}{(1+K_e)t_3} + \frac{D_3(1+g_4)t_4}{(1+K_e)t_4} + \dots + \frac{D_4(1+g_n)t_n}{(1+K_n)t_n}$$

$$P_0 = \sum_{t=1}^n \frac{D_0(1+g_1)t_1}{(1+K_e)t} + \frac{1}{(1+K_e)^n} \left[ \frac{D_0(1+g_1)^n(1+g_2)}{K_e - g_2} \right] \text{or}$$

$$P_0 = \sum_{t=1}^n \frac{D_0(1+g_1)t}{(1+K_e)t} + \left[ \frac{1}{(1+K_e)t} \right] P_n$$

### 1.1.8 Empirical Findings of the Study

The coefficient of correlation between earning per share (EPS) and observed market value of share and also between the dividend per share (DPS) and observed market value of share were computed. Also regressions were run to see the influence of the explanatory variables, EPS and DPS on equity prices. A positive correlation was found to exist between EPS and the market price of the share. The coefficient of correlation between dividend per share and the market price was also computed taking DPS as independent variable and market price as dependent variable. A high degree of positive relationship ( $r= 0.83$ ) was observed between the two variables. Timilsina concluded that the market price of shares depends on EPS as well as on DPS, but DPS is more price sensitive and it will have direct and immediate response in the market. (Economic Review, April 2001:1-23)

**1.1.9** Narayan Prasad Poudel (2001) conducted a study on "Investing in Shares of Commercial Banks in Nepal; An assessment of Return and Risks Elements". He published an article with a heading "Capital Market Development and Stock Price Behaviour in Nepal" in the Economic Review in April 2002. The following is the main part of the study. The DDM Model

This model states that the value of the share now is the sum of stream of future discounted dividends, plus the value of the share as and when sold in some future year.

#### **1.1.10 Review of Thesis**

Sadakar Timilsina (1997), had conducted the study on "Dividend and Stock prices: an Empirical study" by sample testing the data of 16 Enterprises using data from 1990 to 1994. The study was conducted to test the relationship between dividends per share and stock prices, to determine the impact of dividend policy on stock prices and to identify where it is possible to increase the market value of the stock by changing dividend policy or payout ratio.

To explain price behaviour, the study used simultaneously equation model as developed by Friend and Puckett (1964). The findings of his study were as follows:

- 1) The relationship between dividend per share and stock prices is positive in the sample companies.
  - 2) Dividend per share affects the share prices variedly in different sectors
  - 3) Changing the dividend policy or dividend per share might help to increase the market price of share.
  - 4) The relationship between stock prices and retained earnings per share is not prominent.
  - 5) The relationship between stock prices and lagged earnings price ratio is negative
- Nav Raj Adhikari (1997), carried out a research on "Corporate dividend Practices in Nepal" using primary as well as secondary data. The main objectives of his research were to analyse the properties of portfolios formed on dividend, to examine the relationship between dividend and stock prices and to survey the opinions of financial executives on corporate dividend practices.

*Major findings of this research are:*

1. Financial position of high dividend paying companies is comparatively better than that of low dividend paying companies.



2. Market price of stock of both finance and non finance and non finance sectors are affected by dividends.
3. There is a positive relationship between dividend and stock price
4. There is a negative relationship between dividend payout and earnings before tax to net worth
5. Stocks with larger ratio of DPS to book value per share have higher profitability. These profitability ratios of stocks paying larger dividends are also more variable as compared to stocks paying smaller dividends.
6. Companies paying higher are reluctant to employ higher degree of leverage in their capital structures
7. The stocks with larger ratio of dividend per share to book value per share have also higher turnover ratio and higher interest coverage.

R. R. Gautam (1997) carried out a research on "Dividend Policy in commercial banks" which focuses on the objectives to identify the type of dividend policy that is being adopted and to find out whether the policy is appropriate to examine the impact of dividend on share price, to identify the relationship between DPS and other financial indicators, to know if there is any uniformity among DPS, EPS and DPR sampled commercial Banks.

The major findings of this study are there is the largest fluctuation in EPS and DPS, the relationship between DPS and EPS is positive; however it is not significant, there may be various other factors beside EPS to affects MPS and the growth rate of dividend is inconsistent. It concluded that no sampled commercial banks have followed distinctly defined dividend policy.

*1.1.12 Minaraba Sharma (Rajopadhyaya) (2002),*

conducted a research on "Dividend Policy with Respect to Insurance Companies in Nepal" in July 2002. The objectives of this research were to identify the existing practice of dividend policy in insurance companies, to find out the impact of dividend per share of the market price of the stock, to examine whether there is significant different or not among DPS, EPS and DPR on the selected companies and to know if there is any relationship between market value per share (MVPS) on dividend policy and other financial indicator such as

DPS, EPS, DPE, PE Ratio, Liquidity ratio

1.1.14 some major Findings of the study is pointed out as the average DPS and EPS of NLGICO and NICO is satisfactory compared to ICO and UICO. Since, later insurance companies are new in dividend distribution. The analysis of coefficient of variation indicates largest fluctuation in PICO and UNICO, and the dividend yield analysis fluctuating in all sample insurance companies. Kishori Budhathoki (2006), carried on a research on "The study of Dividend Policy of the commercial Banks in Nepal on May 2006. The main objectives of the study were to highlight the dividend practices of Commercial Banks, to compare the dividend policy followed by different commercial banks chosen, to provide the sample banks with some fruitful suggestion that can be implemented easily and possible guideline to overcome various issues and gaps based on the findings of the analysis. Some of the major findings of this study are:

The average earning per share (EPS) of the banks under study shows a positive result.

But the coefficient of variation indicates that there is no consistency of EPS.

- 1) The average dividend per share (DPS) shows that there is no regularity in dividend payment.
- 2) The analysis of DPR shows that the Dividend Payout Ratio (DPR) of the banks is not stable.
- 3) The average market price shows that there is quite high level of fluctuation.
- 4) Mita pandey (2008), researched on "Pricing and yield behaviour of equity shares in
- 5) Nepal: A case of Commercial Banks" on March 2008. The main objectives of the study are:
  - To establish relationship between market prices of commercial bank's equity shares and their yield behaviour in Nepal.
  - To see how effective is yield in determining the market price of the securities?
  - If yield is not the sole determining factor then what could be other factors, which
  - could affect the market prices of securities in Nepal.
  - To identify problems of securities market in Nepal and suggest measures to correct the existing problems.

*Main findings of this research are:*

1. Market prices of the equity shares are overvalued when compared to the earnings

per share, which is the primary indicator of the financial status of the concerned financial institution. This was mainly due to ignorance and improper access to financial health of the company.

2. The result of simple regression analysis between the market price and yield indicators reflected that net worth per share explained the best of the market prices compared to other indicators. Dividend per share and earnings per share were equally explanatory, whereas dividend payout ratio was not a good indicator of stock pricing. The result showed that market price corresponds to the earning per share at a greater extent and then to dividend per share and then to earnings per share.

## **2.4 Research Gap**

This thesis work reflects the following research gap between the previous researches.

None of the previous thesis analyses the impact of dividend on equity share pricing in Nepal.

Most of the masters level thesis work was done by analysing secondary data. They do not have direct responses of the market. But this research work is mainly focused on analysing the impact of dividend on equity share price. This thesis uses secondary data as well as primary data to analyse the impact of dividend in equity share pricing in Nepal. In the primary data presentation, Questionnaires were distributed among various secondary share traders working in various organizations and the response of the individuals who own shares on secondary market was considered.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

This chapter attempts to present a basic structure of the methodology in which the research will be conducted.

### 3.1 Research Design

A research design is a plan of the proposed research work. This research attempts to analyse the impact of Dividend on the stock price behaviour of financial institution and commercial banks. For this, several tools have been employed to accomplish such targets. The analysis has been divided into two sections – based on secondary data and on primary responses. In the first part, this research would explicitly examine the relationship between Market Price per Share (MPS) and Dividend per Share (DPS). For this, ten bank and other institutions would be selected on judgmental basis, considering the years’ of operation and listing in NEPSE, institution type, number of shareholders, and paid up capital among others. For the comparative purpose, the relationship of MPS with Dividend Payout Ratio (DPR), Net Worth per Share (NWPS) and Earning per Share (EPS) will also be calculated and presented. In the second part, which is an empirical analysis, the responses of primary respondent would be analysed.

### 3.2 Population and Sample of the Study

All the companies listed in NEPSE are considered to be the total population of the study. Out of them Commercial Banks, Development Bank, Finance Companies and Insurance Companies listed and doing share transaction in NEPSE were considered as the sample of the study. The no. of listed companies reached 135 by the end of fiscal year 2009/ 2010. The table below clearly describes total population and samples.

**Table 3.1**  
**Total Population, Sample and Sample Percentage**

S.N	Types of the Listed Companies	Total Population	2009/10 Turnover	Percentage	Sample Considered
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			<b>Share Units</b>	<b>Rs. In Million</b>		
<b>1</b>	Commercial Banks	15	8700/20	5563.49	66.55	7
<b>2</b>	Development Bank	16	1360.55	577.55	6.91	1
<b>3</b>	Insurance Companies	16	627.61	204.97	2.45	-
<b>4</b>	Finance Companies	53	2534.19	713.57	8.54	2
<b>5</b>	Manufacturing & Processing Companies	21	82.92	24.27	0.29	-
<b>6</b>	Hotel	4	81.70	7.04	0.08	-
<b>7</b>	Trading Companies	5	11.47	10.42	0.12	-
<b>8</b>	Other	5	4748.61	1258.8	15.06	-
	<b>Total turnover in Rs.</b>			<b>8360.07</b>		

(Source : Annual Report of Bank )

For the purpose of this study, a total 100 companies (15 commercial banks, 16 development banks, 53 finance companies and 16 insurance companies) are considered as sample population. Since standard sample size for any research is 10 percent of the population, the sample of this research would be 10 banks and other institutions. For the basis of selecting companies under study, the market share in NEPSE has been considered. The data for 2006/07 shows that, commercial bank groups' trading constituted 67 percent of the total trading in NEPSE. Similarly, Finance companies' share was 9 percent, development banks' share was 7 percent and others were 17 percent. Going by this structure, the sample would include 7 commercial banks, 2 financial companies and one development bank. The names of the Sampled Financial Institutions are:

1. Nabil Bank Limited

2. Standard Chartered Bank Nepal Limited
3. Bank of Kathmandu
4. Everest Bank Limited
5. Himalayan Bank Limited
6. Machhapuchhre Bank Limited
7. Nepal Industrial and Commercial Bank Limited
8. Siddhartha Finance Limited
9. Nepal Housing and Merchant Finance Limited
10. Development Credit Bank Limited

### **3.3 Sources of Data**

#### **3.3.1 Secondary Data**

Data have been collected from primary as well as secondary sources. In secondary data, concerned banks, finance companies and Nepal Stock Exchange Ltd. and Security Board of Nepal are providers of the data. The researcher collected various data from SEBON and NEPSE in various dates in the month of September. The sample period covers 2005-2010 for examining the relationship as well as for using different indicators. The data obtained are:

- The year ended data sheet showing MPS, EPS, NWPS, DPS, DPR, Balance sheet, Profit and loss a/c of the company.
- Information that is relevant to the study available on various websites (i.e. websites of NEPSE, Security Board of Nepal, Nepal Rastra Bank and other related banks and finance companies)
- Relevant Books, Journals, Magazines, Reports, Bulletins etc.
- Previous Thesis and Studies

#### **3.3.2 Primary Data**

An Empirical finding has been carried out in order to obtain the impact of dividend on equity share pricing in Nepal. At least 50 observations have been taken to analyse the impact of dividend on an equity share price. The responses of the respondents of Nepal

Rastra Bank, Security Board of Nepal and various organizations have been collected by distributing the multiple choice questionnaire in the month of September in various dates.

### **3.4 Analysis of Data**

#### **Dividend per Share (DPS)**

Dividend per share is the net distributed profit to the shareholders. It is the ratio of distributed profit to the number of ordinary shares. It is calculated as:

$$\text{Dividend Per Share (DPS)} = \frac{\text{Amount Distributed to equity Shareholders}}{\text{Number of Equity Shareholders}}$$

Dividend per Share and the Dividend Payout Ratio depend upon the firms' dividend policy, which further depends on several internal factors such as fund needs of the firm, liquidity, ability to borrow, nature of shareholders, and market conditions.

#### **Earnings per Share (EPS)**

Earnings per share measures the profit of equity shareholders in terms of per unit of shares .i.e. the amount that they have earned on every share held. It is calculated as the ratio of available profit to the number of outstanding shares.

#### **Dividend Payout Ratio (DPR)**

This ratio shows the percentage of profit distribution to the shareholders in the form of dividend. It is the ratio between DPS and EPS

Earnings Per Share (EPS)

$$\text{Dividend per share (DPS)} = \frac{\text{Divident Per Share (DPS)}}{\text{Earning Per Share (ES)}}$$

#### **Net Worth per Share**

Net Worth per Share is a measurement of the net worth of the company for each share of stock that has been issued. If this value is negative, this indicates that company's

liabilities exceed its ability to pay them. An increasing net worth per share is a positive signal that the company has reduced its liabilities. The company may also have gone through a stock buy-back plan, reducing the number of shares, essentially making the net worth for each share more valuable

### **Different Statistical Tools**

The following are the major statistical tools that were used while carrying out this study.

#### **Standard Deviation (SD)**

The standard deviation is commonly used to measure the risk. It shows the deviation of actual mean with average mean. The standard deviation measures the absolute dispersion of variability of a distribution. The greater the variability or dispersion the greater would be the magnitude of the deviation of the value from their mean. The smaller the dispersion or variability, smaller would be the standard deviation. There would be high degree of uniformity in the observation and homogeneity in the series. Hence, the standard deviation is extremely useful in judging the representativeness of the mean.

We can find the Standard Deviation from the following formula.

$$SD(6) = \sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum X}{n}\right)^2}$$

Where,

x = value of the variable

n = numbers of years.

Therefore, the standard deviation is used to analyze the stock position of finance company and commercial banks. The SD of seven companies are calculated and analyzed under the study.



### **Coefficient of Variance (CV)**

The corresponding relative measure of dispersion is known as the coefficient of variation. The series for which the coefficient of variation is greater is said to be more variable or conversely less consistent or less uniform. On the other hand the series for which coefficient of variation is less is said to be less variable or more consistent or more uniform. It is denoted by CV and obtained as follows:

$$\text{Coefficient of Variance(CV)} = \frac{\text{SD}(\bar{X})}{\bar{X}} \times 100$$

Where SD is the Standard Deviation and

$$\bar{X} = \text{Mean of the series defined as } \frac{\sum x}{n}$$

### **Karl Pearson's Coefficient of Correlation**

It is statistical tool for measuring the magnitude of linear relationship between the two variables. Karl Pearson's measure, known as Personian correlation coefficient between two variables series x and y, denoted by r(x,y) or rxy. r can be obtained as:

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

Where, r = correlation coefficient

n = no. of years.

$\sum X$  = Sum of Series X

$\sum Y$  = Sum of Series Y

$\sum XY$  = Sum of the product of X and Y variables

$\sum X^2$  = Sum of squares of Series X

$\sum Y^2$  = Sum of squares of Series Y

The value of coefficient of correlation always lies between +1&-1.when coefficient of correlation  $(r) = +1$ , it means there is perfect positive correlation between the variables, when  $(r) = -1$ , it means there is perfect negative correlation between the variables and  $(r) = 0$  refers that there is no relationship between the given variables. The coefficient of correlation finds not only the magnitude of correlation but also its direction. The closer the value of 'r' to 1 or -1, the strong will be the relationship between variables and the closer the 'r' to 0, weak will be the relationship (Shrestha & Manandhar, 1999: 234).

### **Regression Analysis**

Regression analysis helps the estimation or prediction of unknown variable on the basis of known value of other variable. It is used as a tool to determine the strength of relationship between two variables. Thus, it is a statistical device, with the help of which we can estimate or predict the value of one variable when the value of other variable when the other variable is known. The unknown variables which we have to predict are called dependent variable and the variable whose value is known is called independent variable. The analysis used to describe the average relationship between two variables is known as simple regression analysis (B. C. Bajracharya).

### **Line of Regression**

If there exists a relationship between two variables X and Y, the dots the scatter diagram will be concentrating around a certain curve and will be concentrating around a certain curve and if the curve is a straight line, it is said to be the line of regression and the relationship between two variables as the linear regression. A line of regression gives the best estimate (in the least square sense) of one variable for any given value of other variable. So, there are two lines of regression referring as the line of regression of Y on X and the line of regression of X on Y respectively (B.C. Bajracharya, 2060:).

### **Regression of Equation X on Y**

The regression equation is expressed as:

$$Y = a + bx$$

We shall get normal equations for estimating 'a' and 'b' as:

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

$$\Sigma XY = a\Sigma X + b\Sigma x^2$$

Where Y = value of dependant variable

a = Y intercept,                      b = Slope of the trend line/coefficient of regression

X = Value of independent variable

### **Coefficient of Regression**

The coefficient 'b', which is the slope of line of regression of y on x is called the coefficient of regression of y on x. It represents the increment in the value of dependent y for a unit change in the value of independent variable x. In other words, it represents the rate of change. The convenient way to calculate the variable of 'b' is as:

$$b = \frac{n\Sigma xy - \Sigma x\Sigma y}{n\Sigma x^2 - (\Sigma x)^2}$$

Similarly the value of Y-intercept can be computed as

$$a = \frac{\Sigma x^2\Sigma y - \Sigma x\Sigma xy}{n\Sigma x^2 - (\Sigma x)^2}$$

### **Standard Error of Estimates**

A measure of precision of the estimate so obtained from the regression equations is provided by standard error (SE) of the estimate. Standard error is a word analogous to standard deviation (which is dispersion of observation about the mean of the distribution) and gives us a measure of the scatter ness of the observation about the line of regression.

Thus,

$S_{yx}$  = Standard Error of Estimate of Y for given X.

$$S_{yx} = \sqrt{\frac{\sum(Y - Y_c)^2}{n}} = \sigma_y(1 - r^2)^{1/2}$$

$$S_{yx} = \sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{n-2}}$$

### **Test of Regression Coefficient by t-Test**

It was developed for the significant contribution in the theory of sampling applicable in case of small samples. When population variance is not known, the test is commonly known as student's t-test and is based on the t-distribution. As the sample size gets larger, the shape of the distribution loses its flatness and becomes approximately equal to the normal distribution. For applying t-test in context of small samples, the t-value is calculated first of all and then compared with table-value 't' at certain level of significance for given degree of freedom. If the calculated value of 't' exceeds the table value, it infers that the difference is significant at given level of significance. If computed value of 't' is less than the tabulated value of 't', the result is not treated as significant.

The t-test is used when two conditions are fulfilled:

1. The sample size is less than 30.
2. The population standard deviation must be known.

While using t-test we assume the following:

1. That population is approximately normal.
2. That the observations are independent and the samples are randomly drawn samples.
3. That there is no measure error.
4. That in case of two samples, population variance is regarded as equal if equality or the two population means is to be tested.

### **T-Test for Significance of an observed Sample Correlation Coefficient**

Let r be the observed sample correlation coefficient a sample of n pairs of observations from bivariate normal population. In order to test whether the sample correlation

coefficient is significant of any correlation between the variables in the population, t-test for significance of an observed sample correlation coefficient is applied.

### **Statistical Analysis**

In this part, we will see the relationship between market price of the equity shares with earning per share, dividend per share, dividend pay out ratio, and net worth per share. Amongst these four indicators, the study would evaluate which will affect the equity share price.

## **CHAPTER - IV**

### **DATA PRESENTATION AND ANALYSIS**

In this chapter, the collected data are presented, analyzed and interpreted following the research methodology dealt in the third chapter. While analyzing, data gathered from various sources have been inserted in the tabular form in Annex. The basic objective of this chapter is to analyze and explain the collected data following the conversion of unprocessed data to an understandable presentation. Thus this chapter presents the analysis of Impact of dividend on Equity share price various financial institutions.

#### **4.1 Presentation and Analysis of Secondary Data**

##### **4.1.1 The Number of listed companies in Stock Exchange**

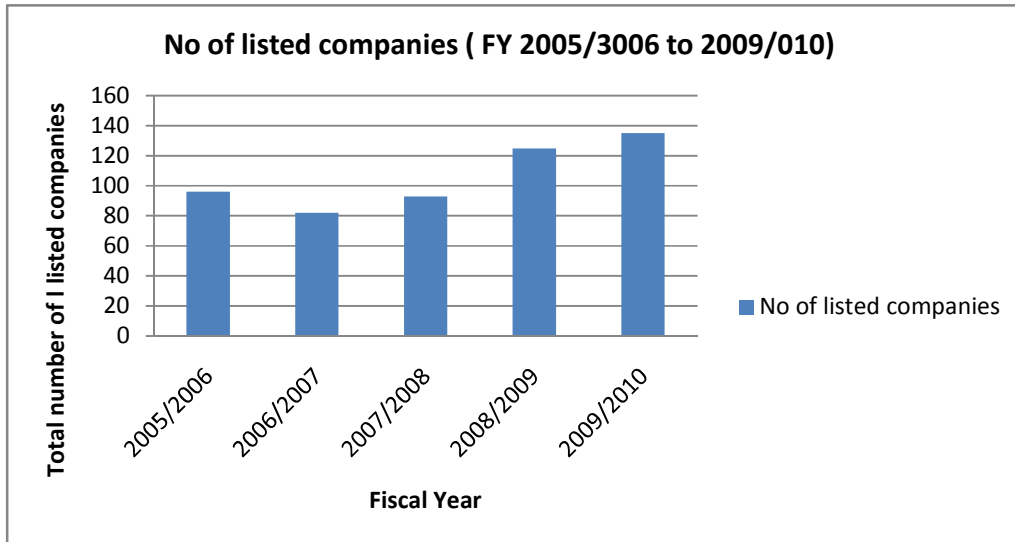
**Table 4.1**  
**Number of Listed Companies (FY 2005/2006 to 2009/2010)**

Fiscal Year	No of listed companies	Change in number
2005/2006	96	-
2006/2007	82	(14)
2007/2008	93	11
2008/2009	125	32
2009/2010	135	10

(Annual Report, SEBON, 2009/010)

Figure 4.1

Number of Listed Companies ( Fy 2006/2007 to 2009/010)



From the table 4.1, it is clear that the rate of listing of the companies is decreasing in the year 2006/007, the total numbers of listed companies decrease from 96 to 82. After where, there was increment in the number of listed companies in 2006/007, there were 82 companies listed and it increased by 11 to form the total of 93 in 2007/08. Again in the year 2008/009 the number of listed companies increased by 32 and the number of total listed companies was 125. In 2009/010, there was an increment of only 10 companies as compared to the previous year and remain 135.

#### 4.1.2 The Number of Listed Companies Under different Sector in Stock Exchange

Table 4.2

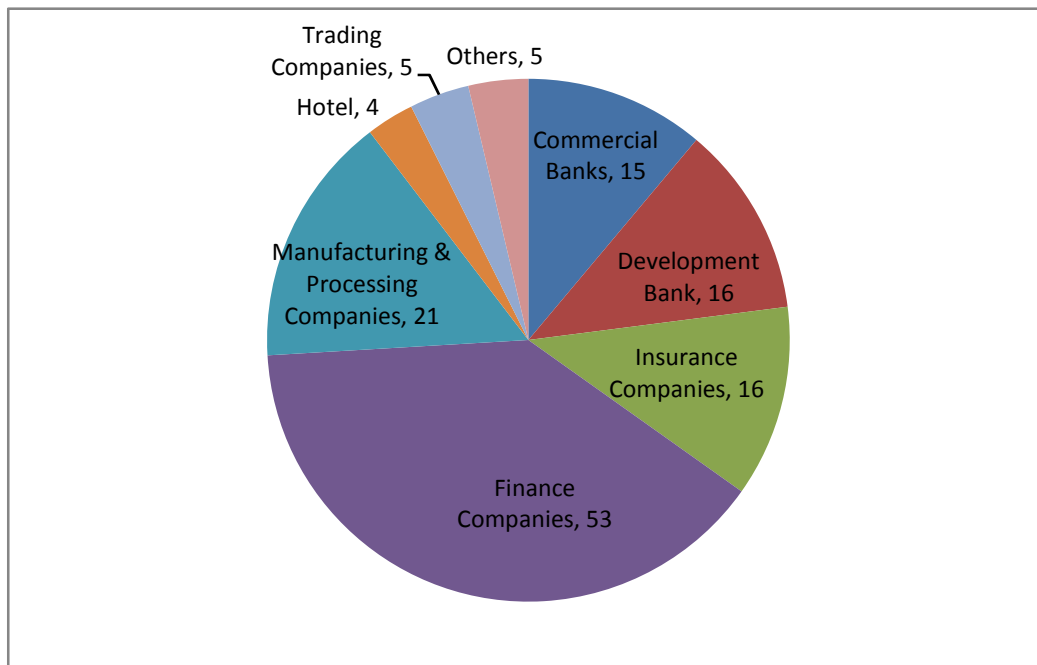
Number of Listed Companies, Sector Wise (2009/010)

Sector	No. of Listed Companies	Percent
Commercial Banks	15	11.11
Development Bank	16	11.85
Insurance Companies	16	39.26
Finance Companies	53	11.85
Manufacturing & Processing Companies	21	2.96
Hotel	4	15.56
Trading Companies	5	3.70
Others	5	3.70
<b>Total</b>	<b>135</b>	<b>100</b>

Figure 4.2

Number of Listed Companies, Sector Wise

(FY 2009/010)





The table 4.2 shows the data of total companies listed under different sector in the Nepal Stock Exchange Ltd. 135 number of companies were listed till 2009/10. There are altogether 15 commercial banks, 16 development banks, 16 insurance companies, 53 finance companies, 21 Manufacturing & Processing Companies, 4 hotels, 5 Trading companies and 5 other companies. The percentage share of each sector is 11.11%, 11.85 %, 39.26 %, 11.85 %, 2.96%, 15.56%, 3.70% and 3.70 % respectively.

#### **4.1.3 Introduction of the Financial Institutions under Study**

Among the total number of financial institutions listed in Nepal Stock Exchange Limited, this research carries only ten financial institutions. Among them seven commercial banks, two finance companies and one development bank are taken for this study.

##### **Commercial Banks**

1. Nabil Bank
2. Standard Chartered Bank Nepal Limited
3. Bank of Kathmandu
4. Everest Bank
5. Himalayan Bank
6. Machhapuchhre Bank Limited
7. Nepal Industrial and Commercial Bank Limited

##### **Finance Companies**

1. Siddhartha Finance limited.
2. Nepal Housing and Merchant Finance limited

##### **Development Bank**

1. Development Credit Bank Limited

#### 4.1.4 Analysis of Financial Indicator

##### a. Earnings per Share (EPS)

Earnings per share measures the profit of equity shareholders in terms of per unit of shares .i.e. the amount that they have earned on every share held. It is calculated as the ratio of available profit to the number of outstanding shares.

**Table 4.3**  
**Analysis of Earning per Share of the financial institutions for**  
**(FY 2005/06 – 2009/10)**

<b>Bank</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/010</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>
Nabil Bank	55.25	84.66	92.61	103.45	129.21	93.036	24.15	25.95
Standard Chartered Bank Limited	141.13	149.30	143.55	143.55	143.55	144.22	2.71	1.88
Bank of Kathmandu	2.00	17.72	27.40	30.1	43.67	24.178	13.85	57.28
Everest Bank	32.91	29.90	45.58	37.54	45.81	38.348	6.47	16.88
Himalayan Bank	60.26	49.54	49.05	47.91	59.24	53.2	5.38	10.12
Machhapuchhre	-	35.59	8.49	15.43	18.74	15.65	10.12	64.65
Nepal Industrial and	1.36	5.19	13.65	22.75	16.1	11.81	7.67	64.98

Commercial Bank								
Siddhartha Finance	20.52	-	32.33	17.54	26.04	19.286	6.04	31.32
Nepal Housing and Merchant finance	22.51	16.33	12.49	24.2	15.86	18.278	4.38	23.99
Development Credit Bank Ltd	5.85	. 10.41	19.22	22.27	122.17	35.984	43.50	120.87

(Annual Report, SEBON, 2009/010)

The table 4.3 shows the Earning per share of all of the financial institutions taken in this study. The table also shows the standard deviation as well as the coefficient of variation of the EPS covering the period from FY 2005/06 to 2009/10. In this table, among the commercial banks, Standard Chartered Bank Limited has the highest EPS throughout the study period. The average EPS of St. Chartered is 144.22, SD is 2.71 and CV is 1.88, which shows that there is a very low fluctuation in EPS of Standard Chartered bank; Nabil Bank has increasing EPS each year. EPS of Himalayan Bank goes on decreasing till 2009/10.

Among the finance companies, the average EPS of Siddharth Finance is 19.286, standard deviation is 6.04 and coefficient of variation is 31.32 which is more fluctuating than the Nepal Housing and merchant finance. Nepal Housing and merchant finance has an average EPS of 18.278, which range between 12.49 to 24.2. Sd is 4.38 and cv of 23.99.

Development credit Bank Ltd. has an average EPS of 35.984, Sd of 43.50 and CV of 120.87 which is one of the highest fluctuation of EPS among the financial institutions in the table.

**b. Market Price per Share (MPS)**

Market price per share (MPS) is a prevailing price of the equity share trading in the secondary market. The price listed in the stock exchange is the actual market price of equity shares. The analysis of the Market price of the equity shares of the financial institutions are presented below.

**Table 4.4**  
**Analysis of Market Price per Share of the financial institutions for**  
**(FY 2005/06 – 2009/10)**

<b>Bank</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>
Nabil Bank	735	735	1000	1505	2240	1243.00	572.33	46.04
Standard Chartered Bank Limited	1550	1640	1745	2345	3775	2211.00	829.96	37.54
Bank of Kathmandu	254	198	295	430	850	405.40	235.12	58.00
Everest Bank	430	445	680	870	1379	760.80	349.22	45.90
Himalayan Bank	1000	836	840	920	1100	939.20	100.41	10.69
Machhapuc hre		100	125	256	320	160.20	92.80	57.92
Nepal Industrial & Commercial Bank	250	180	218	366	497	302.20	115.56	38.24
Siddhartha	145		120	158	158	116.20	20.24	17.41

Finance								
Nepal Housing and Merchant finance	310	240	230	214	210	240.80	36.26	15.06
Development Credit Bank Ltd	152	145	167	305	390	231.80	98.48	42.48

(Annual Report, SEBON, 2009/010)

The table 4.4 shows the market price of equity shares of each of the financial institutions taken for this study. Among the commercial banks, the average Market price of Standard Chartered Bank Limited is highest i.e. Rs. 2211. It has a standard deviation of 829.96 and coefficient of variation is 37.54. Machhapuchhre Bank has a lowest average MPS i.e.160.20. The CV of Bok is 58.0 which show highest fluctuation in the market price.

Nepal Housing and Merchant Finance has higher average MPS than Siddhartha Finance. CV of Siddhartha finance is more fluctuating and the standard deviation of NHMF is higher.

Development Credit Bank Ltd. has an average MPS of 231.80. It has a 98.48 Standard Deviation and CV of 42.48 which is more fluctuating that the two finance Companies.

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

Dividend per share indicates the proportion of earning distributed to the shareholders on per share basis. Generally higher DPS creates positive attitude among the shareholders towards the bank, which accordingly helps to increase the market value of shares. The dividends per share of the financial institutions under study are stated in the following table.

**Table 4.5**  
**Analysis of Dividend per Share of the financial institutions for**  
**(FY 2005/06 – 2009/10)**

<b>Bank</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>
Nabil Bank	30	50	65	70	85	60	18.71	31.18
Standard Chartered Bank Limited	100	120	110	120	140	118	13.27	11.24
Bank of Kathmandu	10	5	10	15	48	17.6	15.53	88.21
Everest Bank	20	20	20	20	25	21	2.00	9.52
Himalayan Bank	35	26.32	20	31.5	35	29.564	5.74	19.42
Machhapuchhre				-	15	3	8.49	282.84
Nepal Industrial and Commercial Bank				30	10	8	12.17	152.07
Siddhartha Finance	15	15		30	10	14	7.66	54.73
Nepal Housing and Merchant finance	15	10	10	15	20	14	3.74	26.73
Development Credit Bank Ltd		10	10	12	12	8.8	1.40	15.94

(Annual Report, SEBON, 2009/010)

The table 4.5 shows Dividend paid by the financial institutions during the year 2005 to 2010. The average dividend paid by Standard Chartered bank ltd. is the highest 118 among the financial institutions listed in the above table. Nabil Bank has the second highest i.e. 60 The CV of Machhapuchhre Bank is the highest i.e. 282.84 which shows a

highest fluctuation in DPS during the period of study. It has not paid dividend for four years. NIC Bank has not paid dividend for three years and it has also a high fluctuation in the CV. i.e. 152.07.

Siddhartha Finance and Nepal Housing and Merchant has equal average dividend per share i.e. 14. But CV of Siddharth Finance (54.73) is higher than that of NHMF.

Development Credit Bank paid an average dividend of Rs. 8.8. It has a Standard deviation of 1.40 and fluctuation of 15.94 in the DPS was seen.

#### **d. Dividend Payout Ratio (DPR)**

Dividend Payout Ratio shows the percentage of profit distributed to the share holders. It depends upon earnings of organization. Greater the earnings, more ability to pay dividend. The DPR of the financial institutions under study are stated in the table as follows.

*1.2 Table 4.6*

#### **Analysis of Dividend Payout Ratio of Sampled financial institutions for (FY 2005/06 – 2009/010)**

<b>Bank</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>
Nabil Bank	54.30	59.06	70.19	67.67	65.78	63.40	5.86	9.24
Standard Chartered Bank Limited	70.86	80.38	76.63	83.59	97.53	81.80	8.93	10.92
Bank of Kathmandu	500.00	28.22	36.50	49.83	109.92	144.89	179.85	124.12
Everest Bank	60.77	66.89	43.88 1	53.28	54.57	55.88	7.72	13.8
Himalayan Bank	58.08	53.13	40.77	65.75 3	59.08	55.36	8.33	15.04

Machhapuchhre		0.00	0.00	0.00	80.04	16.01	34.71	216.79
Nepal Industrial and Commercial Bank	0.00	0.00	0.00	131.87	62.11	38.80	52.39	135.03
Siddhartha Finance	73.10		0.00	171.04	38.40	56.51	63.79	112.88
Nepal Housing and Merchant finance	66.64	61.24	80.06	61.98	126.10	79.20	24.40	30.81
Development Credit Bank Ltd	0.00	96.06	52.03	53.88	9.82	42.36	34.53	81.53

(Annual Report, SEBON, 2009/010)

In the table 4.6, the average DPR of Bank of Kathmandu is 144.89 which is the highest DPR. It means that BOK generally pays 144.89 % of its total earning as dividend to its shareholders. Machhapuchhre Bank has a lowest DPR of 16.01. It has not paid dividend for three years.

The coefficient of variation in the DPR of Nabil bank is the lowest i.e. 9 which shows a very low fluctuation.

Standard Chartered Bank, Himalayan Bank and Everest bank has also low fluctuation in the DPR. There is a maximum fluctuation in the DPR of BOK, NIC, Machhapuchhre Bank and Siddhartha Finance.

Machhapuchhre Bank has not paid dividend for four years, NIC Bank has not paid dividend for three years.

Himalayan, Everest, Standard Chartered Bank has low standard deviation in the DPR. The standard deviation in the DPR of BOK is 179.85 which is very high.



### e. Net Worth Per Share (NWPS)

Net Worth per Share is a measurement of the net worth of the company for each share of stock that has been issued. The negative NWPS indicates that company's liabilities exceed its ability to pay them. An increasing net worth per share is a positive signal that the company has reduced its liabilities. The analysis of net worth per share of the financial institutions is presented below.

**Table 4.7**  
**Analysis of Net Worth per share of Sampled Financial Institutions for**  
**(FY 2005/06 – 2009/010)**

<b>Bank</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>
Nabil Bank	233.2	267.3	301.37	337.16	381.36	304.07	51.87	17.06
Standard Chartered Bank Limited	363.9	403.16	399.25	422.37	468.22	411.37	34.13	8.30
Bank of Kathmandu	112.2	124.93	140.37	155.47	181.14	142.82	24.05	16.84
Everest Bank	150.8	150.1	171.53	169.15	185.87	165.48	13.56	8.19
Himalayan Bank	220	247.82	246.93	239.59	228.72	236.62	10.75	4.54
Machhapuchhre		92.2	100.77	115.95	130.22	87.828	17.55	19.98
Nepal Industrial & Commercial bank	105.2	110.42	124.08	136.84	127.74	120.85	11.56	9.56
Laxmi Bank Ltd		99.04	101.32	196.77	111.33	101.69	42.05	41.35
Siddhartha Finance	113.6		119.48	120.12	132.78	97.196	12.92	13.30
Nepal Housing and Merchant finance	125.4	140.64	149.16	154	154.82	144.8	10.95	7.56
Development Credit Bank Ltd	105.9	105.27	112.72	120.48	1131.29	315.14	408.11	129.50

(Annual Report, SEBON, 2009/010)

The table 4.7 describes the net worth per share of the financial institutions. Among the all, Standard Chartered Bank Ltd. has the highest average NWPS i.e. 411.37. It is a positive signal that the bank has reduced its liabilities and the bank may also have gone through a stock buy-back plan, reducing the number of shares, essentially making the net worth for each share more valuable. Nabil Bank and Development Credit Bank also show a very positive position. Although, Machhapuchhre Bank and Laxmi Bank show a low NWPS, both of their position is good as the average NWPS is positive.

There is a maximum fluctuation in the NWPS of Development Credit Bank. This is not a very good signal. Himalayan Bank has a lowest variation in the NWPS i.e. 4. NIC, Nepal Housing Merchant and Finance and Standard Chartered Bank Ltd. have also low fluctuation in the NWPS.

The Standard deviation of the Development Credit Bank is the highest i.e. 408 which shows a risky stock position. Everest Bank, Himalayan, NIC bank, Sidhartha Finance and Nepal Housing and Merchant has a low risky position as their standard deviation is lower than others.

#### **4.1.5 Correlation Coefficient Analysis**

The following tables are presented to analyse the relationship between Market Price per share and other financial indicators DPS, DPR, EPS and NWPS by correlation coefficient. The correlation coefficient helps to determine whether there exists any relationship among different variables.

Interpretation of Correlation Coefficient:

- i. It lies always between +1 and -1.
- ii. Where  $r = +1$ , there is perfect positive correlation
- iii. Where  $r = -1$ , there is negative correlation
- iv. Where  $r = 0$ , there is no correlation

v. Where  $r$  lies between 0.7 to 0.999 (-0.7 to -0.999) then a high degree of positive (or negative) correlation.

vi. Where  $r$  lies between 0.5 to 0.699, there is a moderate degree of correlation

vii. Where  $r$  is less than, 0.5, there is low degree of correlation.

**Table 4.8**

**Correlation Coefficient Analysis between MPS and DPS of the sampled financial institutions for (FY 2005/06 – 2009/10)**

SN	Name of the financial Institution	Correlation Coefficient (RDPS)
1	Nabil Bank	0.871
2	Standard Chartered Bank Limited	0.893
3	Bank of Kathmandu	0.989
4	Everest Bank	0.885
5	Himalayan Bank	0.850
6	Machhapuchhre	0.759
7	Nepal Industrial and Commercial Bank	-1.000
8	Siddhartha Finance	0.277
9	Nepal Housing and Merchant finance	0.142
10	Development Credit Bank Ltd	0.951

(Annual Report, SEBON, 2009/010)

The table 4.8 clearly shows the degree of relationship between MPS and DPS. The degree of relationship between MPS and DPS seems to be significant in all of the above listed institutions except in the case of NIC Bank and Nepal Housing and Merchant Finance. Where, correlation coefficient recorded as NIC bank = -1.000 and NHMF = 0.142.

Besides these institutions, Siddhartha finance has a low degree of correlation i.e 0.277 and the rest of others have a high degree of positive correlation between MPS and DPS.

**Table 4.9**  
**Correlation Coefficient Analysis between MPS and EPS of the Sampled Financial Institutions for (FY 2005/06 – 2009/10)**

<b>SN</b>	<b>Name of the financial Institution</b>	<b>Correlation coefficient (RDPS)</b>
<b>1</b>	Nabil Bank	0.902
<b>2</b>	Standard Chartered Bank Limited	-0.150
<b>3</b>	Bank of Kathmandu	0.808
<b>4</b>	Everest Bank	0.744
<b>5</b>	Himalayan Bank	0.848
6	Machhapuchhre	-0.304
7	Nepal Industrial and Commercial Bank	0.616
8	Siddhartha Finance	-0.759
9	Nepal Housing and Merchant finance	0.343
10	Development Credit Bank Ltd	0.856

(Annual Report, SEBON, 2009/010)

The table 4.9 shows the degree of relationship between MPS and EPS. The degree of relationship between MPS and RPS seems to be highly positive in Nabil Bank, Himalayan Bank, BOK, Everest Bank, and Development Credit Bank. In Standard Chartered Bank, Machhapuchhre Bank and Siddhartha Finance it is highly negative. In Nepal Housing and Merchant finance, the correlation coefficient between MPS and EPS is low.

**Table 4.10**  
**Correlation Coefficient Analysis between MPS and DPR of the Sampled Financial Institutions for (FY 2005/06 – 2009/010)**

SN	Name of the financial Institution	Correlation Coefficient (RDPS)
1	Nabil Bank	0.518
2	Standard Chartered Bank Limited	0.953
3	Bank of Kathmandu	-0.168
4	Everest Bank	-0.387
5	Himalayan Bank	0.536
6	Machhapuchhre	0.759
7	Nepal Industrial and Commercial Bank	0.294
8	Siddhartha Finance	0.673
9	Nepal Housing and Merchant finance	-0.418
10	Development Credit Bank Ltd	-0.365

The table 4.10 shows the degree of relationship between MPS and DPR. In positive correlation, if independent variable increases then it causes to increase dependent variable by 100 % and vice-versa. Here, MPS is dependent variable and DRP is independent variable.

The degree of relationship between MPS and DPR of Standard Chartered Bank ltd. is highly positive. Bank of Kathmandu, Everest Bank, Nepal Housing and Merchant Finance Development Credit Bank have negative correlation. Such a situation is not a healthy financial environment for the bank and financial institutions in Nepal.

**Table 4.11**

**Correlation Coefficient Analysis between MPS and NWPS of the Sampled financial institutions for (FY 2005/06 – 2009/010)**

<b>SN</b>	<b>Name of the financial Institution</b>	<b>Correlation Coefficient (RDPS)</b>
1	Nabil Bank	0.950
2	Standard Chartered Bank Limited	0.933
3	Bank of Kathmandu	0.918
4	Everest Bank	0.940
5	Himalayan Bank	-0.836
6	Machhapuchhre	0.988
7	Nepal Industrial and Commercial Bank	0.626
8	Siddhartha Finance	0.413
9	Nepal Housing and Merchant finance	-0.980
10	Development Credit Bank Ltd	0.811

The above 4.11 table depicts the major output of correlation between MPS and NWPS of the sampled companies. There is a high degree of positive correlation between MPS and NWPS of all of the commercial banks except Himalayan Bank. Himalayan Bank has negative correlation. Both of the finance companies have medium correlation. And Development Credit Bank has higher degree of positive correlation.

#### 4.1.6 Regression Analysis between MPS and DPS

1.2.1.1 Table 4.12

##### Regression Analysis between MPS and DPS

S.N	Name of the Financial Institution	Regression coefficient		Equation(Y=a+bx)
		Constant(a)	Slope(b)	
1	Nabil Bank	24.60	0.028	MPS = 24.60+ 0.028 DPS
2	Standard Chartered Bank Limited	86.44	0.014	MPS = 86.44+ 0.014 DPS
3	Bank of Kathmandu	-8.88	0.065	MPS = -8.88+ 0.065 DPS
4	Everest Bank	17.14	0.005	MPS = 17.14+ 0.005 DPS
5	Himalayan Bank	-16.10	0.049	MPS = -16.10+ 0.049 DPS
6	Machhapuchhre Bank	-7.10	0.054	MPS = -7.10+ 0.054 DPS
7	Nepal Industrial and Commercial Bank	85.88	-0.153	MPS = 85.88 -0.153 DPS
8	Siddhartha Finance	-40.77	0.385	MPS = -40.77+ 0.385 DPS
9	Nepal Housing and Merchant finance	17.52	-0.015	MPS = 17.52 - 0.015 DPS
10	Development Credit Bank Ltd	. 8.62	0.009	MPS = 8.62+ 0.009 DPS

(Annual Report, SEBON, 2009/010)

The table 4.12 depicts the major output of simple regression between market price and Dividend Per share of the sampled companies. The regression coefficient (b) of Nabil Bank, Standard Chartered Bank Limited, Bank of Kathmandu, Everest Bank, Himalayan Bank, Machhapuchhre Bank, Siddharth Finance and Development Credit Bank are positive of 0.028, 0.014, 0.065, 0.005, 0.049, 0.054, 0.385 and 0.009 respectively. They indicate there exists positive relationship between market price and DPS. But the value of b is negative in Nepal Industrial and Commercial Bank and Nepal Housing and Merchant

finance i.e., -0.153 and -0.015. Which means, if DPS decreases by 15.3% and 1.5%, then it leads to increase MPS by 100% and vice versa. In case of slope, if one variable increases then other variable decreases.

#### 4.1.7 Regression Equation of MPS and EPS

1.2.1.2 Table 4.13

#### 1.2.1.3 Regression Analysis between MPS and EPS

S.N	Name of the Financial Institution	1.2.2 Regression coefficient		Equation(Y= a + bx)
		Constant(a)	Slope(b)	
1	Nabil Bank	45.72	0.038	MPS = 45.72+ 0.038
2	Standard Chartered Bank Limited	145.30	0.000	MPS = 145.30+ 0.0
3	Bank of Kathmandu	4.89	0.048	MPS = 4.86 + 0.048
4	Everest Bank	27.86 0	.014	MPS = 27.86+ 0.014
5	Himalayan Bank	10.51	0.045	MPS = 10.51+ 0.045
6	Machhapuchhre Bank	26.22	-0.033	MPS = 26.22- 0.033
7	Nepal Industrial and Commercial Bank	-0.56	0.041	MPS = -0.56+ 0.041
8	Siddhartha Finance	64.21	-0.276	MPS = 64.21- 0.276
9	Nepal Housing and Merchant finance	8.29	0.041	MPS = 8.29+ 0.041
10	Development Credit Bank Ltd	. -51.70	0.378	MPS = -51.70+ 0.37

(Annual Report, SEBON, 2009/010)



The table 4.13 shows the regression equation drawn between MPS and EPS of the 10 sampled institutions. Here, EPS is independent variable and MPS is the dependent variable. With the help of these indicators, we can obtain the slope (b) and the intercept (a) of the equation  $y = a + bx$ . Here, Y is MPS. In the above table, we can see that regression coefficient (b) is positive in Nabil Bank, Bank of Kathmandu, Himalayan Bank, Everest Bank, NIC Bank, Nepal Housing and Merchant Finance and Development Credit Bank i.e. 0.038, 0.048, 0.014, 0.045, 0.041, 0.041 and 0.378 respectively. They indicate that there exists positive relationship between market price and EPS. If EPS increases by 3.8 %, 4.8%, 1.4%, 4.5%, 4.1% and 4.1% MPS increases 100% and vice versa. Standard Chartered Bank Limited has zero slope (b). But in the case of Machhapuchhre Bank and Siddhartha Finance, value of b is negative i.e., -0.033 and -0.276 which means that there exist negative relationship between MPS and EPS which demonstrate that if EPS (independent variable) decreases by 0.3% and 2.76% it leads to increase MPS by 100% and vice versa. In case of slope if one variable increases then other variable decreases.

#### 4.1.8 Regression Equation of MPS and DPR

1.2.2.1 Table 4.14

S.N	Name of the Financial Institution	Regression coefficient		Equation( $Y = a + bx$ )
		Constant(a)	Slope(b)	
1	Nabil Bank	56.82	0.005	$MPS = 56.82 + 0.005 DPR$
2	Standard Chartered Bank Limited	59.14	0.010	$MPS = 59.14 + 0.010 DPR$
3	Bank of Kathmandu	62.39	-0.009	$MPS = 62.39 - 0.009 DPR$
4	Everest Bank	196.94	-0.128	$MPS = 196.94 - 0.128 DPR$
5	Himalayan Bank	13.6	0.044	$MPS = 13.6 + 0.044 DPR$
6	Machhapuchhre Bank	37.87	0.289	$MPS = -37.87 + 0.289 DPR$
7	Nepal Industrial and	-54.05	0.307	$MPS = -54.05 + 0.307 DPR$

	Commercial Bank			
8	Siddhartha Finance	-329.49	2.755	MPS= -329.49+2.755 DPR
9	Nepal Housing and Merchant finance	146.89	-0.281	MPS = 146.89 - 0.281 DPR
10	Development Credit Bank Ltd	72.05	-0.128	MPS = 72.05 - 0.128 DPR

(Annual Report, SEBON, 2009/010)

The table 4.14 shows the regression equation drawn between MPS and DPR of the 10 sampled institutions. Here, DPR is independent variable and MPS is the dependent variable. With the help of these indicators, we can obtain the slope (b) and the intercept (a) of the equation  $y = a + bx$ . Here, Y is MPS. In the above table, we can see that regression coefficient (b) is positive in Nabil Bank, Standard Chartered Bank, Himalayan Bank, Machhapuchhre Bank, NIC Bank and Siddhartha Finance i.e. 0.005, 0.010, 0.044, 0.289, 0.307 and 2.755 respectively. They indicate that there exists positive relationship between market price and DPR. If DPR increases by 0.5 %, 1%, 4.4%, 28.9%, 30.7% and 275% MPS increases 100% and vice versa. The slope (b) of Everest Bank, Bank of Kathmandu, Nepal Housing and Merchant Finance and Development Credit Bank is negative. i.e., -0.128, -0.009, -0.281, -0.128, which means that there exist negative relationship between MPS and DPR which demonstrate that if DPR (independent variable) decreases by 12.8%, 0.9 %, 28.1 % and 12.8 % it leads to increase MPS by 100% and vice versa.

#### 4.1.9 Regression Equation of MPS and NWPS

1.2.2.2 Table 4.15

#### Regression Analysis between MPS and NWPS

S. N	Name of the Financial Institution	Regression coefficient		1.2.3 Equation(Y= a + bx)
		Constant(a)	Slope(b)	
1	Nabil Bank	197.01	0.086	MPS = 197.01+ 0.086 NWPS
2	Standard Chartered Bank Limited	326.55	0.038	MPS = 326.55+ 0.038 NWPS
3	Bank of Kathmandu	104.74	0.094	MPS = 104.74+ 0.094 NWPS
4	Everest Bank	137.72	0.036	MPS = 137.72+ 0.036 NWPS
5	Himalayan Bank	320.73	-0.090	MPS = 320.73- 0.090 NWPS
6	Machhapuchhre Bank	78.19	0.158	MPS = 78.19+ 0.158 NWPS
7	Nepal Industrial and Commercial Bank	101.92	0.063	MPS = 101.92+ 0.063 NWPS
8	Siddhartha Finance	94.46	0.186	MPS = 94.46+ 0.186 NWPS
9	Nepal Housing and Merchant finance	216.02	-0.296	MPS = 216.02- 0.296 NWPS
10	Development Credit Bank Ltd	-463.61	3.360	MPS = -463.61+ 3.360 NWPS

(Annual Report, SEBON, 2009/010)

The table 4.15 presents the regression equation drawn between MPS and NWPS of the 10 sampled institutions. Here, NWPS is independent variable and MPS is the dependent variable. In the above table, we can see that regression coefficient (b) is positive in Nabil Bank, Standard Chartered Bank, Bank of Kathmandu, Everest Bank, Machhapuchhre Bank, NIC Bank and Siddhartha Finance, Development Credit Bank i.e. 0.086, 0.038, 0.094, 0.036, 0.158, 0.063, 0.186 and 3.360 respectively. They indicate that there exists positive relationship between market price and NWPS. If NWPS increases by 0.8 %,

0.38%, 0.9%, 0.36%, 0.63% and 33.6% MPS increases 100% and vice versa. The slope (b) of Himalayan Bank and Nepal Housing and Merchant Finance and is negative. i.e., -0.090 and -0.296 which means that there exist negative relationship between MPS and NWPS which demonstrate that if NWPS (independent variable) decreases by 0.9%, and 2.96 % it leads to increase MPS by 100% and vice versa.

## **4.2 Presentation and Analysis of Primary Data**

### **4.2.1 Empirical Study: Response of Individuals**

An empirical study was carried out to receive a response of the individuals who own equity shares. A questionnaire was used to collect the view of the shareholders. The questionnaire was distributed to 50 persons representing several sectors like NRB, SEBON, NEPSE, etc. The responses of only 40 responses were used for the purpose of analysis as these respondents had purchased equity shares from the secondary market. Others had purchased shares from the primary market. The questionnaire focused on the behavior of the investors while purchasing the equity shares in the secondary market. The questionnaire examines if the investor analyses financial health of the institution or not, if the investor cares the overall market or not and several other aspects that a good investor is supposed to look at.

The number of respondents is shown in the table below.

**Table 4.16**  
**Responses of the Questionnaire**

<b>S.N</b>	<b>Description</b>	<b>Number</b>	<b>Percentage</b>
<b>1</b>	<b>Respondents by Sex</b>	<b>40</b>	<b>100</b>
	Male Respondent	32	80
	Female Respondent	8	20
<b>2</b>	<b>Respondents by Age</b>		
	Age less than 25	6	16
	Male respondent	6	
	Female respondent	-	
	<b>Age 25 to 50</b>	<b>25</b>	<b>62.5</b>
	Male respondent	17	
	Female respondent	8	
	<b>Age above 50</b>	<b>9</b>	<b>22.5</b>
	Male respondent	9	
	Female respondent	-	
<b>3.</b>	<b>Respondents by owning shares</b>		
	In only one financial institution	8	20
	In multiple financial institutions	32	80

*(Source: Field Survey)*

The table 4.16 describes the respondents by their sex and age. We can see that the investors are mostly male investors. Investors of the age less than 25 and above 50 do not include female investors. Investors of age more than 50 were those who were very experienced in trading of the equity shares and those who want to invest their retirement fund all the way through the equity share investment. Most of the investors turn out to be holding the shares of more than one financial institution. The investor, who is aware of

investing in equity share, goes on searching the prospect to invest more in shares. The above table shows that there are more respondents who invest in multiple financial institutions rather than only one institution.

The responses of the questionnaire given by equity share investors are analyzed below.

The first question was “**What inspired you to invest in the equity shares in Secondary Market?**” The response is shown in the following table.

Options	No of Responses	Percentage
a) Lack of alternative investment	6	15
b) Prospects of higher share prices in future	19	47.5
c) Future benefits from the institution	12	30
d) Prevailing share prices	3	7.5
<b>Total</b>	<b>40</b>	<b>100</b>

*(Source: Field Survey)*

Most of the responses were on behalf of prospects of higher share price in future. This shows that these people were looking for capital gains from equity shares. Such responded counted at 47.5 percent of the total respondent. Furthermore, 7.5 percent of the respondents quoted prevailing market price of the equity shares as major reason for purchasing equity shares. Out of total respondents, 15 percent of the respondent said they purchased shares due to lack of alternative investment in the country and the remaining 30 percent said that they purchased shares with a hope that they can gain benefits from the banks in the form of bonus shares, right shares and cash dividends.

The second question dealt on the fact if the investors care for the financial health of the company or not. The question reads, “**While investing, were you aware of the financial health of the institution?**” The response is shown in the following table.

Options	No of Responses	% of total
a) Yes	35	87.5
b) No	5	12.5
<b>Total</b>	<b>40</b>	<b>100</b>

*(Source: Field Survey)*

Of the total respondents 87.5 percent said that they care for the financial health of the company. When asked “**What you see on the financial health amongst profits, earning per share, dividend per share, net worth per share, dividend payout ratio and others if any**”, the response was as:

Options	No of Responses	% of total
a) Profitability	15	37.5
b) Earnings per Share	6	15
c) Dividend per Share	12	30
d) Net Worth per Share	3	7.5
e) Dividend Payout Ratio	2	5
f) Others (Specify) .....	2	5
<b>Total</b>	<b>40</b>	<b>100</b>

*(Source: Field Survey)*

37.5 percent of the respondents said they would look at the profitability of the company as financial health. Amongst them 30 percent said, they would also care for dividend per share, 15 percent said they would care for earning per share 7.5 percent would care for net worth per share and 5 percent would see the dividend payout ratio 5 percent of the

respondents point out other financial indicators that include the management of the company and etc.

Another question was further asked with the same topic. Question number 5 was, “**What factor amongst the financial health inspired you to purchase the equity shares in the secondary market?**” The response to this question was shown as following.

Options	No of Responses	% of total
a) Profitability	16	40
b) Earnings per Share	6	15
c) Dividend per Share	11	27.5
d) Net Worth per Share	3	7.5
e) Dividend Payout Ratio	3	7.5
f) Others (Specify) .....	1	2.5
<b>Total</b>	<b>40</b>	<b>100</b>

*(Source: Field Survey)*

40 percent of the respondents quoted the profitability behind their motive to buy equity share in the secondary market and 27.5 percent of the respondents said they are interested in dividend per share. They expressed their hope verbally that the bank would offer bonus shares in the future. All those who said they look at net worth per share, dividend payout ratio and other factors such as management and future growth while seeing financial health of the bank said that each of these factors were also the motives for the purchase of the equity shares.

Amongst those who said the do not care for financial health while purchasing equity shares in the secondary market, there was one supporting question in question number 8, which read as, “**If you were not aware of the financial health of the institution, why**



**did you invest in the equity shares in Secondary Markets?** [Respond if your answer to Q2 is no]” The response of 5 respondents who say no to question no. 2 is shown in the following table.

Options	No of Responses	% of total
a) Influence from the family	2	40
b) Demonstration effect	1	20
c) Market Prices	2	40
d) Others	0	-
<b>Total</b>	<b>5</b>	<b>100</b>

*(Source: Field Survey)*

Among those respondents who did not care the financial health, 40 % said that the market price of the bank and influence from the family were equal factors that made them invest in the equity shares. 30 percent of the respondents bought equity shares from the secondary market due to the demonstration effect – their friends and close relatives were purchasing equity shares quite regularly.

Question number 3 asked “**If the investor were aware of other financial indicators such as NEPSE index, share market growth and others**”. Most of the response was yes. There was a total of 70 percent (28 responses) positive response. 30 percent (12 responses) of the response was no, indicating that these group of respondents are not bothered with the other financial indicators in the share market. Amongst those who cared for other financial indicators the following are the indicators that they look into.

Options	No of Responses	% of total
Yes		
a) Share market Growth	15	37.5
b) NEPSE Index	13	32.5
c) Others	0	-

No	12	30
<b>Total</b>	<b>40</b>	<b>100</b>

(Source: Field Survey)

32.5 percent of the respondents said they look at the NEPSE index and 37.5 percent said that they look for the share market growth.

Question number 6 was on the share investors' perception regarding the prices of the equity shares. This question was intended to see if the investors think that the share price that they are paying is just right or not. The response showed that a total of 62.5 percent (25 respondents) thought that the share prices were not just right and thus does not correspond to the financial health of the institution. Among these respondents 60 percent said the market price is overvalued, 24 percent said it is undervalued and 16 percent said they cannot answer this. The questions and their responses are shown in the following table.

**Que.6 Do you think the price that you pay correspond the financial health of the institution? [Respond if your answer to Q2 is yes.]**

	<b>No of Response</b>	<b>% of total</b>
a) Yes	15	37.5
b) No	25	62.5
<b>Total</b>	<b>40</b>	<b>100</b>
<b>For those respondents who chose Option 'No' to Question 6 :</b>		
<b>Que.7 You think that the market price is .....</b>		
	<b>No of Responses</b>	<b>% of total</b>
a) Overvalued	15	60

b) Undervalued	6	24
c) Don't know	4	16
<b>Total</b>	<b>25</b>	<b>100</b>

*(Source: Field Survey)*

This question was on the awareness of the share investors on all the directives issued by the Nepal Rastra Bank, securities board, Nepal Stock Exchange and relevant institutions. The question asked, “**Are you aware of the notice, information and directives issued by the Securities Board, Nepal Stock Exchange and Nepal Rastra Bank?**” the response showed that 70 percent were aware of these things and 30 percent were not aware of this information.

The last question was on “**How share investors rated the risk-factor in the share market**”. The response is shown in the following table.

<b>Options</b>	<b>No of Responses</b>	<b>% of total</b>
a) Very high	5	12
b) High	12	30
c) Normal	6	15
d) Low	2	5
e) Very Low	1	2
f) Don't Know	14	35
<b>Total</b>	<b>40</b>	<b>100</b>

*(Source: Field Survey)*

35% of the respondents were unaware of the risk-factor in the share investment. Their response simply turned out to be I don't know. There was a mixed answer to this question. Most of the respondents who said they had some idea on the associated risk responded that the risk factor is higher (12 percent + 30 percent=42 percent). 15 percent of the responses were in favor of normal risk. Only seven percent of the responded said the risk is lower.

## 4.2 Major Findings of the Study

The main findings of the research work are summarized below:

1. Among the commercial banks, Standard Chartered Bank Limited has the highest EPS throughout the study period. The average EPS of St. Chartered is 144.22, SD is 2.71 and CV is 1.88, which shows that there is a very low fluctuation in EPS of Standard Chartered bank.
2. Among the commercial banks, the average Market price of Standard Chartered Bank Limited is highest i.e. Rs. 2211. It has a standard deviation of 829.96 and coefficient of variation is 37.54.
3. The average dividend paid by Standard Chartered bank ltd. is the highest (118) among the financial institutions listed in the above table. Nabil Bank has the second highest i.e. 60.
4. Average DPR of Bank of Kathmandu is 144.89 which is the highest DPR. It means that BOK generally pays 144.89 % of its total earning as dividend to its shareholders. Machhapuchhre Bank has a lowest DPR of 16.01.
5. Among the all, Standard Chartered Bank Ltd. has the highest average NWPS. Nabil Bank and Development Credit Bank also show a very positive position. Although, Machhapuchhre Bank and Laxmi Bank show a low NWPS, both of their position is good as the average NWPS is positive
6. The degree of relationship between MPS and DPS seems to be significant in all of the above listed institutions except in the case of NIC Bank and Nepal Housing

and Merchant Finance. Where, correlation coefficient recorded as NIC bank = -1.000 and NHMF = -0.142.

7. The degree of relationship between MPS and RPS seems to be highly positive in Nabil Bank, Himalayan Bank, BOK, Everest Bank, and Development Credit Bank. In Standard Chartered Bank, Machhapuchhre Bank and Siddhartha Finance it is highly negative. In Nepal Housing and Merchant finance, the correlation coefficient between MPS and EPS is low.
8. The degree of relationship between MPS and RPS seems to be highly positive in Nabil Bank, Himalayan Bank, BOK, Everest Bank, and Development Credit Bank. In Standard Chartered Bank, Machhapuchhre Bank and Siddhartha Finance it is highly negative. In Nepal Housing and Merchant finance, the correlation coefficient between MPS and EPS is low.
9. There is a high degree of positive correlation between MPS and NWPS of all of the commercial banks except Himalayan Bank. Himalayan Bank has negative correlation. Both of the finance companies have medium correlation. And Development Credit Bank has higher degree of positive correlation.
10. The regression coefficient (b) of Nabil Bank, Standard Chartered Bank Limited, Bank of Kathmandu, Everest Bank, Himalayan Bank, Machhapuchhre Bank, Siddharth Finance and Development Credit Bank are positive of 0.028, 0.014, 0.065, 0.005, 0.049, 0.054, and 0.385 and 0.009 respectively. They indicate there exists positive relationship between market price and DPS. But the value of b is negative in Nepal Industrial and Commercial Bank and Nepal Housing and Merchant finance i.e., -0.153 and -0.015

11. Regression coefficient (b) is positive in Nabil Bank, Bank of Kathmandu, Himalayan Bank, Everest Bank, NIC Bank, Nepal Housing and Merchant Finance and Development Credit Bank i.e. 0.038, 0.048, 0.014, 0.045, 0.041, 0.041 and 0.378 respectively. They indicate that there exists positive relationship between market price and EPS.
12. The regression coefficient (b) is positive in Nabil Bank, Standard Chartered Bank, Himalayan Bank, Machhapuchhre Bank, NIC Bank and Siddhartha Finance i.e. 0.005, 0.010, 0.044, 0.289, 0.307 and 2.755 respectively. They indicate that there exists positive relationship between market price and DPR.
13. They indicate that there exists positive relationship between market price and NWPS.
14. Among the total respondents, 87 percent of the share investors cared on the financial health of the company before purchasing equity shares from the secondary market. Amongst the financial health all investors cared for the profitability of the institution. It was found that 75 percent of the respondents care for dividend per share.

## **CHAPTER - V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

Every firm is established to earn profit. Among the total net profit earned each firm divides its net earning into retained earnings and dividend. Dividend is defined as that portion of the net earnings of the firm, which is distributed to the stockholders either in the form of cash or stock as per its dividend policy. General public invest in equity share with an expectation of good returns in future in the form of capital gains, dividends or growth in terms of share holding. The financial performance of the institution and other economical and financial factors mostly affects the decision to invest in equity shares. Other factors like market imperfection, lack of awareness of the investor, lack of skills to analyze the financial health and unhealthy market competition may lead to fake decision while purchasing equity shares.

The Market price of equity shares is affected by various financial indicators like Dividend per share, earning per share, and net worth per share and dividend payout ratio. Therefore this study mainly examines relationship between market price of the equity share with Dividend per share, earning per share, and net worth per share and dividend payout ratio. This study is mainly focused on whether dividend per share of the company affects market price of share or not?

It has been noticed that there is a significant fluctuations in prices of corporate shares even without significant changes in profitability situation of the company. Amongst the listed companies in the Nepal Stock Exchange, commercial banks always hold a big position in overall trading. The trading - in terms of volume and

amount - of the commercial banks make up to 80 percent of total transactions Finance companies and development banks hold second and third share in the trading in volume as well as in the amount. Therefore, study of 10 financial institutions was expected to reflect the overall stock market in Nepal. This research encloses seven commercial banks (Nabil Bank, Standard Chartered Bank, Bank of Kathmandu, Himalayan Bank, Everest Bank, Machhapuchhre Bank and NIC Bank), two finance companies (Nepal Housing and Merchant Finance Limited and Siddhartha Finance Limited) and one development bank (Development Credit Bank).

Both empirical analysis and statistical observations had been performed to carry out this study. The secondary data was collected primarily from the annual reports of the Securities Board Nepal. The data was studied in order to obtain various financial performances, annual meetings, MPS, DPS, NWPS, EPS, DPR, of the sampled financial institutions.

The analysis of MPS, NWPS, DPR, DPS, EPS was done which showed that Standard Chartered Bank Limited has the highest MPS and EPS throughout the study period. Nepal Housing and Merchant Finance have higher average MPS than Siddhartha Finance. The average dividend paid by Standard Chartered bank ltd. is the highest (118). Among the finance companies, Siddhartha Finance and Nepal Housing and Merchant has equal average dividend per share. The average DPR of Bank of Kathmandu is 144.89 which is the highest DPR. Among the all, Standard Chartered Bank Ltd. has the highest average NWPS. Nabil Bank and Development Credit Bank also show a very positive position. For the purpose of statistical analysis of the entire sample banks, Simple correlation and regression analysis is used to interpret the results. The data obtained were analyzed to run the separate set of regression analysis taking market price as the dependant variable and



earnings per share, dividend per share, net worth per share and dividend payout ratio has been taken as independent variable.

Simple regression analysis between the market price and other financial indicators (DPS, EPS, NWPS and DPR) reflected that net worth per share explained the best of the market prices compared to other indicators. Dividend per share and earnings per share were equally explanatory, whereas dividend payout ratio was not a good indicator of stock pricing. The result showed that market price corresponds to the earning per share at a greater extent and then to dividend per share and then to earnings per share. When carrying out individual analysis of the commercial banks, the result drawn was that market prices of different banks correspond to different financial indicators. While market price of equity shares of some of the commercial banks was high with dividend per share, some had high correlation coefficient between market price and net worth per share. Correlation coefficient was significant between dividend payout ratio and market price in some of the cases.

The empirical analysis was carried out on the basis of the responses of 40 share investors. The result of which is shown as follows. Most of the respondents were male respondents investing in more than one financial institution. They invest with an expectation of gaining more in future. They were more concerned with the purchase and sale of shares rather than holding for a longer period of time expecting dividend and bonus share returns.

Among the total respondents, 87 percent of the share investors cared on the financial health of the company before purchasing equity shares from the secondary market. Amongst the financial health all investors cared for the profitability of the institution. It was found that 75 percent of the respondents care for dividend per share.

13 percent of the respondents who did not care for financial health of the company were mainly due to ignorance, rather than due to high knowledge. This group of people bought shares mainly because those in the close circles were purchasing shares. They had little knowledge but were investing in the shares mainly as a result of demonstration effect.

There was little concern on other financial indicators, risk factors and the directives issued by the central bank, Nepal stock exchange, securities board and concerned commercial banks.

## **5.2 Conclusion**

From this study, it has been concluded that there is not a single financial indicator that has a dominated role to determine MPS. One financial indicator that has significant role fixation in MPS for one company is not significant for another company. Dividend practices of all sample financial institutions are neither stable nor constantly growing. Haphazard way of distribution in growing trend is seemed in practice.

## **5.3 Recommendations**

The findings of the study reveals that market prices of the equity shares are overvalued when compared to the earnings per share, which is the primary indicator of the financial status of the concerned financial institution. This was mainly due to ignorance and improper access to financial health of the company. It is recommended that the investors should be conscious while purchasing equity shares.

Then regulatory bodies should play greater role to disclose the financial status of the company on a regular basis. This can help the investors for proper judgment of the situation and for the calculation of expected market prices.

As the empirical study revealed that there are significant numbers of share investors who do not know about the functioning of the securities market and are unaware of the market price setting mechanism, an intensive program to aware this group of share investors must be carried out by Nepal Stock Exchange and Securities Board Nepal. The present efforts to educate share investors have remained at low level. Since the access to internet in Nepal is quite low, it is recommended that Nepal Stock Exchange and Securities Board take on other measures such as printing leaflets and other information brochures to educate the share investors.

The presence of rating agencies and disclosing the ratings of financial institutions on a regular basis can also help strengthen the equity market, as the market prices for high rated institutions would increased when compared to those having low level of ratings.

As this study has not considered the external factors such as investment climate, economic growth, growth of the financial system and others, it is recommended that a detailed study be carried out to observe the market price behavior in Nepal. This study can help identify the real factors that affect market price of equity shares, other than the financial health of the company itself.

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## ***Questionnaire***

1. What inspired you to invest in the equity shares in secondary market?

- a) Lack of alternative investment
- b) Prospects of higher share prices in future
- c) Future benefits from the institution
- d) Prevailing Prices

2. While investing, were you aware of the financial health of the institution?

- a) Yes
- b) No

3. While investing, were you aware of the other financial indicators?

- a) Yes
- b) No

4. [Respond if your answer to question 2 is Yes] What did you see on the financial health?

- a) Profitability
- b) Earnings per Share
- c) Dividend per Share
- d) Net Worth per Share
- e) Dividend Payout Ratio
- f) Others (Specify) .....

5. [Respond if your answer to question 2 is Yes] What factor amongst the financial health inspired you to purchase the equity shares in the secondary market?

- a) Profitability
- b) Earnings per Share
- c) Dividend per Share
- d) Net Worth per Share
- e) Dividend Payout Ratio
- f) Others (Specify) .....

6. [Respond if your answer to question 2 is Yes] Do you think the price that you pay correspond the financial health of the institution?

- a) Yes
- b) No

7. [Respond if your answer to question 6 is No] you think that the market price is

- a) Overvalued
- b) Undervalued
- c) Don't know

8. [Respond if your answer to question 2 is No] If you were not aware of the Financial health of the institution, why did you invest in the equity shares in Secondary markets?

- a) Influence from the family
- b) Demonstration effect (purchase of shares in the close circles)
- c) Market Prices
- d) Others

9. [Respond if your answer to question 3 is Yes] What did you see on other financial indicators?

- a) Share market Growth
- b) NEPSE Index
- c) Others

10. Are you aware of the notice, information and directives issued by the Securities Board, Nepal Stock Exchange and Nepal Rastra Bank?

- a) Yes
- b) No

11. How do you rate the risk factor?

- a) Very high
- b) High
- c) Normal
- d) Low
- e) Very Low
- f) Don't Know



## **B. SPECIFIC QUESTIONS ON DIVIDEND AND DIVIDEND POLICY**

12. What is a main factor that affects the market price of equity share?

- a) Dividend per share
- b) Profitability of the firm
- c) Net Worth per Share

13. In your opinion which is more preferable?

- a) Cash Dividend
- b) Stock dividend

14. Is Increase in cash dividend increases the market price of equity share?

- a) Yes
- b) No

## *Correlation Coefficient Analysis*

### Correlation Coefficient Analysis between MPS and NWPS

#### **Nabil Bank**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	735	233.18	540225	54372.9124		
2006/2007	735	267.3	540225	71449.2900		
2007/2008	1000	301.37	1000000	90823.8769		
2008/2009	1505	337.16	2265025	113676.8656		
2009/010	2240	381.36	5017600	145435.4496	0.950385	0.903233

#### **Standard Charter Bank Limited**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	1550 6	363.8	2402500	132394.0996		
2006/2007	1640	403.16	2689600	162537.9856		
2007/2008	1745	399.25	3045025	159400.5625		
2008/2009	2345	422.37	5499025	178396.4169		
2009/010	3775	468.22	14250625	219229.9684	0.932876	0.870258

### Bank of Kathmandu

Year	MPS(x)	MPS(Y)	X^y	Y^2	r	r2
2005/2006	254	112.21	64516	12591.084		
2006/2007	198	124.93	39204	15607.5049		
2007/2008	295	140.37	87025	19703.7369		
2008/2009	430	155.47	184900	24170.9209		
2009/010	850	181.14	722500	32811.6996	0.918407	0.843471

### Everest Bank

Year	MPS(x)	MPS(Y)	X^y	Y^2	r	r2
2005/2006	430	150.75	184900	22725.5625		
2006/2007	445	150.1	198025	22530.01		
2007/2008	680	171.53	462400	29422.5409		
2008/2009	870	169.15	756900	28611.7225		
2009/010	1379	185.87	185.87	185.87	0.939593	0.882836

### Himalayan Bank

Year	MPS(x)	MPS(Y)	X^y	Y^2	r	r2
2005/2006	1000	220.03	1000000	48413.2009		
2006/2007	836	247.82	698896	61414.7524		
2007/2008	840	246.93	705600	60974.4249		
2008/2009	920	239.59	846400	57403.3681		
2009/010	1100	228.72	228.72	228.72	-0.8362	0.699238

### **Machhapuchhre Bank Limited**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006			0	0		
2006/2007	100	92.2	10000	8500.84		
2007/2008	125	100.77	15625	10154.5929		
2008/2009	256	115.95	65536	13444.4025		
2009/010	320	130.22	130.22	130.22	0.987758 5	0.97566

### **Nepal Industrial and Commercial Bank**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	250	105.19	62500	11064.9361		
2006/2007	180	110.42	32400	12192.5764		
2007/2008	218	124.08	47524	15395.8464		
2008/2009	366	136.84	133956	18725.1856		
2009/010	497	127.74	127.74	127.74	0.626453	0.392443

### **Siddartha Finance Limited**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	145	113.6	21025	12904.96		
2006/2007			0	0		
2007/2008	120	119.48	14400	14275.4704		
2008/2009	158	120.12	24964	14428.8144		
2009/010	158	132.78	107.56	82.34	0.412926	0.170508

**Nepal Housing and Merchant finance Ltd.**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	310	125.36	96100	15715.1296		
2006/2007	240	140.64 6	57600	19779.609		
2007/2008	230	149.16	52900	22248.7056		
2008/2009	214	154	45796	23716		
2009/010	210	154.82	154.82	154.82	-0.97961	0.959627

**Development Credit Bank Ltd.**

Year	MPS(x)	MPS(Y)	X <sup>y</sup>	Y <sup>2</sup>	r	r <sup>2</sup>
2005/2006	152	105.93	23104	11221.1649		
2006/2007	145	105.27	21025	11081.7729		
2007/2008	167	112.72	27889	12705.7984		
2008/2009	305	120.48	93025	14515.4304		
2009/010	390	1131.29	1131.29	1131.29	0.810641	0.657139