

A STUDY ON DIVIDEND POLICY OF COMMERCIAL BANKS IN NEPAL

(With special reference to Everest Bank Ltd, Himalayan Bank Ltd,
Bank of Kathmandu Ltd & Nabil Bank Ltd)

By

MAHESH DUMARU

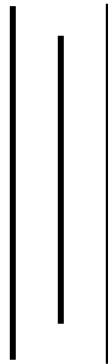
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RECOMMENDATION

This is to certify that the Thesis

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A STUDY ON DIVIDEND POLICY OF COMMERCIAL BANKS IN NEPAL

(With special reference to Everest Bank Ltd, Himalayan Bank Ltd,
Bank of Kathmandu Ltd & Nabil Bank Ltd.)

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*And found the thesis to be the original work of the student and written
according to the prescribed format. We recommend the thesis to
be accepted as partial fulfillment of the requirement for the
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DECLARATION

I hereby declare that the work reported in this thesis entitled "***A study on Dividend Policy of commercial banks in Nepal; With special reference to Everest Bank Ltd, Himalayan Bank Ltd, Bank of Kathmandu Ltd and Nabil Bank Ltd.***" submitted to Shanker Dev Campus, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (MBS) under the supervision of ***Professor Dr. Kamal Das Manandhar, Assistant Dean of Management Faculty*** of Tribhuvan University.

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This thesis entitled "***A study on Dividend Policy of commercial banks in Nepal; With special reference to Everest Bank Ltd, Himalayan Bank Ltd, Bank of Kathmandu Ltd and Nabil Bank Ltd.***" has been prepared in partial fulfillment for the degree of Masters of Business Studies (MBS) under the supervision of my thesis advisor ***Professor Dr. Kamal Das Manandhar, Assistant Dean, Faculty of Management of Tribhuvan University.***

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ABBREVIATIONS

BOK	:	Bank of Kathmandu Limited
BS	:	Bikram Sambat
CV	:	Coefficient of Variation
DPR	:	Dividend Payout Ratio
DPS	:	Dividend Per Share
DYR	:	Dividend Yield Ratio
EBL	:	Everest Bank Limited
EPS	:	Earning Per Share
EYR	:	Earning Yield Ratio
FY	:	Fiscal Year
HBL	:	Himalayan Bank Limited
HMG/N	:	His Majesty's Government of Nepal
LDPS	:	Lagged Dividend per share
LPER	:	Lagged Price Earning Ratio
MPS	:	Market Price per Share
MV/BV	:	Market Value to Book Value
NABIL	:	Nabil Bank Limited
NEPSE	:	Nepal Stock Exchange
NRB	:	Nepal Rastra Bank
NWPS	:	Net Worth Per Share
P/E R	:	Price Earning Ratio
PV	:	Present Value
RE	:	Retained Earning
SEBO	:	Securities Board of Nepal
SEE	:	Standard Error of Estimate
σ	:	Standard Deviation
\bar{x}	:	Mean or Average

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Nepal is a country with various sectors being in developing phase. Nepal is developing its economy from different sectors such as tourism, hydropower, construction etc. For the development of these sectors, financial institutions play a vital role to provide the financial support. Hence, various commercial banks, finance companies, insurance companies etc. are established from both government sector as well as private sector to boost the economy of the country from their perspective. So, the active participation of these financial institutions towards economic development is very important for the country.

Financial Institutions play a major role in the proper functioning and development of the economy of any country. The importance of financial institutions in the developing countries like Nepal is very vast and big. The major roles of financial institutions are following;

- Act as intermediaries between the individuals who lend and who borrow
- Accept deposits and in turn lend it to people who are in need of financial resources
- Make the flow of investment easier
- Pool the scattered funds and mobilize them in productive sector

So no one can deny the role, financial institutions play in developing an economy of a country.

Investment, in its broadest sense, means the sacrifice of current Rupees (Dollars) and resources for the sake of future Rupees (Dollars) and resources. In the other words, it is a commitment of money and other resources that are expected to generate additional money and resources in future.

Investments are made in Assets. Assets generally are of two types;

-Real Assets (Land, Building, Plant, Machineries, Factories etc.)

-Financial Assets (Stocks, Bonds, T-Bills etc.)

Investment in any assets either in real or in financial assets will generate some reward or return for undertaking it. If the return is uncertain, there is some risk in it. So higher the risk, higher is the return and lower the risk, lower is the return.

Return in the investment is combination of two components. The first component that usually comes to mind is the periodic cash receipts (either interest or dividend). This cash receipt is also known as Ordinary Gain on investment. The second component is the appreciation (or depreciation) in the price of the asset and it is known as Capital Gain/Loss. So, mathematically the total return is the sum of Capital Gain/Loss and Ordinary Gain.

Total Return = Capital Gain/Loss + Ordinary Gain

Every shareholders, who invests his/her money expects both capital and ordinary return. That means, the shareholder wants good dividend as well as good value of the share. Otherwise, the shareholder could sell it in the secondary market. So it is necessary for an organization to make an appropriate and convincing dividend policy decision.

Dividend policy is decision regarding distribution of dividend out of net income and retaining the income in the organization. A company has to decide what portion of net income to be distributed to the shareholders and what portion to be retained for reinvestment in future. So, dividend policy is allocating the net income between dividend and retention. Dividend policy may have some impact on the value of stock.

1.2 Focus of the Study

The study will mainly focus on the dividend policies of commercial banks. The study will go through different practices and applications of dividend policies in the Nepalese financial business context. The study will go through the method of dividend payment undertaken by the selected companies. With the view on different theories of dividend policy, it is very difficult subject matter to study. The study will also study the impact of dividend policy on the market price of shares of the selected banks and finance companies.

With the view on the dividend policy, the study will further focus on the different features of dividend such as Dividend per share (DPS), Earning per share (EPS), Market price per share (MPS) and other relating ratios.

1.3 Selected Companies for the study

There are various commercial banks operating within the country. According to the recent data, there are 26 commercial banks operating under the license of A group bank. Some new commercial banks are on the way to start its operations. So, people from various parts of the country are benefiting from the services of those commercial banks. Furthermore, some potential investors are focused on investing on these commercial banks. Because according to the NEPSE transactions, the common share of commercial banks will yield more than other firms. For the purpose of comparative study of dividend policy of commercial banks, 4 commercial banks are selected as

sample among the population of commercial banks. The selected commercial banks for the study are as following;

- 1) Himalayan Bank Limited (HBL)
- 2) Everest Bank Limited (EBL)
- 3) Bank of Kathmandu Limited (BOK)
- 4) Nabil Bank Limited (NABIL)

1.4 Statement of Problem

In recent years, the over-subscription of ordinary shares in initial public offering showed that the people are diverting towards investing in shares, bonds rather than other traditional assets. It is also due to the high increase in the bullion price. Generally, people are investing their money in the common stocks. Some investors are being more rational towards the investment process. They are studying background, past history and performance of the organization, market demand of the stock, dividend policy undertaken by the organization etc. before investing their money. But still more investors are investing without knowing the basic concept and process of the investment. Most of the investors are not aware of the risk involved in investing on such securities. Investors should be aware of the policies and decisions taken by the company management towards wealth or profit maximization.

Dividend policy is the decision to distribute the net income to shareholder or to retain or reinvest in the company. Common shareholders are considered as real owner of the company. So they look after the return on their shares. So dividend policy directly affects the view of the common shareholders towards the company. If company is distributing the dividend regularly, common stockholders will be more positive towards the company. But if the company cannot make its shareholders satisfy, it will lose the belief from the common shareholders.

In general, the dividend policy will affect the stock price in market. If the dividend policy is shareholder oriented, then the market price of the stock will increase. It's because people want to invest in those stocks, which give more return. But some scholars and experts do not agree with this relationship of dividend and market price of stock. Some experts believe to have a positive relationship whereas others believe to have negative relationship. Thus the controversy exists on impact of dividend policy on stock price.

- If there are no tax disadvantages associated with dividends and companies can issue stock at no cost to raise equity whenever needed, dividends do not matter, and dividend policy does not affect value.
- If dividends have a tax disadvantage, dividends are bad, and increasing dividends will reduce value
- If stockholders like dividends, or dividends operate as a signal of future prospects, dividends are good, and increasing dividends will increase value

Moreover; the study will be focused on the following problems regarding the subject chosen for the study. This study deals with the following issues;

- Does there exist the positive or negative relationship between dividend and stock price?
- What kind of dividend policies are following by the commercial banks of Nepal?
- Is there any consistency between dividend policies followed by commercial banks?
- Do the Nepalese investors take care about the dividend policies followed by the related companies before investing?

1.5 Objectives of the study

The main objective of the study is to find out the appropriate dividend policies and practices in Nepal. However, following objectives can be considered more specific;

- To examine the prevailing practices and efforts made in dividend policy

- To examine the relationship between dividend and market price of the stock
- To identify the appropriate dividend policy followed by the commercial banks
- To provide required suggestions on the basis of findings

1.6 Importance & Significance of the study

The study will have a significant importance in the present context of dividend policies taken by the commercial banks in Nepal. As dividend is one of the most important factors to make the stockholders satisfy with the company and make a positive impact on different financial analyzer such as creditors, market researchers etc. The study will be helpful for the companies to take the decisions on the dividend policies. So, the study will provide some knowledge for those new investors who want to invest in new shares without studying the background of the company. Besides, financial institutions may also benefit in one way or the other from this study. Moreover, it will support the future researchers by providing valuable information too.

1.7 Limitation of the study

The study will be limited to the study of the dividend policy of commercial banks. Since, it is not possible to take all commercial banks as sample; the study will be analyzed on some selected sample companies. Also, data and information of only 5 years will be included in the study.

This study is basically for the partial fulfillment for the MBS program. So following limitations could affect the result;

- The study is based on secondary data like annual reports of the selected companies, reviews, journals, articles, published and unpublished thesis works, and various related material from various websites.

- The Balance Sheet, Income Statement and other statements from various published and unpublished reports have been considered as the subject matters of the study.
- The factors like cash dividend, earnings and the market price of stock are considered under study.
- Due to annual distribution system in Nepal, dividend has not been considered for calculation of holding monthly periodic return.
- Dividend policy of only financial institutions is taken into account. Dividend Policy of other companies associated with industry, trade, agriculture is not covered.
- The study covers the data of previous five years period only.
- The study will confine to select only four companies.
- The study is for the partial fulfillment for the MBS program. So, time and cost limits restrain the study.

1.8 Organization of the study

The study will be organized into following five chapters listed below;

Chapter 1: Introduction

This chapter deals with subject matters of the study consisting background of the study, introduction to selected sample companies, statement of problem, objective of the study, significance of the study and limitation of the study.

Chapter 2: Review of Literature

This chapter deals with review of the different literature of the study field. Therefore it includes conceptual framework, theoretical review along with the review of major books, journals, previous research works and thesis reports on the subject matter.

Chapter 3: Research Methodology

This chapter deals with research methodology and it includes research design, population and sample selection, sources of data, data collection procedure, tools for analysis of the study, and limitations of the methodology.

Chapter 4: Presentation and Analysis of Data

This chapter deals with analysis and interpretation of collected data using appropriate financial and statistical tools. This chapter will illustrate the collected data into a systematic format. Similarly, analysis and interpretation of these data will also be included in this chapter.

Chapter 5: Summary, Conclusions and Recommendations

This chapter deals with summary of the entire study. Conclusions of the study will also be included in this chapter. As well as, possible and viable recommendations will also be presented in this chapter.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Conceptual Framework

The three major decisions in a company are *Investment Decision*, *Financing Decision* and *Dividend/Share repurchases Decision*. Dividend decision is not only important for the desire of the shareholders but also firm's internal growth.

Dividend decision of the firm is yet another crucial area of financial management. The important aspect of dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are the most significant internal sources of financing the growth of the firm. On the other hand, dividends may be considered desirable from shareholders' point of view as they tend to increase their wealth. Dividends constitute the use of the firm's funds. (**Pandey, I. M., 1997; 672**)

2.1.1 Introduction to Dividend

Dividend is a periodic payment made by a company to its shareholders. It is compensation to the shareholders for the use of and risk to their investment funds. Or in other words, it is that portion of the net earning divided by the company among the shareholders as a return for their money invested.

When a company earns a profit, that money can be put to two uses: it can either be re-invested in the business (called retained earnings), or it can be paid to the shareholders of the company as a dividend. Paying dividends is not an expense; rather, it is the

division of an asset among shareholders. Many companies retain a portion of their earnings and pay the remainder as a dividend. Publicly-traded companies usually pay dividends on a fixed schedule, but may declare a dividend at any time, sometimes called a special dividend to distinguish it from a regular one.

2.1.2 Dividend Payment Process

Dividends are normally paid quarterly. Dividends must be "declared" (approved) by a company's Board of Directors each time they are paid. There are four important dates to remember regarding dividends. The dividend payment procedure follows following dates;

⇒ Declaration date

The declaration date is the day the Board of Directors announces its intention to pay a dividend. On this day, a liability is created and the company records that liability on its books; it now owes the money to the stockholders. On the declaration date, the Board will also announce a date of record and a payment date.

⇒ Ex-dividend date

The ex-dividend date is the day after which all shares bought and sold no longer come attached with the right to be paid the most recently declared dividend. This is an important date for any company that has many stockholders, including those that trade on exchanges, as it makes reconciliation of who is to be paid the dividend easier. Prior to this date, the stock is said to be cum dividend ('with dividend'): existing holders of the stock and anyone who buys it will receive the dividend, whereas any holders selling the stock lose their right to the dividend. On and after this date the stock becomes ex dividend: existing holders of the stock will receive the dividend even if they now sell the stock, whereas anyone who now buys the stock now will not receive the dividend.

It is relatively common for a stock's price to decrease on the ex-dividend date by an amount roughly equal to the dividend paid. This reflects the decrease in the company's assets resulting from the declaration of the dividend. The company does not take any

explicit action to adjust its stock price; in an efficient market, buyers and sellers will automatically price this in.

⇒ **Holder of Record date**

Shareholders who properly registered their ownership on or before the date of record will receive the dividend. Shareholders who are not registered as of this date will not receive the dividend. Registration in most countries is essentially automatic for shares purchased before the ex-dividend date.

⇒ **Payment date**

The payment date is the day when the dividend cheques will actually be mailed to the shareholders of a company or credited to brokerage accounts.

2.1.3 Forms of Payment

Corporate firms choose to make the payment of dividends in view of its objectives, needs and policies. The firms may distribute the dividends in various forms. Some are briefly explained below;

i) Cash Dividend

Most companies pay dividends in cash. Sometimes cash dividend may be supplemented by a bonus issue (stock dividend). A company should have enough bank balance at the time of paying cash dividend, arrangement should be made to borrow funds. When the company follows a stable dividend policy, it should prepare a cash budget for the coming period to indicate the necessary funds which would be needed to meet the regular dividend payments of the company. It is relatively difficult to make cash planning in anticipation of dividend needs when an unstable policy is followed.

The cash account and the reserves account of a company will be reduced when the cash dividend is paid. Thus, both the total assets and the net worth of the company are reduced when the cash dividend is distributed. The market price of the share drops in most cases by the amount of the cash dividend distributed.

ii) Script Dividend

When company has been suffering from the cash problem but has earned profit, script dividend is paid (issued). Script is a form of promissory note promising to pay the holder at specified later date. Under this type of dividend, company issues and distributes to shareholders transferable promissory notes which may be interest bearing or not.

iii) Stock Dividend

Stock dividend is a form of dividend out of two forms; cash and stock. In the stock dividend company distributes shares as dividend to the shareholders' and this dividend is distributed either from past retained earnings or from net profit earned in the respective year. The share price of stock dividend is fixed at market price at the time of dividend declaration.

The declaration of stock dividend will increase the paid up share capital and reduce the retained earnings. Therefore, it involves making a transfer from the retained earnings amount to the other shareholders' equity accounts like common stock and additional paid-up capital (share premium or excess of par value)

There are number of reasons why company declares stock dividend. The following are the reasons;

- to increase share capital
- to provide tax benefit to the shareholders. Receipts of stock dividend is not taxable income but cash dividend is a taxable income
- to conserve cash in the organization. A company having less liquidity pay stock dividend to conserve cash
- to provide psychological value to the shareholders
- to decrease the share price at taxable range

The share issued to shareholders as dividend is called stock dividend. This is method of paying dividend without reducing cash balance. The issue of stock dividend is also known as bonus shares. Payment of stock dividend increases the number of

outstanding shares of the company. Simply, it is a recapitalization of the owner's equity portion, i.e. the reserves and surpluses and transfer a portion of retained earnings to the capital accounts.

iv) Stock Split

Stock split is also a kind of stock dividend where company breaks (increase or decrease) shares through splitting (breaking) the par value of the share. Split takes place in two ways: Straight split, and Reverse split.

Straight stock split: In the straight split company increases number of shares through a proportional reduction in the par value of stock. Straight split takes place to bring the market price in reasonable range (affordable by small investors) and to increase the total dividend without increasing dividend per share. With a stock split, the number of shares increases. Stock splits are similar to stock dividends. As a result of the stock split, the common stock, paid-in capital and retained earnings accounts remain unchanged. Shareholders' equity also stays the same; the only change is in the par value of the stock. Except in accounting treatment, the stock dividend and stock split are very similar.

Reverse stock split: In the reverse stock split, company reduces number of shares outstanding through merging the par values of the stocks. This takes place to bring low priced shares up at desirable trading levels. Reverse stock split is the opposite of straight stock split where the par value increase but the common stock, retained earnings, additional paid-in capital remain unchanged.

v) Stock Repurchase

Company repurchases its own stock as dividend decision. It is also said that stock repurchase is an alternative of cash dividend. Under this plan, company distributes cash to the shareholders buying back some of its own outstanding stock, thereby decreasing the number of shares, which would increase EPS and the stock price.

Company repurchases its own stock due to number of reasons, such as;

- to bring change in the existing capital structure
- to increase value of stocks in the future
- to distribute temporary excess cash
- to manage excess liquidity

vi) Property Dividend

If the declared dividend is provided in the form of property (assets) instead of cash, the dividend is said to be property dividend. This form of dividend may be followed when there are assets that are no longer necessary in operation of the business or in extraordinary circumstances. Company's own products and securities of subsidiaries are the examples that have been paid as property dividend.

vii) Bond Dividend

Bond dividend by its name is a dividend that is distributed to shareholders in form of a bond. In other words company declares dividend in form of its own bond with a view to avoid cash out flows.

Though there are different forms of dividends, in general, the form of dividends popular in Nepal are cash dividend and stock dividend.

2.1.4 Theories of Dividend

Different dividend theories have been advanced and new and thus head to the controversy regarding those theories as the theories consider the dividend decision to be both relevant and irrelevant. Some of the relevant and irrelevant theories have been discussed below;

2.1.4.1 Residual Theory of Dividend

The crux of the argument supporting the relevance of dividends to valuation is that the dividend policy of a firm is a part of its financing decision. As a part of financing decision of the firm, the dividend policy of the firm is a residual decision and dividends are a passive residual.

Residual theory is that in which the first priority is given to the profitable investment opportunities. If there are profitable opportunities, the firm invests in those and residual income (if any) is distributed to stockholders.

A theory that suggests that the dividend paid by the firm should be the amount left over after all acceptable investment opportunities have been untaken. (**Lawrence J. Gitman, 1988; 616**)

Using this approach the firm would treat the dividend decision in three steps as follows;

STEP I: Determine the optimum level of capital expenditure which would be the level generated by the point of intersection of the investment opportunities schedule (IOS) and weighted managerial cost of capital (WMCC) function.

STEP II: Using the optimal capital structure proportion, it would estimate the total amount of equity financing needed to support the expenditures generated in STEP I.

STEP III: Because the cost of retained earnings (K_r) is less than the cost of new common stock (K_n), retained earnings are inadequate to meet this needs, new common stock would be sold. If the available retain earnings are in excess to this needs, the surplus amount would be distributed as dividends.

Under this policy, the firms use earning to finance the investment opportunities having good returns. If the firm has earnings left after financing all acceptable investment opportunities, these earnings would then be distributed to shareholders in the form of dividend policy as strictly a financing decision the payment of cash dividend is passive residual.

2.1.4.2 Wealth Maximization Theory

Under wealth maximization theory, larger dividends is announced and distributed to shareholders in order to (or in hope with) maximize the wealth of the stockholders. Basically, this theory is beneficial for those companies, which are just established and to those companies whose financial profiles are in decreasing trends. The main purpose of

the wealth maximization theory of dividend is to make assurance to the stockholders that company has better market value and good future.

2.1.5 Overview: Dividend Policy

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividends constitute the cash flows that accrue to stockholders. (*Weston & Copeland, 1992; 657*)

The Objective of a dividend policy should be to maximize a shareholder's return so that value of his investment is maximized. Return consists of two components; dividends and capital gains. Dividend policy has a direct influence on these two components of return. (*Pandey I. M., 1997; 672*)

Dividend Policy involves the decision by the financial manager to pay out earnings or to retain them for reinvestment in the firm.

Dividend policy has two opposing effects, which the financial manager must consider. The optimal dividend policy for a firm strikes the balance that investors in the aggregate want between current dividends and future growth, thereby maximizing the price of the stock.

Dividend policy is of great importance in the corporate firm because it affects the financial structure, the flow of fund, corporate liquidity and investor's attitude. Thus, it is one of the crucial decision and firm attempts to maximize the value of the firm's common stock by means of this decision. Due to its rapidly increasing importance, many thoughts and provoking ideas in this area are up-coming, which needs to be reviewed.

2.1.5.1 Stable Dividend Policy

A stable dividend policy is a long term policy. It does not affect by variation in earning from year to year. When a firm constantly pays a fix amount of dividend and maintains it for all times to come regardless of fluctuations in the level of its earnings, it is called a

stable dividend policy. The dividend will be regular. Stability of dividend means regularity in paying dividend even though the amount of dividend may fluctuate from year to year. By stability we maintain a position in relation to a dividend trend line, preferably one that is upward sloping. (*Van Horne, J. C., 2000; 325*)

The shareholders generally prefer stability or regularity of dividend because the company distributes a stable dividend over the year the market price of the share may be increased. It is suitable for those companies, which have got stable income. All other things being the same stable dividend may have a positive impact on the market price of the share. In other words, the term dividend stability refers to the consistency in the stream of dividends. There are three types of dividend stability which are given below.

a) Constant DPS

Under constant DPS, a fixed amount of dividend per share is distributed each financial year throughout some financial years. The dividend per share for every year is constant. Such as if ABC Company pays Rs. 15 per share as dividend to the equity shareholders, the dividend per share for next year will also be Rs. 15 per share under the constant DPS scheme.

b) Constant Payout Ratio

Under constant payout ratio companies pay dividend at constant rate of earning each year. Under this policy the payout ratio remains constant but the dividend fluctuates with earning fluctuations. The variability in dividend signals uncertainty of dividend in the future to the shareholders. Such as if ABC Company pays 20% dividend of total earnings to its shareholders, then the next year also the rate of dividend will be same, but DPS will vary according to the earnings of the Company.

c) Low Regular Dividend plus extra Dividend

Dividends are usually settled on a cash basis, as a payment from the company to the customer. They can also take the form of shares in the company (either newly-created shares or existing shares bought in the market), and many companies offer dividend

reinvestment plans, which automatically use the cash dividend to purchase additional shares for the shareholder.

2.1.5.2 No Immediate Dividend Policy

If the company does not declare dividend unless the company earn large income is called no immediate dividend policy. In other words, if there is not any hurry about dividend payment and if it could be only when the company earns more profit is known as no immediate dividend policy. This policy is usually pursued the following circumstances;

- When the firm is new and rapidly growing concern, which needs tidy amount of funds to finance its expansion program
- When the firms access to capital market is difficult
- When availability of funds is costlier
- When stockholders have agreed to accept higher return in future

2.1.5.3 Regular Stock Dividend Policy

If the company regularly pays dividend to its shareholders is stock instead in cash, then it is called regular stock dividend policy. Regular stock dividend policy is also designated as bonus shares. Such policy should follow under the following circumstances;

- When the firm needs cash generated by earnings to cover its modernization and expansion project
- When the firm is deficient in cash despite high earnings, this is particularly true when the firm's sale is affected through credit and entire sales proceeds are tied in receivables

2.1.5.4 Irregular pay Dividend Policy

It is the policy in which, the firm does not pay any fixed amount of dividend every year of dividend varied in correspondence with change in level of earnings, i.e. higher earnings means higher dividend and vice versa. The firm with unstable earnings also adopts this policy, when there are investable opportunities the company retains more and when there

is not any investable opportunities, the company distributes the earnings as dividend or there is not regularity of dividend payment therefore it is the most used type of dividend policy in the Nepalese context of present.

2.1.6 Dividend-Reinvestment Plans

A plan that enables a stockholder to automatically reinvest dividends received back into the stock of the paying firm. There are two types of DRPs.

- 1) Plans which involve only 'old' stock that is already outstanding
- 2) Plans which involve newly issued stock

Some companies have dividend reinvestment plans, or DRIPs. These plans allow shareholders to use dividends to systematically buy small amounts of stock, usually with no commission and sometimes at a slight discount. In some cases the shareholder might not need to pay taxes on these re-invested dividends, but in most cases they do.

Management and the board may believe that the money is best re-invested into the company: research and development, capital investment, expansion, etc. Proponents suggest that a management eager to return profits to shareholders may have run out of good ideas for the future of the company. Some studies have demonstrated that companies that pay dividends have higher earnings growth, however, suggesting that dividend payments may be evidence of confidence in earnings growth and sufficient profitability to fund future expansion.

When dividends are paid, individual shareholders in many countries suffer from double taxation of those dividends: the company pays income tax to the government when it earns any income, and then when the dividend is paid, the individual shareholder pays income tax on the dividend payment; in many countries, the tax rate on dividend income is lower than for other forms of income to compensate for tax paid at the corporate level. This is often used as justification for retaining earnings, or for performing a stock buyback, in which the company buys back stock, thereby increasing the value of the stock left outstanding. In contrast, corporate shareholders often do not pay tax on

dividends because the tax regime is designed to tax corporate income (as opposed to individual income) only once. The shareholder will pay a tax on capital gains (which is often taxed at a lower rate than ordinary income) only when the shareholder chooses to sell the stock. If a holder of the stock chooses to not participate in the buyback, the price of the holder's shares should rise, but the tax on these gains is delayed until the actual sale of the shares. Certain types of specialized investment companies (such as a REIT in the U.S.) allow the shareholder to partially or fully avoid double taxation of dividends.

Shareholders in companies which pay little or no cash dividends can reap the benefit of the company's profits when they sell their shareholding, or when a company is wound down and all assets liquidated and distributed amongst shareholders.

2.1.7 Factors influencing Dividend Policy

Many variables influence dividends, however. For example, a firm's cash flows and investment needs may be too volatile for it to set a very high regular dividend. Yet, it may desire a high dividend payout to distribute funds not necessary for reinvestment. In such a case, the directors can set a relatively low regular dividend – low enough that it can be maintained even in low profit years or in years when a considerable amount of reinvestment is needed – and supplement it with an extra dividend in years when excess funds are available.

- I. **Stability of earnings:** The nature of business has an important bearing on the dividend policy. Industrial units having stability of earnings may formulate a more consistent dividend policy than those having an uneven flow of incomes because they can predict easily their savings and earnings. Usually, enterprises dealing in necessities suffer less from oscillating earnings than those dealing in luxuries or fancy goods.
- II. **Age of corporation:** Age of the corporation counts much in deciding the dividend policy. A newly established company may require much of its earnings for expansion and plant improvement and may adopt a rigid dividend

- policy while, on the other hand, an older company can formulate a clear cut and more consistent policy regarding dividend.
- III. Liquidity of Funds:** Availability of cash and sound financial position is also an important factor in dividend decisions. A dividend represents a cash outflow, the greater the funds and the liquidity of the firm the better the ability to pay dividend. The liquidity of a firm depends very much on the investment and financial decisions of the firm which in turn determines the rate of expansion and the manner of financing. If cash position is weak, stock dividend will be distributed and if cash position is good, company can distribute the cash dividend.
 - IV. Extent of share Distribution:** Nature of ownership also affects the dividend decisions. A closely held company is likely to get the assent of the shareholders for the suspension of dividend or for following a conservative dividend policy. On the other hand, a company having a good number of shareholders widely distributed and forming low or medium income group, would face a great difficulty in securing such assent because they will emphasize to distribute higher dividend.
 - V. Needs for Additional Capital:** Companies retain a part of their profits for strengthening their financial position. The income may be conserved for meeting the increased requirements of working capital or of future expansion. Small companies usually find difficulties in raising finance for their needs of increased working capital for expansion programs. They having no other alternative, use their ploughed back profits. Thus, such Companies distribute dividend at low rates and retain a big part of profits.
 - VI. Trade Cycles:** Business cycles also exercise influence upon dividend Policy. Dividend policy is adjusted according to the business oscillations. During the boom, prudent management creates food reserves for contingencies which follow the inflationary period. Higher rates of dividend can be used as a tool for marketing the securities in an otherwise depressed market. The financial solvency can be proved and maintained by the companies in dull years if the adequate reserves have been built up.

- VII. Government Policies:** The earnings capacity of the enterprise is widely affected by the change in fiscal, industrial, labor, control and other government policies. Sometimes government restricts the distribution of dividend beyond a certain percentage in a particular industry or in all spheres of business activity as was done in emergency. The dividend policy has to be modified or formulated accordingly in those enterprises.
- VIII. Taxation Policy:** High taxation reduces the earnings of the companies and consequently the rate of dividend is lowered down. Sometimes government levies dividend-tax of distribution of dividend beyond a certain limit. It also affects the capital formation. In India, dividends beyond 10 % of paid-up capital are subject to dividend tax at 7.5 %.
- IX. Legal Requirements:** In deciding on the dividend, the directors take the legal requirements too into consideration. In order to protect the interests of creditors and outsiders, the Companies Act 1956 prescribes certain guidelines in respect of the distribution and payment of dividend. Moreover, a company is required to provide for depreciation on its fixed and tangible assets before declaring dividend on shares. It proposes that Dividend should not be distributed out of capital, in any case. Likewise, contractual obligation should also be fulfilled, for example, payment of dividend on preference shares in priority over ordinary dividend.
- X. Past dividend Rates:** While formulating the Dividend Policy, the directors must keep in mind the dividend paid in past years. The current rate should be around the average past rate. If it has been abnormally increased the shares will be subjected to speculation. In a new concern, the company should consider the dividend policy of the rival organization.
- XI. Ability to Borrow:** Well established and large firms have better access to the capital market than the new Companies and may borrow funds from the external sources if there arises any need. Such Companies may have a better dividend pay-out ratio. Whereas smaller firms have to depend on their internal sources and therefore they will have to build up good reserves by reducing the dividend pay out ratio for meeting any obligation requiring heavy funds.

- XII. Policy of Control:** Policy of control is another determining factor is so far as dividends are concerned. If the directors want to have control on company, they would not like to add new shareholders and therefore, declare a dividend at low rate. Because by adding new shareholders they fear dilution of control and diversion of policies and programs of the existing management. So they prefer to meet the needs through retained earning. If the directors do not bother about the control of affairs they will follow a liberal dividend policy. Thus control is an influencing factor in framing the dividend policy.
- XIII. Repayments of Loan:** A company having loan indebtedness are vowed to a high rate of retention earnings, unless one other arrangements are made for the redemption of debt on maturity. It will naturally lower down the rate of dividend. Sometimes, the lenders (mostly institutional lenders) put restrictions on the dividend distribution still such time their loan is outstanding. Formal loan contracts generally provide a certain standard of liquidity and solvency to be maintained. Management is bound to hour such restrictions and to limit the rate of dividend payout.
- XIV. Time for Payment of Dividend:** When should the dividend be paid is another consideration. Payment of dividend means outflow of cash. It is, therefore, desirable to distribute dividend at a time when is least needed by the company because there are peak times as well as lean periods of expenditure. Wise management should plan the payment of dividend in such a manner that there is no cash outflow at a time when the undertaking is already in need of urgent finances.
- XV. Regularity and stability in Dividend Payment:** Dividends should be paid regularly because each investor is interested in the regular payment of dividend. The management should, in spite of regular payment of dividend, consider that the rate of dividend should be all the most constant. For this purpose sometimes companies maintain dividend equalization fund.

2.1.8 Conflicting Theories of Dividend Policy

Basically two schools of thoughts have been advanced in the theoretical literature of finance. One school, associated with Myron Gordon and John Linter, among others holds that the capital gains expected to result from earnings retention are riskier than dividend expectations. Accordingly these theories suggest that the earnings ratios are typically capitalized at bigger rates than the earnings of a high payout firm, other things held constant. (*Weston & Brigham, 1972; 686*)

The other schools, associated with Merton Miller and Franco Modigliani holds that investors are basically indifferent to returns in the form of dividends or capital gains when firms raise or lower their dividends. If their stock prices tend to rise or fall in like manner, does this prove that investors prefer dividends? Miller and Modigliani argue that it does not; that they affect change in dividends has no the price of a firm's stock is related primarily to information about expected future earnings conveyed by a change in dividends. Recalling that corporate managements dislike cutting dividends, Miller and Modigliani argue that increase in cash dividends raise expectations about the level of future earnings that they have favorable information content. (*ibid; 687*)

Dividends are probably subject to less uncertain than capital gains, but they are taxed at a higher rate. How do these two forces balanced out? Some argue that the uncertain factor dominates; other feel that the differential tax rate is the stranger force and causes investors to favor corporate retention of earnings; still other like Miller and schools, reason that investors have opportunities for altering the tax effects of dividends, nor do systematic empirical studies settle the manner. (*ibid; 687*)

2.1.9 Role of Expected Dividend on Stock Value

This is one of the prime issues of this research. According to generally accepted theory, stock prices are the present value of future cash flows streams. In other words, the capitalization of income procedure applies to common stocks as well as to bonds and other assets. What are the cash flows that corporations provide to their stockholders?

What flows do the markets in fact capitalize? A number of different models have been formulated. They are; (*Op. Cit; 687*)

- The stream of dividends
- The stream of earnings
- The current earnings plus flows resulting from future investment opportunities, and
- The discounting of cash flows as in capital budgeting models

In the dividend formulation, a share of common stock may be regarded as a similar to a perpetual bond or share of perpetual preferred stock and its value may be established as the present value of its stream of dividends. This is,

Value of stock (P_0) = PV of expected future dividend

$$= \frac{d_1}{(1 + Kg)_1} + \frac{d_2}{(1 + Kg)_2} + \dots$$

$$= \sum_{r=1}^{\infty} \frac{d_1}{(1 + Kg)^r}$$

Stock values with growth:

$$Price = \frac{Dividend}{Capitalization Rate}$$

$$P_0 = \frac{d_1}{Kg}$$

Constant/Normal growth:

$$P_0 = \sum_{t=1}^{\infty} \frac{d_0 (1 + g)^t}{(1 + Kg)^t}$$

Or,

$$P_0 = \frac{d_1}{Kg - g}$$

Super Normal Growth:

Present Price = PV of dividend during super normal growth period + value of stock price at end of super normal growth period discounted back to present

$$P_0 = \sum_{t=1}^N \frac{d_0 (1 + g_s)^t}{(1 + K_s)^t} + \left(\frac{d_N + 1}{K_s - g_n} \right) \left(\frac{1}{(1 + K_s)^N} \right)$$

2.1.10 Review of Company Act

Human is governed by natural rules and human works are governed by their rules and regulations. Companies are approved by constitutional provision of the country. Company's decisions are based on their rules and regulations. But in Nepalese context, companies do not have any rules and regulations regarding dividend policy. There are some provisions regarding dividend in the Company Ordinance, 2062 (2006). These provisions may be seen as under;

Section 2 (q) states that bonus share mean a share issued as an additional share to the shareholders by capitalizing saving earned from profit or reserve fund and also includes a circumstances where paid up value of the shares is increased by capitalizing the said surplus and reserve fund. **(Companies Ordinance 2062)**

Section 179 Bonus shares (1) may be issued by a company to its shareholders out of the amount available for the distribution of dividends after adopting a special resolution to this effect in the general meeting. Sub-section (2) the company shall have to inform the office before issuing bonus shares under sub-section (1).

Section 182: Dividend as follows,

1. Except in the following circumstances, the dividend shall be distributed to the shareholders within 45 days of the decision made to provide the Dividend:
 - a. If any law prohibits the distribution of Dividend
 - b. If the right to receive Dividend is subject to any dispute
 - c. If, without the fault on the part of the company, the Dividend cannot be distributed within the above mentioned time limit due to any god's act
2. A company wholly or partly owned by His Majesty's government shall distribute Dividend only with prior approval of HNG and HMG may issue necessary directives in relation to distribution of such Dividend.
3. If Dividend is not paid stipulated in sub section (1) the same shall be paid together with the interest at the rate as prescribed.
4. The shareholders in whose name the share is registered in the shareholders registers the time of declaration of the dividend or his successor shall be entitled for the payment of the Dividend.
5. A company shall not pay or distribute Dividend except from profit allocated for the purpose.

A company shall eliminate pre-incorporation expenses, deduct the amount depreciation as per the accounting standard prescribed by competent authority under law enforced and allocate any amount to be allocated or paid out of profit under the law enforced and eliminate the accumulated loss of the preceding years before the payment or distribution of Dividend out of the profit in a particular year.

Provided that a company which is required to transfer any amount out of the profit to certain reserve fund under the law in force, Dividend shall not be reserve fund.

In Company Act of India, there are some provisions regarding Dividends;

- Dividend should be paid only out of profit available after providing for depreciation as per rules and after transferring 10 percent or more of profits to reserve.

- Unpaid Dividend should be transferred to "Unpaid Dividend Account" with 7 days of the expiry of 42 days of dividend declarations. If not, the company shall pay an interest of 12 percent per annum.
- Any unpaid Dividend declared before enforcement of this Act should also be transferred to the "Unpaid Dividend Account" within six month from the commencement of this Act.
- Dividend remained unpaid or unclaimed for 3 years from the date of transfer to "Unpaid Dividend Account" must be transferred to the general reserve account of the central Government. The claimants still apply to the government.
- On transfer of the unpaid dividend to the general account the company must also furnish a statement in the prescribed form setting forth the nature of sums, the names and addresses of the concerned persons the amount to which each is entitled and the nature of his claim there to.

2.1.11 Dividend Payment Procedure in Nepal

In Nepalese context, to carry out the dividend payment procedure, the Board of Directors proposes the amount or percent of dividend or bonus shares to the shareholders. The reports on proposed dividend or bonus shares should be presented to following organization;

- Nepal Rastra Bank
- Security Board of Nepal
- Annual General Meeting of the company

If the above listed organizations have approved the proposed dividend, then only the company can carry out the dividend payment process to the shareholders. Any changes on the payment procedures should be reported to them and company should get approval from these organizations.

2.2 Empirical Review

In this part, various studies related to dividend policy from different researchers in different time are reviewed for the study. For the review, some major studies from international scholars and their opinions and conclusions are reviewed in this section. Furthermore, different studies on the context of Nepalese dividend policy from different researchers and students are also reviewed.

2.2.1 Review of Major Studies

There have been so many studies made by different persons and institutions for dividend policy and stock price. There are two opinions regarding to dividend payout and market price of shares. One point of view is that dividends are irrelevant and the amount of dividend payout does not affect the market value of the shares. On the other hand, other point of view suggests that dividend is relevant and the amount of dividend paid affect market price of the shares.

There is always raise the critical and confused question, whether dividend policy affect the market value of the shares or not. To highlight this matter, different studies carried out by different international scholars and researchers should be overviewed. Therefore some of the main researches are going to be discussed below;

2.2.1.1 Walter's Study

An approach developed by Professor Walter is of considerable interest. Walter conducted a study on dividend and stock prices in 1966.

The main point, which he emphasized, is that, there is a significant relationship between the internal rate of return and cost of capital are determining factors to retain profit or distribute dividends. As long as the internal rate of return (R) is greater than the market rate (K), the stock price will be enhanced by retentions and will very inversely with dividend payout.

Walter's model is based on the following assumptions;

- ⇒ The firm finances all investment through retained earnings that is, debt or new equity is not issued.
- ⇒ The firm's internal rate of return 'r' and its cost of capital 'k' are constant.
- ⇒ All earnings are either distributed as dividends or reinvested internally immediately.
- ⇒ The value of EPS and DPS are assumed to remain constant forever in determining a given value.
- ⇒ The firm has a very long or infinite life.

He insists in the fundamental premise that stock prices over the long period reveal the present value of the expected dividends. The retained earnings affect stock prices in consideration of their impact on future dividends. Operating on the objective of maximizing the wealth position of the ordinary shareholders, the appropriate dividend payout is suggested by the following formula

$$V_c = \frac{D + (R_a/R_c)(E - D)}{R_c}$$

Where,

V_c = Theoretical market value of company's ordinary share

R_a = Internal productivity of retained earnings

R_c = Market capitalization rate

E = Earning per share

D = Dividend per share

According to Walter's model, the optimum dividend policy depends on the relationship between the firm's internal rate of return 'r' and its cost of capital 'k'. Walter's view on the optimum dividend payout ratio can be summarized as follows;

a) Growth Firm ($r > k$)

Growth firms are assumed to have ample profitable investment opportunities. These firms would reinvest retained earnings at a rate that is higher than the rate expected by

shareholders from investing elsewhere. These firms will maximize the value per share if they follow a policy of retaining all earnings for internal investment. Thus, the optimum payout ratio for a growth firm is zero. The market value per share P_0 increases as payout ratio declines when $r > k$.

b) Normal Firms ($r = k$)

If the firms have $r = k$, there is no role of stock prices variation i.e. dividends are indifferent from stock price. In other words dividend payment doesn't affect the value of the shares. Whether the firms retains the profit or distributes dividends is a matter of indifference. This kind of firm is referred as normal firms.

c) Decline Firms ($r < k$)

Some of the firms don't have any profitable investment opportunities to invest the earnings. Such firms would earn on their investments rates of returns less than the minimum rate required by investors. Investors of such firms would like earnings to be distributed to them so that they may either spend it or invest elsewhere to get a rate higher than earned by declining firms. The market value per share of a decline firm with $r < k$, will be maximum when it does not retain earning at all. Thus, the optimum payout ratio for a declining firm is 100 percent.

Thus, in Walter's model, the dividend policy of the firm depends on the availability of investment opportunities and relationship between the firm's internal rate of return 'r' and cost of capital 'k'. Reinvestment, if ($r > k$). If, ($r < k$) it should distribute all earnings as dividends. If $r = k$, would remain indifferent.

When dividend policy is treated as a financing decision the payment of cash dividends is passive residual.

Limitations of Walter's model

Walter has assumed that, firm is first financed by retained earnings. It can be applicable to only those firms who have financed all capital by equity. He has assumed that the firm's internal rate of return 'r' and cost of capital 'k' are equal if earnings per share and

dividends per share are constant which is not applicable for Nepalese companies. Rate of return (r) changed with increase and decrease of investment, and cost of capital (k) changes with risk born by the firms.

2.2.1.2 Gordon's Study

Myron Gordon develops another popular model explicitly relating the market value of firm to dividend policy, which explains that dividend policy affects the value of shares even in a situation where the return on investment and required rate of return are equal. This model explains those investors are not indifferent between current dividend and retention of earnings with the prospects of future dividends, capital gain and both. The conclusion of the study is that investor gives more emphasis to the present dividend more than future capital gain. His argument stresses that an increase in dividend payout ratio leads to increase in the stock price for the reason that investors consider the dividend yield (P_1/P_0) is less risky than the expected capital gain.

Hence, investor's required rate of return increases as the amount of dividend decreases. This means there exist positive relationship between the amount of dividend and stock prices.

His model is based on the following assumptions;

- ⇒ The firm is an all-equity firm.
- ⇒ The internal rate of return (R) and cost of capital (K_e) are constant.
- ⇒ The firm and its stream of earnings are perpetual.
- ⇒ The corporate taxes do not exist.
- ⇒ The retention ratio ' b ' once decided upon is constant. Thus the growth rate $g = br$ is constant.
- ⇒ K_e must be greater than ' g '.
- ⇒ No external financing is available, so retained earnings would be used to finance for any expansion.

Based on the above assumptions, Gordon has provided following formula, to determine the market value of a share.

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

Where,

P = Price of the share

E = Earning per share

b = Retention ratio

1 – b = Percentage of earnings as dividends

E (1 – b) = Dividend per share

K_e = Capitalization rate or cost of capital

br = Growth rate (g)

According to this model, the following facts are revealed.

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

2.2.1.3 Modigliani & Miller's Study

In their 1961 article, MM hypothesis provides the most comprehensive argument in support of the irrelevance of dividends i.e. dividend policy has no effect on the share price of the firm. They argue that the value of the firm depends on the firm's earnings,

which result from its investment policy. Thus, when investment decision of the firm is given, dividend decision, the split of earnings between dividends and retained earnings is of no significance in determining the value of the firm.

Their hypothesis of irrelevance is based on the following assumption;

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

Considering the above assumption, MM formula to determine the value of the firm is as follows;

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

Where,

Np_0 = Value of the firm

p_1 = Market price of the share at the end of year

n = no of existing shares

Δn = no of additional shares

I = Total investment

E = Total earning of the firm

There is no any role of dividend in above equation. So Modigliani and Miller concluded that dividend policy has no effect on the share price or value of the firm.

The MM proposition is not relevant in case of Nepal since its assumption significantly deviates when it is applied. The assumption of perfect capital market mechanism and rational investors prove faulty assumptions in case of Nepal. Flotation cost, transformation cost and tax effect on capital gain are neglected by MM hypothesis, which is not appropriate. For the assumption of 'in a world without taxes', one critic

satires, 'such a world is probably a moon or other planet in the universe'. Tax is everywhere in the world. Without taxes, the world economy is not possible. Arbitrage argument as described by MM applied only when there are very sensitive investors and which are lacking in Nepal. The assumption that investors are indifferent between dividend and retained earnings does hold true for unconscious investors.

2.2.1.4 Lintner's Study

Lintner (1956) made an important study focusing on the behavioral aspect of dividend policy in the American context. He investigated a partial adjustment model as he tested the dividend patterns of some 28 companies. He concluded that a major portion of the dividend of a firm could be expressed in the following way;

$$DIV_t = pEPS_t \text{-----} (1)$$

and,

$$DIV_t - DIV_{t-1} = a + b(DIV_t - DIV_{t-1}) + e_t \text{-----} (2)$$

Or,

$$DIV_t = a + bDIV_t + (1 - b)DIV_{t-1} + e_t \text{-----}(3)$$

Where,

DIV_t = Firm's desired payment

$EPSt$ = earnings

P = targeted payout ratio

a = constant relating to dividend growth

b = the adjustment factor relating to the previous period's dividend and new desired level of dividends where $b < 1$

The major findings of this study were as follows;

⇒ Firms generally think in terms of proportion of earnings to be paid out.

- ⇒ Investment requirements are not considered for modifying the pattern of dividend behavior.
- ⇒ Firms generally have target payout ratios in view while determining change in dividend per share (or dividend rate).

2.2.1.5 Friend & Puckett's Study

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

They used dividends, retained earnings and price earnings ratio as independent variables in their regression model of price function. They used supply function and dividend function as well. In their dividend function earnings, last year's dividends and price earnings ratio are independent variables. They quoted that; the dividend supply function was developed by adding, to the best types of relationship developed by Linter.

Symbolically, their price function and dividend supply function are presented below;

Price Function:

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

Where,

P_t = Per share price at time 't'

D_t = Dividends at time 't'

R_t = Retained earnings at time 't'

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

Dividend Supply Function:

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

Where,

E_t = earning per share at time 't'

D_{t-1} = Last year Dividend

Their study based on the following assumptions;

- ⇒ Price does not contain speculation components.
- ⇒ Earnings fluctuation may not sum zero over the sample.

Their regression results based on the equation of $P_t = a + b D_t + cR_t$ showed the company's strong dividend and relatively weak retained earnings effects on three of the five industries, i.e. chemicals, foods and steels. Again they tested other regression equation by adding lagged earnings price ratio to the above equation and resulted the following equation, $P_t = a + b D_t + cR_t + d(E/P)_{t-1}$. They found that more than 80% of the variation in stock prices could be explained by three independent variables. Dividend have predominant influence on stock prices in the same three industries out of five industries but they found the difference between the dividend and retained earnings coefficients are not quite so market as in the first set of regressions. They also found that the dividends and retained earnings coefficients are closed to each other for all industries in both years except for steels in 1956, and the correlation are higher again except for steel.

They also calculated dividend supply equation i.e. $D_t = e + fE_t + gD_{t-1} + h(P/E)_{t-1}$ and they derived price equation for industry group in 1958. In their derived price equation is seems that there was no significant changes from those obtained from the single equation approach as explained above. They argued that the stock prices more

accurately the price earning ratio does not seem to have a significant effect on dividend payout. On the other hand, they noted that the retained earnings effect is increased relatively in three of the four cases tested. Further, they argued that their results suggested price effects on dividend are probably not a serious source of bias in the customer derivation of dividend and retained earnings affects on stock prices. Though, such a bias might be marked. The disturbing effect of short run income movements is sufficiently great.

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

Similarly, they tested the regression equation of $P_t = a + b D_t + cR$ by using normalized earnings again. They obtained normalized retained earnings by subtracting dividends from normalized earnings. That normalization procedure was based on the period 1950-61. Again, they added the prior year's normalized earnings price variable and they compared the result. Comparing the result they found that there was significant role of normalized earnings. When they examine the later equation they found that the difference between dividends and retained earnings coefficients disappeared. Finally they excluded that management might be able to increase prices some what by raising dividends in foods and steels industries. Finally, Friend and Puckett concluded that it is possible that management might be able, at least in some measure to increase stock prices in non-growth industries by raising dividends and growth industries by greater retention, i.e. low dividends.

2.2.1.6 Mahapatra & Sahu's Study

R. P. Mahapatra and P. K. Sahu studied on determinants of corporate dividend behavior in India and econometric analysis. The objectives of their study were as follow;

- ❖ To examine the relative significance of some known dividend models in the Indian situation.
- ❖ To enquire into the determinants of corporate dividend behavior with the help of some known regression models.

Their study was based on the judgmental sample of 90 companies for period 1977-78 to 1988-89. They collected the data from various volumes of Bombay stock exchange official directory, covering a period of 12 years i.e. from 1977-78 to 1988-89.

The known dividend models they use to examine the relative significance in the Indian situation were as follows;

Linter's Model

$$D_t = a_1 + a_1p_1 + a_2D_{t-1} + U_t$$

Britain's Cash Flow Model

$$D_t = a_1 + a_1c_1 + a_2D_{t-1} + U_t$$

Britain's explicit depreciation Model

$$D_t = a_0 + a_1p_1 + a_2D_{t-1} + a_3A_tU_t$$

Darling Model

$$D_t = a_0 + a_1p_1 + a_2D_{t-1} + a_3A_t + a_4\Delta S_{-2} + U_t$$

Where,

D_t and D_{t-1} = Total equity dividend in period 't' and 't-1' respectively

P_t and P_{t-1} = Net Profit after tax in period 't' and 't-1' respectively

C_t = Cash Flow in period't'

A_t = Amount of depreciation in period't'

ΔS_{-2} = Change in sales in a year over the preceding two years

U_t = Error term

A comparative review of the various regression models used in their study revealed that Britain's cash flow model is the "model of good fit" not only at the macro level, but also at the industry group level in the Indian situation. None of the other models provide as satisfactory explanation of dividend behavior as Britain's cash flow model. Based on this model, their study attempted to examine the impact of a few more determinants of dividend behavior with the help of their sample data. Those determinants were Investment Demand (ID), Flow of Net Debt (FND), Interest (I), Liquidity (L), Behavior of Share Price (SP) and changes in the Britain's cash flow model, which provided the model of good fit in most of the sample classifications.

After using various regression equations they found that dividend decision is primarily governed by cash flow, a measure of company's capacity to pay and dividend paid in the previous year, in majority of the sample companies.

Among other determinants, investment demand has been found having significant impact on the dividend decision of electrical goods and chemical industries. The impact of flow of net debt on dividend decision found significant in care of new companies at the aggregate level and paper industry at the industry group level of their study. Similarly, they found that liquidity factor turns out to be a significant determinant of dividend payout in cotton and general engineering industries of their study. They found that determinants like interest payment, change in sales and behavior of share prices in general do not have any significant bearing on the dividend decision of the sample companies.

The findings of the above mentioned studies conducted in the context of India may or may not be applicable in Nepalese perspective because of dissimilarities that exist between Nepalese and Indian Capital market environment. Indian capital market is very big matured, organized and very several years of experiences. Nepalese capital market

is small, unorganized and has experience only few years. Hence the Indian result may not be directly comparable to that of Nepal.

2.2.2 Review of Major Studies on Nepalese context

Since Nepalese capital market is small, and at emerging stage, there are few studies regarding corporate dividend policy and its impact on share prices. Here is little review of studies in Nepalese perspective;

2.2.2.1 Shrestha's Study

There are very few articles published related to dividend in Nepal. The article by Dr. M. K. Shrestha published in 1981 about the dividend performance of some public enterprises highlighted the following issues.

HMG expects two things from the public enterprises: i) They should be in a positive to pay minimum dividend and ii) Public enterprises should be self supporting in financial matters in future years to come but none of these two objectives are achieved by public enterprises.

The article point's irony about government business that government has not allowed banks to follow an independent dividend policy and HMG is found to pressurize dividend payment in case of Nepal Bank Limited regardless of profit. But it has allowed Rastriya Banijya Bank to be relieved from dividend obligation in spite of considerable profit.

2.2.2.2 Pradhan's Study

The study on stock market behavior in small capital market is a popular case study made by Radhe Shyam Pradhan.

Pradhan's study was based on the data collected from 17 enterprises from 1986 through 1990.

The objectives of this study were as follows;

- ◆ To assess the stock market behavior of Nepal.
- ◆ To examine the relationship of market equity, market value to book value, price earnings and dividends with liquidity, profitability level age, assets turnover and interest coverage.

Some findings of his study, among others are as follows;

- ❖ Higher the earnings on stock larger the ratio of dividend per share to market price per share.
- ❖ Dividend per share and market price per share was 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.
- ❖ 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 leverage are more variable for the stock paying higher dividends.

2.2.2.3 Manandhar's Study

The main statement of the problem of the study is to set test whether Nepalese corporate firms consider the lagged earnings and pay dividend in current year. To test this problem, he has considered 17 corporate companies as sample and set different hypothesis and drawn the following conclusion;

- There is significant relationship between the change in dividend policy in terms of DPS and change in lagged earnings.
- There is positive relationship between change in lagged consecutive earnings and dividend per share.
- There is relation between distributed lag profits and dividend.

- When change in lagged consecutive earnings is greater than zero, in 65% of the case change in dividend per share.
- Increase in EPS has resulted to increase in the dividend payment in 66.6% of the cases, while decrease in EPS has resulted decrease in dividend payment.
- Nepalese corporate firms have followed the practice of maintaining constant dividend payment per share.
- Corporate firm do not take into account one year or two year lagged earnings.

2.3 Review of Master's Degree Thesis

In this review section, the unpublished thesis reports prepared by students of master's level are reviewed for the further highlight on the dividend policy and its impact on share price.

Gautam, R. R. (1998) has conducted a research work on comparative study on dividend policy of Nepal Grindlays Bank Ltd, Nepal Indosuez Bank Ltd and Nepal Arab Bank Ltd. The main objectives of the study were;

- To identify the type of dividend policy followed by the banks
- To examine the impact of dividend on share price
- To identify the relationship between DPS and other financial indicators
- To know the uniformity among DPS, EPS and DPR of the sample companies

With various analyses, following conclusions were drawn from the study;

- No clearly defined dividend policy is found followed by the sample companies
- The market price of the share does not seem to be more or less dependent on EPS or DPS
- No significant relationship between DPS and other financial indicators
- No uniformity in EPS but prominent difference in DPS and DPR

Rajbhandari, P. L. (2001) in her comparative study of dividend policy between banks and insurance companies, concluded that the sample institutions have average

earnings which can be considered satisfactory. However, no consistency in dividend payment is found in all the sample institutions i.e. NGBL, NIBL, NABIL, NIC and EIC except NLGI which seems to be paying average DPS Rs. 20 every year.

On her study, she further concluded that none of the six sample institutions have a clearly defined and appropriate dividend policy. The dissimilarity and insignificant relationship between the financial indicators of all three banks and insurance companies helps to conclude that they don't seem to follow and practice the dividend policy as established and developed in our context. However the analysis based on pooled data of dividend payment ratio between banks and insurance companies concluded that there is a kind of similarity in dividend payment decision of banks and insurance companies.

She further concluded on investors that they are not found to be investing their capital by studying the financial performance of the institutions but rather randomly without properly understanding the stock market.

The institutions don't seem to follow the optimal dividend policy of paying regular dividend as per the shareholder's expectation and interest. This would create (increase) uncertainty among the shareholders. But this does not mean that the institutions need to follow liberal dividend policy as the shareholders might even expect higher dividend as always. If the institutions are liberal on shareholders, it might make the company to raise extra capital in the near future.

The major findings of the study also makes conclusion that controversy existed in declaring dividend by the companies in the sense that the major factors like the earning and liquidity position of the firm have been neglected, ignored and disregarded which must have been considered the most.

Dhakal, L. R. (2002) in his study of dividend policy of Banking, Finance companies and Hotel sector has concluded that the retained earnings have strong influence on stock prices in financial sector, compare to others. Another conclusion he found out from the study that there is no positive relationship between market price per share and dividend

per share but stock price of share is affected inconsistently by dividends, earnings, not profit, and net worth. The other point he found out that dividend payment is based on net profit in the individual sector. Lastly, he concluded that all the sectors have not clearly defined the dividend policy. The companies of those sectors do not have clear vision to maintain good image in the stock market.

Shrestha, M. (2004) on her study on dividend practices of listed insurance companies in Nepal concluded that most of the insurance companies of the Nepal give first priority to earnings to get into the decision of dividend and next priority to the past dividend. After that, concern about change in the stock price.

In the study, further concluded that DPS and EPS are positively correlated in all companies, higher EPS will generate higher DPS. There is no uniformity in dividend distribution policy adopted by insurance companies in Nepal. Most companies are not paying regular cash dividend.

At last, the researcher ended the study with the conclusion that the insignificant relationship between DPS and other financial variables (i.e. EPS, MPS, NW and NP) indicate that the dividend policy of most of the companies is not better. They are adopting the dividend policy according to their required with the change in time.

Luitel, B. (2006) has done a study related to dividend policy and its impact on share price in Nepalese context. The researcher has selected three commercial banks and three manufacturing companies as sample for the study. From the study, the researcher has specified following conclusions;

- The market price of the share is the consequent results of various factors. Since the study aims at finding the impacts of dividend policy on the market price of the share.
- The study of DPS and MPS indicate that stocks with larger ratio of dividend per share to market price per share have higher dividend yield.
- The better the liquidity position the higher will be the amount to pay dividend.

- The more the earning generated by the company, the higher will be the dividend distribution and vice versa since EPS and DPS are positively correlated.
- The positive correlation between the MPS and DPS calls to draw the conclusion that the more the company distribute dividend the higher will be the market price per share. However, the bonus share distribution intervened this conclusion because such relation is negative in case of EBL, UNL and NLOL. It may be the impact of intervening variable like bonus share.
- This study rests to conclude that the cash dividend can't be said as a sole factor to affect price of share. But there are other factors like earning power, bonus share, information value of dividend decisions etc. that also cause the share price fluctuation. In the imperfection market mechanism like Nepalese share market, the security brokers, other market makers and the rumors they spread in market have also a significant role in the share price fluctuation.

Dongol, G. (2006) has done a study, which has main objective as to find out the impact of dividend policy on market price of stock. From the study, the researcher has found that none of the sample firms have adopted consistent dividend policy. The researcher further concluded that dividend policy depends upon earnings, and EPS and DPS having positive correlation may impact upon market price of stock.

The researcher has done some multiple regression analysis, which gave some conclusions. As from the first model of multiple regression analysis, there is positive impact of LDPS and EPS on DPS in some cases, whereas in some cases there is negative impact too. Similarly, as from the second model of multiple regression analysis, the dividend policy sometimes makes impact upon MPS whereas sometimes just to the reverse it does not make any impact upon MPS at all.

The researcher further concluded on the study that the majority of Nepalese firms give first priority to the earnings to make dividend decisions. The second priority goes to the availability of cash and at the same time the priority also goes to the analysis of past dividend trend. Moreover, the study found that the concern about maintaining or

increasing the stock price level also influences the dividend policy of the firm and hence that may make impact upon market price of stock.

Ranabhat, B. (2006) has done research on dividend policy of banks, insurance companies and finance companies. On his study, he has analyzed the dividend policy situation of different sample firms with the help of different analytical tools. From the analysis he has done, he reached on the conclusion that;

- The capital market of Nepal is still immature
- Dividend practices of all sample financial institutions are neither stable nor constantly growing. Dividends are distributed on an ad hoc basis.
- Change in DPS affect the market price per share differently in different financial institutions as under.
- The study of the impact of cash dividend on market price of share revealed that dividend per share has positive impact on MPS in all sectors.
- DPS and EPS are positively correlated. The highest relationship has been found in banking sector and lowest in insurance and finance sector.
- Market price per share of listed companies is higher than net worth per share. There exist vast difference between MPS and NWPS. This situation clearly indicates that the investors are not comparing book value and market value of the share.

Bhurtel, K. (2006) has done research on dividend policy and its effects on stock price, with taking some selected commercial banks as sample to collect the data. From the study held by the researcher, it can be concluded that there is not any consistency in the dividend policy of the sample firm except SCBL, therefore sometimes the result of the different test accept the theoretical assumption of dividend and sometimes do not. Company used to make dividend decision haphazardly.

Researcher found the majority of the Nepalese firm gives first priority to earnings to get in to decision of dividend. The second priority goes to the cash availability and third priority give to past dividend (terminologically lagged dividend). After all concern about

maintaining or increasing the stock price priority also influences the dividend policy of the firm in Nepal.

The market price of the stock is influenced by the dividend decision in most of the cases. However, the influences is not much high and not always in the same direction. Sometimes dividend decision effect positively to MP and sometimes it affect negatively to MP. The investors seem to invest for capital gain rather than dividend. Thus a little impact of dividend decision on stock price is recognized in case of Nepalese banking sectors.

Raut, S.R. (2008) has carried out the study on dividend policy of commercial banks. She has done her study taking three commercial banks (NIBL, SCBNL, and NSBI) as sample banks for her study. In her study she has analyzed the relationship of dividend, market price and earnings with correlation analysis as well as regression analysis. Through out the study, she reached on conclusion that the banks are paying dividend to the shareholders there is instability of dividend and inconsistent payout ratio is the most applied phenomenon of Nepalese dividend distribution practices. Further she concludes that the banks don't seem to follow the well defined optimum dividend policy of paying regular dividend as per the shareholders expectation.

Every year EPS and MPS of selected commercial banks are highly fluctuating. The CV of EPS has ranged from 8.55 to 53.08 percent. Similarly market prices per share are also fluctuating. This short of fluctuation causes not to win public faith. The average dividend yield of banks has ranged from 1.051 percent to 4.59 percent. The highest percent of 4.59 % is also cannot be considered so encouraging figure.

From her analysis through regression equation concluded that a change in dividend per share affects the share price differently in different banks. The market price of share is affected by the financial position and the dividend paid by the firms.

Yadav, V.K (2007) has carried out study on dividend policy and its impact on market price of stock, with taking two different sectors banking and insurance companies for the study. The researcher has taken Nabil Bank and Himalayan Bank from banking sector

and Himalayan General Insurance Company Limited and United Insurance Company Nepal Limited from insurance company sector as sample firms for the study.

The researcher has concluded that more or less the dividend policy depends on the earning per share of a company; the earning per share and dividend per share having the positive relation may also impact on market price of stock.

For that argument, two multiple regression equations formed. The first multiple regression was formed to see the relationship of the average dividend per share and earning per share to dividend per share. The results of different test reveal that there is positive relationship between DPS & EPS most of the times. But for MPS it would not happen all the time that increase of EPS & DPS increases the MPS. The second multiple regression was formed to see the effect of EPS & DPS to MPS. But it also concludes the fact that some times the increase in DPS & EPS affects the MPS and some times it does not.

The relation between DPS and EPS were observed as positive all the times in the simple firms, it could highlight the fact that “pay as much as the investors expects from their investment.” Among the sample firms, HBL is a strong company with the financial market reputation, if the result of it compared to other firms, it can be said that although EPS affects DPS it is less concerned with MPS. Therefore the MPS is more or less dependent with DPS in the efficient capital market.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The process of searching again and again to come closer and closer to the truth is known as research; (*Pant, 2009; 6*). Research means searching for some new fact or knowledge regarding to the specific problem. By research, the problem is analyzed through various systematic tools, and draws appropriate conclusions.

Research Methodology is a way to systematically solve the research problem; (*Kothari, 1990; 10*). It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher, studying his research problem among with the logic behind them.

This chapter looks into the research design, nature and sources of data, data collection procedure and tools & technique of analysis.

A research methodology helps us to find out accuracy, validity and suitability. The justification on the present study can not be obtained without help of proper research methodology. For the purpose of achieving the objectives of study the applied methodology is used. The research methodology used in the present study is briefly mentioned below.

3.2 Research Design

The research design is a mixture of descriptive, exploratory, and analytical. While analyzing the research, both parametric and non-parametric tools will be used wherever and whenever necessary.

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Descriptive and analytical research designs have been used to this study. With the help of maintained research design the study evaluates the dividend policy structure of selected sample commercial banks as well as its impact on the market price of the stocks of the respective banks.

The research design is basically focused on analytical study. Ratio analysis, correlation and regression analysis have been done for analyzing the research. The research examines the relationship of EPS, MPS and DPS with respect to the dividend policy of the banks.

3.3 Sources of Data

Data is the raw material for any kind of research through which further analysis of study can be done. Therefore, data collection happens to be a very important task. In this study, various types of data collection methods are adopted. They are presented in the tabular and graphic method as required in this report. Mainly primary and secondary data collection methods have been used.

The primary data are those which are collected a fresh and for the first time and thus happen to be original in character. The Secondary data, on the other hand are those, which have already been collected by some one else and already, been passed through the statistical process; **(Kothari, 1990; 117)**

Primary sources of necessary data and materials will be collected from direct and indirect conversation with the employees or staffs and the customers of various commercial banks. Some materials and data will be collected from interview, face to

face and telephone interview company officials, customers of the company and various departments whenever and wherever necessary.

Secondary sources of data will be collected from the Annual Reports of sample commercial banks, final accounts, income statements, official records, financial statistics and other journals. Various financial reports from Securities Board of Nepal (SEBO), Nepal Stock Exchange (NEPSE), Nepal Rastra Bank (NRB) and other financial organizations will provide other necessary data needed for the study. Various other related organizations and departments will be visited to collect necessary data for the study.

The study is mainly based on secondary data. So, the major sources of secondary data for this study are as follows:

- a) Annual reports of the HBL
- b) Annual reports of the EBL
- c) Annual reports of the BOK
- d) Annual reports of the NABIL
- e) Reports of NRB
- f) Reports of NEPSE
- g) Published and unpublished bulletins, reports relating to dividend policy
- h) Previous studies and reports
- i) Unpublished official records
- j) Various Books
- k) Various Internet Websites

3.4 Population and Sample

Currently there are 26 commercial banks are operating with expanding their branches all over the country. So collection the data from all banks is very complicated. With that

reason only some banks are chosen as sample for the study. The study will mainly focus the data from such sample commercial banks. The selected commercial banks for the sample are;

- 1) Himalayan Bank Limited (HBL)
- 2) Everest Bank Limited (EBL)
- 3) Bank of Kathmandu Limited (BOK)
- 4) Nabil Bank Limited (NABIL)

3.5 Data Collection Procedure

The data and information are collected from both the primary and secondary sources. For the collection of secondary data and information, directives of Nepal Rastra Bank, annual reports selected sample commercial banks; various publications of Nepal Rastra Bank, Security Board of Nepal, NEPSE, magazines, the other publications and the internet websites have been used to search about the dividend policy. Also, for other related information, various books and periodicals have been referred from library.

3.6 Data Analysis Tools

Since the study will be including both primary and secondary data, the financial and statistical tools will be used to analyze the relationship between the variables. Central Tendency Measurement, Regression analysis and other ratio analysis will be used to analyze the collected data.

The relationship between different variables related to study topic will be illustrated with the use of different financial and statistical tools. The various calculated results obtained through financial and statistical tools will be tabulated. Then, the results will be compared with various other results and interpreted.

Various processing tools are used to present and analyze the data collected from different sources. The data from different sources are in raw form. Those data should be

presented in various statistical ways. For the analysis of the data, different statistical tools such as percentage, ratios, mean, standard deviation and other comparisons are calculated for effective study.

Before analyzing the data, the data and information have been presented systematically in the formats of Tables, Graphs and Charts which will explain a lot about the data and information collected.

For the analysis of the research study, the following financial tools and statistical tools are used.

3.6.1 Financial Tools

Ratio analysis is the best and widely used tools for financial analysis. It measures the strength and weakness of the company. A ratio is defined as a relationship between two components, numbers, amount or measurements, which shows how much greater one is than another. Hence, a ratio analysis refers to the quantitative relationship between two variables. Ratios can be taken as expression of relationships between two items or group of items and therefore may be calculated in any number and ways so far meaningful co-relationship is obtainable.

Pandey (1995) emphasizes that a ratio is used as a benchmark for evaluating the financial position and performance of a firm.

There are some measures to analyze the effectiveness of the Dividend Policy. These measures are useful to both company and the stockholders. So, following measures will be used in the study;

- **Dividend Per Share (DPS):** The Net Profit after the deduction of taxes belongs to the shareholders. The amount of earning distributed and paid as cash dividend on per share basis is Dividend Per Share (DPS). DPS shows the part of earning distributed to the shareholders on per share basis.

$$\text{Dividend Per Share (DPS)} = \frac{\text{Total Dividend to shareholders}}{\text{No. of Shares outstanding}}$$

- **Earning Per Share (EPS):** Apart from the rate of return, the profitability of a firm from the point of view of the ordinary shareholders is the Earning Per Share (EPS). It measures the profit available to the equity shareholders on per share basis. EPS will be useful to evaluate change in the company's earning power on per share basis over certain period of time or year.

$$\text{Earning Per Share (EPS)} = \frac{\text{Net Profit after Tax}}{\text{No. of Shares outstanding}}$$

- **Market Price Per Share (MPS):** It is the value of the stock which is traded in the secondary market of the stock. It is the price given to a particular share in the secondary market. The MPS may go above par value or may fall below par value. It is generally believed that if the EPS and DPS are high, the market value of the share (MPS) will also be high. But some other factors also influence the rise and fall of market price of share. Such as political instability, inflation, supply of money etc.
- **Dividend Payout Ratio:** This ratio measures the relationship between the earning belonging to the ordinary shareholders and the dividend paid to them. It measures the percentage of earnings that the company pays in terms of dividends to the shareholders. It will also show the percentage of earnings to be retained as reserve for the future investment for the company.

$$\text{Dividend Payout Ratio (DPR)} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

There is a reciprocal relationship between dividends and retained earnings, the higher the dividend payout ratio, the lower will be the retained earnings and hence the capacity of internal financing of the firm is checked. It is calculated to indicate the percentage of the profit that is distributed as dividend. This ratio is calculated by dividing dividend per share by the earning per share.

Thus,

$$\begin{aligned} \text{Retention Ratio} &= (1 - \text{Dividend payout ratio}) \\ &= (1 - \text{DPR}) \end{aligned}$$

- **Price Earning Ratio (P/E Ratio):** This ratio reflects the market value per share for each rupee of currently reported earning per share. In other words, this represents the amount which investors are willing to pay for each rupee of the firm's earnings.

$$\text{Price Earning Ratio (P/E Ratio)} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$$

- **Dividend Yield Ratio:** It is defined as the ratio of dividend per share to market value per ordinary share. Its measures the return that an investor can make from dividends alone. This ratio highly influences the market price per share because a small change in dividend per share can bring effective change in the market value of the share. The share with higher dividend yields is worth buying. Dividend has important guidance to commit funds for buying of shares in the secondary market.

$$\text{Dividend Yield Ratio (DYR)} = \frac{\text{Dividend Per Share}}{\text{Market Price Per Share}}$$

- **Earning Yield Ratio:** The ratio is defined as the ratio of earnings per share to market value per ordinary share. The share with higher earnings yield is worth buying. Earning yield is informative to compare the market share prices of stocks in the secondary market.

$$\text{Earning Yield Ratio (EYR)} = \frac{\text{Earning Per Share}}{\text{Market Price Per Share}}$$

- **Net Worth Per Share (NWPS):** Net Worth is the total assets minus total liabilities of an individual for a company. For a company it is called shareholders' preference and may be referred as book value. Net Worth per share is the ratio of Net Worth on number of outstanding share.

$$\text{Net Worth Per Share (NWPS)} = \frac{\text{Shareholder's Equity}}{\text{Number of shares}}$$

- **Market Value to Book Value (MV/BV) Ratio:** This ratio measures that the market situation per share in the competitive open market with respect to book

value per share of joint venture banks. This ratio indicates the price that the market is paying for the share that is reported from the net worth of the banks.

This is important to compare the market share prices of different stocks on the basis of the book value per share. It shows the market share price of a stock as a percentage of book value per share and the effect of later on the former. The higher ratios represent to conclude that the better performance of joint venture banks in terms of market price per share to book value per share. This ratio can be derived by dividing market price per share by book value per share.

$$\text{Market Value to Book Value Ratio (MV/BV Ratio)} = \frac{\text{Market Value Per Share}}{\text{Book Value Per Share}}$$

3.6.2 Statistical Tools

The basic tools of statistics are Average or Mean, Standard Deviation (σ) and Coefficient of Variation (C.V.). The following formulae have been used to calculate the value of Mean (\bar{x}), Standard Deviation (σ) and Coefficient of Variation (C.V.);

$$\text{Average or Mean } (\bar{x}) = \frac{\sum x}{n}$$

$$\begin{aligned} \text{Standard Deviation } (\sigma) &= \sqrt{\frac{\sum x^2}{n-1} - \left(\frac{\sum x}{n-1}\right)^2} \\ &= \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}} \end{aligned}$$

$$\text{Coefficient of Variation (C.V.)} = \frac{\text{S.D. } (\sigma)}{\text{Mean } (\bar{x})} \times 100\%$$

There are other statistical tools available to measure the relationship between two data, validity of the calculations and other measures. The following statistical tools are also used to analyze the calculated data:

3.6.2.1 Regression Equation

Regression analysis is concerned with the study of the relationship between one variable called explained or dependent variable and one or more other variables called independent or explanatory, variables. There are two types regression analysis. One is called simple linear regression analysis, which is concerned with the study of the relationship between one variable called the dependent or explained variable and one other variable called independent or explanatory variable other is called multiple-linear regression analysis, which is concerned with the study of the relationship between one variable called dependent or explained variable and more than one other variables called independent or explanatory variable. The regression analysis submits the following two concepts:

a) Regression Constant (a)

The value of constant which is intercept of the model indicates the average level of dependent variable when independent variable (s) is zero. In other words, it is better to understand that “a” indicates the mean or average effect and dependent variable if all the variables omitted from the model.

b) Regression Coefficient (b)

The regression coefficient of each independent variable indicates the marginal relationship between that variable and value of dependent variable, holding constant the effect of all other independent variable in the regression model. In other words, the coefficients describe how changes in independent variables affect the values of dependent variable’s estimate.

3.6.2.2 Coefficient of (Multiple) Determination (R^2)

The coefficient of determination is a measure of degree (extent or strength) of linear association or correlation between two variables, one of which happens to be independent and other being dependent variable. In other words, R^2 measures the percentage total variation in dependent variables explained by independent variable the coefficient of determination can have value ranging from zero to one. A value of one can

occur only if the unexplained variation is exactly on the regression line. In this study, R^2 is calculated as the requirement of model.

3.6.2.3 Standard Error of Estimate (SEE)

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

3.6.2.4 F-Statistic

To test the validity of the assumption, f-test is also used. The difference between two sample mean can be studies through t-test where as to examine the significance of the differences between more than two sample means at one at the same time, F-test is used. F-test, i.e. the technique of analyzing variance enables to test the significance of difference between more than two sample means. Using this technique, one will be able to make inferences about whether his/her regression equation provides statistically significant result or not.

3.6.2.5 Regression Model Used

In this study the multiple regressions are used to analyze and test the relationship between dependent and independent variables (s). For the regression analysis, the multiple regression models developed by Friend & Puckett and Lintner are used for the study.

According to Friend & Puckett's Models, two functions of multiple regression equation are prepared for the study. They are;

Price Function:

$$MPS_t = a + b_1 DPS_t + b_2 RE_t + b_3 PER_{t-1}$$

Dividend Function:

$$DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1} + b_3 PER_{t-1}$$

where,

- MPS_t = Market Price of Stock at time 't'
- DPS_t = Dividend per share at time 't'
- RE_t = Retained Earnings at time 't'
- PER_{t-1} = Price Earning Ratio at time 't - 1'
- EPS_t = Earning per share at time 't'
- DPS_{t-1} = Dividend per share at time 't - 1'
- a = Regression Constant
- b₁, b₂, b₃ = Regression Coefficients

According to Lintner's Models, a multiple regression equation is prepared for the study, which is given below;

$$DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1}$$

where,

- DPS_t = Dividend per share at time 't'
- EPS_t = Earning per share at time 't'
- DPS_{t-1} = Dividend per share at time 't - 1'
- a = Regression Constant
- b₁, b₂, b₃ = Regression Coefficients

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter named, *Data Presentation and Analysis* is considered as most crucial and important part of the study. The data collected from different sources should be presented in an understandable way that the reader of the report can understand it easily.

Data analysis is an important stage of the research process. The purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. The analysis of data consists of organizing, tabulating, performing statistical analysis and drawing inferences. (*Pant, 2009; 298*)

This chapter provides a mechanism for meeting the basic objectives stated earlier in the first chapter of this research. The research has followed the methodology described in the third chapter in order to attain the objectives, which are related to the capital adequacy of the sample banks.

This chapter consists of presentation and analysis of data which is collected from different sources. The data is mainly focused on the capital adequacy position and its impact on the performance of the sample banks, i.e. NABIL and HBL. To obtain best result, the data and information have been analyzed with the measures of different financial and analytical tools by using appropriate tables, graphs, formulae, hypothesis and other tools.

4.2 Presentation of Data

The collected data and information are presented in this section. Various tables, charts and graphs are used to best present the data. The data and information has been presented in most understandable format.

Dividend is a periodic payment made by a company to its shareholders. It is compensation to the shareholders for the use of and risk to their investment funds. Or in other words, it is that portion of the net earning divided by the company among the shareholders as a return for their money invested.

For the study of dividend policy of commercial banks in Nepal, 4 commercial banks are selected as sample banks. From the selected sample banks, data related to dividend policy are collected and presented as well as analyzed in this chapter.

4.3 Analysis of financial indicators

4.3.1 Divided Per Share Analysis

Dividend per share (DPS) is that amount, which is paid to common shareholders on a per share basis. DPS shows that what exactly do the ordinary shareholders receive. It is calculated by dividing the total dividend to equity shareholders by the total numbers of equity shares. Company can distribute dividend in the form of stock also, which is known as bonus shares. Company converts the amount of dividend to shareholders into par value of the equity shares. So shareholders can benefit with extra share with original par value.

4.3.2 Cash Dividend Per Share Analysis

Cash dividend is the percent of amount declared to distribute on each share to shareholders out of the net profit.

Table 4.1
Cash Dividend Per Share

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	0	11.58	15	70
2062/63	25	30	18	85
2063/64	10	15	20	100
2064/65	20	25	2.11	60
2065/66	30	12	7.37	35
Mean (\bar{x})	17.00	18.72	12.50	70.00
S.D. (σ)	12.04	8.32	7.53	24.75
CV %	70.83	44.43	60.29	35.36

Source: Annual Reports of EBL, HBL, BOK and NABIL

The above table shows the cash dividend percent on each share distributed to shareholders out of the net profit by the selected sample banks. Out of four selected sample banks, NABIL is distributing higher dividend per share. The average dividend per share of NABIL is Rs. 70 on each share. On compare with that, BOK has the lowest dividend per share with Rs. 12.50 on average.

The average DPS of EBL is Rs. 17.00. EBL has distributed highest dividend per share on the year, 2065/66 which is Rs. 30 per share and EBL has not distributed cash dividend in FY 2061/62. The DPS data of EBL is very fluctuating. There is more uncertainty on the DPS of EBL. For last three years, DPS of EBL is increasing in constant rate. The standard deviation of DPS of EBL is 12.04 and the CV is 70.83%, which means there is more variation in the dividend per share of EBL.

The average DPS of HBL is Rs. 18.72. HBL has paid highest dividend per share in the year 2062/63 of Rs. 30 per share. On that HBL has paid lowest DPS as Rs. 11.58 in the fiscal year 2061/62. There is more variability in the DPS of HBL. Only in two fiscal years, the DPS of HBL has increased. Otherwise, it has decreased. The standard

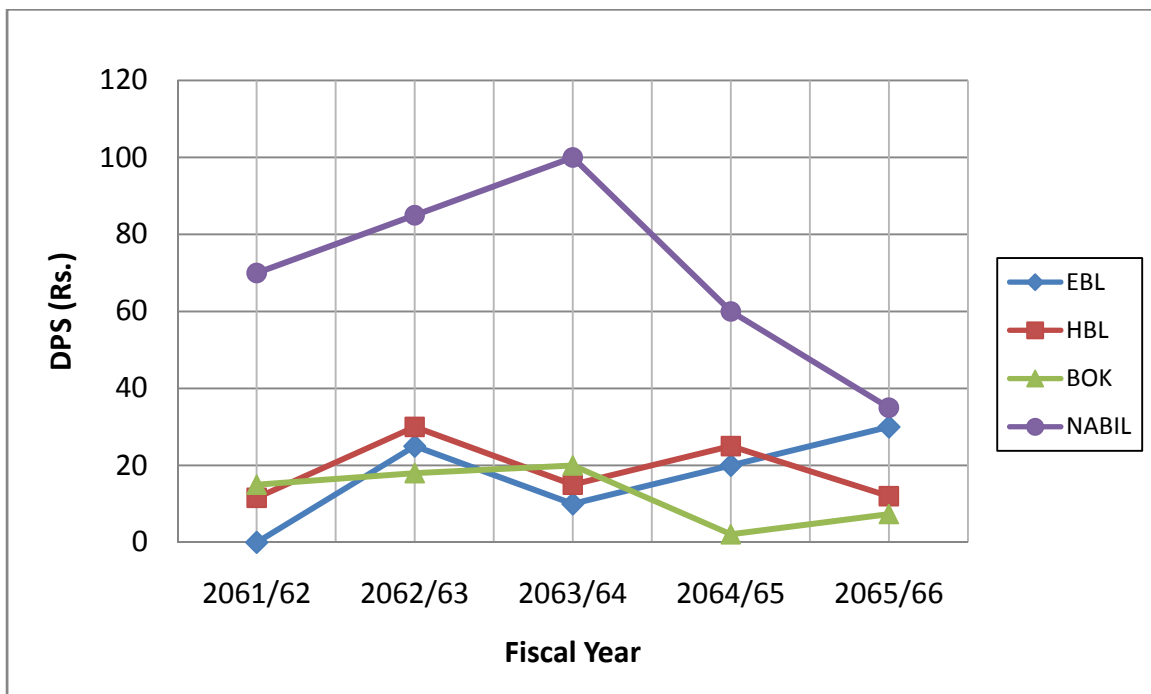
deviation of DPS of HBL is 8.32 and the coefficient of variation is 44.43%, which shows there is some variation in the DPS of HBL.

The average DPS of BOK is Rs. 12.50 per share. The DPS of BOK is highest in FY 2063/64 (Rs. 20) and lowest in FY 2064/65 (Rs. 2.11). The DPS of BOK is increasing from 2061/62 to 2063/64. But for last two years, the trend is fluctuating. The standard deviation of DPS is 7.53. The CV of DPS of BOK is 60.29%. This indicates that there is high fluctuation in the DPS of BOK.

The average DPS of NABIL is Rs. 70.00 per share. NABIL has paid highest dividend of Rs. 100 per share in the year 2063/64 and lowest dividend per share in the year 2065/66 of Rs. 35 per share. The standard deviation of DPS of NABIL is 24.75 and the coefficient of variation is 35.36%, which is acceptable in compare with other selected sample banks.

The DPS data of selected commercial banks are presented in the trend form in Figure 4.1 below;

Figure 4.1
Dividend Per Share



From the above analysis of dividend per share of selected sample banks, it can be concluded that the DPS of NABIL is highest than other selected banks on analyzing the average DPS of selected banks for last five fiscal years. It indicates that NABIL has been paying higher dividend to its shareholders in compare with other selected banks. From above figure also, the trend of NABIL is much higher than other trends. The trends of EBL, HBL and BOK are more close to each other. The average DPS of these banks are also much close roaming around 12 to 20. Among 4 selected sample banks, the average DPS of BOK is the lowest, which is Rs. 12.50 per share. The variation in the DPS of NABIL is lesser than other sample banks.

4.3.3 Stock Dividend Per Share Analysis

Stock dividend is percent of dividend distributed to the shareholders as bonus share instead of cash dividend. Stock dividend will increase the number of outstanding shares of the company.

Table 4.2
Stock Dividend Per Share

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	20	20	0	0
2062/63	0	5	30	0
2063/64	30	25	0	40
2064/65	30	20	40	40
2065/66	30	31.56	40	50
Mean (\bar{x})	22.00	20.31	22.00	26.00
S.D. (σ)	13.04	9.79	20.49	24.08
CV %	59.27	48.18	93.15	92.63

Source: Annual Reports of EBL, HBL, BOK and NABIL

The above table shows the data of stock dividends distributed by the selected sample banks. In some cases, the sample banks have not distributed stock dividend (bonus shares).

The average stock dividend of EBL is 22% on the equity shares. EBL has distributed a constant 30% of stock dividend to the shareholders from 2063/64 to 2065/66. But EBL has not distributed stock dividend in 2062/63. The standard deviation of stock dividend is 13.04 and coefficient of variation is 59.27%.

The average stock dividend of HBL is 20.31% on the value of ordinary shares. HBL has regularly distributes bonus shares, which other banks are unable to do. HBL has distributed higher 31.56% of stock dividend in the year 2065/66 and lower 5% in the year 2062/63. The standard deviation is 9.79 and the coefficient of variation is 48.18%, which is lower among other sample banks.

The average stock dividend distributed by BOK is 22.00%. In two fiscal years, BOK has not distributed stock dividend. BOK has distributed 40% of stock dividend in FYs 2064/65 and 2065/66. The standard deviation of BOK is 20.49 and the coefficient of variation is 93.15%, which is very high. That means, there is very high fluctuation in the stock dividend of BOK.

The average stock dividend distributed on the ordinary shares of NABIL is 26.00%. NABIL has not distributed stock dividend in the FYs 2061/62 and 2062/63. But after that, NABIL has distributed 40% in next two years and 50% in previous year. The standard deviation of NABIL is 24.08 and the coefficient of variation is 92.63%, which is also higher among sample banks.

From above analysis of stock dividend distributed by selected sample banks, it can be concluded that NABIL has distributed highest stock dividend though it has not distributed in starting two years. HBL has lowest stock dividend. But HBL has uniformity in to distribution of stock dividend. There is very high variation in the data of BOK and NABIL. Their coefficients of variation are more than 90%.

4.3.4 Earning Per Share Analysis

Earning per Share (EPS) is one of the most important financial indicators, which measure the earning capacity of a firm. It measures the profit available to the ordinary shareholders on a per share basis. EPS is calculated by dividing net income available to the common stockholders by the total number of common shares outstanding. The EPS of the selected sample banks is presented below in Table 4.3;

Table 4.3
Earning Per Share

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	54.22	47.91	30.1	105.49
2062/63	62.78	59.24	43.67	129.21
2063/64	78.42	60.66	43.5	137.08
2064/65	91.82	62.74	59.94	108.31
2065/66	99.99	61.9	54.68	106.76
Mean (\bar{x})	77.446	58.49	46.378	117.37
S.D. (σ)	19.17	6.06	11.55	14.70
CV %	24.76	10.36	24.90	12.53

Source: Annual Reports of EBL, HBL, BOK and NABIL

In above table, the Earning Per Share of selected banks are presented. The EPS of selected banks are in Rs. amount. From the table it can be seen that the EPS of NABIL is much better than that of other banks. The average EPS of NABIL is Rs. 117.37. On compare with that the EPS of BOK is lesser among 4 selected banks. The average EPS of BOK is only Rs. 46.378.

The average EPS of EBL is Rs. 77.446. EBL has highest EPS in FY 2065/66 (Rs. 99.99) and lowest EPS is in FY 2061/62 (Rs. 54.22). From the table, it can be seen that the earning per share of EBL is increasing every year. The standard deviation of EPS of

EBL is 19.17 and coefficient of variation of EBL is 24.76%. The 24.76% C.V. of EBL indicates that there is some fluctuation in the EPS of EBL.

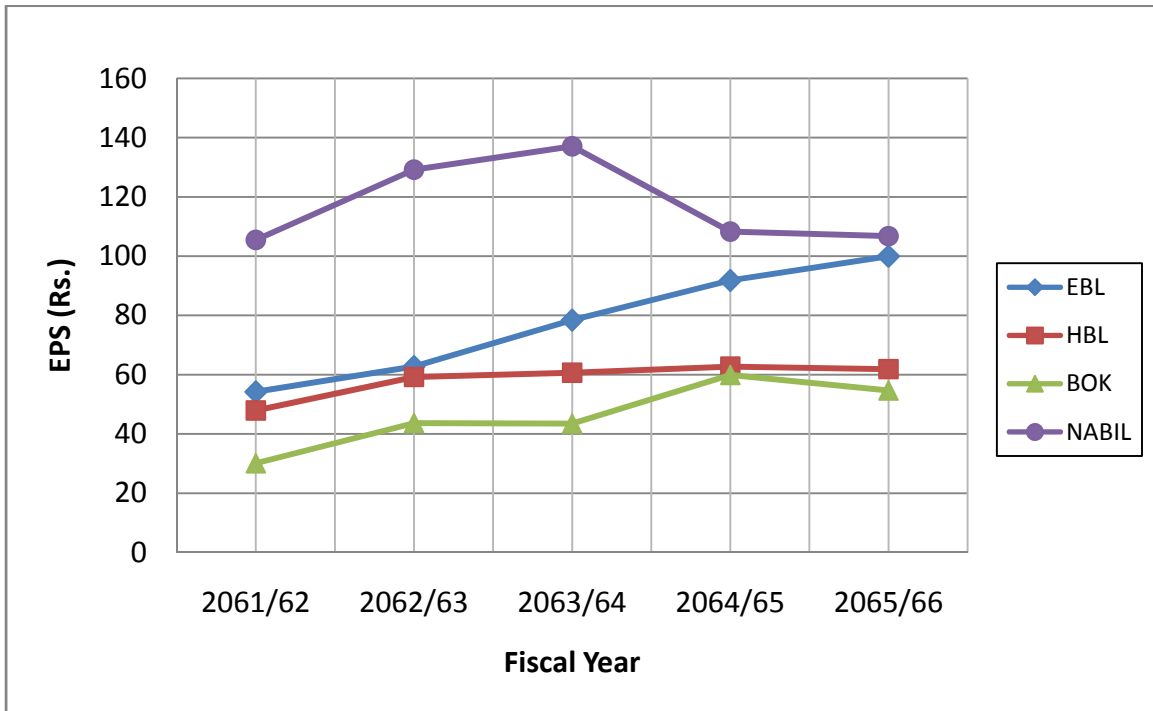
The average EPS of HBL is Rs. 58.49. HBL has highest EPS in FY 2064/65 (Rs. 62.74) and lowest EPS is in FY 2061/62 (Rs. 47.91). From the table, it can be seen that the earning per share of HBL is increasing every year from FY 2061/62. The EPS of HBL has decreased in the year 2065/66. The standard deviation of EPS of HBL is 6.06 and coefficient of variation of HBL is 10.36%. The 10.36% C.V. of HBL indicates that there is very little fluctuation in the EPS of HBL.

The average EPS of BOK is Rs. 46.378. BOK has highest EPS in FY 2064/65 (Rs. 59.94) and lowest EPS is in FY 2061/62 (Rs. 30.1). From the table, it can be seen that the earning per share of BOK is in fluctuating trend. It has increased in 2062/63, but very little decreased in 2063/64. Then again it has increased next fiscal year. The EPS of BOK has decreased in 2065/66 again. The standard deviation of EPS of BOK is 11.55 and coefficient of variation of BOK is 24.90%. The 24.90% C.V. of BOK indicates that there is high fluctuation in the EPS of BOK. The fluctuation of BOK is more than fluctuation of other selected sample banks.

The average EPS of NABIL is Rs. 117.37. NABIL has highest EPS in FY 2063/64 (Rs. 137.08) and lowest EPS is in FY 2061/62 (Rs. 105.49). From the table, it can be seen that the earning per share of NABIL is increasing in FYs 2062/63 and 2063/64. But it has been decreasing from 2063/64 to 2065/66. The standard deviation of EPS of NABIL is 14.70 and coefficient of variation of NABIL is 12.53%. Variation in the data of EPS of NABIL is also lesser.

The EPS of selected banks are presented in the trend form in Figure 4.3 below;

Figure 4.2
Earning Per Share



From the analysis of Earning per share of selected sample banks, it can be concluded that the EPS of NABIL is highest than other selected banks on analyzing the average EPS of selected banks for last five fiscal years. From the figure also it can be seen that the trend of EPS of NABIL is uppermost than other EPS trends and the EPS trend of BOK is lower in compare with other trends. EPS of BOK is lowest from the above analysis of last five fiscal years.

4.3.5 Market Price Per Share Analysis

Market price of share is that value of stock, which can be received by firm or equity holders selling it in capital market. The capital market determines MPS. If this analysis MPS represents the closing market price of NEPSE index of the sample firms. The following table shows the market price of stock (MPS) of the sample firms:

Table 4.4
Market Price Per Share

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	870	920	430	1505
2062/63	1379	1100	850	2240
2063/64	2430	1740	1375	5050
2064/65	3132	1980	2350	5275
2065/66	2455	1760	1825	4899
Mean (\bar{x})	2053.2	1500	1366	3793.8
S.D. (σ)	911.28	461.52	761.80	1778.09
CV %	44.38	30.77	55.77	46.87

Source: Annual Reports of EBL, HBL, BOK and NABIL

The above table illustrates the market value per share of selected commercial banks in secondary market. The common shares of selected banks are listed in Nepal Stock Exchange (NEPSE). The above market prices are the traded price of selected sample banks in the given year. Among the prices, the shares of NABIL are traded in higher price in the market. The average MPS of NABIL is Rs. 3793.8 per share. On the other hand, the shares of BOK are traded in lower among the 4 selected banks. The average MPS of BOK is Rs. 1366 per share.

The average MPS of EBL is Rs. 2053.2. The market price of shares of EBL is increasing every year, except for the year 2064/65. The MPS of EBL is decreased in the year 2064/65 to 2065/66. The highest price given for the shares of EBL is in the year 2064/65, which is Rs. 3132 per share. So as the lowest is in the year 2061/62, that is Rs. 870 per share. The standard deviation of MPS of EBL is 911.28 and coefficient of variation of MPS of EBL is 44.38%. It shows there are some variations in the market price of EBL.

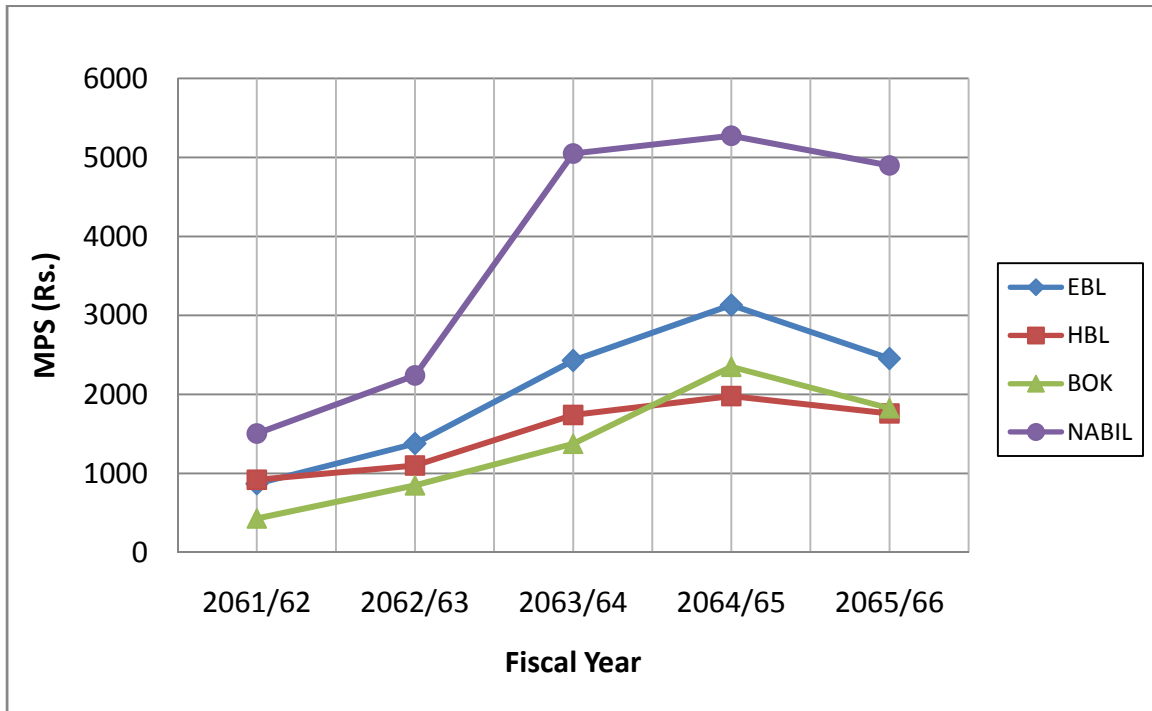
The average market price per share of HBL is Rs. 1500 per share. The MPS of HBL has increased for from 2061/62 to 2064/65. But it has decreased in the year 2065/66. The highest bided price for share of HBL in NEPSE is Rs. 1980 in the year 2064/65 and the lowest bided price for share of HBL is Rs. 920 in the fiscal year 2061/62. The standard deviation of MPS of HBL is 461.52. The CV of MPS of HBL is 30.77%. The variation in the price of HBL is very lesser. It means that the price of HBL is not so much scattered.

The average market price per share of BOK is Rs. 1366 per share. The market price per share of BOK traded in NEPSE is in increasing trend from the year 2061 to 2065. But the price of share has decreased in the FY 2065/66. The highest bided price for the shares of BOK is Rs. 2350 in the year 2064/65. The lowest bided price for the shares of BOK is Rs. 430 in the year 2061/62. The standard deviation of MPS of BOK is 761.80 and the coefficient of variation of MPS of BOK is 55.77%. The CV of 55.77% indicates that there is more fluctuation in the market price of BOK.

The average MPS of NABIL is Rs. 3793.8 per share. The MPS of NABIL has been increasing every year leaving the previous fiscal year 2065/66. In the previous fiscal year the MPS of NABIL has decreased. The highest price bided for the shares of NABIL are in the year 2064/65 (Rs. 5275) but they are bided lowest in the year 2061/62 (Rs. 1505). The standard deviation of MPS of NABIL is 1778.09 and the coefficient of variation is 46.87%. It shows there are some variations in the market price of NABIL.

The data in the above table is represented as trend graph in below figure 4.3;

Figure 4.3
Market Price Per Share



From above analysis of market price of shares of selected sample banks it can be concluded that the shares of NABIL are getting higher price in the market than other banks in the study. The average MPS of NABIL is Rs. 3793.8 per share. The average MPS of BOK is lowest among 4 selected banks. The above table as well as the figure also indicates that the market prices of shares of all selected banks have decreased in the year 2065/66. The variation in the MPS is lesser in the case of HBL. It has only 30.77% variation in the data.

4.3.6 Net Worth Per Share Analysis

Net worth per share is the value left for the shareholders after deducting the total liabilities from the total assets of the company. Net worth per share is the real value of any company. Because it will tell the actual condition of the company whether it has more value of assets or liabilities.

Table 4.5
Net Worth Per Share

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	220	240	214	337
2062/63	218	229	231	381
2063/64	293	265	165	418
2064/65	322	248	223	354
2065/66	314	257	206	324
Mean (\bar{x})	273.4	247.8	207.8	362.8
S.D. (σ)	50.78	14.10	25.70	37.51
CV %	18.57	5.69	12.37	10.34

Source: Annual Reports of EBL, HBL, BOK and NABIL

The above table illustrates the net worth per share of the selected banks. Net worth per share is the value remained after deducting the total liabilities from the total assets. In the above table NABIL has maximum value of net worth, so as BOK has minimum value of net worth.

The average NWPS of EBL is Rs. 273.4 per share. The NWPS data of EBL from 2061 to 2066 are not so much constant. They are moving with some fluctuation. The higher NWPS value of EBL is Rs. 322 in 2064/65 and lowest value of NWPS is Rs. 218 in 2062/63. The standard deviation of NWPS is 50.78 and the coefficient of variation is 18.57%.

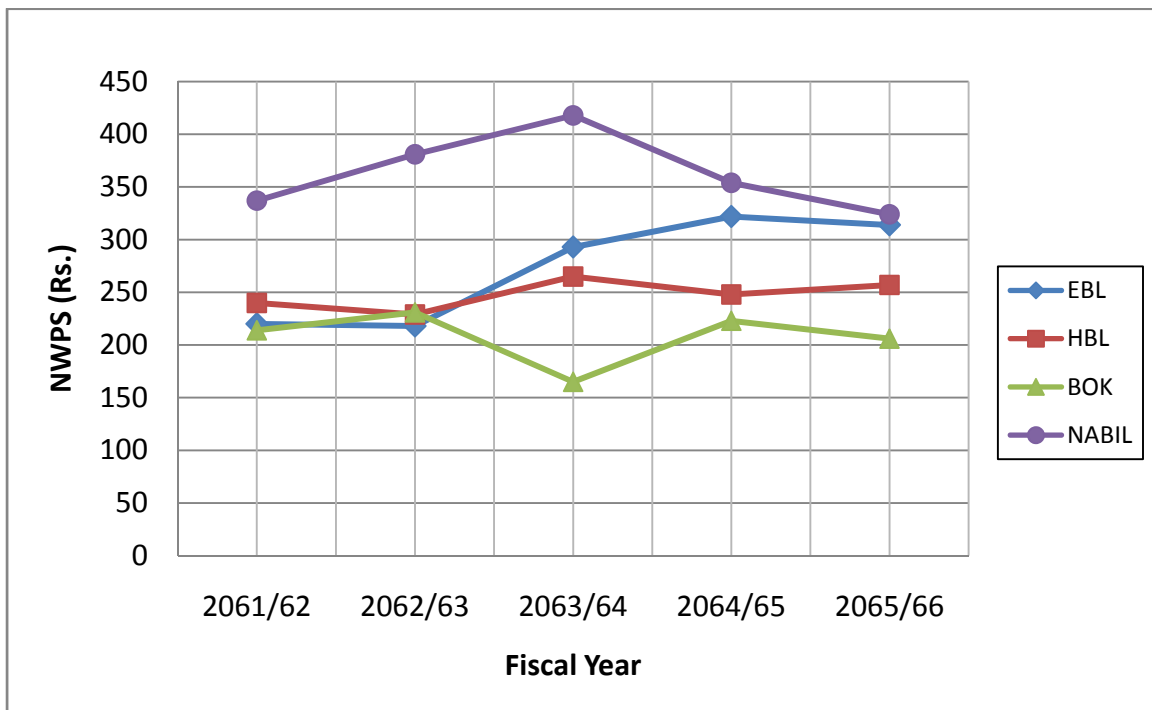
The average NWPS of HBL is Rs. 247.8 per share. HBL has highest net worth value per share in the year 2063/64 (Rs. 265 per share). So as it has lowest net worth in the year 20662/63 (Rs. 229 per share). The standard deviation of NWPS of HBL is 14.10 and the coefficient of variation is only 5.69%, which is lowest variation among other three sample banks.

The average net worth per share of BOK is Rs. 207.8 per share. BOK has lowest NWPS as Rs. 165 per share in the year 2063/64 and highest NWPS as Rs. 231 per share in the year 2062/63. The standard deviation of NWPS of BOK is 25.70 and the coefficient of variation is 12.37%.

The average net worth per share of NABIL is Rs. 362.8 which is higher among other three selected sample banks. NWPS of NABIL is peak in the year 2063/64 (Rs. 418 per share) and dip in the year 2065/66 (Rs. 324 per share). The net worth per share of NABIL has not dropped down below Rs. 300 per share. The standard deviation of NWPS of NABIL is 37.51 and the coefficient of variation is 10.34%.

The above tabulated data of net worth per share of selected sample banks are presented in the trend form in the figure below;

Figure 4.4
Net Worth Per Share



From the above analysis of Net worth per share of selected sample banks, it can be concluded that NABIL has higher NWPS. In average NABIL has Rs. 362.8 net worth per

share. BOK has lower NWPS among selected sample banks, which is Rs. 207.8 per share in average. The standard deviation of HBL is lower and EBL is higher. The lower standard deviation of HBL has generated lower coefficient of variation as well. But the higher standard deviation of EBL has generated higher coefficient of variation. HBL has lowest CV as 5.69% and EBL has highest CV as 18.57%. That means the data of NWPS is more fluctuated in the case of EBL and less fluctuated in the case of HBL.

4.3.7 Dividend Payout Ratio Analysis

Dividend payout ratio indicates that what percentage actual earnings of a firm has been received by the ordinary shareholders. It is calculated by dividing the dividend per share to ordinary shareholders by the earning per share (EPS). The following table shows that dividend payout ratio of simple firms.

Table 4.6
Dividend Payout Ratio

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	0.00%	24.17%	49.83%	66.36%
2062/63	39.82%	50.64%	41.22%	65.78%
2063/64	12.75%	24.73%	45.98%	72.95%
2064/65	21.78%	39.85%	3.52%	55.40%
2065/66	30.00%	19.39%	13.48%	32.78%
Mean (\bar{x})	20.87%	31.75%	30.81%	58.65%
S.D. (σ)	0.15	0.13	0.21	0.16
CV %	73.64	41.12	67.81	26.88

The above table illustrates the dividend payout ratio of the selected banks. Dividend payout ratio is the portion of earning distributed to the shareholders. The company may distribute its net earnings to shareholders either in the form of cash dividend or in form

of stock dividend (bonus shares). However, the company may retain the earning for the future investments. So, the dividend paid out of the earning is the dividend payout ratio.

The dividend payout ratio of NABIL is better than other banks. The average DPR of NABIL is 59%. The average DPR of EBL is lowest among four sample banks, which is 21%.

The average DPR of EBL is 21%. The highest DPR of EBL is 40% in the FY 2062/63. So as the lowest DPR of EBL is 0% in the year 2061/62. The standard deviation of data of DPR is 0.15 and the coefficient of variation is 73.64%. This means there is very high fluctuation in the DPR of EBL. There is very less consistency in the dividend payout ratio of Everest Bank Limited.

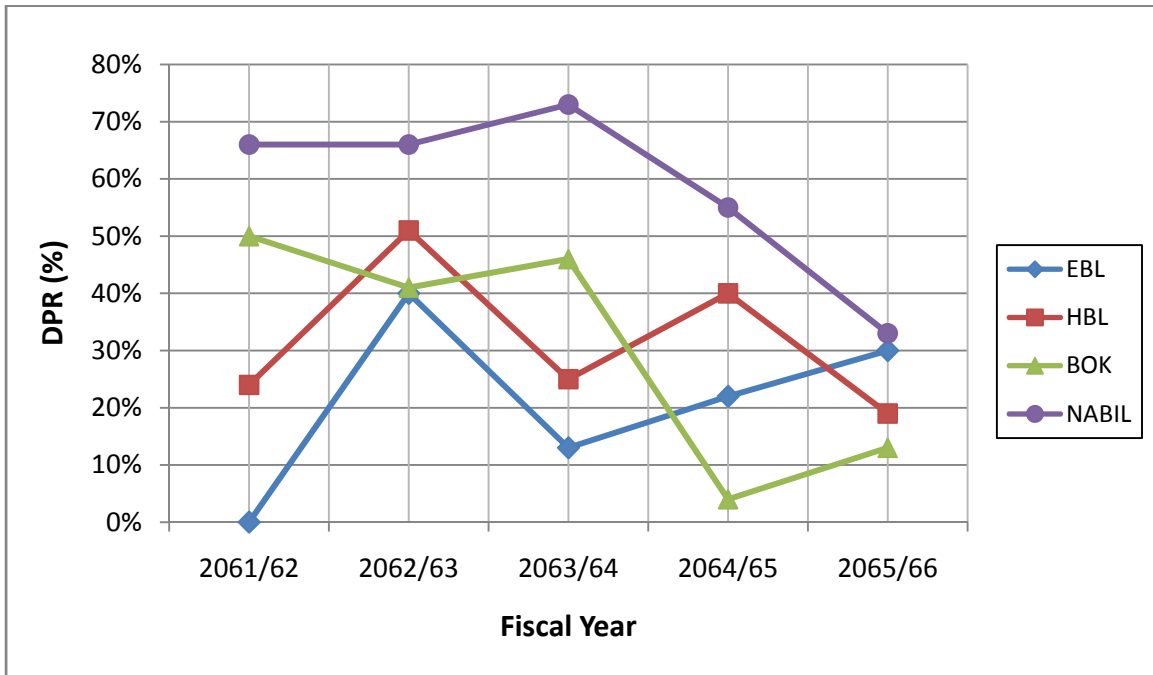
The average DPR of HBL is 32%. The DPR of HBL is higher in the year 2062/63 that is 51%, and it is lower in the year 2065/66 that is 19% only. The standard deviation of DPR is 0.13 and the coefficient of variation is 41.12%. The CV of 41.12% indicates that there is some variation in the DPR of HBL.

The average DPR of BOK is 31%. The DPR of BOK is higher in the year 2061/62 that is 50%, and it is lower in the year 2064/65 that is only 4%. The standard deviation of DPR of BOK is 0.21 and the coefficient of variation is 67.81%, which means there is high fluctuation in the dividend payout ratio of BOK.

The average DPR of NABIL is 59%. The dividend payout ratio of NABIL is very high among selected banks every year. NABIL has highest DPR in the year 2063/64 which is 73% and the lowest DPR in the year 2065/66 which is 33%. The standard deviation of DPR of NABIL is 0.16 and the coefficient of variation of DPR of NABIL is 26.88%. This means there is less variation in the DPR of NABIL. The dividend payout ratio of NABIL is comparatively consistent among selected 4 sample banks.

The dividend payout ratios of selected banks are presented below in the figure;

Figure 4.5
Dividend Payout Ratio



From the above analysis of dividend payout ratio, it can be concluded that the dividend payout ratio of NABIL is better than other banks. NABIL has been paying dividend to the shareholders regularly. That is the reason about NABIL has high dividend payout ratio to the shareholders. NABIL's average dividend payout ratio is 59%. That indicates that NABIL distributes 59% on average of its earnings to the shareholders. And only about 40% of earnings are retained for future investments. The DPR of EBL is lesser among selected sample banks. On average 21%, EBL distributes its earnings to the shareholders as dividend. The variation in the data to DPR of 4 sample banks shows less variation in the data of NABIL, and more variation in the data of EBL.

4.3.8 Price Earning Ratio Analysis

Price Earning Ratio is the ratio between market price per share and earning per share. It indicates the payment by the investors in the market for per rupee of earning in the company.

Table 4.7
Price Earning Ratio

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	16.05	19.20	14.29	14.27
2062/63	21.97	18.57	19.46	17.34
2063/64	30.99	28.68	31.61	36.84
2064/65	34.11	31.56	39.21	48.70
2065/66	24.55	28.43	33.38	45.89
Mean (\bar{x})	25.53	25.29	27.59	32.61
S.D. (σ)	7.19	5.98	10.34	15.99
CV %	28.18	23.64	37.48	49.04

The above table shows the price earning ratio of selected 4 sample banks under study. The table shows the average PE ratio of NABIL is better than other banks. NABIL has an average of 32.61 times PE ratio. This means the investors of NABIL are willing to pay Rs. 32.61 in average for earning of Re. 1 by NABIL. The average PE ratios of rest 3 banks are very close to each other ranging from 25.29 times to 27.59 times.

The average PE ratio of EBL is 25.53 times. This means the market price of each share is 25.53 times of 1 rupee earning by EBL. The PE ratio of EBL is higher in 2064/65 (34.11 times) and lower in 2061/62 (16.05 times). The PE ratio of EBL is in increasing trend except for the year 2065/66. The standard deviation of PE ratio of EBL is 7.19 and coefficient of variation is 28.18%.

The average PE ratio of HBL is 25.29 times. The PE ratio of HBL is fluctuating. The higher PE ratio of HBL is 31.56 times in 2064/65 and lower PE ratio is 18.57 times in the year 2062/63. The standard deviation of PE ratio of HBL is 5.98 and the coefficient of variation is 23.64%.

The average PE ratio of BOK is 27.59 times. The PE ratios of BOK for five years of study have shown that they are increasing trend except the year 2065/66. The highest PE ratio of BOK is 39.21 times in the FY 2064/65 and lowest PE ratio is 14.29 times in the FY 2061/62. The standard deviation of PE ratios of BOK is 10.34 and the coefficient of variation is 37.48%.

The average PE ratio of NABIL is 32.61 times. The PE ratio of NABIL is in increasing trend except for the FY 2065/66. The highest PE ratio of NABIL is 48.70 times in the year 2064/65. The lowest PE ratio of NABIL is 14.27 times in the year 2061/62. The standard deviation of PE ratio of NABIL is 15.99 and the coefficient of variation is 49.04%.

From above analysis of PE ratio, it can be concluded that in average, the PE ratio of NABIL is better among 4 selected banks and PE ratio of HBL is lesser among them. The variation in the PE ratios of selected banks for five years of observations shows that the PE ratio of NABIL is more diverged and PE ratio of HBL is less diverged.

4.3.9 Dividend Yield Ratio Analysis

Dividend yield is a percentage of dividends per share on market price per share. It shows that how much is the dividend per share on market price per share.

Table 4.8
Dividend Yield Ratio

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	0.00%	1.26%	3.49%	4.65%
2062/63	1.81%	2.73%	2.12%	3.79%
2063/64	0.41%	0.86%	1.45%	1.98%
2064/65	0.64%	1.26%	0.09%	1.14%
2065/66	1.22%	0.68%	0.40%	0.71%
Mean (\bar{x})	0.82%	1.36%	1.51%	2.46%

S.D. (σ)	0.01	0.01	0.01	0.02
CV %	86.97	59.31	90.79	69.38

The table presented above shows the ratio of dividend yield. This ratio expresses the percent of market price generated by the dividend per share distributed by the company.

The average DY ratio of EBL is 0.82%. There is no uniformity in the dividend yield ratio of EBL. EBL has not paid cash dividend in the year 2061/62, so the dividend yield for that fiscal year is 0%. The DY ratio for the year 2062/63 is highest, i.e. 1.81%. The standard deviation of data is 0.01 and the coefficient of variation is 86.97%. The high coefficient of variation shows the high fluctuation of the data.

The average dividend yield ratio of HBL is 1.36%. The dividend yield ratio of HBL is ranging from lowest 0.68% (FY 2065/66) to highest 2.73% (FY 2062/63). The standard deviation of DY ratio of HBL is 0.01 and the coefficient of variation is 59.31%.

The average dividend yield ratio of BOK is 1.51%. The dividend yield ratio of BOK is decreasing from the year 2061/62 to 2064/65. The highest DY ratio of BOK is 3.49% is the FY 2061/62 and the lowest DY ratio is 0.09% in the FY 2064/65. The standard deviation of DY ratio of BOK is 0.01 and the coefficient of variation is 90.79%. This shows that the DY ratio of BOK is most varied among other selected commercial banks.

The average dividend yield ratio of NABIL is 2.46%. The dividend yield ratio of NABIL is in decreasing trend every year. It has higher DY ratio in the year 2061/62 that is 4.65% and lower DY ratio in the year 2065/66 that is 0.71%. The standard deviation of DY ratio of NABIL is 0.02 and the coefficient of variation is 69.38%.

From the analysis of dividend yield ratio of selected commercial banks, it can be concluded that NABIL has been paying higher dividend compare to the market price of its stock. On an average NABIL pays 2.46% of dividend on market price of share. The

dividend yield ratio is lowest for EBL (0.82%) among other commercial sample banks. The dividend yield ratio of BOK is most varied and that of HBL is less varied.

4.3.10 Earning Yield Ratio Analysis

It measures the earning in relation to market value of share. It gives some idea of how much an investor might get for his money. The share with higher earnings yield is worth buying. Earning yield is informative to compare the market share prices of stocks in the secondary market.

Table 4.9
Earning Yield Ratio

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	6.23%	5.21%	7.00%	7.01%
2062/63	4.55%	5.39%	5.14%	5.77%
2063/64	3.23%	3.49%	3.16%	2.71%
2064/65	2.93%	3.17%	2.55%	2.05%
2065/66	4.07%	3.52%	3.00%	2.18%
Mean (\bar{x})	4.20%	4.15%	4.17%	3.94%
S.D. (σ)	0.01	0.01	0.02	0.02
CV %	31.08	25.39	44.80	57.98

The table presented above shows earning yield ratio of selected sample banks. Earning yield is the ratio of earning and the market price of share. It shows the percent of market price of share generated by the earning of the company.

The average earning yield ratio of EBL is 4.20%, which is highest among the selected sample commercial banks. The earning yield ratio of EBL is in decreasing trend except for the year 2065/66. EBL has highest EY ratio in the FY 2061/62 of 6.23% and the

lowest EY ratio in the FY 2064/65 of 2.93%. The standard deviation of EY ratio of EBL is 0.01 and coefficient of variation is 31.08%.

The average earning yield ratio of HBL is 4.15%. The trend of earning yield of HBL is not so consistent. The highest earning yield of HBL is 5.39% in 2062/63 and the lowest earning yield is 3.17% in the year 2064/65. The standard deviation of EY ratio of HBL is 0.01 and the coefficient of variation is 25.39%. The earning yield data of HBL is less varied than other compared sample banks.

The average earning yield ratio of BOK is 4.17%. The earning yield of BOK is 7.00% in the FY 2061/62. But it has dropped down to 2.55% in between next three years. Then after, it has increased again to 3.00% in the year 2065/66. The standard deviation of EY ratio of BOK is 0.02 and the coefficient of variation is 44.80%.

The average earning yield ratio of NABIL is 3.94%. The earning yield of NABIL is 7.01% in the FY 2061/62. But it has dropped down to 2.05% in between next three years. Then after, it has increased again to 2.18% in the year 2065/66. The standard deviation of NABIL is 0.02 and the coefficient of variation is 57.98%. The earning yield of NABIL is most fluctuated among other selected sample banks.

From the analysis of earning yield ratio of four commercial banks, it can be concluded that EBL has highest earning yield on average and NABIL has the lowest among others. The standard deviations of earning yield data of all four banks are almost identical. The coefficient of variation of four sample banks shows that NABIL has most varied data and HBL has less varied data.

4.3.11 Market Value to Book Value Ratio Analysis

This ratio indicates the price that the market is paying for the share that is reported from the net worth of the banks.

Table 4.10
Market Value to Book Value Ratio

Fiscal Year	EBL	HBL	BOK	NABIL
2061/62	3.955	3.833	2.009	4.466
2062/63	6.326	4.803	3.680	5.879
2063/64	8.294	6.566	8.333	12.081
2064/65	9.727	7.984	10.538	14.901
2065/66	7.818	6.848	8.859	15.120
Mean (\bar{x})	7.224	6.007	6.684	10.490
S.D. (σ)	2.19	1.67	3.65	5.02
CV %	30.37	27.73	54.55	47.90

The above table illustrates the ratio of market value to book value of shares. This ratio

The average market value to book value ratio of EBL is 7.224 times. The highest MV/BV ratio of EBL is 9.727 in the FY 2064/65 and the lowest is 3.955 in the FY 2061/62. The standard deviation of EBL is 2.19 and the coefficient of variation is 30.37%.

The average market value to book value ratio of HBL is 6.007 times. HBL has acquired highest MV/BV ratio in the FY 2064/65 of 7.984 times and lowest MV/BV ratio in the FY 2061/62 of 3.833 times. The standard deviation of HBL is 1.67 and coefficient of variation is 27.73%. The MV/BV of HBL is less varied compared to other three sample banks.

The average market value to book value ratio of BOK is 6.684 times. BOK has highest MV/BV ratio in the year 2064/65 of 10.538 times and lowest MV/BV in the year 2061/62 of 2.009 times. The standard deviation of BOK is 3.65 and the coefficient of variation of BOK is 54.55%. The MV/BV ratio of BOK is more fluctuated than other three banks as the coefficient of variation of BOK is highest among them.

The average market value to book value ratio of NABIL is 10.490 times, which is highest among other three sample banks. The market MV/BV ratio of NABIL has been increasing every year. NABIL's highest MV/BV ratio is 15.120 times in the year 2065/66 and lowest MV/BV ratio is 4.466 times in the year 2061/62.

From the analysis of market value to book value ratio of selected sample banks, it can be concluded that NABIL's shares have highest market value in compare to its book value of shares. So as HBL's shares have lowest MV/BV ratio. As per the consistency, the MV/BV ratio of HBL seems consistent and MV/BV ratio of BOK is more inconsistent.

4.4 Multiple Regression Analysis

The multiple regression analysis has been done to illustrate the effect of certain variables on the dependent variable. According to some school of thoughts, dividend has some effect on market price of stock. So the regression models are made and analyzed to study the effect of some variables on dependent variable.

The regression model introduced by Friend & Puckett is taken, and another two regression models are made for the study. So as the regression model introduced by Lintner is also taken and another regression model is made for the study.

4.4.1 MPS on DPS, RE and Lagged PER

This regression model is taken from Friend & Puckett's Price Function Model. In this regression model, the price of common stock of firm in the market is taken as dependent variable. And the other independent variables which influence the market price of firm are dividend, retained earnings and lagged price earning ratio. Therefore the regression equation is;

$$MPS_t = a + b_1 DPS_t + b_2 RE_t + b_3 PER_{t-1}$$

Using the above equation, the regression coefficient (a) and regression coefficients (b_1 , b_2 and b_3) are calculated along with coefficient of determination (R^2), Standard error of estimate (SEE) and F-value. The calculated values are presented below;

Table 4.11
Multiple Regression Analysis of MPS on DPS, RE and LPER
Regression Equation: $MPS_t = a + b_1 DPS_t + b_2 RE_t + b_3 PER_{t-1}$

Banks	Regression Constant (a)	Regression Coefficient (b)			R	R^2	SEE	F	Sig F
		b_1	b_2	b_3					
EBL	-1769.188	112.239	15.270	-16.506	0.939	0.882	625.947	2.493	0.429
HBL	-5386.700	210.107	18.641	-16.526	0.995	0.990	90.348	34.459	0.124
BOK	-3187.983	221.907	-76.348	48.047	0.930	0.864	561.490	2.121	0.458
NABIL	-5735.367	258.252	2.362	46.052	0.997	0.994	277.438	54.433	0.099

Source: Appendix I

From above table, using the regression constant and regression coefficients, the regression equation for the sample banks can be written as;

For EBL: $MPS_t = -1769.188 + 112.239 \cdot DPS_t + 15.270 \cdot RE_t + (-16.506) \cdot PER_{t-1}$

For HBL: $MPS_t = -5386.7 + 210.107 \cdot DPS_t + 18.641 \cdot RE_t + (-16.526) \cdot PER_{t-1}$

For BOK: $MPS_t = -3187.983 + 221.907 \cdot DPS_t + (-76.348) \cdot RE_t + 48.047 \cdot PER_{t-1}$

For NABIL: $MPS_t = -5735.367 + 258.252 \cdot DPS_t + 2.362 \cdot RE_t + 46.052 \cdot PER_{t-1}$

The above table represents the linear relationship of MPS with DPS, RE and lagged PER. The regression constant (a) is negative in all cases. The beta coefficient (b) of NABIL is positive for all independent variables, compared to other banks which have at least on beta coefficient is negative.

From the table, it shows clearly that the one rupee increase in DPS of EBL leads to Rs. 112.24 increase in MPS of EBL keeping other variables constant. The one rupee increase in RE gives Rs. 15.27 increase in MPS and one rupee increase in lagged PER gives decrease of Rs. 16.51 in MPS.

Since all beta coefficients of NABIL are positive, it will lead to increase the MPS of NABIL by every one rupee increase of every taken variable.

The coefficients of determination (R^2) of selected banks are 0.882, 0.990, 0.864 and 0.994 respectively for EBL, HBL, BOK and NABIL. The standard error of estimate is lower in the case of HBL (90.348) and higher in the case of EBL (625.947).

The F-statistics of EBL and BOK are 2.493 and 2.121 respectively which is very less in compare to the F-statistics of HBL and NABIL (34.459 and 54.433 respectively). The F-statistics for regression of HBL and NABIL are significant at 5% level of significance, which signifies that the regression equation provides a statistically significant explanation of variation in MPS of HBL and NABIL. But the F-statistics of EBL and BOK are not significant at 5% level of significance.

4.4.2 DPS on EPS, Lagged DPS and Lagged PER

This regression model is taken from Friend & Puckett's Dividend Function Model. In this regression model, the cash dividend distributed to stockholders of the firm is taken as dependent variable. The independent variables which will influence the dividend function are earning per share, lagged dividend per share and lagged price earning ratio. Therefore the regression equation is;

$$DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1} + b_3 PER_{t-1}$$

Using the above equation, the regression coefficient (a) and regression coefficients (b_1 , b_2 and b_3) are calculated along with coefficient of determination (R^2), Standard error of estimate (SEE) and F-value. The calculated values are presented below;

Table 4.12**Multiple Regression Analysis of DPS on EPS, LDPS and LPER**

Regression Equation: $DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1} + b_3 PER_{t-1}$

Banks	Regression Constant (a)	Regression Coefficient (b)			R	R ²	SEE	F	Sig F
		b ₁	b ₂	b ₃					
EBL	-24.116	-1.319	-0.751	1.078	0.913	0.834	9.808	1.676	0.504
HBL	-100.883	-0.957	-0.976	2.694	0.995	0.990	1.689	31.992	0.129
BOK	36.951	0.212	0.343	-0.726	0.776	0.602	9.503	0.505	0.746
NABIL	-36.171	-0.888	0.361	0.864	0.996	0.993	4.194	46.086	0.108

Source: Appendix II

From above table, the regression equation for the sample banks can be written as;

For EBL: $DPS_t = -24.116 + (-1.319) \cdot EPS_t + (-0.751) \cdot DPS_{t-1} + 1.078 \cdot PER_{t-1}$

For HBL: $DPS_t = -100.883 + (-0.957) \cdot EPS_t + (-0.976) \cdot DPS_{t-1} + 2.694 \cdot PER_{t-1}$

For BOK: $DPS_t = 36.951 + 0.212 \cdot EPS_t + 0.343 \cdot DPS_{t-1} + (-0.726) \cdot PER_{t-1}$

For NABIL: $DPS_t = -36.171 + (-0.888) \cdot EPS_t + 0.361 \cdot DPS_{t-1} + 0.864 \cdot PER_{t-1}$

The above table represents the linear relationship of DPS with EPS, lagged DPS and lagged PER. The regression constant (a) is negative for EBL, HBL and NABIL. But it is positive in case of BOK. For all four selected sample banks, at least one beta coefficient is negative. In case of EBL and HBL, two beta coefficients are negative.

From the table, it shows clearly that the one rupee increase in EPS of EBL leads to Rs. 1.319 decrease in DPS of EBL keeping other variables constant. The one rupee increase in lagged DPS gives Re. 0.751 decrease in DPS and one rupee increase in lagged PER gives increase of Rs. 1.078 in DPS.

The coefficients of determination (R²) of selected banks are 0.834, 0.990, 0.602 and 0.993 respectively for EBL, HBL, BOK and NABIL. The standard error of estimate is lower in the case of HBL (1.689) and higher in the case of EBL and BOK i.e. 9.808 and 9.503 respectively.

The F-statistics of EBL and BOK are 1.676 and 0.505 respectively which is very less in compare to the F-statistics of HBL and NABIL (31.992 and 46.0863 respectively). The F-statistics for regression equation of dividend of HBL and NABIL are significant at 5% level of significance, which signifies that the regression equation provides a statistically significant explanation of variation in DPS of HBL and NABIL. But the F-statistics of EBL and BOK are not significant at 5% level of significance.

4.4.3 DPS on EPS, Lagged DPS

This regression model is taken from Lintner's Model In this regression model for dividend for stockholders is taken as dependent variable. The independent variables which will influence the dependent variable are earning per share and lagged dividend per share. Therefore the regression equation is;

$$DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1}$$

Using the above equation, the regression coefficient (a) and regression coefficients (b₁ and b₂) are calculated along with coefficient of determination (R²), Standard error of estimate (SEE) and F-value. The calculated values are presented below;

Table 4.13
Multiple Regression Analysis of DPS on EPS and LDPS
Regression Equation: $DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1}$

Banks	Regression Constant (a)	Regression Coefficient (b)		R	R ²	SEE	F	Sig F
		b ₁	b ₂					
EBL	-9.801	-0.752	0.492	0.898	0.806	7.492	4.167	0.194
HBL	-72.007	-0.815	1.778	0.820	0.673	6.728	2.056	0.327
BOK	33.146	0.199	-0.501	0.773	0.597	6.766	1.479	0.403
NABIL	-108.381	0.224	1.375	0.858	0.736	17.970	2.793	0.264

Source: Appendix III

From above table, the regression equation for the sample banks can be written as;

$$\text{For EBL: } \text{DPS}_t = -9.801 + (-0.752) \cdot \text{EPS}_t + 0.492 \cdot \text{DPS}_{t-1}$$

$$\text{For HBL: } \text{DPS}_t = -72.007 + (-0.815) \cdot \text{EPS}_t + 1.778 \cdot \text{DPS}_{t-1}$$

$$\text{For BOK: } \text{DPS}_t = 33.146 + 0.199 \cdot \text{EPS}_t + (-0.501) \cdot \text{DPS}_{t-1}$$

$$\text{For NABIL: } \text{DPS}_t = -108.381 + 0.224 \cdot \text{EPS}_t + 1.375 \cdot \text{DPS}_{t-1}$$

The above table represents the linear relationship of DPS with EPS, lagged DPS. The regression constant (a) is negative for EBL, HBL and NABIL. But it is positive in case of BOK. Among four selected banks, NABIL has both beta coefficients positive. But for other sample banks, at least one beta coefficient is negative.

From the table, it shows clearly that the one rupee increase in EPS of EBL leads to Rs. 9.801 decrease in DPS of EBL keeping other variables constant. The one rupee increase in lagged DPS gives Re. 0.752 decrease in DPS.

The coefficients of determination (R^2) of selected banks are 0.806, 0.673, 0.597 and 0.736 respectively for EBL, HBL, BOK and NABIL. The standard error of estimate of NABIL is higher (17.970) in compare with other selected banks. EBL, HBL and BOK has SEE of 7.492, 6.728 and 6.766 respectively. The F-statistics of EBL, HBL, BOK and NABIL is 4.167, 2.056, 1.479 and 2.793 respectively. The significance F values of EBL, HBL, BOK and NABIL at 5% level of significance are 0.194, 0.327, 0.403 and 0.264 respectively. That shows the F-statistic of EBL seems moderately significant than other banks at 5% level of significance.

Taking view of Lintner's model, the target payout ratio p and speed of adjustment b can be calculated using following process.

$$\text{DPS}_t^* = p \text{EPS}_t \text{ ----- (i)}$$

$$\text{DPS}_t - \text{DPS}_{t-1} = a + b (\text{DPS}_t^* - \text{DPS}_{t-1}) + e_t$$

The above equation can be expressed as;

$$\text{DPS}_t = a + b \text{DPS}_t^* + (1 - b) \text{DPS}_{t-1} + e_t$$

From equation (i), we can write;

$$\text{DPS}_t = a + bp \text{EPS}_t + (1 - b) \text{DPS}_{t-1} + e_t$$

So the coefficient given by EPS_t will be equal to bp and coefficient given by DPS_{t-1} will be equal to $(1 - b)$.

Here, p is the target payout ratio, b is the speed of adjustment and e_t is an error term. The regression equations made above are used and compared with Lintner's model; following results are derived for p and b .

Table 4.14
Target Payout Ratio

Banks	bp	$1 - b$	Speed of Adjustment (b)	Target Payout Ratio (p)
EBL	-0.752	0.492	0.508	-1.4803
HBL	-0.815	1.778	-0.778	1.0476
BOK	0.199	-0.501	1.501	0.1326
NABIL	0.224	1.375	-0.375	-0.5973

The above table shows gives the target payout ratio for coming fiscal year for the commercial banks. On analyzing the above table of target payout, it can be said that HBL has to pay 104% of its earning to shareholders, so as BOK has to pay 13% to its shareholders in coming fiscal year. But the target payout ratio of EBL and NABIL is negative, which gives meaning that these banks should not pay dividend to its shareholders in coming years.

4.5 Major Findings

Some of the major findings initiated from above analysis of dividend and its various aspects are summarized and listed below;

- The cash dividend distributed by NABIL very high in compare other three banks. Its average cash DPS is Rs. 70 on each share. But other banks are distributing on average only Rs 13 to Rs 18 on each share as dividend. The DPS of NABIL is more consistent than other banks.

- There is more inconsistency in the stock dividend distributed by the commercial banks. Except HBL, other three banks did not provide stock dividend to its shareholders in some years. Stock dividend of EBL is stable for last three years. The average SDPS of all banks is ranging from 20% to 26%.
- The EPS of NABIL is higher among other three banks (i.e. Rs. 117.37). This shows NABIL is capable in earning reasonable profit. Leaving some fiscal years aside, the earnings of the commercial banks are in increasing trend. The EPS of EBL and BOK seems less consistent than other two banks.
- The MPS of NABIL is very higher than other three banks. That is because its DPS, EPS is also very higher than other banks. The average MPS of HBL and BOK is comparatively lower than other two banks. It seems that the market price shares of all commercial banks have decreased in the year 2065/66. It might be due to political instability of the country and the improper regulations in that year regarding share market.
- The net worth per share of NABIL is Rs. 362.8, which is higher among the sample banks. That means the worth of NABIL is maximum. On comparing BOK is less worthy. The NWPS of HBL is more consistent than other banks. It has only 5.69% of variation in the NWPS.
- Dividend payout ratio of NABIL is more than 50% on average. But other banks have only 20% to 30% on average. That means NABIL is superior in distributing dividend out of its earnings. EBL has lower DPR than other three banks.
- The price earning ratio of NABIL is higher. Its share price is 32 times on the earnings in the market, which means investors are giving more value to shares of NABIL for its every earning. It can be seen that NABIL has more variation in PE Ratio.
- Dividend yield ratio of NABIL is 2.46% in average, which is high among other banks. Dividend yield of EBL is lower averaging only 0.82%. Earning yield ratio of EBL is 4.20% in average, which is high among other banks. But the average earning yield of HBL and BOK is also around 4.15%.

- The market value to book value ratio of NABIL is higher than other banks. NABIL is getting 10.49 times value in the market in compare to its book value of share. But other banks are getting only 6 to 7 times of the book value.
- From the regression analysis of MPS on DPS, RE and lagged PER the result is very mixed. In case of EBL and HBL, the increase in lagged PER will decrease the MPS. In case of BOK the increase in retained earnings will decrease MPS of that bank. But the case of NABIL is very positive. The every increase in independent variable will increase the MPS. The F-statistics for the regression is significant at 5% level of significance for NABIL and moderately significant for HBL. This indicates that the regression equation provides a statistically significant explanation of the variation in MPS of NABIL and HBL, while F-statistic is not significant at 5% level of significance in EBL and BOK.
- From the regression analysis of DPS on EPS, lagged DPS and lagged PER the result is very inconsistent. At least one regression coefficient is negative for every sample commercial bank. That means at least one independent variable will decrease the DPS of the sample bank. Only BOK has positive regression constant in compare to negative regression constant of other three banks. The F-statistics for the regression is moderately significant at 5% level of significance for NABIL and HBL. This indicates that the regression equation provides a statistically significant explanation of the variation in DPS of NABIL and HBL, while F-statistic is not significant at 5% level of significance in EBL and BOK.
- From the regression analysis of DPS on EPS and lagged DPS, regression constants of EBL, HBL and NABIL are negative, only BOK has positive regression constant. At least one regression coefficient given by EPS and lagged DPS is negative for EBL, HBL and BOK. But both regression coefficients are positive in case of NABIL. That means both EPS and lagged DPS will increase the DPS of NABIL. The F-statistics for the regression is moderately significant at 5% level of significance for EBL. This indicates that the regression equation provides a statistically significant explanation of the variation in DPS of EBL, but the F-statistic seems insignificant at 5% level of significance for HBL, BOK and NABIL.

- After analyzing the regression equation given by Lintner, the target payout ratios for the sample commercial banks are calculated using the regression equations of Lintner's model. The results are very insignificant. The target payout ratio of EBL and NABIL is negative, which gives meaning that these banks should not pay dividend for some years. In case of BOK, it has to pay 13% of earning to the shareholders. But in case of HBL, it has to pay 104% of its earning to the shareholders, which means HBL has to pay whole earnings to the shareholders.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The real owners of any company are the equity shareholders. Equity shareholders are also known as the common shareholders. The common shareholders will get some gain on their investment, which is known as dividends. Company's decision on distributing the dividend depends upon the dividend policy. Dividend policy gives the ratio of payments for the dividend and the retaining amount. Company may distribute its net earning as dividend or hold as retained earnings.

Every investor expects a good return from his/her investment. An investor has mainly two gains; capital gain and dividend gain. If the dividend gain for the investment is regular and satisfying, then it is believed that the capital gain may be better. That means the market price of share will be better. Dividend is a periodic payment made by a company to its shareholders. When a company earns profit, that amount is either reinvested in the business (as retained earnings) or paid to the shareholders (as dividend). Dividend policy determines the division of earnings between payments to shareholders and reinvestment in the firm. Dividend policy is of great importance in the corporate firm because it affects the financial structure, the flow of fund, corporate liquidity and investors' attitude towards the firm. The firm which assures more returns to the shareholders is taken as good firm in the share market. So every firm or company wants to be good in the market.

But in case of Nepalese share market, only some selected big companies are pay regular dividends. But other companies seem to be irregular in payment of the dividends. But still investors are holding their shares of those companies. Though the share market is very low, the investors are running for investment in new shares, which is very unexplainable.

This research mainly aims at analyzing the dividend policies of selected commercial banks and identifies the regularity of dividend distribution of the commercial banks. Four commercial banks; Everest Bank Limited, Himalayan Bank Limited, Bank of Kathmandu Limited and Nabil Bank Limited are taken as sample banks to study dividend policy decision and other factors related to dividend. The study has been undertaken under last five fiscal years from 2061/62 to 2065/66. The available secondary data have been analyzed using various financial and statistical tools in this study. So, the reliability of the conclusions of this study is determined on the accuracy of secondary data

5.2 Conclusion

From the analysis of financial indicators, multiple regression equations, it can be concluded that the dividend policy of Nepalese commercial banks is very uncertain. There is no consistency in the dividend payout schemes of selected commercial banks. Banks are paying dividend without adopting any appropriate policy. Leaving NABIL aside, the other three banks has paid very low cash dividend to its shareholders. The banks are more focused on stock dividend rather than cash dividend. EBL, HBL and BOK are paying 20% to 30% of its earning to its shareholders, but NABIL is paying more than 55% on average to its shareholders. Taking the cash dividend, stock dividend and dividend payout ratio of NABIL as indicators, NABIL has highest market price compared to other banks. This can give conclusion that dividend payout has some effect on market price of the stock. The market value of commercial banks is very high in compare to its book value. Investors are paying 6 times to 10 times than book value for the stock of these commercial banks in the market. So, from the analysis of various financial indicators, NABIL has been giving more return to its shareholders than other

commercial banks in comparison. That's why its market value is also higher than other commercial banks.

After analyzing the regression models given by finance experts, the results are very inconsistent. Sometimes the result is in favor of the model, but the results are very insignificant. So, the models given by the finance experts may not give correct result to analyze the dividend policy and Nepalese stock market.

Moreover, the dividend policy of Nepalese commercial banks is very uncertain and inconsistent. Commercial banks are focused on market image only, rather than focusing on the various financial indicators. So both commercial banks and investors need to be aware of market indicators. Commercial banks should exercise the dividend policy according to the earnings available in the firm, market conditions and other factors. So as investors also need to study the current value position of the firm before investing on any securities.

5.3 Recommendation

Based on major findings and conclusion drawn by the related study on dividend policy of commercial banks in Nepal, some recommendations are presented below, which may assist for the further applications on dividend policy subject matter.

- The bank should consider the existing conditions and expectations of shareholders while distributing dividends so that it will meet the interests or expectations of the shareholders as far as possible.
- Firms should have their clearly defined dividend policy i.e. stable dividend or constant pay out or low regular plus extras, which helps to determine the dividend amount.
- There is lack of rules binding companies to pay dividend. The legal rule concerning dividend policy is needed for smooth growth of firm as well as national economy. The regulating acts are silent on these matters. Some firms

are not paying dividend to its shareholders, though there is profit. Those firms should be taken under legal rules.

- The bank should study about the strategies to retain the ordinary investors so that shareholders will attract in new shares in future even the bank can't pay the dividend in some year.
- Banks are advised to have target rate of return (earnings) and target payout ratio, which will help the banks to build good image in stock market and investors will be benefited on making investment decision.
- Shareholders should be given option to choose between stock dividend and cash dividend instead of declaring stock or cash dividend arbitrary. For this dividend declaration should be proposed to the annual general meeting of shareholders for approval.
- All the firms must accept one major fact that EPS is to be considered for determining dividend. The significant relationship of DPS with other variables is not so accurate. So, it is important to consider various factors rather than neglecting them while making dividend decision.
- Each and every company should provide correct information regarding their activities and performance, so that investors can analyze the situation and invest their money in the best company.
- The payment of dividend is highly fluctuating, which is neither static nor constantly growing. Such inconsistency and irregularity in the dividend may create more confusion and miss-conception. The investors' attitude may impact the firm's market price per share adversely. So these banks are advised to follow either static or constantly growing dividend payment policy.
- There is no clear-cut legal provision regarding dividend payments. So the government should act in favor of investors and should bind through such legal provisions or distinct rules so that the profit earning companies should distribute certain percent of their earnings as dividend.

BIBLIOGRAPHY

Books:

Bhattacharai, R. (2005). ***Capital Structure Management; Theory and Practice***. Kathmandu: Dhaulagiri Books and Stationery.

Bhattacharai, R. (2005). ***Investments; Theory and Practice***. Kathmandu: Buddha Academic Publishers and Distributors.

Francis, J.C. (1990). ***Investments; Analysis & Management***. New York: McGraw Hill, International Edition.

Hastings, P.G. (1996). ***The Management of Business Finance***, New York: Von Nostrand Company.

Kothari C. R. (1990). ***Research Methodology; Method and Techniques***. New Delhi: Wishwa Prakashan.

Khan, M.Y. & Jain, P.K. (1990). ***Financial Management***, New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Levin, R.I., and Rubin D.S. (1995). ***Statistics for Management***, New Delhi: Pearson Education Pte. Ltd.

Mathur, Iqbal,(1999). ***Introduction to Financial Management***, New York: Mac Millian Publishing Company.

Pandey, I. M. (Eds.). (1995). ***Financial Management***. New Delhi: Vikash Publishing House Pvt. Ltd.

Pant, P.R. (2009). ***Social Science Research and Thesis Writing***. Kathmandu: Buddha Academic Publishers and Distributors.

Patheja, A. (1994). ***Financial Management of Commercial Banks***. Delhi: South Asia Publications.

Shrestha, S & Silwal, D.P. (2000). ***Statistical Methods in Management***. Kathmandu: Taleju Prakashan

Van Horne, J. C. (1999). ***Financial Management and Policy***, New Delhi: Prentice Hall of India Pvt. Ltd.

Weston, J. F. and Brigham, E. F. (1981). ***Managerial Finance***, Hinsdale, Illinois, The Dryden Press.

Wolff, H.K. & Pant, P.R. (Eds.). (1999). ***A Handbook for Social Science Research and Thesis Writing***. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Journals:

Manandhar, K.D. (2000). ***Preliminary Test of Lagged Structure of Dividend***, Management Dynamics.

Pradhan, R.S. (1993). ***Stock Market Behavior in a Small Capital Market: A Case of Nepal***, The Nepalese Management Review. Vol. IX, No. 1, summer.

Shrestha, M.K. (1981). ***Public Enterprises: Have they Dividend Paying Ability?*** Prakashan, Nepalese Journal of Public Administration.

Thesis:

Bhurtel, K. (2006). ***Dividend Policy and its Effects on Stock Price***. Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

Budhathoki, K. (2006). ***The Study of Dividend Policy of Commercial Banks in Nepal***. Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

Dhungel, A. (2006). ***Comparative Study on Dividend Policy of Commercial Banks and Insurance Companies in Nepal***. Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

Dhungel, B (2009). ***A Study on Dividend Policy of Everest Bank Limited and Bank of Kathmandu Limited***. Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

Dhungel, P. (2004). ***The Study of Dividend Policy of Commercial Banks in Nepal***. Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

- Dhakal, L.R. (2002). ***A Comparative Study on Dividend Policy of Banking, Finance and Hotel Sector.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Dongol, G. (2006). ***Impact of Dividend Policy on Market Price of Stock.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Gautam, R.R. (1996). ***Dividend Policy in Commercial Banks; A Comparative Study of NGBL NIBL and NABL.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Luitel, B. (2006). ***Dividend Policy and its Impact on Share Price in Nepalese Context.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Rajbhandari, P.L. (2001). ***Dividend Policy; A Comparative Study between Banks and Insurance Companies.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Ranabhat, B. (2006). ***Dividend Policy of Banks, Insurance Companies and Finance Companies.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Raut, S.R. (2008). ***A Study of Dividend Policy of the Commercial Banks in Nepal.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.
- Shrestha, M. (2004). ***A Study on Dividend Practices of Listed Insurance Companies in Nepal.*** Unpublished Master's Thesis, Nepal Commerce Campus, Tribhuvan University.
- Yadav, V.K. (2007). ***Dividend Policy and its Impact on Market Price of Stock.*** Unpublished Master's Thesis, Shanker Dev Campus, Tribhuvan University.

Reports and Directories:

Annual Reports of Everest Bank Limited

Annual Reports of Himalayan Bank Limited

Annual Reports of Bank of Kathmandu Limited

Annual Reports of Nabil Bank Limited

Annual Reports of Nepal Rastra Bank

Annual Reports of Securities Board of Nepal (SEBO)

Nepal Rastra Bank, ***Banking and Financial Statistics***, Kathmandu, Bank
& Financial Institution Regulation Department

Internet:

en.wikipedia.org

www.nepalsharemarkets.com

www.nepalstock.com

www.nrb.org

www.sebonp.com

www.himalayanbank.com.np

www.everestbankltd.com

www.bok.com.np

www.nabilbank.com

CD-ROM:

Encyclopedia Britannica 2002: Encyclopedia Britannica, Inc., CD-ROM

Microsoft Encarta Reference Library 2003: Microsoft Corporation., CD-
ROM

APPENDIX I

Multiple Regression Analysis of MPS on DPS, RE and LPER

The Regression Equation is; $MPS_t = a + b_1 DPS_t + b_2 RE_t + b_3 PER_{t-1}$

Everest Bank Limited

Regression Statistics					
Multiple R	0.939173381				
R ²	0.882046639				
Adjusted R ²	0.528187				
Standard Error	625.9474868				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	3	2929928.544	976642.8479	2.492642376	0.42853025
Residual	1	391810.2562	391810.2562		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-1769.188382	1750.81241	-1.010495683	0.496676591	
DPS	112.2390918	48.16406435	2.330349261	0.25805722	
RE	15.27031015	13.62929279	1.120403705	0.46388935	
LPER	-16.50579727	34.06568861	-0.484528508	0.712760988	

Himalayan Bank Limited

Regression Statistics					
Multiple R	0.995198076				
R ²	0.99041921				
Adjusted R ²	0.961677				
Standard Error	90.34839977				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	3	843837.1667	281279.0556	34.4585077	0.124427321
Residual	1	8162.833342	8162.833342		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-5386.700333	839.9508883	-6.413113443	0.09847543	
DPS	210.1066797	23.86743618	8.803068672	0.072009255	
RE	18.64132494	2.673336089	6.973057007	0.090678818	
LPER	-16.52571124	5.996775955	-2.755765992	0.221606609	

Bank of Kathmandu Limited

Regression Statistics					
Multiple R	0.929616899				
R²	0.864187578				
Adjusted R²	0.456750				
Standard Error	561.4898771				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
<i>Regression</i>	3	2006099.118	668699.706	2.121032242	0.458374936
<i>Residual</i>	1	315270.8821	315270.8821		
<i>Total</i>	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
<i>Intercept</i>	-3187.982962	7530.442228	-0.423346049	0.745053579	
<i>DPS</i>	221.9066786	364.9498748	0.608047006	0.652204804	
<i>RE</i>	-76.3484738	182.9395976	-0.417342526	0.748301638	
<i>LPER</i>	48.04667138	158.9503977	0.302274622	0.813125171	

Nabil Bank Limited

Regression Statistics					
Multiple R	0.996952116				
R²	0.993913522				
Adjusted R²	0.975654				
Standard Error	277.4378898				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
<i>Regression</i>	3	12569387.02	4189795.672	54.43287822	0.099232049
<i>Residual</i>	1	76971.78268	76971.78268		
<i>Total</i>	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
<i>Intercept</i>	-5735.366605	1992.824401	-2.878009021	0.212893539	
<i>DPS</i>	258.2519507	52.03084916	4.963439092	0.126567462	
<i>RE</i>	2.362284186	4.937860086	0.478402414	0.715927055	
<i>LPER</i>	46.05154353	16.93730499	2.718941623	0.224366955	

APPENDIX II

Multiple Regression Analysis of DPS on EPS, LDPS and LPER

The Regression Equation is; $DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1} + b_3 PER_{t-1}$

Everest Bank Limited

Regression Statistics					
Multiple R	0.913308898				
R ²	0.834133143				
Adjusted R ²	0.336533				
Standard Error	9.808301449				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	3	483.7972227	161.2657409	1.676310657	0.503834463
Residual	1	96.20277732	96.20277732		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-24.11577447	40.64515924	-0.59332464	0.65909222	
EPS	-1.318579517	3.228710435	-0.408392002	0.75316987	
LDPS	-0.751064548	0.500684475	-1.500075566	0.374319282	
LPER	1.078275583	1.459630387	0.738731937	0.594950378	

Himalayan Bank Limited

Regression Statistics					
Multiple R	0.994830771				
R ²	0.989688263				
Adjusted R ²	0.958753				
Standard Error	1.689015757				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	3	273.8003458	91.26678192	31.99229053	0.129070753
Residual	1	2.852774228	2.852774228		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-100.8834459	12.79121615	-7.886931524	0.080289885	
EPS	-0.95685926	0.172591164	-5.544080229	0.113607213	
LDPS	-0.975633525	0.1187415	-8.216449398	0.077101927	
LPER	2.693631797	0.277791603	9.696591852	0.06542269	

Bank of Kathmandu Limited

Regression Statistics					
Multiple R	0.776011877				
R²	0.602194433				
Adjusted R²	-0.591222				
Standard Error	9.503125289				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
<i>Regression</i>	3	136.7095297	45.56984325	0.504596954	0.746069596
<i>Residual</i>	1	90.30939025	90.30939025		
<i>Total</i>	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
<i>Intercept</i>	36.95109183	38.33314844	0.963946175	0.511685657	
<i>EPS</i>	0.212066444	1.799124427	0.117872027	0.925304997	
<i>LDPS</i>	0.34303816	1.390326668	0.246732058	0.846001298	
<i>LPER</i>	-0.72583268	1.950161473	-0.372191067	0.7731687	

Nabil Bank Limited

Regression Statistics					
Multiple R	0.996403069				
R²	0.992819075				
Adjusted R²	0.971276				
Standard Error	4.194432667				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
<i>Regression</i>	3	2432.406735	810.8022449	46.08594405	0.107765478
<i>Residual</i>	1	17.5932654	17.5932654		
<i>Total</i>	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
<i>Intercept</i>	-36.17149977	21.75215708	-1.662892542	0.344678804	
<i>EPS</i>	-0.887553986	0.14852381	-5.975836362	0.105554307	
<i>LDPS</i>	0.361318874	0.132790509	2.720969119	0.224213261	
<i>LPER</i>	0.864137104	0.168742674	5.121034789	0.122769765	

APPENDIX III

Multiple Regression Analysis of DPS on EPS and LDPS

The Regression Equation is; $DPS_t = a + b_1 EPS_t + b_2 DPS_{t-1}$

Everest Bank Limited

Regression Statistics					
Multiple R	0.898036302				
R ²	0.8064692				
Adjusted R ²	0.612938				
Standard Error	7.49159075				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	2	467.7521361	233.876068	4.16713619	0.1935308
Residual	2	112.2478639	56.12393197		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-9.801427749	15.71818134	-0.623572634	0.64503849	
EPS	-0.752393198	0.382415245	-1.967477001	0.299362712	
LDPS	0.491792032	0.199460828	2.465607092	0.245294134	

Himalayan Bank Limited

Regression Statistics					
Multiple R	0.820206193				
R ²	0.6727382				
Adjusted R ²	0.345476				
Standard Error	6.728224063				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	2	186.1151219	93.05756095	2.055657578	0.3272618
Residual	2	90.53799809	45.26899905		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-72.00705298	46.53843984	-1.547259711	0.365274934	
EPS	-0.814866368	0.458687148	-1.776518856	0.326389999	
LDPS	1.778396523	0.88999011	1.998220546	0.295393964	

Bank of Kathmandu Limited

Regression Statistics					
Multiple R	0.772442487				
R²	0.596667396				
Adjusted R²	0.193335				
Standard Error	6.766244608				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	2	135.4547878	67.7273939	1.479343325	0.403332604
Residual	2	91.5641322	45.7820661		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	33.14634764	14.72178775	2.251516474	0.266090723	
EPS	0.199196511	0.47433775	0.419946569	0.746891074	
LDPS	-0.501192044	0.294472918	-1.701997068	0.338179508	

Nabil Bank Limited

Regression Statistics					
Multiple R	0.85812808				
R²	0.736383802				
Adjusted R²	0.472768				
Standard Error	17.97024881				
Observations	5				
ANOVA					
Source	df	SS	MS	F	Sig F
Regression	2	1804.140315	902.0701577	2.793393609	0.263616198
Residual	2	645.8596846	322.9298423		
Total	4				
Predictor	Coefficients	Standard Error	t – Stat	P-value	
Intercept	-108.3813871	77.49058104	-1.398639495	0.395155885	
EPS	0.224006629	0.560333583	0.399773699	0.757886323	
LDPS	1.374771094	0.623399056	2.205282605	0.271024783	